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CSR in Banking – Managing Stakeholder Claims under Bounded Rationality

Dissertation zur Erlangung des Grades Doktor der Wirtschaftswissenschaft (Dr. rer. pol.)

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1 Introduction

In early April 2009, the Group of Twenty (G20) convened in London to discuss how to combat the fallout of the 2007-08 Financial Crisis and what actions to take to mitigate the risk of similar events happening again. Besides established measures, such as fiscal and monetary stimuli or financial markets regulation, the heads of state aligned on strengthening the corporate social responsibility (CSR) of financial institutions. All parties present committed to strive for a "resilient, sustainable, and green recovery" (G20, 2009, 9), an outcome which clearly called for banks to take action.

This idea fits the *zeitgeist*: To an increasing extent, consumers consider social, ethical, or environmental product criteria in their purchasing decisions (Carrigan and Attalla, 2001; Sheth, Sethia and Srinivas, 2011; Young et al., 2010). A cross-country study by the World Economic Forum documents that "green products" are preferred by 95% of the consumers surveyed (World Economic Forum, 2013). More generally, companies at large are expected to behave in an ethical and responsible manner (Financial Times, 2016*b*). Sustainable corporate behavior – or corporate social responsibility – has therefore been described as an "emerging megatrend" (Lubin and Esty, 2010, 42).

To a significant extent, this development has already affected the financial industry. Over the last few years, banks with a social, ethical, or environmental agenda have experienced strong growth in terms of customers, deposits, and lending activities (Weber and Remer, 2011). In addition, socially responsible investing is on the rise, with more than 30% of all assets under professional management across countries being managed according to certain CSR criteria (US SIF, 2015). This explains why CSR in banking has received increasing attention by management practitioners and policymakers alike.

At the same time, CSR remains a concept which is hard to grasp. Similarly, there is no clear definition as to what being "socially responsible" entails for banks: While credit institutions pursue various CSR activities (Pérez and del Bosque, 2012), there is limited transparency on the relevance of individual stakeholders, the effectiveness of the measures taken to address their claims, and the impact of general CSR moderators as well as industry characteristics. The limited amount of empirical literature on this topic provides little guidance. More importantly, it is unclear how the investors of a bank value CSR activities: Mainstream finance theory assumes rational portfolio choice which is exclu-

CHAPTER 1. INTRODUCTION

sively based on financial criteria. In contrast, behavioral finance scholars emphasize that decision-making is affected by systematic heuristics and biases. Such behaviors may be reinforced when banks engage in CSR, which constitutes a concept with high context dependence and strong connotations. Against this background of sparse previous research and considerable practical relevance, the present study poses three research questions:

- 1. What is the meaning of "CSR" in banking?
- 2. How do the CSR activities of banks affect the decisions of their investors?
- 3. What is the impact of bounded rationality on these investment decisions?

Chapter 2 tackles the first research question by looking at the meaning of CSR from a general perspective: Section 2.1 establishes CSR as an alternative approach to shareholdervalue theory by discussing the different positions on the responsibility of companies towards their stakeholders over time. The conceptual features of CSR, which render a clear definition of this term difficult, are introduced in section 2.2. The resulting suggestion is to operationalize – rather than define – corporate social responsibility in terms of three qualities: CSR thus means voluntariness beyond legal obligations, integration of activities within a company's regular operations, and the management of stakeholder claims.

CSR and banking are considered jointly in chapter 3. Section 3.1 highlights that CSR is a meaningful concept in contemporary banking with regard to banks' non-profit expenditures, industry CSR initiatives, and the role of CSR in the 2007-08 Financial Crisis. The banking-specific meaning of CSR is investigated in section 3.2. It establishes a framework in which banks can implement CSR activities via both bank-internal and bank-external - or lending – measures to address the claims of primary and secondary stakeholders and are impacted by different interaction factors such as reputation. To determine whether these predictions hold true in practice, a comprehensive CSR survey is conducted among 479 university students. The findings suggest that the meaning of CSR in banking is adequately captured by the framework. As shown in section 3.3, the CSR survey finds that that all stakeholders, CSR channels, and interaction factors shape the perceptions of banks as socially responsible companies. The analyses in particular suggest the salience of primary stakeholders' claims and the effectiveness of bank-internal action programs as well as all the importance of all three interaction factors. These findings provide a set of empirical insights into the banking-specific features of CSR, which in turn answers the first research question.

To answer the remaining two research questions, chapter 4 introduces the element of finance. If investors are rational and maximize their expected utility, as described by portfolio selection theory (Markowitz, 1959, 1952) in section 4.1, only CSR activities which are related to a bank's risk and returns profile should affect investment decisions.

This relationship, for which ambiguous evidence exists in the literature (Wu and Shen, 2013), is not required when investors exhibit bounded rationality: As section 4.2 shows, three behavioral phenomena, in combination with a bank's CSR activities, may interact with systematic biases and heuristics in investment decisions. An experiment in which 100 university students decide on investments into different types of banks allows for a differentiated assessment of these two opposing positions concerning investor rationality: On the one hand, financially attractive banks attract higher investments, implying rational investor motives. On the other hand, investors show a lower willingness to sell underperforming stocks of CSR banks, tend to invest similar amounts across these institutions, and prefer the socially responsible option when deciding between two banks with equal risk/returns profiles. These systematic patterns can be explained by interactions between disposition effects, mental accounting, as well as halo effects and a bank's social performance. In response to the two research questions, these findings suggest that, first, CSR activities are taken into account by investors and, second, CSR carries the potential to trigger, reinforce, or mitigate systematic biases and heuristics in investment decisions.

From a scholarly perspective, these results generate a set of novel insights which contribute to the sparse body of academic literature. The field of research at the intersection of CSR, banking, and behavioral science therefore constitutes a reasonable combination, which has not yet been covered in depth. This exploratory approach opens up various avenues for further research. In addition, CSR practitioners are provided with an actionable methodology to identify, classify, and prioritize the claims of key stakeholders as well as to evaluate their CSR activities and the methodological blueprints to be able to take things further. Additional implications for theory and practice are derived in chapters 3 and 4. Chapter 5 complements this managerial perspective by outlining the factors for a successful implementation of CSR, and discussing corporate social responsibility with regard to a bank's corporate strategy.

The objective of the present study is not to make the – rather philosophical – case in favor of or against the social responsibility of credit institutions. Instead, it takes the existence of CSR activities of banks for granted to achieve transparency on a bank's stakeholders, the activities to address their claims, and how social performance is evaluated in connection with a bank's financial performance by boundedly rational investors. This information may inform ongoing debates and allow banks to take informed decisions. Time to do so is short: Of all the industries, finance and banking are least likely to be seen as behaving in a socially responsible way across all the European countries (European Commission, 2013). Accordingly, the topic of the present study matters – not only as a subject of social or political discussions, but first and foremost for the banks themselves.

2 CSR – Origins and Concept

This chapter discusses the concept of CSR from a general perspective. Section 2.1 contrasts the different positions on corporate responsibilities towards shareholders and stakeholders over time. Section 2.2 shows the four conceptual features of CSR and suggests to operationalize this corporate social responsibility in terms of three qualities: Voluntariness beyond legal obligations, integration of activities within a company's regular operations, and the management of stakeholder claims.

2.1 From Shareholders to Stakeholders

What is the role of companies in society? Since the beginning of the modern industrial age, this question has been the topic of controversial discussions among scholars, policymakers, and management practitioners. Most positions taken in this debate can be assigned to one out of two schools of thought.

The first one is grounded in neoclassical economics, the dominant economic theory and research program for the longest time of the 20^{th} century (Davis, 2006). This school of thought's priorities for corporate governance are clear: As summarized by the headline of Milton Friedman's 1970 article, it argues that the "social responsibility of business is to increase its profits" (Friedman, 1970, 30). Friedman builds this argument on two pillars: First, the impersonal nature of business implies that it cannot be responsible in a literal sense as only businesspersons can have responsibilities. Second, these corporate executives are merely agents, hired by principals – the shareholders of their company – to serve their interest and achieve the highest possible return on their investment. If social activities do not maximize the value of the firm, their pursuit is considered imprudent and irresponsible use of shareholder resources (Friedman, 1970). Other scholars point out that an efficient provision of goods or services simultaneously caters to the needs of the non-shareholding public, too (Gaski, 1985; Levitt, 1958).

Friedman argues that addressing wider social issues goes beyond both the mandate of companies and the competence of their management: While any businessperson, customer, or shareholder may show social commitment in private, but first and foremost, social affairs constitute a governmental responsibility (Relano and Paulet, 2014). Short, the neoclassical school of thought embraces *"shareholder-value theory"* and endorses a laissez-faire approach within which "the state, and not (...) firms, is in charge of correcting market failures and income or wealth inequality" (Bénabou and Tirole, 2010, 1).

For this reason, shareholder-value theory is often equated with unfettered profit maximization and exclusive focus on the interests of a company's owners. However, this view is inadequate, as three examples illustrate: First, Friedman himself qualifies that corporate behavior is only acceptable "so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud" (Friedman, 1962, 133). While relating to legal boundaries such as antitrust laws at first glance, this qualification may also imply compliance with society's "moral rules" (Donaldson, 1982, 68-69). Second, according to Phillips, Freeman, and Wicks (2003), the principle of shareholder-value maximization is informed by a notion of morality, namely the company's fiduciary duty owed to its shareholders (Phillips, Freeman and Wicks, 2003). Third, Friedman makes explicit references to a company's interest groups besides shareholders: For instance, corporate executives should consider that social activities may also harm employees and customers by lowering wages or raising prices (Friedman, 1970, 30-31). In other words, despite its name, shareholder-value theory acknowledges that the responsibility of companies may extend to some degree beyond their owners' financial demands.

These tentative acknowledgments of shareholder-value theory are taken up and further developed by the second school of thought: It argues that companies are part of society; a status which entails responsibilities besides profit maximization (Quazi, 1997). The roots of this reasoning date back to Adam Smith (1799) who, a moral philosopher himself, described how the "invisible hand" ensures that the pursuit of corporate profit yields the greatest possible benefit for society as well (Smith, 1799, 181). Over time, this convergence of individual and collective interest weakened due to changes in market conditions (Relano and Paulet, 2014). This situation created the need to explicitly define the role of companies in society – or, in other words, their corporate social responsibility.

The term "corporate social responsibility" was introduced by Bowen (1953), who sets forth that CSR "refers to the obligations of businessmen to pursue those politics, to make those decisions, or to follow those lines of actions which are desirable in terms of the objectives and values of society" (Bowen, 1953, 6). Two aspects limit the practicality of this initial definition: First, it assigns social responsibility to corporate executives, not to companies. As a consequence, social responsibility becomes an individual rather than a corporate commitment with potentially high personal costs (Falck and Heblich, 2007, 248-249). Second, Bowen's definition does not delimit the scope for CSR activities and therefore provides little guidance which societal objectives and values to consider. Both shortcomings are addressed by subsequent research efforts. First, Davis (1968) asserts that companies are very well responsible "to a variety of claimant groups in a variety of ways (...) and these claimants in turn have responsibilities to business because of their power to affect it" (Davis, 1968, 47). The underlying argument is that contemporary societies are characterized by pluralism rather than individualism, which implies that people increasingly coordinate, organize their interests, and interact via institutions such as companies. The result is corporate social responsibility in a literal sense, driven by a mutual dependency between all groups of society.

To address the second aspect and define a scope of CSR, Carroll (1979) specifies a company's social responsibilities in terms of four classes:

- Economic responsibilities: Profitably provide goods and services to society
- Legal responsibilities: Fulfil the legally binding requirements
- Ethical responsibilities: Meet society's ethical norms beyond legal compliance
- Discretionary responsibilities: Engage in social activities on a voluntary basis

The hierarchy of these responsibilities is clarified in Carroll (1991): Economic and legal responsibilities are compulsory for firms, ethical behavior is expected, and philanthropy – which replaces discretionary responsibilities – is desired by society.¹

A milestone in CSR research is provided by Freeman (1984), who personalizes the concept of CSR by stressing the relevance of "stakeholders", which can be "any group or individual who can affect or is affected by the achievement of the organization's objective" (Freeman, 1984, 46). This approach implies that companies are supposed to identify those societal actors that are critical to their business and to cluster them into stakeholder categories, e.g., employees, customers, and society at large, but also shareholders (Freeman and McVea, 2001). Aptly named "stakeholder theory" (Freeman, 1984, 181), this concept is characterized by a much broader scope than to shareholder-value theory. In its logic, CSR subsumes multiple managerial initiatives to address the claims of a company's specific stakeholders (Falck and Heblich, 2007).

Figure 1 summarizes these three key aspects of Freeman's theory: First, it shows that stakeholder theory is a comprehensive concept, which encompasses shareholder-value theory and extends its focus to additional internal and external socioeconomic actors. Second, as these actors need not be physical entities or one person may overlap in-person, companies need to focus on stakeholder claims rather than the stakeholders themselves. Third,

¹Carroll applies the same logic to define the "four faces of corporate citizenship" in his eponymous 1998 paper.(Carroll, 1998, 1) Both terms are often used interchangeably, as shown by Dahlsrud (2008).

the management of these claims within CSR activities builds upon stakeholder theory as a theoretical foundation.

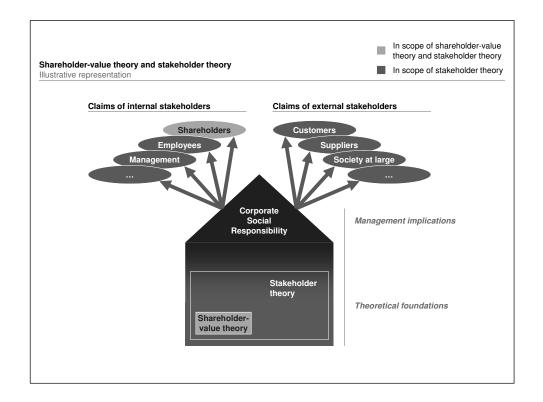


Figure 1 Shareholder-Value Theory and Stakeholder Theory

Source: Own representation based on Falck and Heblich (2007).

Shortly after its development, stakeholder theory was considered a key concept for management theory and practice (Donaldson and Preston, 1995; Margolis and Walsh, 2003). Stieb (2009) argues that it represents "one of the most prominent and well-known theories of business management" (Stieb, 2009, 402). However, over the years, scholars criticized stakeholder theory, particularly for its theoretical opacity (Brummer, 1991; Jensen, 2001) as well as its impracticality under real-world conditions (Donaldson and Preston, 1995; Hendry, 2001) or its misguided incentives for management (Jensen, 2001; Marcoux, 2003). These objections, which were partially refuted (Phillips, Freeman and Wicks, 2003; Freeman et al., 2010), may ultimately have kept stakeholder theory from becoming the prevailing management approach. Therefore, stakeholder theory is mainly used in practice for specific issues within business ethics and corporate social responsibility as well as for interdisciplinary management research these days (Laplume, Sonpar and Litz, 2008).

2.2 Key Characteristics

The previous section concludes that, in spite of considerable research into CSR and stakeholder management, both concepts are often criticized for their vagueness. A key driver of this situation is the lack of a clear definition of CSR; instead, Dahlsrud (2008) documents that there are nearly 40 common definitions for this concept. Some scholars argue that this results from the inherent features of CSR which render its definition a daunting task: Following Herzig and Moon (2012), CSR is an *"essentially contested"*, dynamic, and contextual concept which overlaps with other ideas (Herzig and Moon, 2012, 7). These four conceptual features are described in table 1.

Feature	Description	
	CSR is appraisive: The concept of CSR is regarded as gen-	
	erally valued	
	CSR is internally complex: There are multiple potential mo-	
	tivations to pursue CSR activities and socially responsible	
CSR is essentially	companies need to balance multiple and potentially conflict-	
contested	ing responsibilities	
	CSR is open-ended: There is no finite definition to the con-	
	cept of CSR	
CSR is dynamic	The scope of CSR changes over time	
CCD is a la inter	CSR is an umbrella term which overlaps with other concepts	
CSR is overlapping	of relations between business and society	
CCD is contented	The meaning of CSR depends on the specific setting in which	
CSR is contextual	it is used	

Table 1	Conceptual	Features	of CSR
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Source: Own representation based on Matten and Moon (2008) and Herzig and Moon (2012).

The classification of CSR as essentially contested results from the first three features in table 1: First, the assumption that CSR activities are appraised by the general public, which is one possible reason why companies may pursue CSR activities and report them. Second, the internal complexity of CSR, which means both that a company can implement one CSR initiative for multiple reasons – e.g., an energy efficiency program can be motivated by cost savings or environmental concerns – and that, in doing so, it must balance multiple responsibilities such as economic, legal, and environmental ones. (Moon, Crane and Matten, 2005). Third, the open-ended quality is partly implied by the first two features, but also echoes the observation that multiple definitions of CSR exist. The differences between them depend mainly on the defining party and their intention; for instance, a company that wishes wish to indicate socially responsible commitment or a

non-governmental organization (NGO) that seeks to criticize certain corporate behaviors (Herzig and Moon, 2012).

Dynamism means that, over time, different topics have dominated the agenda of CSR – from Carroll's (1979) four responsibilities to environmental topics and more recent aspects such as work-life balance (Herzig and Moon, 2012, 5-6). CSR also overlaps with various management concepts such as business ethics or corporate governance and is used synonymously with other theories, for instance, corporate citizenship or sustainable development. Finally, its contextual quality implies that the meaning of CSR changes in line with the setting within which it is discussed: Intuitively, the evolution of CSR from an academic theory rooted in the US to a managerial concept that is widely employed across countries is likely to be affected by the respective idiosyncrasies of these contexts (Herzig and Moon, 2012).

While this list of features may be collectively exhaustive, it is clearly not mutually exclusive: For instance, the overlaps between CSR and other concepts change over time, a result of its dynamism (Matten and Moon, 2008). This indicates how a change in one feature of CSR can affect another one via interactions and feedback loops.

As a consequence, there is no finite, authoritative definition of CSR – instead, it is "socially constructed" (Dahlsrud, 2008, 1). This implies that the general concept of CSR needs to be translated to a concrete context to determine its specific characteristics. Still, this approach presupposes that a set of fundamental CSR characteristics are established, which are commonly shared and accepted. This criterion is most likely to be met by the European Commission's (2001) definition of CSR as

"a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis." (European Commission, 2001, 6)

Three aspects render this definition particularly useful as a starting point for the following analyses: First, it is widely used. Second, it is comprehensive in scope and addresses multiple dimensions of CSR such as voluntariness and stakeholders as well as social, environmental, and economic responsibilities (Dahlsrud, 2008). Third, the definition is issued by a supranational institution that is unsuspicious of, e.g., corporate partisanship. In 2011, the European Commission updated its CSR definition to further encourage corporate social activities against the backdrop of the 2007-08 Financial Crisis and its repercussions on the real economy (European Commission, 2001). Its *"Renewed EU Strategy 2011-14 for Corporate Social Responsibility"* clarifies that

"corporate social responsibility concerns actions by companies over and above their legal obligations towards society and the environment" (European Commission, 2011, 3)

and emphasizes that

"to fully meet their corporate social responsibility, enterprises should have in place a process to integrate social, environmental, ethical, human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders." (European Commission, 2011, 6)

In combination, these statements provide the foundation to derive three qualities to operationalize CSR going forward. The first quality concerns the activity character of CSR, the second one its status within a company's economic activities and the third quality describes the scope of CSR.

First, CSR activities are voluntary and go beyond legal obligations. This is not a straightforward assumption, but a topic of long-standing discussions: One position claims that CSR includes mere abidance by the law. This way of thinking echoes Carroll's (1979) model of four CSR responsibilities, which explicitly include legal responsibilities. From this perspective, initiatives to tackle bribery or corruption would also qualify as CSR activities (Park, 2009).

An opposing attitude argues in line with the European Commission that "CSR is always about going beyond the law" (European Commission, 2009, 1). According to this school, voluntariness of action is characteristic for CSR and distinguishes it from compliance and regulation (McWilliams and Siegel, 2001; Scholtens, 2009; Garriga and Melé, 2004): In an early definition, Davis (1973) emphasizes that "social responsibility begins where the law ends. (...) It is a firm's acceptance of a social obligation beyond the requirement of the law" (Davis, 1973, 313). The relevance of this feature is illustrated by Dahlsrud (2008), who finds that CSR is equally defined in terms of topics covered and by voluntary actions taken to address them. These findings illustrate that voluntariness matters in two respects: First, in positive terms, as it represents a constitutive feature of CSR itself. Second, from an instrumental angle as this criterion helps reduce the overlap between CSR and related concepts.

Second, CSR activities are integrated within a company's regular operations. Again, this characteristic has evolved over time: As shown in the previous section, Carroll (1991)

describes that "business contributions of financial resources or executive time (...) to the arts, education, or the community" (Carroll, 1991, 42) are part of CSR. These philanthropic activities are, however, unrelated to a company's a core business activity. Still today, philanthropy remains a criterion to determine social performance: The MSCI ESG (formerly KLD Research & Analytics) database, a frequently used measure of corporate social performance (Hillman and Keim, 2001), uses corporate charitable giving as one indicator to determine a company's community engagement (Lougee and Wallace, 2008). This implicit foundations of these approaches is that firms which aspire to be socially responsible necessarily face a financial trade-off between donating money and using these resources productively for their core business activities.

Contemporary scholars emphasize that the trade-off argument only holds for discretionary philanthropy: CSR activities that are unrelated to a company's business are at best futile or even reduce a firm's value by diverting resources from its core operations (Luo and Bhattacharya, 2006). However, a "strategic CSR" (Sen and Bhattacharya, 2001, 233)) approach can create value for a firm. Therefore, the integration of CSR within a company's core business activities is key.

According to Porter and Kramer (2006), strategic CSR can yield benefits for both companies and society: The former are able to develop a competitive advantage by integrating selected CSR topics within their business activities. Thereby, society benefits from an optimal exploitation of the respective firm's skills and its resources for a social cause. CSR activities then no longer entail a trade-off, but rather a win-win situation for all the parties involved (McGee, 1998). Research suggests that CSR initiatives which are closely aligned with a company's business objectives are more likely to be launched and supported, too (Burke and Logsdon, 1996). For this reason, "doing good to do good", i.e., the pursuit of philanthropic CSR activities such as donations for the sake of doing good to society, is becoming less and less common. Instead, companies are increasingly shifting their efforts towards "doing good to do well" and leverage CSR strategically to achieve their financial objectives (Vogel, 2005, 20-21). To some extent, strategic CSR therefore constitutes a third way that reconciles a Friedmanite business focus with the notion that companies do have social responsibilities. Strategic CSR also provides a more compelling answer to the question why firms should engage in CSR activities than a pure philanthropy-based approach.

Third, CSR is about the management of stakeholder claims. Straightforward at first, this aspect and how it is approached by the European Commission carries three important implications: First, it establishes corporate responsibilities beyond the interests of shareholders, which companies are legally obliged to meet. Thereby, the European Commission takes a clear stand in the debate on the role of companies in society. Second, stakeholder theory implies that the scope of corporate responsibilities is comprehensive, but delimited. This is illustrated by figure 1. Third, the European Commission states that companies should address "social, environmental, ethical, human rights and consumer concerns" (European Commission, 2011, 6). On the one hand, this implies that a constant set of stakeholders exist that all companies, irrespective of their industry, should consider. On the other hand, it emphasizes the relevance of societal topics such as ethical or environmental considerations in a company's stakeholder management activities. This is in line with the idea that companies have intangible stakeholders, too, and supports the focus on stakeholder claims introduced in section 2.1.

This shows that an explicit definition of the essentially concept CSR is not required. Instead, the following sections draw upon the work done by the European Commission to operationalize corporate social responsibility in terms of three qualities: Voluntariness beyond legal obligations, integration of activities within a company's regular operations, and the management of stakeholder claims.

3 CSR and Stakeholder Claims Management in Banking

The previous chapter established the theoretical foundations of CSR in general. The objective of this chapter is to apply this theory to the banking industry. Section 3.1 finds that CSR is a meaningful aspect of contemporary banking with regard to banks' nonprofit expenditures, industry CSR initiatives, and the role of CSR in the 2007-08 Financial Crisis. Section 3.2 establishes a framework in which banks can implement CSR activities via both bank-internal measures and bank-external or lending activities to address the claims of primary and secondary stakeholders and are impacted by different interaction factors such as reputation. The findings of a comprehensive CSR survey among 479 university students, documented in section 3.3, suggest that the meaning of CSR in banking is adequately captured by this framework. Section 3.4 concludes.

3.1 The Relevance of CSR in Banking

Banks play a key role as financial intermediaries for today's economies (Freixas and Rochet, 2008, 1-2). This is mirrored by the dimensions of the banking sector: In the European Union (EU), the assets of monetary financial institutions are approximately equal to 350% of GDP (Liikanen, 2012, 11-12). This reach and relevance of banks renders them key actors in the EU's efforts to strengthen CSR. Consequently, this section demonstrates that and how CSR matters in contemporary banking: First, as section 3.1.1 shows, banks' nonprofit expenditures are significant as well as increasing and encompass a wide range of CSR activities with social, environmental, or educational purposes. Second, industry initiatives have increasingly institutionalized socially responsible practices and raised the profile of CSR in the financial sector, as summarized in section 3.1.2. Third, section 3.1.3 illustrates how both a lack of social responsibility and misguided good intentions have been identified as triggers or reinforcing factors in the 2007-08 Financial Crisis.

3.1.1 Corporate Expenditures

Section 2.1 showed that CSR was a well-established concept at the turn of the 21st century. At that time, banks were still hesitant to implement CSR policies and initiatives, as

Jeucken (2004) finds. Since then, banks have significantly ratcheted up their CSR efforts, which is also reflected in corporate expenditures.

For three reasons – which partly result from the characteristics of CSR – determining a bank's expenditures for corporate social responsibility is not a straightforward task: First, there is no authoritative definition of those activities which are in scope of CSR, as described above. Second, there is neither an obligation for banks to document their CSR initiatives nor a binding reporting framework, as section 3.1.2 will show. Third, a bank's CSR activities may be intertwined or overlapping with non-CSR business operations (Herzig and Moon, 2012), which impedes an outside-in mapping of corporate expenditures.

Intuitively, establishing a perspective on banks' CSR expenditures faces one additional challenge: Secondary data is not based on a notion of CSR as operationalized in section 2.2 and often includes philanthropic activities, donations, or charitable giving. This is also true for the "Giving in Numbers" survey, which is conducted annually by the Council Encouraging Corporate Philanthropy (CECP)² to capture the nonprofit expenditures of large companies across industries. Still, this survey is a valuable resource for benchmarks of corporate nonprofit expenditures across industries and over time and detailed breakdowns for financial firms and banks. As the CECP's most recent survey abandons this granular distinction (CECP, 2015*b*), all analyses are based on the 2014 report, which aggregates data for the reporting year 2013. While the absolute magnitude of these figures should be interpreted with caution, relative distinctions – e.g., on differences in expenditures between banks and non-banks – can still be made.

Bearing these caveats in mind, the CECP data suggests three insights into the financial relevance of CSR for banks: First, as section 3.1.1.1 shows, banks spend more on social and environmental topics than most other industries. Second, there is an upward trend in these expenditures, as illustrated in section 3.1.1.2. Third, section 3.1.1.3 finds that the nonprofit expenditures of banks and other companies focus on similar program areas as other companies.

3.1.1.1 Cross-Industry Benchmarking of Corporate Giving

The observation that banks exceed other industries with respect to nonprofit expenditures is illustrated by figure 2, which benchmarks the corporate giving of banks against financial institutions, the 100 largest US companies (Fortune 100), and a cross-industry average.

²The CECP is a forum, founded in 1999, of more than 150 CEOs that are "united in the belief that societal improvement is an essential measure of business performance". The associated companies are among the world's largest across industries and represent \$7 trillion in annual revenues (CECP, 2015a).

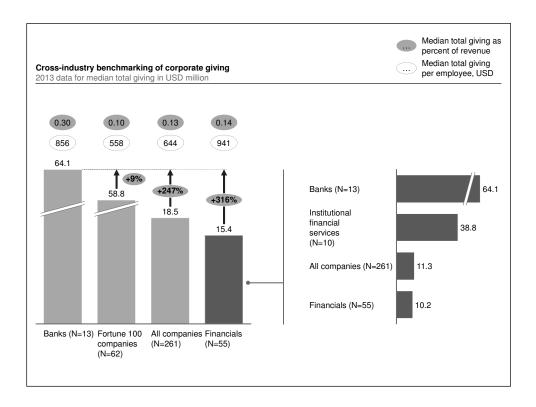


Figure 2 Cross-Industry Benchmarking of Corporate Giving

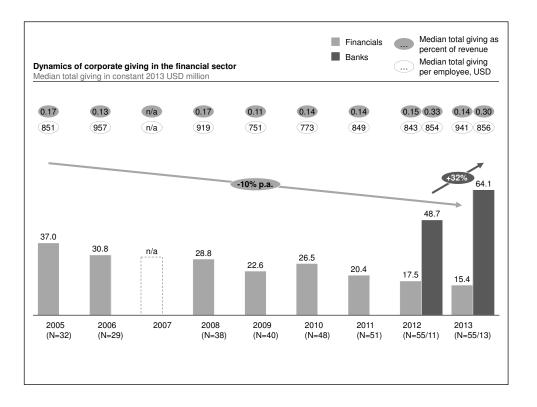
Source: Own representation based on CECP (2014). Notes: Absolute values rounded.

Three insights can be derived from figure 2: First, the chart on the left shows that banks' median total giving exceeds all three benchmarks: Banks spend approximately 3 times as much as the cross-industry average and about 4 times as much as financials in general for nonprofit purposes. This suggests a gap in corporate giving among financial companies, which is broken down on the right-hand side of figure 2. It shows that banks outstrip other financials – in particular insurance companies – in terms of nonprofit expenditures. Second, the same picture emerges when corporate giving is expressed as percent of revenues: The share of revenues that banks spend on nonprofit purposes is between 2 and 3 times bigger in comparison to all benchmarks. This suggests that that banks give relatively high priority to corporate giving. Third, banks nonprofit expenditures per employee exceed both non-financial benchmarks and are only surpassed by the general financials average.

While the CECP survey also captures charitable giving, its outcomes are directionally in line with CSR country-level studies: Truscott, Bartlett, and Tywoniak (2009) show that the financial sector in Australia is more active in CSR than other industries. Marin and Ruiz (2007) find high levels of CSR and significant spending in the Spanish banking industry. Taken together, these findings illustrate that *"the banking industry is one of the* main investors in CSR worldwide" (Pérez and del Bosque, 2012, 148). 3.1.1.2 Dynamics of Corporate Giving in the Financial Sector

The notion that CSR has quickly gained traction in banking is already implied by the benchmarking of figure 2 when considering the initially slow CSR adoption of banks (Herzig and Moon, 2012). A longitudinal analysis of corporate giving over in the financial sector, shown in figure 3, corroborates this argument.

Figure 3 Dynamics of Corporate Giving in the Financial Sector



Source: Own representation based on CECP (2014; 2013; 2012; 2011; 2010; 2009; 2008; 2007; 2006) and World Bank (2016). Notes: Absolute values rounded.

For financials in general, figure 3 shows that total giving more than halved from 2005 to 2013, implying a negative compound annual growth rate (CAGR) of -10%. This suggests that the sector's corporate giving has a cyclical component and fluctuates in line with business results, which developed similarly over this period (Schildbach et al., 2013). However, the share of financial companies' revenues given for nonprofit purposes remained nearly constant while median total giving per employee even increased by roughly 10%. This may be an indication that the relative share of nonprofit expenditures in the financial sector's budget planning is fixed and less volatile than a bank's workforce.

The CECP survey explicitly reports results for banks only recently. Yet, this snapshot of data suggests that banks defy the wider sector's trend in overall corporate giving: Banks'

median nonprofit expenditures increased by more than 30% from 2012 to 2013 and exceeded financials' spending by a factor of more than 2.5 and 4, respectively. Over these two years, banks' median total giving as a percent of revenue remained fundamentally unchanged at approximately 0.3% – twice the ratio spent by financials in general. Similarly, median total giving per employee increased only slightly over the same period. Due to the short observation period, these conclusions are subject to some empirical uncertainty so that it remains to be seen whether this trend persists.

Additional evidence for an upward trend in banks' CSR spending is provided by a survey among the 17 largest European banks on their past and planned expenditures for three CSR activities. Figure 4 summarizes this survey data.

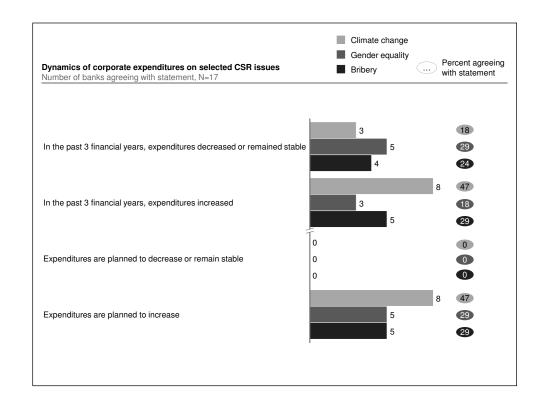


Figure 4 Dynamics of Corporate Expenditures on Selected CSR Issues

Source: Own representation based on Viganò and Nicolai (2009).

Notes: Percentage values rounded. Number of agreeing banks by statement may exceed sample size and percentages may not sum to 100 due to multiple-choice format.

The operationalization of CSR as a corporate activity beyond legal obligations in section 2.2 implies that measures to counter bribery, which are part of Vigano and Nicolai's (2009) survey, are out of scope for the present study. Still, banks' expenditures for the remaining issues suggest a twofold conclusion: For the past, the pattern is ambiguous – banks more often increased rather than decreased or maintained their financial efforts to mitigate climate change while the opposite is true for activities to promote gender equality. For the future, the plans seem clear: None of the surveyed banks reports plans to cut or maintain their level of expenditures for either of the two CSR activities. In contrast, nearly half of the banks in the sample plan to increase their financial efforts to mitigate climate change while approximately one third seeks to increase spending to promote gender equality. Considering that the survey was conducted immediately after the 2007-08 Financial Crisis, this is a remarkable outcome which underlines the significance of CSR for banks. In addition, it is in line with previous research: For instance, McDonald and Rundle-Thiele (2008) find that banks across high-income countries have increased their spending on CSR activities, a result replicated by Scholtens (2009). Research for emerging economies – for instance, India (Fatma, Rahman and Khan, 2014; Nakkeeran, Ananth and Arulraj, 2011) or different African (Achua, 2008; Folajin, Ibitoye and Dunsin, 2014) and Latin American countries (Prior and Argandoña, 2009) – yields similar results. This suggests that the upward trend in banks' CSR expenditures is a robust phenomenon.

3.1.1.3 Cross-Industry Benchmarking of Corporate Giving by Program Area

To compare the CSR focus topics and activities between banks and non-banks, the CECP survey data can be used again. Figure 5 provides a breakdown of corporate giving by program area for banks, financial companies in general, and a cross-industry benchmark.

As figure 5 demonstrates, the corporate giving of banks focuses on community and economic development (27% of corporate giving), education (26%), as well as health and social services (10%). Combined, these three program areas account for more than 60% of banks' nonprofit cash contributions. While financials and companies in general set similar priorities in corporate giving, a closer look shows that banks emphasize community and economic development more strongly than financials (23% of corporate giving) and especially companies in general (14% of corporate giving). The opposite is true for corporate giving to health and social services, which accounts for 27% of corporate giving across industries and 15% among financials. Corporate giving for educational purposes is broadly in line across all three industry clusters.

These top three priorities of corporate giving are corroborated by previous research: First, the 2015 "Business Backs Education" report finds that education spending plays a major role for banks. This is illustrated by the result that Banco Santander was ranked global

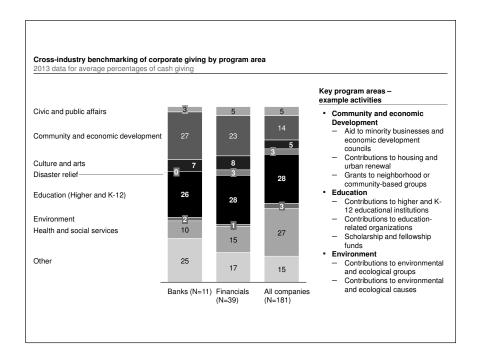


Figure 5 Cross-Industry Benchmarking of Corporate Giving by Program Area

Source: Own representation based on CECP (2014).

leader in CSR education spend two times since 2010. Similarly, Deutsche Bank takes the first place in education-related expenditures for German companies (Business Backs Education, 2015). Second, Decker (2004) finds that cooperative banks and commercial banks in the UK increasingly provide support for financial institutions and credit unions to stimulate community development. De Clerck (2009) shows that banks in The Netherlands, Canada, and France have launched similar programs. Economic development is mainly implemented by banks in terms of financial inclusion, the "delivery of financial services to disadvantaged and low income segments of society at affordable costs" (World Bank, 2015b), or via programs to encourage financial literacy. Both activities play a major role in banks' CSR efforts (Do, Tilt and Tilling, 2007; Gibbons, 2011; Pérez and del Bosque, 2012). Third, the relevance of spending for environmental purposes is underlined by the results of Viganò and Nicolai (2009) for European banks or Hoepner and Wilson (2010) for banking in general.

The outcome that similar priorities exist in the nonprofit expenditures among banks and companies in general suggests can be interpreted in two ways: On the one hand, it may be that CSR has become an established corporate concept, described by a finite set of topics that are – to some degree – shared across industries. On the other hand, the rather subtle differences between the priorities in corporate giving of banks and non-banks contrast with the outcome of section 2.2 that CSR strategies need to be as specific as possible. This may suggest that banks currently implement activities across a broad spectrum of

topics instead of launching targeted initiatives which are tailored to meet the claims of their stakeholders, possibly driven by limited transparency on this aspect.

3.1.2 Industry Initiatives

The relevance of CSR in banking is mirrored in a substantial number of industry initiatives, most of which were launched towards the end of the 20th century. This section provides an overview of this aspect by analyzing three major initiatives with banking relevance³: Section 3.1.2.1 introduces the United Nations Environment Programme Finance Initiative, which seeks to promote CSR in the financial sector as a whole. The Equator Principles, which govern CSR in project finance, are discussed in section 3.1.2.2. Section 3.1.2.3 analyzes the Global Reporting Initiative, which is concerned with the disclosure and reporting of CSR. The analysis shows that industry initiatives have increasingly institutionalized socially responsible practices and raised the profile of CSR in banking.

3.1.2.1 The United Nations Environment Programme Finance Initiative (UNEP FI)

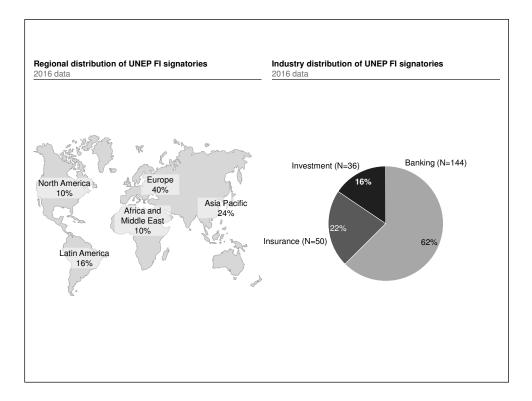
The first international initiative for CSR in the financial sector was initiated by the United Nations (UN). At the 1992 UN Conference on Environment and Development, the scope of the United Nations Environment Programme (UNEP) broadened towards promoting sustainable development in terms of environmental, social, and economic considerations. The financial sector's involvement was regarded as crucial to achieve this objective, resulting in the launch of the UNEP FI's predecessor - called the "Banking Initiative" as a public-private partnership between the UNEP and a small set of commercial banks (Hoepner and Wilson, 2010). The Banking Initiatives' objectives were twofold: First, the integration of environmental considerations into banks' value chains. Second, the increase in investments by banks into environmentally-friendly services and technologies (UNEP FI, 2016b). These objectives are formalized in the Banking Initiative's 1992 UNEP Statement by Banks on the Environment and Sustainable Development, a voluntary commitment by signatory banks to advance sustainability and environmental issues both within their operations and in public. The increasing relevance of the UNEP Statement is illustrated by a growing number of subscribers: Within five years' time, 165 banks signed up for the Banking Initiative, which was renamed Financial Institutions Initiative (FII) in 1997. This change in name both reflects its increasingly diverse membership structure and an ambition to further extend the Initiative's scope beyond banks, which was realized by the FII's 2003 merger with the UNEP Insurance Industry Initiative into the UNEP FI. This initiative describes its mission as "to bring about systemic change in finance to support a sustainable world" (UNEP FI, 2016a). Therefore, the UNEP FI develops stan-

³The Organisation for Economic Co-operation and Development (OECD) provides an overview of CSR initiatives in general (OECD, 2009). Peeters (2003) summarizes smaller CSR initiatives within the financial sector.

dards to incorporate sustainability and environmental issues into business operations and decision-making, offers trainings on sustainability in finance, and encourages networking and best-practice sharing among its members (Hoepner and Wilson, 2010).

Currently, the UNEP FI has about 230 member institutions from over 40 countries (UNEP FI, 2016c). As their regional distribution according to figure 6 illustrates, the majority of the Initiative's signatories (40% of all members) are European institutions. In addition, the industry breakdown on the right-hand side indicates that commercial banks represent by far the largest membership group across all nations (62% of all members).

Figure 6 Distribution of UNEP FI Signatories



Source: Own representation based on UNEP FI (2016c).

Short, there are two important takeaways from the analysis of the UNEP FI: First, the environment is only one factor to be considered by financial institutions these days – instead, the UNEP FI's pivot towards ESG factors shows that companies need to consider a broad range of issues and stakeholders. Second, figure 6 suggests that an investigation of CSR in the financial sector should in particular focus on European commercial banks.

3.1.2.2 The Equator Principles

Both environmental and social topics are in scope of the Equator Principles (EP), which dates back to a joint effort between four international banks and the World Bank's International Finance Corporation (IFC) (Hoepner and Wilson, 2010). Since their publication in 2003, 80 Equator Principles Financial Institutions (EPFIs) from 35 countries have subscribed to the EP. This initiative has a clear focus on emerging economies, where EP-FIs account for more than 70% of international project finance debt (Equator Principles, 2016a). Focusing on project finance, the EP represent a "risk management framework (...) for determining, assessing and managing environmental and social risk (Equator Principles, 2016a). Throughout their 2006 and 2013 revisions, the fundamental mechanisms of the EP remained unchanged: The EPFIs pledge to provide project finance or project finance advisory services only to those debtors who commit to meeting its principles. This implies, for instance, to perform environmental and social assessments (Equator Principle 2), to design and implement environmental and social management systems (Principle 4), but also to engage with stakeholders (Principle 5) and consider the interests of "in*digenous people*", mirroring the focus on emerging markets (Equator Principles, 2013, 7). This illustrates both the overall relevance of Freeman's (1984; 2001) concepts for the EP and how CSR needs to be constructed specifically or a certain environment.

Since their development, the Equator Principles have been subject to criticism, most of which has revolved around two aspects: First, the EP's efficiency – as Wu and Shen (2013) document, some studies have scrutinized whether banks comply with the EP on the surface, but do not actually follow the principles when granting loans. Instead, EP signatories have been accused of financing disputed projects such as the Three Gorges Dam on China's Yangtze River, or the Baku-Tbilisi-Ceyhan oil pipeline (Relano and Paulet, 2014). Second, the legitimacy of the Equator Principles has been criticized: The EP constitutes a voluntary industry agreement – therefore, its signatories are not accountable to, for instance, the IFC. NGOs, which were a key driver behind the original development of the EP, particularly found fault with this fact (Herzig and Moon, 2012; O'Sullivan and O'Dwyer, 2009).

The EFPIs' membership structure is summarized in figure 7. Similar to the UNEP FI's members, the geographical distribution on the left-hand side indicates that more than 40% of the signatories are European institutions. Although financial institutions in general are in scope, mostly commercial banks have subscribed to the EPs, as indicated on the right-hand side. This supports the conclusion drawn in section 3.1.2.1 to focus on European commercial banks going forward.

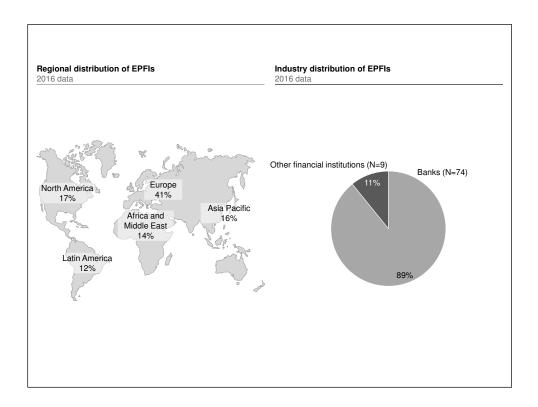


Figure 7 Distribution of Equator Principles Financial Institutions

Source: Own representation based on EP (2016b).

Note: "Banks" denotes to commercial deposit-taking financial institutions. "Other financial institutions" denotes to non-deposit taking financial institutions, e.g., development banks, export credit agencies, and infrastructure finance companies.

3.1.2.3 The Global Reporting Initiative

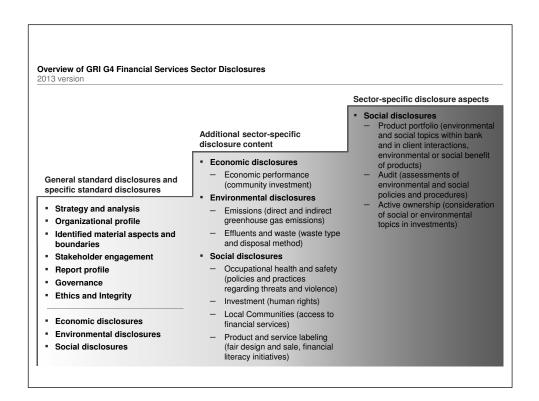
As described in Jeucken (2004), the financial industry has a high and increasing demand for CSR information which is accurate, easily available, and presented in a standardized format. Meeting this demand is the objective of the Global Reporting Initiative (GRI), which was launched in 1997 by the Coalition for Environmentally Responsible Economies (CERES) and the Tellus institute, two US nonprofit organizations. Since then, the GRI has developed into an independent institution that cooperates with other major CSR initiatives, e.g., the UNEP and the UN's Global Compact⁴. The mission of the GRI is to devise guidelines that companies across industries and organizations can apply to report on their economic, environmental, and social performance (Global Reporting Initiative, 2015). Due to their scope, these guidelines are often referred to as a "triple bottom line" or

⁴The UN Global Compact is a "strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption". Currently, the UN Global Compact has over 12,000 corporate participants and other stakeholders from over 145 countries, making it the largest global CSR initiative (United Nations Global Compact, 2015).

"triple P" reporting framework, as they account for profit (economic performance), people (social performance), and the planet (environmental performance) (Peeters, 2003).

As all major cross-industry frameworks, the GRI's guidelines face a trade-off between global harmonization of standards and considering sector-specific phenomena. Until 2010, the GRI's implicitly took a decision in favor of the former: Neither the GRI's inaugural 2000 guidelines nor their overhauled 2002 version offered sector-specific guidance. Yet, the third generation of the GRI's guidelines – released in 2006 – eventually received with so-called "Sector Supplements": For the financial sector, this information was published in 2008 and updated in line with the guidelines' fourth and most recent version (the G4 guidelines) in 2013 (Global Reporting Initiative, 2015). As shown in figure 8, these "G4 Financial Services Sector Disclosures" cover retail as well as commercial and investment banking, asset management, and insurance (Global Reporting Initiative, 2013).

Figure 8 Overview of GRI G4 Financial Services Sector Disclosures



Source: Own representation based on GRI (2013).

Figure 8 illustrates that the G4 Financial Services Sector Disclosures follow a threestep logic: First, financial services companies are to publish an extensive set of "general standard disclosures and specific standard disclosures". It is worth noting that economic information is also part of these disclosures in the first column of figure 8, which suggests that the GRI understands CSR as a broad and probably stakeholder-based concept. Second, "additional sector-specific disclosure content" exists for the financial industry: Financial companies are supposed to provide additional information within disclosure aspects that apply across industries. The GRI's guidelines emphasize content across three disclosure categories: Within economic disclosures, financial companies are supposed to detail the monetary and non-monetary dimensions aspects of their community investment activities. The sector-specific environmental disclosures encompass information on greenhouse gas emissions and waste. Finally, social disclosures cover a wide range of information, including health and safety practices, human rights in investments, or access to finance in local communities (Global Reporting Initiative, 2013, 9-19).

Third, the "sector-specific disclosure aspects" show that financials are to provide additional social disclosures of product responsibility (Global Reporting Initiative, 2013, 19-21). This aspect is broken down into the social and environmental dimension of the product portfolio, the coverage and frequency of corresponding audits, and the company's consideration of social or environmental topics in its active ownership of shares.

This analysis suggests that CSR reporting according to the G4 Financial Services Sector Disclosures, which are further detailed in two annexes and an implementation manual, is an elaborate process. Still, the – non-compulsory – GRI guidelines have been widely adopted within the financial industry: Already in 2009, almost 90% of the largest European banks used the GRI guidelines to produce their CSR reports (Viganò and Nicolai, 2009). More recent analyses for France, Germany, Spain, and the UK yield similar results (Gibbons, 2011). In addition to that, these reports typically cover the full range of GRI disclosure items and are externally assured (Pérez and del Bosque, 2012).

Yet, as Gibbons (2011) shows, critics have pointed towards three weaknesses of the GRI guidelines for the financial sector: First, a potential lack of consistency, as not all banks apply the non-compulsory GRI standards. Moreover, some banks which reference the GRI guidelines in their CSR reports do not apply them consistently. Second, even if the guidelines are used, different application levels – indicating the extent to which the guidelines are used in a specific report – limit transparency and comparability. Third, the requirements themselves have been criticized for encouraging only narrow impact assessments: For instance, banks are not required to determine whether branch closures affect access to finance in local communities, one disclosure item (Gibbons, 2011, 22).

The overview of the most important milestones in the development of these three initiatives in table 2 suggests three conclusions: First, there is a considerable number of CSR initiatives and regimes which are relevant for the financial sector. Banks can be both covered explicitly and implicitly within a broad approach to financial companies at large. As concluded in sections 3.1.2.1 and 3.1.2.2, the regional distribution of signatories renders the Equator Principles and the UNEP FI particularly relevant for European banks. Second, while the first initiative dates back to 1992, the majority of relevant events happened during the first and the second decade of the new millennium. This implies that CSR in banking increasingly gained traction over the last 25 years. Third, these more recent initiatives are characterized by a broadening in conceptual scope and mostly apply comprehensive concepts such as CSR or ESG rather than environmental concerns alone.

Year	Event	Institution	Industry	Scope
1992	Launch of UNEP Banking Initiative	UNEP,	Banking	Environ-
	(BI), publication of UNEP Statement	banks		ment
1997	Redraft of UNEP Statement, renam-			
	ing of UNEP BI as UNEP Financial	UNEP	Financials	CSR
	Institutions Initiative (FII)			
	Launch of GRI	CERES,	Cross-	ESG
		Tellus	industry	
	Launch of UNEP Insurance Industry	UNEP	Insurance	CSR
	Initiative (III)			
2000	Publication of 1^{st} version of GRI	GRI	Cross-	ESG
	guidelines		Industry	
2002	Publication of 2^{nd} version of GRI	GRI	Cross-	ESG
	guidelines		Industry	
	Design of Equator Principles (EP)	IFC, banks	Financials	ESG
2003	Merger of UNEP FII and III into	UNEP	Financials	CSR
	UNEP Finance Initiative (FI)		1 manetais	COR
	Publication of EP	EP As-	Financials	ESG
		sociation		
		(EPA)		
	Publication of 2^{nd} version of EP	EPA	Financials	ESG
2006	Publication of 3^{rd} version of GRI	GRI	Cross-	ESG
	guidelines		Industry	
2008	Publication of GRI Financial Sector	GRI	Financials	ESG
	Supplements			
2013	Publication of $3^{\rm rd}$ version of EP	EPA	Financials	ESG
	Publication of 4 th version of GRI			
	guidelines and Financial Services Sec-	GRI	Financials	ESG
	tor Disclosures			

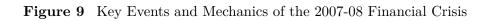
 Table 2
 Milestones of CSR Initiatives in Banking

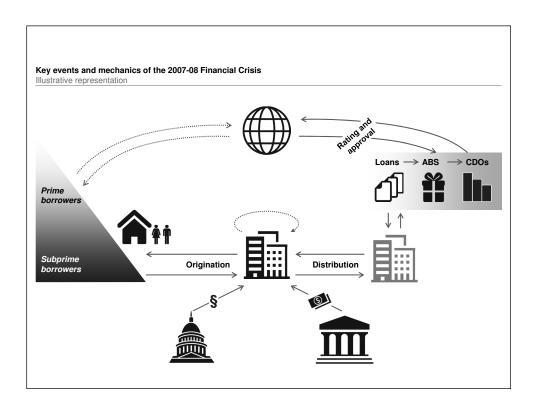
Source: Own representation based on EP (2016a), GRI (2015), Hoepner and Wilson (2010), Peeters (2003), and UNEP FI (2016b).

3.1.3 The 2007-08 Financial Crisis

The 2007-08 Financial Crisis stands for the worst turbulences in financial markets and the global economy since the early 1930s Great Depression (Brunnermeier, 2008). Banks played an important role at all stages of this crisis: They contributed to the build-up of a housing market bubble, then experienced the effects of its bursting from the frontline, and represented the focal point of ensuing regulation efforts. This section illustrates that both a lack of social responsibility and misguided good intentions have been identified as triggers or reinforcing factors in the 2007-08 Financial Crisis, resulting in growing attention paid to CSR in banking since then.

To conduct this analysis, it is necessary to briefly recap the key events and mechanics of the 2007-08 Financial Crisis⁵, which are illustrated by figure 9.





Source: Own representation based on BMF (2015).

⁵This overview focuses on the banking industry as well as events with relevance for an analysis in terms of CSR and neglects, for instance, the contagion from the financial sector to sovereign debt. For a comprehensive account of the roots of the 2007-08 Financial Crisis, see Brunnermeier (2008). Taylor (2009) provides an analysis of policy responses to the crisis. Reinhart and Rogoff (2011) describe how the crisis spilled over from the financial sector to the real economy and sovereign debt. For a European perspective of this phenomenon, see Lane (2012).

Figure 9 demonstrates that the roots of the 2007-08 Financial Crisis lie in an "originate and distribute" business model within the mortgage market for subprime borrowers: In the first step, banks originated loans to subprime borrowers⁶, who were granted mortgages under the assumption of a continuous rise in house prices. In a second step, these loans were distributed, i.e., transferred to off-balance special purpose vehicles (SPVs). Sponsored by banks, these shadow banking entities pooled the mortgages into residential mortgage backed securities (MBS) and bundled them into different tranches of collateralized debt obligations (CDOs), according to their risk and earnings potential. Rating agencies evaluated the quality of these products or derivatives, which were re-sold globally to investors, e.g., other banks (Brunnermeier, 2008, 79-82). By its very nature, the "originate and distribute" business model is reinforcing: Selling loans instead of holding them to maturity frees-up funds and makes them available for new loans. In addition to this intrinsic business model feature, three additional drivers stimulated growth in the subprime market segment before 2007:

The first driver is the institutional framework: US legislators encouraged homeownership among low- and moderate income borrowers, mainly via the federal lenders "Fannie Mae" and "Freddie Mac"⁷. This objective was formalized into quantitative affordable targets in the 1992 Housing and Community Development Act (Wallace, 1995). From 1999 onwards, Fannie Mae and Freddie Mac were pushed to further relax their credit requirements for the mortgages they purchased in the secondary market (The New York Times, 1999). Affordable housing was also prioritized by the Bush administration in the 2000s in order to promote an "ownership society" (The New York Times, 2007).

In line with the government's policies, the Federal Reserve System (FED) facilitated the housing boom in a twofold manner: First, by opposing the regulation of subprime mortgages and derivatives (The New York Times, 2008). Instead, the FED encouraged legislation that favored financial innovation such as the 2000 Commodity Futures Modernization Act to deregulate derivatives markets (Boz and Mendoza, 2010). Second, the FED kept interest rates intentionally low, which further facilitated access to credit for subprime borrowers (Taylor, 2009, 4).

⁶The Federal Deposit Insurance Corporation (FDIC) defines subprime borrowers by "weakened credit histories that include payment delinquencies, and possibly more severe problems such as charge-offs, judgments, and bankruptcies. They may also display reduced repayment capacity as measured by credit scores, debt-to-income ratios, or other criteria that may encompass borrowers with incomplete credit histories" (FDIC, 2015).

⁷The Federal National Mortgage Association (FNMA, often referred to as "Fannie Mae") and the Federal Home Loan Mortgage Corporation (FHLMC, often referred to as "Freddie Mac") are governmentsponsored enterprises that provide residential mortgage credit in the US secondary market, i.e., buy and pool mortgages to sell them as RMBS (FNMA, 2015).

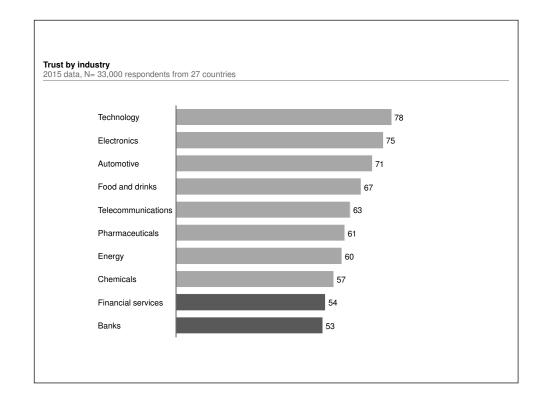
Practices within the financial sector were a second driver. As Brunnermeier (2008) summarizes, teaser rates (low introductory interest rates on mortgages, followed by higher, typically variable interest rates), no-documentation mortgages (loans which do not require a formal proof of income, assets, and liabilities), as well as piggyback mortgages (combinations of two mortgages to avoid down payments) became commonplace. These low lending standards increasingly replaced precautionary underwriting principles and background checks of mortgage applicants. Within the banking industry, short-term profits received greater attention to determine the performance and compensation of employees as well as managers. This further reinforced the origination of loans – in particular to high yield borrowers – for the purpose of distribution (Federal Reserve System, 2011, 4-6). Short, in terms of its business model and its corporate culture, commercial banking became increasingly similar to investment banking. As a corollary of this increased focus on capital markets, banks faced greater shareholder pressure, resulting in even stronger short-termism and risk-taking (Liikanen, 2012, 89).

The third driver was a global search for yield: In 2005, then FED chairman Bernanke pointed to a "global saving glut", referring to significant capital inflows in particular from Asia, which further decreased the already low level of interest rates⁸ (Bernanke, 2005). This development posed a challenge in particular for investors with fixed return obligations. As a consequence, many investors significantly increased the share of derivatives in their portfolios, spurred by the assumption that these instruments were high in yield, but low in risk (Boz and Mendoza, 2010). This search for yield phenomenon has been identified as a key driver behind the increase in demand for high-return asset-backed securities such as subprime RMBS (Liikanen, 2012, 13-14).

This crisis began in February 2007 with a growing number of defaults on US subprime mortgages, which then accounted for about 20% of all RMBS (Liikanen, 2012, 4). This situation escalated further when London Interbank Offered Rate (LIBOR) spreads rose over summer 2007 and increased the interest payments on – typically adjustable-rate – mortgages. In consequence, the number of delinquencies and foreclosures increased, which pushed house prices further down, creating a reinforcing spiral (Taylor, 2009, 7-8). This housing market slowdown had an impact beyond the issuing bank and meant losses for all investors which held derivatives backed by subprime mortgages such as other banks or investment funds, but also solvent private households. Consequently, demand for these structured products dried up – in particular, as defaults on mortgages became more widespread, proving previous favorable ratings and risk diversification assumptions regarding RMBS too optimistic (Brunnermeier, 2008, 81-4). Therefore, off-balance SPVs

⁸While Bernanke's strong version of a global savings glut has been challenged, other scholars have admitted to substantial positive savings gaps for countries outside the US (Taylor, 2009) and for periods after the year 2004 (Obstfeld and Rogoff, 2009).

faced increasing difficulties to roll-over their debt and required the financial support of their sponsoring banks. Beyond these potential liabilities to off-balance vehicles, banks incurred direct costs by write-downs on loans and derivatives as well as further losses due to widespread uncertainty about their holdings of troubled assets (Brunnermeier, 2008, 94-96). The total sums are estimated to be massive: The International Monetary Fund (IMF) reckons that the losses associated with the 2007-08 Financial Crisis amount to USD 4.1 trillion (IMF, 2009). Recent estimates put the total costs for the US economy as a whole in the range of USD 6 trillion to USD 14 trillion (Atkinson, Luttrell and Rosenblum, 2013). More difficult to quantify but equally severe is the impact on confidence in the financial sector. As figure 10 shows, a recent survey finds that trust in financial services in general and banks in particular is low across countries: Only slightly more than 50% of the 33,000 participants agree that these industries are trustworthy.





Source: Own representation based on Edelman (2015).

A growing body of literature suggests that these events can be approached from a CSR perspective. The majority of these publications focuses on insufficient levels of corporate social responsibility – particularly a lack of ethics – as a main crisis trigger.

First, origination practices have been characterized as "unethical" (Hoepner and Wilson, 2010, 13): As Brunnermeier (2008) documents, low lending standards were applied partic-

ularly to "no income, no job, or assets" mortgage applicants (NINJAs). Similarly, the US government's Financial Crisis Inquiry Commission (FCIC) describes in its 2011 report how subprime lenders systematically identified "the elderly, minorities, and borrowers with lower incomes and less education" as target groups and then applied "predatory, (...) abusive, (...) deceptive, or high-pressure sales tactics" (FCIC, 2011, 78). At the same time, unethical practices existed among borrowers, too: Argandoña (2009) documents that some borrowers took out a mortgage with the intention to default on it and purchase a bigger house shortly after.

Second, banks' distribution activities suggest a lack of social responsibility: Keys et al. (2010) show that the possibility to securitize loans reduced the quality of banks' subprime mortgage applicants screening. This can be considered a negligence towards to two stakeholder, namely the borrowers themselves and a bank's investors, who ultimately bear the risks and losses of a bank's activities. Consequently, Flannery, Kwan, and Nimalendran (2013) find that investors faced increasing difficulties to assess the firm value of banks over the course of the crisis. The interactions between banks and rating agencies, originally meant to boost transparency in financial markets, are also linked to irresponsible behaviors: First, rating agencies were paid for their ratings by the issuing bank. This created a conflict of interest for the rating agencies between ensuring quality in assessments on the one hand and realizing higher profits on the other hand. This trade-off was further complicated by the fact that the evaluation of derivatives generated higher fees for rating agencies than the assessment of other, less complex financial products. Second, banks and rating agencies often cooperated to achieve "ratings at the edge", i.e., jointly ensured that the tranches of a CDO exactly met the minimum standards for a certain – typically the highest – rating category (Brunnermeier, 2008, 81). As a result, the rating agencies systematically underestimated risks at the expense of investors (Taylor, 2009).

The third and probably most common example how insufficient levels of CSR contributed to the 2007-08 Financial Crisis is staff compensation in banking. A frequently-cited view is that the "outrageous" salary levels of bank executives contributed to irresponsible behavior, in particular excessive risk-taking (Visser, 2008). However, research shows that the pre-crisis compensation levels of large-bank chief executive officers (CEOs) in the US were similar to the sums received by CEOs in other industries. Yet, the compensation structure is characterized by a significantly higher weighting of variable, short-term remuneration components for bank executives (Bebchuk, Cohen and Spamann, 2010). Moreover, executive pay in banking is more strongly positively correlated to both changes in the respective firm's stock prices (performance-based pay) and especially changes in the volatility of stock returns (risk-based pay) than in other industries. Strongly risk-based pay in turn constitutes a meaningful predictor of above-average RMBS investments, offbalance sheet activities, and overall risk-taking (DeYoung, Peng and Yan, 2013). The finding of an overweighting of variable remuneration components is echoed by the IMF's 2014 Global Financial Stability Report, which indicates that, over the 2006-07 period, fixed salaries accounted for less than 30% among European and not even 20% of total compensation among US banks (IMF, 2014). As illustrated in Kane (2009), short-term incentives that encouraged irresponsible behavior were commonplace on all levels of the organization; for instance, mortgage brokers' compensation considered only the number of mortgages signed, not the borrower's creditworthiness, which drove risk-taking and even fraudulent behaviors. Still before the outbreak of the 2007-08 Financial Crisis, Citigroup's Chuck Prince, stated that "as long as the music is playing, you've got to get up and dance. We're still dancing" (Brunnermeier, 2008, 82), admitting to incentives which promoted increases in risk and leverage beyond sustainable levels of risk. Therefore, scholars have argued that a stronger emphasis on long-term objectives and overall responsible business practices could have mitigated this development (Argandoña, 2009).

However, there is also a diametrically opposed interpretation of the role that CSR played in the 2007-08 Financial Crisis: As described in Herzig and Moon (2012), this position claims that CSR contributed to the crisis "by legitimising a fundamentally irresponsible social agenda of extending credit to people who could not repay loans and then risked even greater financial difficulty" (Herzig and Moon, 2012, 44). This may point to the US government's affordable housing strategy, which aimed at promoting homeownership particularly among the socially deprived. Similarly, Atikison, Littrell, and Rosenblum (2013) explain the deregulation of derivatives markets and political pressure on lenders – especially the GSEs Fannie Mae and Freddie Mac – in terms of "misguided government incentives" (Atkinson, Luttrell and Rosenblum, 2013, 2). The authors argue that these actions were meant to achieve social goals, but in fact distorted financial markets and sound lending practices.

It should be noted that these two positions of insufficient and excessive, but misguided, CSR are not mutually exclusive. Instead, they illustrate that CSR may help to explain different phenomena which fueled the 2007-08 Financial Crisis. Consequently, CSR has received renewed attention from legislators in the aftermath of the crisis. Probably the clearest and most powerful reference exists in the "Leaders' Statement" of the G20's 2009 London Summit, which contains a pledge of the participating heads of state to "support (...) the corporate social responsibility of all firms". What contributes to this commitment's particular relevance is that it establishes CSR as a lever – next to, for instance, enhanced regulation – within the G20's agenda of "strengthening the financial system" (G20, 2009, 4).

One final reason why CSR assumes a prominent role within the global post-crisis financial architecture is its function to create trust in markets (Gibbons, 2011). As Hoepner and

Wilson (2010) illustrate, the 2007-08 Financial Crisis triggered a simultaneous breakdown of multiple trust relationships between banks and their investors, other financial institutions, and customers as well as the wider public. However, trust is a key prerequisite for a properly functioning banking sector, which critically depends on the assumption of ethical behavior in relationships. In business contexts, this can be achieved by a quasiinstitutionalized recognition of stakeholder interests beyond shareholders – in other words, by CSR⁹ (Argandoña, 2009, 18-9). As recent survey results show, trust in the financial sector and banks in particular remains low in comparison to other industries (Edelman, 2015). This underlines the need for sustained CSR efforts in banking.

Therefore, the third reason why CSR in banking matters is the 2007-08 Financial Crisis. One reason is that its main events and dynamics be accounted for both in terms of insufficient levels of social responsibility and misguided good intentions. In addition, this crisis has created the need for banks to engage in CSR to respond to increased political demands and to re-establish lost trust. CSR scholars and practitioners argue that this process will result in a re-orientation of CSR away from philanthropy towards activities which are embedded into a company's business activities (Herzig and Moon, 2012; Visser, 2008). Going forward, CSR as operationalized in section 2.2 is therefore likely to gain further importance.

The demonstration that corporate social responsibility – and the ways in which it manifests – constitutes a meaningful aspect of contemporary banking may raise the question whether this concept is different from CSR in other industries. A set of insights into this topic can be derived from the discussion in this section: On the one hand, it needs to be emphasized that CSR in banking takes place against the background of the 2007-08 Financial Crisis. As illustrated by figure 10, banks therefore face both a particularly challenging starting position from which they develop and implement their CSR strategy as well as a great sense of urgency to leveraging CSR and restore public trust (Gibbons, 2011). This is exacerbated by the major role of trust for the efficient provision of banking services (Hoepner and Wilson, 2010). By comparison, the overall situation for CSR initiatives is considerably more favorable for advanced and traditional industries as their public image has improved significantly over recent years (The Economist, 2013*a*) and their dependency on trust is relatively lower.

On the other hand, the above review highlights a number of commonalities between CSR in banking and in other industries. For instance, multiple CSR frameworks – such as the GRI guidelines – either apply across industries or include multiple sector-specific provi-

⁹In a 2009 speech, Jose Manuel Barroso, then President of the European Commission, shared this instrumental view of CSR by calling a "new culture of ethics and responsibility" crucial "not just to restore the brand image of particular enterprises but to restore people's faith in the market economy itself" (Gibbons, 2011, 13).

sions (Global Reporting Initiative, 2016). Other regimes such as the UNEP FI matter for financials beyond banks. In addition, the structure of banks' non-profit expenditures according to figure 5 is broadly in line with the general cross-industry average. Slightly different patterns mostly exist at the industry level where different sectors tend to focus on those priority areas which are particularly relevant for their respective business: One example is that health care companies allocate 72% of their nonprofit expenditures to health and social services while the particularly energy-intensive utilities and companies operating in the basic materials industry allocate nearly 10% of their funds to environmental programs (CECP, 2014, 18).

This outcome suggests two differentiated conclusions: First, CSR remains a concept which needs to be constructed for a specific context, as discussed in section 2.2. The immediate consequence is that a specific construct of CSR for a certain industry is required to determine the differences and similarities with CSR in banking. For some industries – and, as far as possible, in general – this aspect has been sketched in the previous paragraphs. Second, the potential to discover commonalities is likely to be higher for related financial services providers: Similar to banks, these companies suffered a decline in public trust after the 2007-08 Financial Crisis and set similar priorities in their nonprofit spending while being governed by comparable CSR frameworks. As CSR in banking was discussed precisely in terms of these three features, at least some of the insights derived for banks are likely to apply for asset managers or insurers, too.

3.2 CSR in Banking – Theoretical Foundations

To complement these findings, the following section investigates the theoretical foundations of CSR in banking. Therefore, the first research question is broken down into three aspects: First, who are the stakeholders of banks? Second, how can banks address the claims of their stakeholders? Third, which other factors affect these activities and how?

The three subsections 3.2.1, 3.2.2, and 3.2.3 each correspond to one of these issues. In combination, their results establish a framework in which banks can implement CSR activities via both bank-internal measures and bank-external or lending activities to address the claims of primary and secondary stakeholders and are impacted by different interaction factors such as reputation. While this result is derived specifically for the banking industry, the overall analysis approach can be applied to establish relevant stakeholders, CSR channels, and interaction factors for a given industry.

3.2.1 Bank Stakeholders

As analyzed in section 2.2, the meaning of corporate social responsibility needs to be *"socially constructed in a specific context"* (Dahlsrud, 2008, 7). When CSR is implemented as a stakeholder management approach, the implication is clear: Companies need to identify those stakeholder claims which matter specifically to their industry or even their individual business. This conclusion holds across industries and therefore also for banks.

3.2.1.1 Existing Approaches

Within the existing body of literature, there are two major approaches to the overall topic of stakeholders in banking: The first one focuses on selected stakeholders and their relevance in banking. For instance, early research looks into the stakeholding character of relationships between borrowers and banks (Slovin, Sushka and Polonchek, 1993). McDonald and Rundle-Thiele (2008) extend this analysis to bank customers in general – depositors and borrowers in both retail and business segments – which they regard as *"the centre of a network of stakeholders"* (McDonald and Rundle-Thiele, 2008, 180). Girard and Sobczak (2012) investigate the particular importance of shareholders, customers, and employees for banks. De Clerck (2009) looks into the influence of ethical considerations on banking. Bouma, Jeucken, and Klinkers (2001) document how banks increasingly consider the environment as a stakeholder.

Yet, this approach deserves a rather mixed overall assessment: On the one hand, it mostly provides in-depth analyses of the relationships between a bank and certain stakeholders. On the other hand, it typically follows a narrow, top-down research focus without a comprehensive identification of a bank's stakeholders in the first place and may therefore risk neglecting important stakeholders.

The second approach aims to establish precisely a picture of stakeholders in banking which is as comprehensive as possible. One example can be found in Jeucken (2004), which is shown in figure 11. It suggests that a bank's stakeholders can belong to one of two surroundings¹⁰: A bank's internal surrounding is made up of those stakeholders which are legally part of the company such as employees and its management. The external surrounding encompasses all other groups or individuals which are not legally linked to the bank, but are stakeholders in a sense that they can affect or are affected by the bank's objectives, as defined by Freeman (1984). Most of these are stakeholders with business-related claims such as customers or suppliers. Other external stakeholders include different levels of government, the media, or society in a wider sense. Shareholders

¹⁰These surroundings are also referred to as a firm's "environments" in the management literature. Following Jeucken (2004), the term "surrounding" is used to avoid confusion between this concept and the environment as a potential stakeholder.

can be allocated to both surroundings, depending on whether their legal or the economic quality of their relationship with the bank is emphasized (Jeucken, 2004, 124-6).

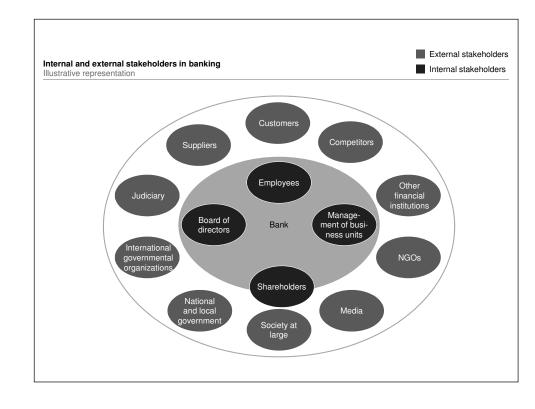


Figure 11 Internal and External Stakeholders in Banking

Source: Jeucken (2004).

Reviews of CSR reports suggest that the overview in figure 11 indeed covers the majority of a bank's potential stakeholders (Strandberg, 2005; Pérez and del Bosque, 2012). However, this bottom-up approach suffers from three shortcomings which limit its usefulness for the present study: First, it still does not provide a 360° perspective of stakeholders in banking. In particularly, it misses out on what Jeucken refers to as "socially funded stakeholders" (Jeucken, 2004, 124), such as the environment or ethical and moral standards. Second, it captures the stakeholder management aspect of CSR, but not that its activities go beyond mere legal compliance and are integrated into a firm's core business operations. For instance, the government and the judiciary are included though their role is to provide and enforce the legal preconditions for business (Jeucken, 2004, 127). This it at odds with the qualities of CSR according to section 2.2 and results in an inflated list of stakeholders. Third, Jeucken provides more of a bank stakeholder overview than a CSR framework: The distinction between internal and external stakeholder is primarily based upon economic and legal criteria and does not imply a prioritization between or within the two categories. Moreover, the relations between a bank and its stakeholders are described on a level of granularity which does not enable banks to implement targeted CSR activities.

3.2.1.2 A Revised Approach

When taken individually, neither the top-down perspective on selected bank stakeholders nor a bottom-up stakeholder overview provides are adequately comprehensive, actionable, and theory-driven. This section addresses this issue in a three-step approach: The first step identifies a bank's stakeholders in a way which is both holistic and in line with the previous operationalization of CSR. As a second step, the model by Mitchell, Agle, and Wood (1997) to classify stakeholders is introduced. Third, this model is applied to a banking context.

The natural starting point for identifying any company's stakeholders is its value chain (Donaldson and Preston, 1995; Hillman and Keim, 2001). As Freixas and Rochet (2008) clarify, the original banking business model is based on issuing long-term loans and funding these by taking in short-term deposits on a revolving basis¹¹. Together, depositors and borrowers therefore constitute a bank's customer base, which are served by a bank's employees, including its management, as financial intermediaries. As most commercial banks are private companies, its shareholders¹² are a key stakeholders as well. This illustrates the approach to stakeholder management as a concept which encompasses shareholder-value theory, as illustrated in section 2.1.

The value chain analysis therefore results in an initial set of three stakeholders: Bank customers, employees, and shareholders. They represent a bank's "primary" stakeholders, defined as a group "without whose continuing participation the corporation cannot survive as a going concern" (Clarkson, 1995, 106).

Moving beyond the core value chain yields two a set of two additional bank stakeholder: The first one are suppliers, whose relevance is well-documented in the general CSR literature (Clarkson, 1995; Hillman and Keim, 2001; Tirole, 2001). Unlike, for instance, manufacturing companies, banks depend on suppliers only to a very limited extent¹³, which is why suppliers are not part of a bank's core value chain. The second stakeholders are the media, which were introduced into the stakeholder debate by Freeman (1984), mainly for their capability to influence, as illustrated by Donaldson (1995). Similarly,

¹¹This business model accounts for approximately 50% of revenues of European corporate banks (McKinsey & Company, 2012). The remainder of this paper therefore focuses on deposit-taking and lending and abstracts from other business lines such as investment banking.

¹²The term "shareholders" typically refers to the owners of a listed stock corporation and will be used in this way in the remainder of this paper. In a more general sense, it may refer to the owners of a company in general, thereby covering alternative legal forms of bank ownership such as cooperative or mutual structures.

¹³"Suppliers" are understood in the narrow sense of the word as providers of goods or services that are required for the development of a specific product or service by another company. This excludes suppliers of financial capital (i.e., depositors) or human capital (i.e., employees), which are in turn part of the bank's core value chain.

Clarkson (1995) describes the media as being able to mobilize public opinion to the advantage or to the disadvantage of company. However, as companies do not depend on neither of the two for their economic success and survival, suppliers and the media are categorized as "secondary stakeholders" by Clarkson (Clarkson, 1995, 107). In the following, the two stakeholders will be referred to as "tangible secondary stakeholders". This terminology takes up the idea that suppliers and the media have only indirect significance for banks and emphasizes that both denote individuals or groups which physically exist.

The final set of a bank's stakeholders is identified by regarding a bank as an institution within society, which may expect banks to meet responsibilities beyond the realm of their value chain (Jeucken, 2004). For this reason, the stakeholder overview in figure 11 considers "society at large". However, research suggests that this view is incomplete as banks consider both ethical and environmental topics as much as social matters (De Clerck, 2009; Bouma, Jeucken and Klinkers, 2001). Similarly, responsible investing is typically described in terms of social, ethical, and environmental criteria (Nilsson, 2008), which provides further support for including these stakeholders. Environmental and social criteria are also components of the ESG framework, which was introduced as a concept similar to CSR in section 3.1.2.1. All three stakeholders are characterized by two common elements: First, their conceptual, immaterial nature. Second, just like the media and suppliers, they are not immediately relevant for a bank's core economic activity. For this reason, society, ethics, and the environment constitute "intangible secondary stakeholders" for banks.

Intuitively, this final set of stakeholders does not represent tangible persons or groups the way employees or shareholders do. Instead, all three intangible secondary stakeholders can be regarded as content-based categories of claims on a bank or a bank's different corporate responsibilities. These result from the position of the company as an entity in society (Moon, Crane and Matten, 2005; Carroll, 1998) and each emphasize a specific dimensions of its corporate actions, such as their social, ethical, or environmental implications. Echoing the research approaches of the relevant literature (Phillips, Freeman and Wicks, 2003; Mitchell, Agle and Wood, 1997; Donaldson and Preston, 1995), the subsequent analyses therefore focuses not on stakeholders but on their claims, which do not need to be associated with a physical person or group. This change in perspective towards stakeholder claims also allows to examine the true relationship between a company and its intangible stakeholders such as the environment itself without introducing additional and potentially distorting layers such as environmental interest groups. At the same time, considering society, ethics, and the environment within a stakeholder – or stakeholder claims – management approach is in line with more inclusive definitions of the subject matter: For instance, Nutt and Backoff (1992) abstract from persons and groups to define stakeholders as "all parties who will be affected by or will affect (the organization's) strategy" (Nutt and Backoff, 1992, 439), which allows to integrate intangible topics such as ethical claims more easily (Bryson, 2004).¹⁴ In addition, the role of the three intangible secondary stakeholders is widely acknowledged in fundamental stakeholder management theories: First, society and social communities are explicitly included as stakeholders in Clarkson's (1995) framework. Taking a wider perspective, Carroll (1991) refers to the "public at large" – or society – as one corporate stakeholder (Carroll, 1991, 44). Second, "ethical responsibilities" are a constant basic component of Carroll's different CSR and stakeholder frameworks (Carroll, 1998, 1991, 1979). Third, Mitchell, Agle, and Wood (1997) explicitly discuss the environment as one corporate stakeholder. Ultimately, strategic management against the background of societal, ethical, and environmental considerations is discussed by Freeman and McVea (2001). The approach pursued in the remainder of the present study integrates these insights in a twofold manner: While society and social issues, ethics and morale, and the environment are in scope of the bank stakeholder analysis, these stakeholders are defined in terms of their claims rather than their physical existence.

Figure 12¹⁵ summarizes the resulting refined overview of primary and secondary stakeholders. A comparison to figure 11 shows two major differences: First, while Jeucken (2004) differentiates between internal and external stakeholders, figure 12 introduces a three-level structure. Its purpose is to distinguish primary and secondary stakeholders based upon their criticality for a bank's survival and to additionally break down the latter stakeholder set according to their tangibility. Second, for three reasons, the number of stakeholders in figure 12 is considerably lower than in Jeucken's overview: First, the requirement that CSR activities are voluntary in nature implies that the judiciary and the government as well as governmental organizations are out of scope. Second, while NGOs in general are included Jeucken's overview, figure 12 understands nongovernmental organizations as advocates of the three intangible secondary stakeholders. As research suggests, social, environmental, and ethical topics indeed constitute main areas of NGO work (Vakil, 1997). Provided that NGOs do not pursue any additional self-interests, a direct focus on the content of their work represents a more granular approach than considering this stakeholder group in general. Third, when regarding bank executives as stewards of a company's owners and their interests (Davis, Schoorman and Donaldson, 1997; Donaldson and Davis, 1991), only shareholders need to be considered.

The refined overview of figure 12 represents only an intermediate result. In a second step towards a specific, successful CSR strategy, these stakeholders and their claims need

¹⁴Even more inclusive definitions such as Starik (1994) describe stakeholders as "any naturally occurring entity which affects or is affected by organizational performance" (Starik, 1994, 92), thereby extending the scope to inanimate objects, the solar system, and past as well as future generations (Friedman and Miles, 2006, 9-10).

¹⁵To improve readability, figure 12 refers to the intangible secondary stakeholders as "society", "ethics", and "environment". This abbreviated nomenclature will be used for all figures and tables in the remainder of this paper.

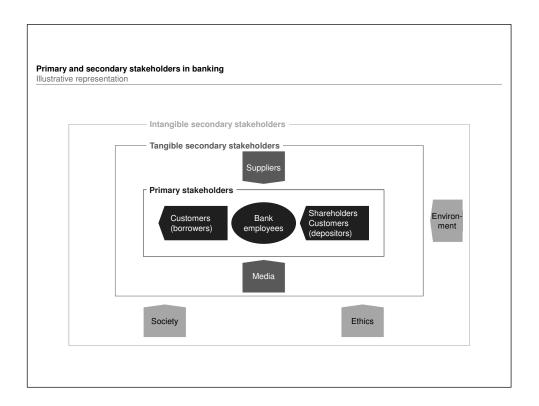
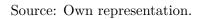


Figure 12 Primary and Secondary Stakeholders in Banking



to be classified according to their characteristics and the quality of their relation to the respective company (Van Marrewijk, 2003). In a seminal paper, Mitchell, Agle, and Wood (1997) suggest that these classes can be distinguished by a stakeholder's factual or attributed possession of three attributes.

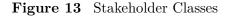
The first stakeholder attribute is power, defined as the "relationship among social actors in which one social actor, A, can get another social actor, B, to do something that B would not have otherwise done" (Mitchell, Agle and Wood, 1997, 869). Power can be exercised in a coercive, utilitarian, or a normative way – i.e., rely on physical, financial, or symbolic resources for its implementation. This general definition allows to capture companystakeholder relations in which either of the two parties has power over or depends on the other as well as mutual dependencies. However, applying the power criterion alone may overestimate the number of relevant stakeholders and their relations with a company as only one actor's individual capabilities to influence another actor are considered (Mitchell, Agle and Wood, 1997, 862-865).

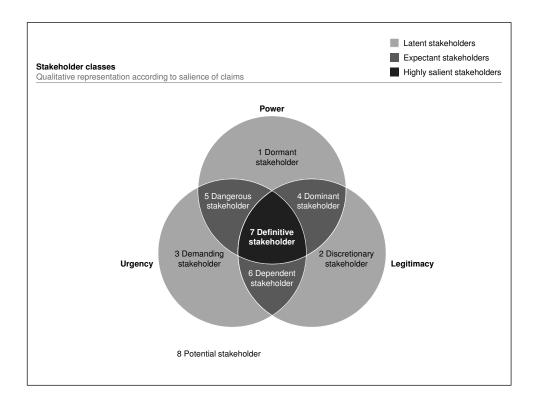
Legitimacy, the second attribute, counteracts the power criterion's overestimation tendencies: It emphasizes that the claims of stakeholders on a firm need to be legitimate, meaning "desirable, proper, or appropriate within some socially constructed system of *norms, values, beliefs, and definitions* "(Mitchell, Agle and Wood, 1997, 866). For instance, legitimate claims are based upon an existing or attributed contract, at-risk status, or a moral right or interest – in other words, they are accepted or expected in society. In the following, particular emphasis is put on claims the legitimacy of which is not a result of contractual or legal obligations to maintain the operationalization of CSR as a corporate activity which goes beyond compliance. This illustrates how the legitimacy adds a normative, social perspective to stakeholder relations by focusing on who *should* be considered by a company. Together with power, legitimacy therefore constitutes a "core attribute" of this model (Mitchell, Agle and Wood, 1997, 862-865).

The third attribute is urgency, referring to "the degree to which stakeholder claims call for immediate attention" (Mitchell, Agle and Wood, 1997, 867). The first condition for claim to be urgent is time sensitivity: A stakeholder must consider a delay in meeting their claim as highly unacceptable, based on their individual and possibly situational perception. The second condition is the claim's criticality, i.e., its high level of importance for the stakeholder. Again, various factors can contribute to a claim's criticality – for instance, stakeholder sentiment, illustrated by multiple generations of investors who hold shares in a specific company, irrespective of the its economic performance) or expectations, such as employees who await their year's end bonus. The urgency criterion complements the core attributes of power and legitimacy like a catalyst and thereby allows to capture the dynamics of stakeholder-company relationships (Mitchell, Agle and Wood, 1997, 864-868).

As the authors emphasize, there are three features of power, legitimacy, and urgency, which apply both for stakeholders as well as their claims: First, a stakeholder's attributes may vary over time. For instance, the power of a stakeholder can increase or decrease – for instance, after exercising it in a way that is regarded as irresponsibly by society. Second, the attributes are social constructs rather than objective concepts. This implies that the decision whether or not a claim is legitimate depends on multiple actors and their views. Third, stakeholders may or may not be aware of possessing an attribute – such as power – and, if they are aware, may choose not to behave correspondingly and, e.g., exercise their power.

The stakeholder model's dynamics are further reinforced by interactions between the three attributes: For instance, a both powerful and legitimate claim also possesses authority. A combination of multiple attributes increases a claim's salience and thereby its likelihood to be given priority at management level over another stakeholder claim (Mitchell, Agle and Wood, 1997, 868-870). Figure 13 illustrates these relations between the three stakeholder attributes. It shows how stakeholders can be allocated to three different classes, depending on their factual or attributed possession of power, legitimacy, and urgency, and how these classes determine the managerial salience of the respective stakeholder's claims.





Source: Mitchell, Agle, and Wood (1997).

The first class of "latent stakeholders" encompasses those actors who possess or are perceived to possess only one stakeholder attribute. The first intra-class category are "dormant stakeholders", who are powerful, but lack legitimate or urgent claims. This class is referred to as category 1 in figure 13). Examples are the media, who may possess symbolic power, or oligarchs, whose money implies utilitarian power. Dormant stakeholders can become more salient by acquiring one of the other stakeholder attributes, and should therefore be monitored by a company's managers. "Discretionary stakeholders" are characterized by legitimate, but not urgent, claims and a lack of power to influence (stakeholder category 2 in figure 13). As a result, a company's managers face no pressure to consider discretionary stakeholders within – strategic – CSR; instead, this class represent a textbook example for recipients of corporate charitable giving and philanthropy. Third, stakeholders with urgent claims, but without the power or legitimacy to enforce them, represent "demanding stakeholders", whose claims remain typically unconsidered by a company's management (Mitchell, Agle and Wood, 1997, 875-876). Demanding stakeholders are referred to as category 3 in figure 13. Typically, the relation between a company's managers and latent stakeholders is characterized by a high level of indifference or even ignorance. Hence, the claims of these stakeholders have a low level of managerial salience (Mitchell, Agle and Wood, 1997, 874).

"Expectant stakeholders" constitute the second class of stakeholders, characterized by the attributed or factual combination of two attributes. For this reason, the salience of these stakeholders and their claims for a company and its managers is moderate (Mitchell, Agle and Wood, 1997, 876). "Dominant stakeholders", the first category within this class, possess both power and legitimacy, which is why managers typically try and address their claims in a formal process: For instance, relations with investors and employees are typically handled by a dedicated company department, important shareholders or creditors are represented on corporate boards, and social or environmental interest groups are addressed via CSR reports. Traditionally, stakeholder research has focused exclusively on dominant stakeholders, which are captured by category 4 in figure 13: This is illustrated, for example, by Freeman's original definition of a stakeholder as everyone who "can affect or is affected by the achievement of the organization's objectives" (Freeman, 1984, 46), which emphasizes the role of power and uses the term "stakes", which implies legitimacy (Freeman and McVea, 2001). Still, as Mitchell, Agle, and Wood (1997) emphasize, a company's managers should also consider the claims of other stakeholders, such as "dependent stakeholders" (class 6 in figure 13). This class is characterized by both legitimate and urgent claims, but also depends on support from other stakeholders or the company management's goodwill to implement them. An example for dependent stakeholders are indigenous people who are affected by a major environmental catastrophe caused by a specific company. Yet, the dynamics of the stakeholder model imply that, should a powerful stakeholder back their claims, dependent stakeholders can move into the highest, most salient stakeholder category (Mitchell, Agle and Wood, 1997, 877). While "dangerous stakeholders" (category 5 in figure 13) possess the power to assert their urgent claims, they lack a legitimate relationship with a company. Therefore, this stakeholder category typically interacts with a company via coercive, unlawful, or even violent channels such as sabotage or even terrorism. Explicitly accounting for dangerous stakeholders does not render their claims legitimate – instead, it underlines that companies need to identify those stakeholders who possess the attributes of power and urgency to proactively mitigate the dangers that they pose (Mitchell, Agle and Wood, 1997, 877-878).

The last stakeholder class are "definitive stakeholders", who possess or are perceived to possess all three attributes. Figure 13 therefore positions these stakeholders (category 7) at the center of the Venn diagram. Definitive stakeholders are often dominant stakeholders with urgent claims. One illustration is the activism of shareholders, which is typically triggered by a sense of urgency among these both powerful and legitimate stakeholders. However, any expectant stakeholder can move into the highly salient "definitive" category, provided that they gain the attribute they lack (Mitchell, Agle and Wood, 1997, 878-879).

Actors who do not possess at least one of the three stakeholder attributes, illustrated by their positioning outside the circles of power, legitimacy, and urgency in figure 13, are referred to as "potential stakeholders". This stakeholder class is largely neglected in Mitchell, Agle, and Wood's (1997) paper; however, their model's dynamics imply that potential stakeholders can increase their salience by acquiring at least one stakeholder attribute. A company's managers therefore face little immediate pressure to address the claims of potential stakeholders, but should re-evaluate their status on a regular basis.

As a third step, this model is applied to a banking context to characterize and prioritize the bank stakeholders according to figure 12 – with one extension: The three stakeholder attributes are evaluated in qualitative rather than binary terms (as in the original model) by using different levels from "low" to "high". This serves two purposes: On the one hand, a stakeholder's power, legitimacy, and urgency can be evaluated more granularly. On the other hand, it allows for an approximation of the stakeholder model's dynamics: For instance, if a bank's stakeholder is not powerful at the moment, but possesses the potential to acquire significant amounts of it, this is described best by "medium" power.

The first set to be analyzed are a bank's primary stakeholders, starting with its customers. First, both depositors and borrowers can claim to have a highly legitimate relation with a bank: Relations in banking are governed by explicit contracts between, e.g., a mortgage debtor and the bank which provides the loan (Storbacka, Strandvik and Grönroos, 1994). More importantly, due to the high complexity of financial services, customers' trust in a bank is crucial (Hoepner and Wilson, 2010; Poolthong and Mandhachitara, 2009). Therefore, customers who entrust their savings to a bank or enter into a loan agreement also have moral claims on this fiduciary's integrity.

For two reasons, the power of bank customers is high as well. First, a strong mutual power relationship exists between borrowers and banks: On the one hand, banks represent a key source of financing, particularly for corporate customers in Europe (Schildbach et al., 2013). On the other hand, whether or not customers repay these loans is decisive for a bank's survival and success, as illustrated by the events of the 2007-08 Financial Crisis. Second, fractional-reserve banking implies that banks depend on deposits. At the same time, there is no obligation for a depositor to hold their funds in the account of a specific bank or any bank account at all (Bryant, 1980; Tobin, 1964). While bank customers typically do not exercise this power and switch their bank – due to, e.g., trust and countervailing incentives such as deposit insurance (Aldlaigan and Buttle, 2005; Beerli, Martin and Quintana, 2004; Keaveney, 1995) – stakeholder power can also be implicit (Mitchell, Agle and Wood, 1997, 868-869). A situation that shows this stakeholder's explicit power is a bank run: Here, depositors' efforts to withdraw their savings can result in the bankruptcy of individual institutions as well as contagion of the entire financial system (Diamond and Dybvig, 1983; Allen and Gale, 2000).

From the perspective of urgency, bank runs also imply a high degree of time sensitivity for both the depositor trying to withdraw their savings sooner than others and for a bank which needs to meet these demands before ending up illiquid. Moreover, current economies depend critically on a properly functioning financial system. This is illustrated by contemporary research approaches which regard banks as utilities and consider access to financial services, water, and electricity similar in importance (Mullineux, 2014, 2009). Combined, these examples imply that customers' relations to their banks are also of major urgency. Short, a bank's customers are characterized by high levels of power, legitimacy, as well as urgency and therefore constitute definitive stakeholders.

The second set of interest within a bank's primary stakeholders are its shareholders. As shown in section 2.1, stakeholder theory can be understood as an extension of shareholder-value theory to additional groups or individuals. Accordingly, Mitchell, Agle, and Wood's (1997) model suggests that shareholders are strong as well as legitimate stakeholders and able to assert urgent claims on a bank.

First, the power of shareholders in general is high due to their function of providing a listed company with equity, which a company needs to survive. Shareholders therefore own a company; in most legislations, this status grants them a substantial degree of influence on a company's corporate governance such as the power to vote on directors or to determine the level of dividends (Nenova, 2003). European bank shareholders are also granted additional voting rights to determine an appropriate level and structure of compensation in banking: The fourth set of amendments to Capital Requirements Directive IV (CRD IV) specifies that, while the variable and fixed remuneration components should not exceed a 1:1 ratio, shareholders of credit institutions and investment firms have the right to determine a higher ratio of 2:1 maximum (European Union, 2013, 387). In addition, contemporary regulation has specifically strengthened the power shareholders in banking: One example is market discipline, which assigns the providers of capital a key role in supervising and sanctioning bank risk-taking, e.g., by withdrawal of capital. Naturally, the focus of market discipline is on shareholders who have stronger incentives to monitor banks and exert influence than depositors, whose funds are insured against losses up to a certain amount (Flannery, 1998, 2001). The Basel Committee on Banking Supervision (BCBS) institutionalizes market discipline – and thereby also the important function of shareholders – in its Basel II and Basel III capital frameworks (Basel Committee on Banking Supervision, 2006, 2010) and describes an improvement of market discipline as one of its main objectives (Basel Committee on Banking Supervision, 2010, 2). Another implication of Basel III is that banks are required to hold significantly higher overall levels of capital – as a recent report finds, the combined capital shortfall of 224 international banks at the Basel III target level amounts to approximately EUR 120 billion (Basel Committee on Banking Supervision, 2015a). Simultaneously, banks need to increase the quality of their capital base and strengthen in particular their Tier 1 capital, which predominantly consists of common shares and retained earnings (Basel Committee on Banking Supervision, 2010, 2). To achieve this, close coordination with their shareholders, who cannot receive retained earnings in the form of dividends, is crucial. This illustrates that bank shareholders are instrumental for banks to meet their regulatory requirements and can therefore be considered highly powerful.

Second, a bank's shareholders are legitimate stakeholders, too. In principle, this results from their status as owners of a company, which implies not only power, but also legitimacy of claims: In terms of corporate governance, shareholders constitute "principals" who can expect a company's managers or "agents" to administer their property - the company – in a fiduciary manner (Tirole, 2001). To ensure that this is true, companies and their shareholders are linked by multiple contractual relations; a key feature of legitimate stakeholders (Mitchell, Agle and Wood, 1997, 861). Moreover, their relationship is strongly formalized: Most listed banks assign the responsibility for interactions with shareholders to specialized investor relations departments and produce a substantial amount of financial reports to proactively meet the information requirements of their shareholders (Mitchell, Agle and Wood, 1997, 876-877). Finally, stock corporation law institutionalizes shareholder interests; for instance, within the UK and the US, only shareholders are granted the right to elect a company's board of directors. With reservations, the same is true for Germany: Here, an equal representation of shareholders' and employees' interests is statutory, but shareholder interests are ultimately overweighted as the chairman of the board, a representative of the shareholders, is granted double voting rights (Fauver and Fuerst, 2006). These formal mechanisms suggest that companies consider shareholders highly legitimate stakeholders.

These observations apply across industries, i.e., also for banking. An additional factor for the legitimacy of stakeholders in general is the perception of having something at risk, as described in Mitchell, Agle, and Wood (1997). For bank shareholders, this aspect is of particular relevance against the background of the 2007-08 Financial Crisis, which triggered losses and writedowns for banks that the IMF estimates at USD 2.5 trillion (IMF, 2009). As a result, bank stocks underperformed relative to the market (Financial Times, 2015; The Economist, 2011), which hit shareholders hard. Recent empirical findings tentatively suggest that bank stocks are characterized by a higher level of volatility – the technical measure of risk – in comparison to other industries (Tsatsaronis and Yang, 2012; Kasman, Vardar and Tunç, 2011). Anecdotal evidence is likely to reinforce this perception that the stakes of bank shareholders are particularly high these days and thereby the legitimacy of bank shareholders as well as their claims (The Wall Street Journal, 2011). Third, the claims of a bank's shareholders con be considered urgent, too. The first component of this attribute, time sensitivity, has a general and a banking-specific component: In general, the Efficient Markets Hypothesis (EMH) describes that a listed company's share prices both mirror the present value of the company's expected future cash flows and incorporate all new relevant information (Fama, 1970). In principle, these two aspects imply a highly time-sensitive relation between shareholders and a company: Shareholders claims are first and foremost financial in nature and represented by the shares they hold, the value of which is subject to expectations and information regarding a company's future profits. When both information and expectations can change at any given point in time, the impact on shareholders is immediate. However, the EMH has increasingly come under pressure due to insights from behavioral economics and finance (De Bondt and Thaler, 1985; Shleifer, 2000; Shiller, 2003): For instance, findings suggest that market participants tend to sell stocks which have performed well and keep those assets which have lost in value; an asymmetric behavior referred to as the "disposition effect" (Weber and Camerer, 1998; Barberis and Xiong, 2009). The result may be systematic investor underreaction (Daniel, Hirshleifer and Subrahmanyam, 1998) or portfolio inertia, i.e., hesitant adjustments to the securities holdings of investors, which may be reinforced by an aversion to incorporate the typically ambiguous information about a company's financial performance (Dow and da Costa Werlang, 1992; Illeditsch, 2011). This phenomenon moderates the urgency of the relationship between shareholders and companies in general – especially when taking the perspective of the latter, as unfavorable financial information may trigger only delayed or muted responses from their shareholders.

The banking-specific component of time-sensitivity relates to banking supervision: For instance, the Basel III rules do not only stipulate that banks strengthen their capital ratios, as discussed in the previous paragraph, but also set a tight schedule to do so until the beginning of 2019 (Basel Committee on Banking Supervision, 2015*b*). This implies that banks need to urgently coordinate the relations to their powerful shareholders and indicates the time-sensitivity of the latter's claims. Combined, these findings suggest that the urgency of shareholders is rather high, though moderated to some extent by the influence of behavioral phenomena.

Mitchell, Agle, and Wood (1997) describe successful shareholder activism as key characteristic of company owners who possess both power, legitimacy, and urgency. Recently, activism has become more and more common among bank shareholders, in particular to take action against executive pay packages which were perceived as unjustified (Financial Times, 2012; The Economist, 2012). This suggests that shareholders constitute definitive stakeholders for a bank, driven by both the general characteristics of shareholders and their increased importance in contemporary banking regulation. In addition to publicly listed banks which are owned by their shareholders, alternative legal forms and ownership structures such as savings or mutual banks may exist. In many countries, these institutions play a significant role: For instance, the combined market share of both types of banks in Germany amounts to about 40% of the sector's total assets (Deutsche Bundesbank, 2016, 24-25), mainly driven by strong savings banks. In the entire European Union, cooperative banks account for approximately one fifth of all bank deposits and loans (Fiordelisi and Mare, 2014, 2) with market shares of more than 30% in Austria or even 40% in France (Bülbül, Schmidt and Schüwer, 2013, 8). For two reasons, the subsequent analyses abstract from this aspect: First, alternative ownership structures may impede a clear distinction of different stakeholders and their claims on a bank. As Girard and Sobczak (2012) emphasize, members of mutual banks are simultaneously customers, shareholders, or even employees. This may give rise to multiple and potentially overlapping or conflicting relations between a bank and its stakeholders. Second, empirical studies find little systematic differences between the efficiency and profitability of private, savings, or mutual banks in high-income countries (Micco, Panizza and Yanez, 2007; Altunbas, Evans and Molyneux, 2001). This may suggest that the owners of a bank – irrespective of whether these owners are shareholders, members, or public entities - are driven by similar value creation motives. In line with the general (Mitchell, Agle and Wood, 1997; Carroll, 1991; Freeman, 1984) and the banking-specific (Fatma, Rahman and Khan, 2014; Pérez and del Bosque, 2012; Scholtens, 2009) stakeholder management literature, the remainder of this paper therefore considers companies in general and banks in particular to be owned by their shareholders.

The final group of primary stakeholders in scope are a bank's employees. As described in Mitchell, Agle, and Wood (1997), these stakeholders are generally part of a company's "dominant coalition", characterized by their possession of both legitimacy and power. The findings indicate that both attributes are not only present, but also particularly pronounced, for bank employees.

Three examples illustrate that companies in general regard their employees as highly legitimate stakeholders: First, the relationship between any company and its employees is formalized in terms of specific work contracts. Second, these relations are typically managed by dedicated corporate human resources departments (Mitchell, Agle and Wood, 1997, 876). Third, corporate governance models such as the "*Rhineland model*" (Jeucken, 2004, 122-123), which is common particularly in Continental Europe, are often characterized by a representation of employee interests at board level. In a majority of European countries, this feature is statutory (Fulton, 2013). These three general observations are also true for the banking industry and suggest that the claims of a bank's employees are characterized a high level of legitimacy. Their board level representation already implies that bank employees possess a significant level of power. Beyond this aspect, the power relationship between banks and their employees is strong: On the one hand, banking is a service industry and characterized by high intensity of knowledge rather than capital intensity (Hoyler, Freytag and Mager, 2008). As a consequence, banks are highly reliant on their employees, which grants these stakeholders considerable power over their employees. Their right to strike, specified in work contracts, further adds to the power of employees. On the other hand, employees ultimately depend on companies who have the power to decide on an optimal level of employment. This aspect is of particular relevance these days as the 2007-08 Financial Crisis triggered job losses within the financial sector which amount to about 10% of banks' pre-crisis workforce in Europe (Bischoff, 2014) and more than 380,000 employees in the US (Clinch, 2013). For this reason, the negotiating position, one aspect of banks employees' power, has deteriorated. When considering all these facts, the power relationship between banks and their employees can therefore be described best as a mutual dependency in which the balance of power has slightly shifted.

For three reasons, the urgency of employees' claims on a bank can be regarded as high, too: First, research suggests that employment is critical for individual well-being while unemployment is highly undesirable (Kahneman and Krueger, 2006). For instance, Blanchflower and Oswald (2004) find that "to 'compensate' men for unemployment would take a rise in income at the mean of approximately \$60,000 per annum" (Blanchflower and Oswald, 2004, 1375). Due to the tight labor market situation in the financial sector, it can be assumed that bank employees consider their relation with a bank to be even more critical than before the 2007-08 Financial Crisis or than employees of other industries. Second, the time sensitivity of being employed is obvious as employees need to pay their rent and other recurring living expenses out of their salaries. A factor which reinforces this aspect is the high and increasing level of global private debt such as mortgages or car loans (McKinsey Global Institute, 2015), which need to be serviced regularly as well. Third, Mitchell, Agle, and Wood (1997) describe how an employee's expectation to receive a salary and especially a bonus strengthens their perception of a critical relation with a company (Mitchell, Agle and Wood, 1997, 868). As shown in section 3.1.3, absolute compensation levels and the role of variable salary components are high in the financial industry and were even more so before the 2007-08 Financial Crisis. Therefore, the expectation phenomenon is probably particularly important for bank employees.

Short, the 2007-08 Financial Crisis is a key event which has simultaneously moderated the considerable power of bank employees and reinforced the urgency of their relationship with the bank. This illustrates the dynamics of Mitchell, Agle, and Wood's (1997) model. At the same time, the status of bank employees as highly legitimate stakeholders of a bank has remained unaffected. Therefore, a bank's employees constitute definitive stakeholders. An analysis of the media, the first tangible secondary bank stakeholders, needs to distinguish between the form and the content of this stakeholder's claims: Formally, the importance of the media in today's societies as a key provider of information and a trigger of public debates is uncontested. However, the content of the media are typically positions or interests of other parties. This distinction also informs the media's power, legitimacy, and urgency as stakeholders of banks.

On the one hand, the stakeholder power of the media can be high. For instance, the media are a key channel to get consumers involved in actions against specific companies (Jeucken, 2004, 128). Similar considerations apply for banking. As a recent study finds, unfavorable media coverage during the 2007-08 Financial Crisis had a detrimental effect on the future returns on banking stocks (Wisniewski and Lambe, 2013).

On the other hand, figure 12 illustrates that the media – unlike shareholders, customers, and employees – are not part of a bank's core value chain: The provision of banking services does not require media coverage, which limits the stakeholder power of the media. Moreover, most of what is commonly regarded as media power can in fact be attributed to those individuals or groups who are able to command the attention of the media. This illustrates the distinction between form and content, as the media merely provide a channel – in other words, the form – for these stakeholders and their claims – the content – to exert symbolic power (Mitchell, Agle and Wood, 1997, 875). Taking into account these qualifications, the media can be considered moderately powerful stakeholders of banks.

The legitimacy of the media as stakeholders of banks can be regarded as low: As described above, legitimate stakeholders have contractual or moral claims on a firm or something at risk. None of these criteria apply for the media: For instance, the media are not entitled to receive information from a bank and typically do not have anything other at risk in their relation with a bank either. Instead, the media can be leveraged by other stakeholder groups to enforce their legitimate claims: For instance, shareholders possess a contractbased, legitimate claim to receive relevant information on the company which they are invested in (Siems and Cabrelli, 2013). While, for instance, a broadcast of an annual general meeting or a newspaper summary of its results can help shareholders exercise this right to information, the media functions merely as a catalyst for these claims of another stakeholder in both cases. The same is true for society's moral claims: As Jeucken (2004, 128) puts it, "society at large and media are largely correlated as stakeholders groups (...) media function as a channel for voicing requests of society at large and also of informing society at large" (Jeucken, 2004, 128). This implies that the claims of the media themselves can hardly be regarded as legitimate. For this reason, Donaldson and Preston (1995) argue that the media are "influencers", characterized by their fundamental lack of stakes (Donaldson and Preston, 1995, 86).

The distinction between form and content of the media also informs the investigation of how urgent their claims on a bank are. As defined above, the media function as a catalyst. Therefore, the stakeholders whose "claims call for immediate attention" (Mitchell, Agle and Wood, 1997, 867) via the media are not the media themselves. Instead, the urgency of their claims on a bank depends on how critical and time-sensitive these claims are for the respective stakeholders, which in turn determines the response of the bank. One recent example is the mid-2000s UK payment protection insurance (PPI) scandal¹⁶: While the misselling practices of banks were broadly covered in the media, the actions taken by UK banks directly addressed the claims of their customers, not the media (Ferran, 2012).

To some extent, banks may consider their relation to the media as time-sensitive: It is unlikely that a bank chooses to ignore unfavorable media coverage without responding to these claims. For instance, UK bank HSBC admitted that its insufficient compliance processes enabled its customers to evade taxes came in response to media reports (Reuters, 2015). Again, the media's claims expressed only the positions of other stakeholders in this case – such as legal claims of the judiciary or more fundamental moral claims – but their coverage created a sense of urgency which the bank could not ignore for a longer time. Yet, the overall urgency of the relation between the media and a bank remains low and is mostly driven by the claims of stakeholders that commands the media's attention. Only in individual cases, banks may consider their relation to the media as time-sensitive.

The question whether the media constitute stakeholders for a company at all has been debated controversially: As documented in Donaldson and Preston (1995), Freeman (1984) considered the media a stakeholder only in his early studies. The above analysis suggests that, in a banking context, the media may represent a stakeholder set, though without relevance for a bank's core value chain. Second, a breakdown of their attributes suggests that the media are in fact relatively powerful, but lack legitimate and urgent claims on a bank. Therefore, the media represent dormant bank stakeholders.

The second bank stakeholder in this set are suppliers. As discussed previously, the provision of banking services relies to a lesser extent on the external supply of goods and services than, for instance, an industrial production process. For this reason, suppliers are not part of a bank's core value chain either. This suggests that bank suppliers also rank low in terms of their power, legitimacy, and urgency.

For power, the first stakeholder attribute, two findings support this assumption: First, the general banking business model, consists financial intermediation between depositors

¹⁶The original purpose of PPI policies is assume liability for the repayments of a borrower in case of their, e.g., illness or unemployment. From the year 2005 onwards, about 16 million policies were mis-sold in the UK to, for instance, "self-employed people who would not have been able to claim, to borrowers who were wrongly told that taking PPI was a condition for being granted their loan, and even to consumers who did not realise they were taking out a policy" (BBC, 2011).

and borrowers; a process which does not require suppliers that provide, e.g., raw materials or intermediate products. Intuitively, the limited relevance of suppliers – in the narrow sense of word – within the core value chain translates into limited power as well.

The second finding uses Porter's (1979; 2008) framework of five competitive forces to determine the power of bank suppliers and regards this stakeholder from a corporate procurement perspective, which extends the scope to providers of physical goods, services, and knowledge (Jeucken, 2004, 128). According to Porter (1979; 2008) theory, a supplier can be regarded as highly powerful if it meets the following six criteria:

- 1. The supplier group is more concentrated than the industry that it sells to
- 2. The supplier does not depend heavily on its client industry for its revenues
- 3. The supplier offers differentiated products
- 4. The supplier can credibly threaten to integrate forward into its client industry
- 5. There is no substitute for the supplier's goods or services
- 6. The industry which the supplier sells to faces supplier switching costs

For suppliers of the banking industry, some of these six criteria have the potential to be true, albeit to different degrees. Criterion 1 is not completely true in all cases for banking. On the one hand, a number of suppliers that provide key auxiliary products and services to banks are in fact highly concentrated: For instance, the market for auditing services is dominated by the "Big 4" firms (Gerakos and Syverson, 2013) and Microsoft enjoys a quasi-monopoly in the market for software products and operating systems (Porter, 2008, 31), which are used intensively by banks. At the same time, the banking industry in Europe and particularly in German is fragmented (Moch, 2013; The Economist, 2013b). On the other hand, it should be noted the markets for providers of more general products and services used by banks - e.g., office supplies - are much more fragmented (MacGuigan, deB. Harris and Moyer, 2010, 88). Criteria 2 and 3 are closely interrelated and cannot be determined in a general sense for banking: For instance, a specialized supplier of regulatory consulting services may depend heavily on banks for assignments as well as revenues; for this supplier, criteria 2 and 3 do not apply. The opposite is true for major consultancies which serve multiple industries on a range of topics or large vendors of office supplies. Criterion 4 is unlikely to be relevant for banks: First, regulation establishes high barriers for any prospective entrants on the banking market (Cetorelli and Strahan, 2006; Claessens and Laeven, 2004). Second, vertical integration by banks is more common than forward integration by bank suppliers (Elsas, Hackethal and Holzhäuser, 2010). This is particularly true for mutual or savings banks, which were discussed in

connection with shareholders: For instance, the "National Association of German Cooperative Banks" develops most of the more complex banking products and services for its member institutions (Reicherter, 2000, 43-45). Similarly, a number of support services or central functions of German savings banks such as IT, marketing, or product development are carried out at group level (Riekeberg, 2013, 242). This structure further limits the significance of additional external suppliers in banking. Finally, criterion 5 describes a strong version of criterion 6. To some extent, both may apply for banks, particularly with respect to IT products and services: One example described in Porter (2008) are Bloomberg terminals, which are heavily used in financial services and can hardly be substituted for a the lack of equivalent products. Another case are operating systems, which typically locks-in their users: Like any other company, a bank that chooses to switch from a Microsoft to an Apple platform is likely to incur major switching costs (Shapiro and Varian, 2013, 12). Still, these products lack the overall criticality for a bank's core value chain: A Bloomberg terminal is not required for the provision of banking services in a way that a carmaker needs seats or spark plugs. Moreover, no bank supplier meets all six criteria simultaneously. Therefore, the overall power of bank suppliers, even when these stakeholders are defined in the broad sense, is low.

The legitimacy of a bank's suppliers can be regarded as high with respect to their formalized relationships: As companies in general, banks engage with their suppliers in business exchanges which are therefore governed by contracts (Tirole, 2001). This aspect implies a high legitimacy of suppliers as bank stakeholders (Mitchell, Agle and Wood, 1997, 861). However, there are two opposite factors, in particular against the background of the operationalization of CSR as a voluntary business activity: First, Hill and Jones (1992) emphasize the quality of legitimate stakeholders as actors that provide "the firm with critical resources" (Hill and Jones, 1992, 133). As discussed above, banks depend only to a very limited extent on external suppliers. This limits the latters' potential to supply critical resources and therefore their legitimacy, too. Second, Mitchell, Agle, and Wood (1997) show that moral claims are a key factor of legitimate stakeholder relations. While individual moral claims of suppliers on a bank – potentially due to individual personal relations – cannot be ruled out, it is safe to describe the character of these relations first and foremost as transactional.

All in all, the legitimacy of bank suppliers is therefore medium-high: On the one hand, a bank is legally bound to meet its contractual obligations towards its suppliers. On the other hand, this relationship is confined to exchanges of mostly non-critical goods or services and commercial, not moral, in nature.

The third stakeholder attribute is urgency. While a supplier's claims on a bank are to some extent time-sensitive – banks need to pay their trade receivables within a specified

period of time – the overall urgency of their relation is rather low for three reasons. The first one results from the banking value chain: Suppliers, defined in the narrow sense, are integrated in the core banking operations only to a limited extent. Therefore, this stakeholder group has little reason to consider their relations to a bank critical.

The second reason is a rather low dependency of suppliers – defined in a broad sense – on banks. As shown in the analysis of their power, this result is not universally valid as small suppliers may exist that specialize on banks as clients. However, the business models of larger suppliers such as consulting and auditing firms are well-diversified across industries with banking representing only one out of multiple sectors served (The Boston Consulting Group, 2015; KPMG, 2015; McKinsey & Company, 2015; PricewaterhouseCoopers, 2015).

Third, the hypothesis of an overall low urgency of suppliers' claims on banks is suggested by the findings of a representative survey among sustainability managers in banking: As shown in Jeucken (2004), none of the respondents considered suppliers to be relevant stakeholders for their business. This result, which holds true for both large universal banks as well as for small, ethical institutions, implies that bank managers do not regard relationships with their suppliers as urgent (Jeucken, 2004, 311-313).

This analysis corroborates the result of the value chain analysis: The overall salience of suppliers as stakeholders in banking is limited. More specifically, suppliers are characterized by low levels of power as well as urgency and mostly have business-focused claims on a bank. Suppliers therefore constitute discretionary bank stakeholders. According to Mitchell, Agle, and Wood (1997), companies typically address this stakeholder classes via corporate philanthropy or charitable giving. This description, however, inadequately captures the relationship between a bank and its suppliers: In this case, there is little need for a bank to go beyond meeting its formal obligations towards this stakeholder.

The third set of bank stakeholders are society and social issues, ethics and morale, and the environment. As discussed at the beginning of this section, these stakeholders do not constitute tangible persons or groups, which reinforces the appropriateness of analyzing stakeholder claims rather than actual stakeholders (Phillips, Freeman and Wicks, 2003; Mitchell, Agle and Wood, 1997; Donaldson and Preston, 1995). This approach was already implemented in the investigation of primary bank stakeholders and is representative of the perspective employed in this entire study. At the same time, the previous discussion showed that considering intangible actors within a stakeholder management approach is consistent with the relevant literature (Freeman and McVea, 2001; Freeman, 1984; Mitchell, Agle and Wood, 1997; Carroll, 1991). Due to the common features of the intangible secondary stakeholders – their immaterial nature and limited value chain relevance – their claims will be analyzed jointly in terms of power, legitimacy, and urgency. In principle, the two defining features of intangible secondary stakeholders render them at best moderately powerful: First, society and social issues, ethics and morale, and the environment cannot assert their claims themselves. Second, a bank does not need to involve either of the three stakeholders to provide its services.

However, the institutional landscape of today's economies is increasingly characterized by various NGOs, which often advance the interests of these three stakeholders (Mitchell, Agle and Wood, 1997). Similar to the media, these organizations channel and amplify social, ethical, or environmental claims on companies such as banks. For instance, nongovernmental organizations mobilized a boycott of both Morgan Stanley and Credit Suisse for being involved in the Chinese Three Gorges Dam construction project in the year 2000. In the same year, the NGO "AIDEnvironment" targeted a number of major international banks for financing palm oil plantations in Indonesia (Jeucken, 2004, 173). In contrast, the "Occupy" movement, whose protests focus on banks and the financial sector, describes its objectives as "social (...) and environmental justice" (Occupy, 2015) and has occasionally been characterized as an ethical initiative (Mörtenböck and Mooshammer, 2014). This analysis suggests that, while NGOs used to concentrate mostly on environmental issues, social as well as ethical topics constitute further recent focal points. Still, these interest groups must not be equated with the issues of interest: While NGOs may be powerful, society and social issues, ethics and morale, or the environment are not. As this distinction may, however, be difficult to draw for a banks in real-life settings, the intangible secondary bank stakeholders are considered to possess low – instead of no – power.

Whether or not the claims of intangible secondary stakeholders on a bank are legitimate may appear like a rewording of the fundamental question of CSR: Whom should a company be accountable to? Yet, following Mitchell, Agle, and Wood's (1997) model shows that the stakeholder legitimacy of society and social issues, ethics and morale, as well as the environment is not a matter of judgment, but can be determined analytically.

There are two reasons for the legitimacy of environmental claims on a bank, the first one being moral claims. While banking is a rather non-polluting, the total size of the banking industry implies that its operations can considerably affect the environment. In addition, banks may finance industrial activities which are more environmentally harmful (Jeucken, 2004, 100). The wider public may therefore consider the environment a legitimate bank stakeholder in a sense that it can be affected by a bank's business (Freeman, 1984).

Second, environmental legislation, regulations and initiatives have established the environment as a stakeholder in banking. For instance, German environmental law requires all companies, irrespective of their industry, to recycle waste (BMUB, 2012) or to support the further expansion of renewable energies by paying additional levies on the price

of electricity (BMUB, 2014). This latter aspect is of particular relevance for an industry whose contribution to environmental pollution is largely driven by its energy consumption (Jeucken, 2004, 99). More specifically, the US "Comprehensive Environmental Response, Compensation and Liability Act" makes it possible to hold banks liable for the environmental damage of activities financed by them (Jeucken, 2004, 167). The European counterpart of this law is Directive 2004/35/CE, which establishes an extended polluter pays principle for Europe-based "operators" (European Union, 2004, 1). On the other hand, various banking-specific initiatives grant the environment additional formal legitimacy as a stakeholder: Some of these initiatives are non-binding in nature, as discussed in section 3.1.2: For instance, the UNEPFI seeks to strengthen the role of the environment in banks' value chains and investment plans. Others are mandatory requirements for banks; for instance, banking regulation in an increasing number of countries considers environmental risks, too. A recognition of these risks in supranational regulatory regimes such as the Basel framework is also under discussion (CISL and UNEPFI, 2014).

Yet, these regulations and initiatives do not constitute claims in the original sense of narrow sense of Mitchell, Agle, and Wood's (1997) model as the environment itself does not assert its claims on a bank. However, industry agreements, legislation, and regulatory regimes strengthen the formal nature of the environment as a stakeholder of banks. This is qualified by the non-polluting character of banking activities, resulting in a moderate legitimacy of the environment's claims on banks.

The legitimacy of ethics and morale as well as corresponding claims on a bank is driven by two aspects: First, moral claims are an important feature of stakeholder legitimacy (Mitchell, Agle and Wood, 1997, 861) and, in turn, a defining feature of ethics and morale. Therefore, moral and ethical claims on a company are in general highly legitimate. The second argument relates specifically to banking: After the 2007-08 Financial Crisis, ethics and morale in the financial industry have received greater attention as shown in section 3.1.3: Scholars identified both a lack of social responsibility and misguided good intentions as triggers or reinforcing crisis factors (Argandoña, 2009; Hoepner and Wilson, 2010). Similarly, "moralisation and ethical leadership" in banking have been regarded as critical to deal responsibly with its consequences and to promote stronger corporate social responsibility in banking (Herzig and Moon, 2012, 36-43). As developments within the financial industry sector suggest, banks also acknowledge the legitimacy of ethical and moral claims on their business: One indicator are ethical commitments and oaths for bankers, which have been discussed in the UK (British Bankers Association, 2014) and established as a requirement in the Netherlands (The New York Times, 2014) or on a voluntary basis in Australia (BFO, 2015). Another example are compulsory ethics seminars for bank employees (FAZ, 2013b). This suggests that moral and ethical claims on banks are regarded as legitimate both inside and outside the industry.

Two factors may compromise this overall high legitimacy: On the one hand, ethics and morale represent a concept without an authoritative definition, in particular in a business context (Lewis, 1985; Donaldson and Dunfee, 1994). It might therefore be that the legitimacy of this stakeholder set cannot be determined as it remains unclear which claims are in fact "ethical" or "moral" and are therefore in scope. Yet, the analysis of ethics and morale as a bank stakeholder does not require a specific definition of the subject matter to determine whether considering ethical and moral standards, which may manifest in multiple ways, is justified in banking. On the other hand, similar to the environment, this intangible stakeholder cannot close formal contracts with a bank. Taking these two factors into account, the legitimacy of this stakeholder's claims on a bank is medium-high.

The legitimacy of society and social issues, the last intangible secondary bank stakeholder, is driven by both a general and a banking-specific aspect: The first one is a corollary of the very meaning of CSR, which implies that the extended responsibility of companies is first and foremost social in nature. This idea is taken up by the concept of "corporate citizenship": As discussed in section 2.1, corporate citizenship, but emphasizes a company's social rights and obligations (Logsdon and Wood, 2002; Moon, Crane and Matten, 2005). Accepting these concepts implies accepting the legitimacy of social claims on a company.

The second aspect is the role of banks as providers of payment services and credit allocation. As outlined above, some scholars argue present-day economies and societies depend on these functions of banks in a way that financial institutions are considered utilities (Mullineux, 2014; Goodhart, 2011; Mullineux, 2009). In a strong form, their argument is that "access to credit is a basic human right" (Mullineux, 2009, 464), which has been discussed controversially (Financial Times, 2016*a*; Forbes, 2014). In a weak form, however, it is safe to say that access to basic financial services is key for economic participation in today's societies; as activities to foster financial inclusion illustrate, this topic is addressed by banks (Do, Tilt and Tilling, 2007; Gibbons, 2011; Pérez and del Bosque, 2012).

At the same time, access to financial services may be an illegitimate claim on a bank if unjustified by the applicant's fundamentals, e.g., their risk profile. As discussed in section 3.1.3, financial inclusion in the subprime segment is regarded as one trigger of the 2007-08 Financial Crisis. Another aspect which limits the legitimacy of social claims on companies in general are today's welfare states, which assume and bundle the social responsibilities of companies in exchange for taxation. While the welfare state model and its dimensions differ even between high-income countries (Matten and Moon, 2008) and are subject to fluctuations (Herzig and Moon, 2012), an unrestricted validity of social claims on companies and therefore also banks cannot be assumed. Finally, the intangibility nature of this stakeholder limits its overall legitimacy as it cannot assert formal claims by itself. Therefore, social and societal claims on a bank are moderately legitimate. The final criterion is urgency: First, the time-sensitivity of environmental claims is evident against the background of climate change and global warming, which are resulting in an increasing number of environmental disasters. Accordingly, the International Panel on Climate Change (IPCC) emphasizes "adaptation and mitigation choices in the near term" (IPCC, 2014, 9). As a recent study by the Bank of England finds, these catastrophes have the potential to threaten the stability of financial markets and institutions (Bank of England, 2015) and are therefore critical as well. Still, the limited direct environmental impact of the financial industry suggests that the potential for banks to counteract or mitigate climate change is limited, too. Therefore, the total urgency of this stakeholder's claims on a bank is rather moderate.

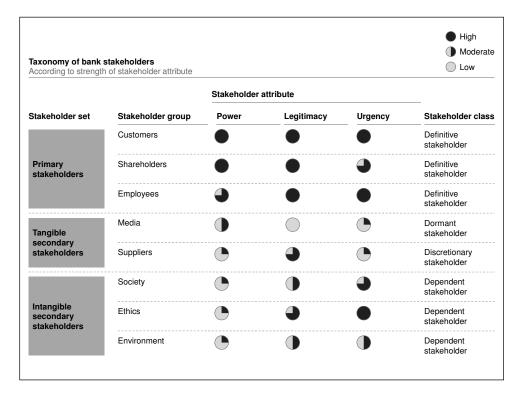
There are no similar limitations regarding the urgency of ethical and moral claims on banks. Instead, the 2007-08 Financial Crisis has reinforced the importance for banks to take action swiftly and comprehensively. The fact that banks implemented the bulk of their formal ethical measures such as commitments and staff training programs shortly after the crisis suggests a high level of – perceived – time-sensitivity. Jeucken's (2004) example of the financial sector's inertia in responding to environmental issues illustrates that this is not a typical behavior of banks unless certain claims are considered urgent. The criticality of ethical and moral claims can be broken down into push and pull factors: The former mainly result from public and political pressure for ethical standards in banking, illustrated by the 2008 statement of then UK Prime Minister Gordon Brown, who called for the "age of irresponsibility" in the financial industry to be ended (Herzig and Moon, 2012, 2). This renders ethical and moral engagement by banks no longer an option, but an obligation. At the same time, banks customers increasingly demand ethical financial products (San-Jose, Retolaza and Gutierrez-Goiria, 2011; Benedikter, 2011), which constitutes a pull factor. The total urgency of ethical and moral claims on a bank can therefore be regarded as high.

The urgency of social claims on a bank are not reinforced to a similar extent by a single recent event. However, as Hoepner and Wilson (2010) find in a comprehensive press research, public interest in the social dimensions of banking has increased significantly throughout the last decade. This finding suggests that this stakeholder's claims are to some extent time-sensitive. Moreover, Herzig and Moon (2012) show that the social and societal responsibilities of companies typically increase during recessions. Considering the global economic downturn which followed the 2007-08 Financial Crisis, social claims on companies in general and banks – for their major involvement in the crisis – may therefore also be critical for those in need. Yet, the above argument that the primary responsibility for social matters is assumed by the welfare state in most high-income countries still holds true. In total, the claims of society and social issues on banks can therefore be regarded as medium-high.

Society and social issues, the environment, and ethics and morale are therefore dependent stakeholders for banks: While their power may be low, the claims of this stakeholder set are both legitimate and urgent. This is true in particular for ethics and morale, which has received considerably greater attention after the 2007-08 Financial Crisis.

The results of applying Mitchell, Agle, and Wood's (1997) model to all three sets of a bank's stakeholders yields a taxonomy of bank stakeholders, summarized in figure 14.

Figure 14 Taxonomy of Bank Stakeholders



Source: Own representation.

Figure 14 shows that all three stakeholder classes are represented among the stakeholders of a bank: First, its three primary stakeholders clearly constitute definitive stakeholders, characterized by a powerful and legitimate relationship with banks as well as urgent claims. Second, both tangible secondary stakeholders can be described as latent: Suppliers are expectant stakeholders, meaning that there is little need for a bank to engage in a relation with these discretionary stakeholders beyond meeting contractual obligations. In contrast, the media are a powerful channel for other stakeholders to assert their claims on banks; yet, this dormant stakeholder lacks in particular legitimate stakes. Third, the limited power of the intangible secondary stakeholders render them dependent on banks. Still, all three of them fall into the second-highest salience category. This result is particularly strong for ethics and morale, whose claims are likely to be legitimate and urgent after the 2007-08 Financial Crisis. The stakeholder profile of the environment as well as society and social issues is similar, but generally weaker with respect to the two relevant attributes legitimacy and urgency.

Like all other companies, banks which seek to implement a meaningful, tailored CSR strategy need to identify their stakeholders first and then determine the characteristics of these groups or individuals. An initial review illustrates that the bulk of the literature on this topic either focuses top-down on the relevance of selected stakeholders or describes the full range of a bank's potential stakeholders bottom-up without a previous prioritization or a subsequent profiling of stakeholders. The latter approach may explain the multitude of CSR activities documented by reviews of banks' CSR reports (Strandberg, 2005; Pérez and del Bosque, 2012). This reinforces the clear case for a concise framework of CSR in banking with the analyses of a bank's stakeholders as a first building block.

The discussion at the end of chapter 3.1 illustrated that and in which ways CSR in banking differs from the manifestations of this managerial concept in other industries. This outcome is mirrored by the intermediate result of this section, which focuses on the stakeholders of a bank. On the one hand, it implies that the salience of certain stakeholder claims on a bank according to figure 14 is likely to be higher in a crossindustry comparison: First, one unique feature of banks is that their customer base encompasses not only the purchasers of products or services, but the two different groups of borrowers and depositors, which play a dual role in a bank's value chain. Unlike the clients of other companies, a bank's customers therefore also have an immediate impact on the liabilities of an institution. This is likely to contribute to the particularly high salience of this stakeholder group's claims on a bank in comparison to other sectors. One example which illustrates this difference is the pharmaceuticals industry, which is typically characterized by a unidimensional buyer and seller relationship and, in addition, strong business-to-business structures. As a result, pharmaceutical companies tend to focus less on customer than, for instance, shareholder claims (Sweeney and Coughlan, 2008). Second and similarly, the salience of shareholder claims should be relatively high for banks, too. The two main drivers for this observation, as derived at the beginning of this section, are the role of shareholders as market-based banking supervisors and the increasingly stringent capital requirements (Flannery, 2001, 1986; Santos, 2001): Both constitute regulatory phenomena which are not faced by non-banking companies. Third, it may be expected that ethical and moral claims are more salient for banks than for other firms: While the importance of ethics has clearly increased across industries recently (Treviño and Nelson, 2010, 2), this development should be particularly strong in the banking sector. One reason is the – ambiguous – role of ethical considerations in the 2007-08 Financial Crisis as described in section 3.1.3. More structurally, ethical behavior is often considered a general prerequisite for impersonal and transactional exchange relationships to function properly

(Argandoña, 2009); a description which should be more accurate for global banking than for traditional buyer-seller relations concerning tangible products.

On the other hand, the stakeholder taxonomy shows that the specific features of CSR in banking can also translate into a lower salience of other stakeholder claims: Possibly the most vivid example are suppliers, the claims of which on a bank are rather low in salience. In contrast, the value chains of secondary sector companies such as car manufacturers are characterized by a significantly higher dependency on suppliers, resulting in a higher salience of a supplier's claims on these companies (Caniëls, Gehrsitz and Semeijn, 2013; Geffen and Rothenberg, 2000). In particular the greater power, one stakeholder attribute, of automotive suppliers is illustrated by a recent dispute between Volkswagen and two of its suppliers, which resulted in significant interruptions of production as well as shorter working hours for nearly 30,000 workers employed by the carmaker (Financial Times, 2016c): Banking industry cases of similar dimensions are difficult to come up with. Finally, environmental claims illustrate the distinctive properties of CSR in banking in two ways: First, the relatively low salience of these claims mainly results from the fact that the banking business itself tends to be non-polluting (Jeucken, 2004, 100). In contrast, their business models imply that environmental claims can be considered much more salient for automobile as well as the oil and gas companies and typically triggers increased corporate efforts and more extensive disclosures concerning this specific CSR aspect (Sweeney and Coughlan, 2008, 120). Second, the above discussion showed how the banking sector is still related to the environment as a stakeholder by providing finance for potentially polluting corporate activities. This indirect impact – or, more generally, this indirect responsiveness to stakeholder claims, enabled by the banking value chain – is another unique feature of CSR in banking and may only be true for certain and similar financial companies such as asset managers and insurers. Figure 14 can therefore also be considered an illustration of the general conclusion by section 3.1 for the example of credit institutions and the claims of their stakeholders: CSR in banking first and foremost constitutes a sector-specific construct with a confined set of implications for closely-related industries.

3.2.2 CSR Channels

The second block in this banking-specific CSR framework are a bank's CSR channels, which determine how credit institutions can address the claims of their stakeholders. This section shows that banks can use both internal and external channels for this purpose: Within the former, banks can commit to meeting stakeholder claims or to launch targeted activity programs while positive and negative lending standards – or "screens" – to consider stakeholder claims can be implemented within the external channel.

As any other company, a bank can pursue CSR activities via the internal channel, which denotes the management of stakeholders and their claims within internal corporate structures and processes. As described in the European Commission's (2001) "Green Paper", internal CSR activities therefore primarily focus on a company's employees. Typical activities are training and personal development measures, investments in health and safety measures, or special employee assistance during major transformation and restructuring programs (European Commission, 2001, 9-10). This perspective is echoed by cross-industry research on CSR (Tang, Hull and Rothenberg, 2012; Torres et al., 2012) and specifically for the banking sector: For instance, Scholtens (2009) summarizes that "a bank's internal commitment (...) relates to the ways in which it deals with its work-force" (Scholtens, 2009, 163).

A second stakeholder group which a bank can consider internally are its shareholders. As documented in Fatma, Rahman, and Khan (2014), a common measure in banking to address the – financial – claims of this stakeholder is rigorous cost controlling. In addition, banks often commit to either ensuring their economic sustainability or to meeting their obligations towards shareholders in general (Fatma, Rahman and Khan, 2014, 19-20). Typically, these commitments are anchored in a bank's mission statement. For instance, HSBC used to describe their corporate vision that as "a commercial organization, our governing objective is to provide a satisfactory return on our shareholders capital¹⁷" (Jeucken, 2004, 124).

Finally, banks often engage in internal activities to meet the claims of their customers: Typical examples are commitments to customer-relevant corporate behaviors such as ensuring the confidential treatment of customer data or the introduction of standards of conduct for client advisors to, e.g., encourage greater fairness and honesty in customer interactions (Fatma, Rahman and Khan, 2014). In addition, banks often take specific measures to address the demands of their customers either proactively by launching programs to determine the needs of bank customers bottom-up or by implementing standardized procedures to deal with customer complaints (Pérez, Martínez and del Bosque, 2013). Short, these examples illustrate that and how that a bank can engage with all three primary stakeholder via the internal CSR channel.

In addition, banks can address relevant secondary stakeholders and their claims by internal measures: To protect the environment, a bank can implement policies which encourage or require its employees to reduce their consumption of water and natural resources, recycle office paper, or use energy and electricity in a more efficient manner (Jeucken, 2004, 99-100). As a central measure, a bank can improve the environmental footprint

¹⁷HSBC's current mission statement contains a rather general reference to meeting "the expectations of society, customers, regulators and investors"(HSBC, 2015).

of its buildings and curb its energy consumption and CO_2 emissions, as in the case of Deutsche Bank's "Greentowers" headquarters renovation project (FAZ, 2009). Similar steps taken by banks to increase the sustainability of their office buildings as well as their waste management processes are documented in Jeucken (Jeucken, 2004, 244-7). Another common measure is to reduce air travel: As a survey among large European banks finds, more than 90% of the institutions already substitute video conferences for flights while more than 70% of the respondents plan to increase the share of trips done by train (Viganò and Nicolai, 2009).

This suggests that, out of all intangible secondary stakeholders, banks typically emphasize the environment and environmental claims when taking internal CSR measures. However, this observation is only true for the early stages of CSR in banking, as documented in Herzig and Moon: These days, banks increasingly incorporate social criteria into their internal corporate structures and processes (Herzig and Moon, 2012, 9-10): For instance, various banks undertake targeted efforts to improve the financial literacy of their customer base. As research suggests, interactions between financial advisors and bank customers are a key lever to achieve this objective (Hackethal, Haliassos and Jappelli, 2012), illustrating the impact potential of CSR activities which are integrated within a company's regular business operations. Other credit institutions encourage employee volunteering for social purposes and formally account for this activity within performance management and compensation systems (Strandberg, 2005). In addition to these specific measures, banks can also anchor social goals such as *"improving the general well being of society"* (Fatma, Rahman and Khan, 2014) in their corporate vision or mission statement¹⁸.

The last measure is also widely used banks to address ethics and morale, their last intangible secondary stakeholder: To comply with claims for stronger moral standards, banks often commit to generally accepted principles of ethics (Pérez, Martínez and del Bosque, 2013, 479). A survey shows that this instrument is used particularly often by European banks (Viganò and Nicolai, 2009, 22). In addition, banks also implement specific measures to foster ethics and morale: One bank-internal activity are ethics seminars, which were discussed in section 3.2.1.2, a second one is ethical executive pay: In 2009, the G20 agreed to promote more "sustainable compensation schemes" (G20, 2009, 4) in the financial industry. A recent IMF report finds that the industry has responded to some extent as the share of fixed salary components has increased over the recent years, in particular in Europe. Still, the authors of the report argue that "strengthening integrity in financial institutions requires a culture in which ethical behavior is consistently rewarded throughout

¹⁸Activity-level research on CSR in banking – such as Fatma, Rahman, and Khan (2014) or Pérez, Martínez, and del Bosque (2013) – also includes social contributions and donations in the social activity portfolio of banks. While these activities may be regarded as bank-internal in the sense that they are not related to bank lending, they are clearly out of scope for the present study's operationalization of CSR as a non-philanthropic business activity.

the ranks" (IMF, 2014, 129). This shows how overhauling performance management and compensation schemes therefore represents a powerful internal lever that banks can pull to meet claims for a greater emphasis on ethics and morale.

These examples illustrate that their internal CSR channels enable banks to meaningfully address both their primary and their intangible secondary stakeholders and their claims. The second option for banks to do so is the external channel, which describes how a bank can tailor its lending activities in terms of scope and standards to manage stakeholder claims. This channel, which results from the economic function of banks as financial intermediaries, is a unique feature of CSR in banking.

As described in Argandoña (2009), the basic economic functions of banks can be ascribed a social function: In a general sense, financial intermediation is not only a means to allocate funds efficiently, but also has the potential to increase the well-being of savers or borrowers. Moreover, banks can be regarded as bound by a "commitment to society" to provide their services (Argandoña, 2009, 8-9). This suggests that the external CSR channel is particularly well-suited to address the claims of intangible secondary stakeholders.

Practical evidence corroborates this hypothesis. The example of lending activities with an environmental focus shows that banks typically pursue two main approaches within the external CSR channel: The first one involves establishing dedicated environmental credit facilities such as European Investment Fund (EIF) loans, which were launched in the late 1990s to foster "green" investments among SMEs in Europe. As documented in Jeucken (2004), several banks implemented EIF loans or similar credit schemes for businesses which improve or protect the environment¹⁹. Special environmental loans are no longer a European phenomenon: A study into the climate-related strategies of more than 100 banks finds that borrowers across countries are granted preferential loan conditions if they reduce CO_2 emissions or use renewable energies (Furrer and Swoboda, 2009).

The second approach describes bank policies to lend to a lesser extent, at worse terms, or not at all to those borrowers whose operations have a detrimental impact on the environment. A survey among major European banks illustrates that typical examples are policies to avoid lending to projects that cause considerable emissions or that reduce natural CO_2 sinks such as rainforests (Viganò and Nicolai, 2009). Preferential conditions for environmentally-friendly projects – sometimes referred to as "green lending" (CISL and UNEPFI, 2014, 26) – and worse terms for borrowers that harm the environmental are not mutually exclusive and are therefore often combined (Scholtens, 2009).

¹⁹A common feature of these loans are their favorable conditions – for instance, interest rates are generally lower than those on regular bank loans and borrowers often do not have to make upfront payments (Jeucken, 2004, 214-215).

In similar ways, banks are able to address social or ethical claims via lending: On the one hand, banks can directly engage in lending activities with a social focus by, e.g. launching financial inclusion programs (Pérez and del Bosque, 2012; Fatma, Rahman and Khan, 2014) and microcredit schemes for the socially deprived (Karlan and Zinman, 2011; Battilana and Dorado, 2010) or by financially supporting their local communities (Simpson and Kohers, 2002; Kalmi, 2014). Another possibility for banks is to apply preferential conditions for loans to those borrowers that show a particularly strong social performance. The latter is typically determined based on a generally accepted CSR index such as the MSCI ESG database (Lougee and Wallace, 2008). This tool can be used to determine the strength of a company's social performance along a concise set of criteria such as the respective company's employee volunteering programs, its enforcement of labor rights, or its involvement in legal disputes with have a social component, such as tax matters (Lougee and Wallace, 2008, 102).

Financial inclusion programs or microcredit schemes illustrate that socially-focused lending activities often have ethical or moral connotations, too. Still, banks can use a set of criteria with a clear ethical scope – such as a company's absolute and relative pay levels, incentives structures or diversity policies (Lougee and Wallace, 2008, 102) – to evaluate potential borrowers in a first step. In a second step, the bank can then incentivize ethical and moral behaviors by granting firms which meet these criteria more favorable loan conditions or charge higher interest rates in case of a borrower's weak ethical and moral performance. In addition, banks may decide to fully stop lending to entire business sectors which they deem unethical: Examples range from the gambling, alcohol, or tobacco industry (Scholtens, 2009, 165), energy suppliers that operate nuclear power stations (De Clerck, 2009, 218-219), or manufacturers of internationally outlawed weapons such as cluster munitions (Deutsche Bank, 2015*a*; The Guardian, 2012).

These examples point towards a more general concept: Within the external CSR channel, banks either grant borrowers more favorable conditions if they comply with certain criteria or reduce their exposure to those borrowers which fail to meet these criteria. This dichotomy is an established principle within the socially responsible investment (SRI) segment of the asset management and mutual funds industry. SRI strategies are characterized by a combination of social, environmental, and ethical (SEE) or ESG considerations as well as financial criteria (Michelson et al., 2004). Dating back to the 18th century (De Clerck, 2009), this segment has gained momentum in recent years, fueled both by a trend towards funds-based investments and a growing overall concern for SEE topics (Nilsson, 2008, 307-308): The Global Sustainable Investment Alliance²⁰ estimates that

²⁰The Global Sustainable Investment Alliance is a "collaboration of membership-based sustainable investment organizations around the world", such as Europe's Eurosif, with the goal of strengthening the role of sustainable investment in the global financial system (US SIF, 2015).

the global SRI market volume is equivalent to USD 21.4 trillion or more than 30% of all assets under professional management in Europe, the United States, Canada, Asia, Japan, Australasia, and Africa (US SIF, 2015, 3).

To implement SEE or ESG criteria, most SRI strategies follow one out of two approaches: The largest and most common approach is negative or exclusionary screening, which refers to "the exclusion from a fund or portfolio of certain sectors, companies or practices based on specific ESG criteria". Currently, USD 14.4 trillion in assets under management or almost 70% of the SRI market are managed according to negative screening (Global Sustainable Investment Alliance, 2015, 6-8). The opposite approach – positive or best-inclass screening – describes the "investment in sectors, companies or projects selected for positive ESG performance relative to industry peers". Though research suggests that it may be the more profitable investment strategy (Galema, Plantinga and Scholtens, 2008; Kempf and Osthoff, 2007), less than USD 1 trillion in assets are managed by positive screening (Global Sustainable Investment Alliance, 2015, 6-9),

In principle, the business model of asset managers and investment funds, who select assets ex-post in a portfolio approach, facilitates the use of positive and negative screening relative to the banking business model, which requires an ex-ante screening of individual loan applicants. However, the use of positive and negative criteria in bank lending have become increasingly common, mostly among dedicated sustainable or ethical banks such as Triodos Bank in the Netherlands (De Clerck, 2009). Therefore, the preferential treatment of borrowers – e.g., by granting favorable loan conditions – who meet certain stakeholder-relevant standards will be referred to as "lending based on positive criteria" or positive screening. In contrast, bank practices to lend to a lesser extent, at worse terms, or not at all to those borrowers who do not meet these standards is specified as " lending based on negative criteria" or negative screening going forward.

The focus of CSR activities within the bank-external channel has been on intangible secondary stakeholders so far. In principle, banks are also capable of addressing two of their primary stakeholders by means of lending: On the one hand, as Pérez, Martínez, and del Bosque (2013) document, profit maximization of a bank can be regarded as the objective of a stakeholder management targeted at the financial claims of its shareholders. Translated into bank lending, this goal can be achieved by, e.g., granting credit preferably to those loan applicants who agree to pay the highest possible interest rates for a given level of risk. Alternatively, a bank can choose not to grant credit to those borrowers who do not pay a certain minimum interest rate on a – without considering, e.g., social criteria. The former approach can be regarded as lending based on positive criteria in the interests of a bank's investors, the latter as an exclusionary lending strategy.

On the other hand, a bank can pursue a diametrically opposed approach to address the claims of its customers via lending: In terms of positive screening, a bank may choose to grant credit to its customers at the lowest possible interest rates. A negative screening strategy in turn could imply that the bank determines a maximum interest rate ceiling on the loans that it issues. Both strategies have a social connotation which suggests that lending in the interests of borrowers may be intertwined with external CSR measures to address social issues such as financial inclusion. At least in theory, the two approaches can distinguished by their target group: While customer-focused lending strategies aim at encouraging overall standards or address social issues in a wider context. While it is conceivable that banks seek to address the claims of shareholders or customers in terms of lending standards, especially the former stakeholder group plays only a minor role in banks' external CSR activities²¹.

This analysis yields three results: First, banks can use both internal and external channels for their CSR purposes. Second, the internal channel seems particularly well-suited for the management of the claims of primary stakeholder while bank lending appears more effective to address social, ethical, and environmental claims on a bank. Third, measured by the size of their potential impact on stakeholders, external CSR activities may be more powerful than internal activities: As Jeucken (2004) argues, it is rather the users of banking products than the banks themselves who have a major impact on the environment. Similarly, Herzig and Moon (2012) conclude that the social and environmental effects caused by the operations of banks' corporate clients "far outweigh(s) the direct impacts of the financial sector" (Herzig and Moon, 2012, 10). The banking industry itself takes a similar position: Survey results indicate that major European banks rate their "indirect responsibility in social and environmental issues via customers" as the most important issue area within CSR (Viganò and Nicolai, 2009, 17). This assumption appears justified: From a macroeconomic perspective, the reach and relevance of bank-internal activities to address the claims of employees is limited as, on average, merely 3% of a high-income country's workforce are employed in the entire financial sector (Stegmann and Gärtner, 2015). In contrast, the impact potential of bank lending is much higher: The volume of domestic credit provided by the financial sector significantly exceeds the respective nation's GDP in most high-income countries and amounts to about 150% in the European Union and more than 240% in the US (World Bank, 2015a). This suggests that the external CSR channel represents a powerful platform to establish in particular social, ethical, or environmental standards.

²¹To some extent, Deutsche Bank's pre-crisis objective to achieve a return on equity of 25% constitutes an exception. While clearly addressing the claims of the bank's shareholders, this objective translated into cost targets and affected lending as well as investment decisions (FAZ, 2013*a*) and therefore does not constitute an unequivocal example for shareholder-focused bank lending.

3.2.3 CSR Interaction Factors

The third building block in a framework of CSR in banking are interaction factors. This section discusses three aspects – the dichotomy of "saying" and "doing", the reputation of banks, and the cause/business fit between a stakeholder management activity and the banking business – and how they can impact the effectiveness of a bank's CSR activities.

The first factor is the dichotomy of "saying" vs. "doing", which describes the phenomenon that committing to consider certain stakeholders constitute a less effective CSR strategy than taking specific measures to address their claims. Implicitly, this distinction has already been introduced in section 3.2.2: For instance, a bank can "say" that, for instance, its shareholders will be considered by including corresponding references in its mission statement. On the other hand, a bank ca "do" something to meet the claims of this stakeholder group and launch a program to increase its profitability. Similarly, banks can address their intangible stakeholders such as ethics and morale by means of "saying" or "doing": Ethical codes of conduct are an example for the former, ethical criteria in performance management and compensation schemes or preferential loan conditions for particularly ethical companies for the latter approach.

These examples point towards a more general result: A bank can pursue a "doing" approach and implement specific programs both internally and externally or by means of lending. At the same time, the institutionalization of certain stakeholders and their claims within a "saying" approach constitutes an internal activity. This suggests that the first interaction factor primarily affects the bank-internal CSR channel.

This hypothesis is corroborated by the literature: Asymmetric information (Akerlof, 1970; Flannery, 1986) between company insiders and outsiders imply that the latter face much greater difficulties in determining whether companies in general translate their internal commitments and standards into practical measures. For the banking industry, this situation is exacerbated by the fact that banks are *"inherently more opaque than other firms"* (Morgan, 2002, 874). Turker (2009) documents how this limited transparency may be exploited by banks to deviate from their commitments in their actions.

In contrast, it is easier to determine from an external perspective whether a bank does what it says in lending: For instance, a bank cannot claim to address the environment by means of lending without establishing dedicated credit lines to "green" companies. This illustrates that a bank is judged by its actions rather than its words in lending: As documented in Relano and Paulet (2014), strong commitments to sustainable credit are insignificant if the respective bank grants loans to, e.g., manufacturers of cluster munitions, dictators, or companies which are known for environmentally harmful practices. As "saying" must coincide with "doing" in bank lending – at least in the long run – the first interaction factor needs is considered only within a bank's internal CSR channel.

Studies into the relative effectiveness of "saying" and "doing" have yielded a clear result: Actions are much more powerful than words. In general, Idowu and Filho (2009) argue that CSR "is demonstrated by actions and deeds; not by words or information inserted in some glossy magazines or corporate websites" (Idowu and Filho, 2009, IX). Specifically focusing on CSR in banking, a 2009 survey distinguishes between "Rhetoric and Realities" and concludes that the latter, i.e., tangible CSR activities and instruments, is the "influential factor" (Viganò and Nicolai, 2009, 48). Pérez, Martínez, and del Bosque (2013) find that CSR in banking is perceived mainly as a "collection of corporate actions" (Pérez, Martínez and del Bosque, 2013, 471). The authors argue that "saying" only creates value when implemented as CSR communication – rather than internal commitments – to inform the respective stakeholders about the activities to address their claims. Therefore, it can be assumed that "doing" CSR by implementing bank-internal action programs is more effective than "saying" CSR in terms of commitments.

The second factor which can influence the effectiveness of CSR activities is the reputation of both an individual company and of the wider industry. As documented in Fombrun and Shanley (1990), reputation can influence the effectiveness of CSR activities by providing a reference point against which stakeholders evaluate information about the CSR activities pursued by a specific company. The relation between CSR and reputation has been discussed at some length in the literature: For instance, Du, Bhattacharya, and Sen (2010) find that the good reputation of a company reinforces the positive effects of its CSR activities on consumers. Sen and Bhattacharya (2001) identify a positive relation between the effectiveness of a company's CSR activities and the public image of the company and its products. Similarly, the reputation of a company's industry has a moderating effect on the perceived effectiveness of its CSR activities: In combination, CSR activities pursued companies in the oil, tobacco, or alcohol industry are therefore likely to be ineffective due to consumers' "unfavorable, often cynical attributions" (Bhattacharya and Sen, 2004, 17). In contrast, CSR measures by companies with a poor reputation are mostly met with public skepticism and may therefore yield at best muted results or even prove negative. Therefore, it can be assumed that a favorable reputation of the company or its industry is likely to result in a higher effectiveness of this company's CSR activities.

Overall, the reputation of banks is far from favorable, driven by both historical sector characteristics and recent industry events. First, as documented in Decker and Sale (2010), the banking business model has faced allegations of usury and therefore been held in public contempt since medieval times. De Clerck (2009) shows that this attitude towards banks is common across religious boundaries. Second and more recently, the 2007-08 Financial Crisis has severely damaged the reputation of the banking industry: Herzig and Moon (2012) report consumer survey evidence that the reputation of banks suffered due to their role in the role in this crisis. Brown and Whysall (2010) replicate this finding specifically for the financial industry in the UK. Decker and Sale (2010) take a broad perspective and argue that "questions about bankers' judgment" and an erosion of confidence in their ability to perform their "economic, legal, ethical and philanthropic responsibilities" (Decker and Sale, 2010, 142-153) led to a loss of banks' reputation in the wider public. In line with the outcomes of section 3.1.3, Pérez and del Bosque (2012) as well as Hoepner and Wilson (2010) emphasize that the 2007-08 Financial Crisis affected not only the image of banks, but also undermined their public credibility and trustworthiness.

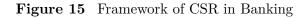
The poor reputation of the financial industry is likely to translate into a rather muted effectiveness of CSR activities in banking. In two ways, this is an important result: First, it matters from a general perspective as reputation is crucial for the banking industry. As documented in Hoepner and Wilson (2010), banks provide services that are characterized by "credence qualities" (Darby and Karni, 1973, 68); in other words, their quality cannot be evaluated in the short term without incurring additional costs. Therefore, as Decker and Sale (2010) argue, the value of banks and the stability of the entire financial sector depend to a critical degree on intangible assets such as reputation and trust. In contrast, poor reputation and a lack of trust in banks may cause contagion within the entire financial sector and spread to the real economy (Diamond and Dybvig, 1983; Allen and Gale, 2000). Second, the result carries particular relevance for CSR in banking as reputation can interact with the first factor, the distinction between "saying" and "doing": As described above, information asymmetries and bank opacity make it difficult for stakeholders to evaluate whether "saying" is followed by "doing". As a consequence, stakeholders need to trust a bank that its commitments to consider their interests are not mere lip service. Against the background of poor reputation and lost trust as well as credibility in the banking industry, this may be a challenging thing to do. The unfavorable reputation of banks may therefore undermine the effectiveness of a bank's CSR activities, in particular of its internal CSR commitments.

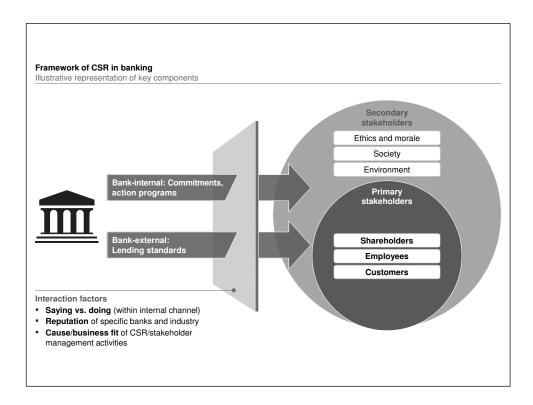
The third interaction factor in scope is the fit between cause and business, which describes the phenomenon that CSR activities are particularly effective in case of a high perceived congruity between the cause they address and the characteristics of the company which pursues them. As Ellen, Webb, and Mohr (2006) show, companies initially focused on CSR causes that were unrelated to their business to avoid "opportunistic attributions" (Ellen, Webb and Mohr, 2006, 150) before concentrating on high-fit activities to build a public image as experts on a specific CSR topic and facilitate spill-overs of positive attitudes towards a cause to the company. Further research corroborates this position: For instance, Van De Ven (2008) advises that companies should consider their values, strengths, and reputation when setting the priorities of a CSR strategy. In contrast, a low level of fit may reduce stakeholders' positive attitudes towards a company. As Du, Bhattacharya, and Sen (2010) show, a weak cause/business fit may trigger an open-ended reflection process to connect both aspects in which CSR activities may end up being attributed to alternative, extrinsic motivations, which reduce their effectiveness.

Though originally anchored in cause-related marketing (CRM) for consumer goods, the cause/business fit theory can be translated to a banking context: An effective CSR strategy of a bank needs to be consistent with its most important characteristics. Therefore, a bank should identify both its relevant stakeholders and the activities which meet the claims of these groups or individuals (Pérez and del Bosque, 2012, 148). In a fundamental sense, this is ensured by the approach is pursued in the present study: First, CSR is operationalized in terms of a company's regular business activities and rules out philanthropic or charitable giving, which is unrelated to a bank's operations. Second, a bank's stakeholders are identified and prioritized on the basis of, among other factors, their value-chain relevance and the quality of their relations with a bank. This implies a significant ex-ante fit between cause and business.

Again, the extent to which a high or low cause/business fit may drive the effectiveness of a bank's CSR activities may depend on other interaction factors: On the one hand, Bhattacharya and Sen (2004) find a particularly strong influence of CSR activities on consumers if the respective company's reputation is strong and its business characteristics overlap with the focus of its activities. As shown above, the reputation of banks can be regarded as poor. To compensate for this status, banks may decide to ensure an even higher cause/business fit in their CSR activities. If so, banks should also consider that consumers have occasionally proven particularly skeptical if companies with an unfavorable reputation engage in CSR activities that are very closely associated to their business (Bhattacharya and Sen, 2004, 14). This underscores the need for banks to implement a targeted and context-specific approach to CSR.

The combination of these three components of CSR in banking – stakeholders, CSR channels, and interaction factors – yields the final framework of CSR in banking. As illustrated in figure 15, it implies that banks can implement CSR activities via both bank-internal commitments and action programs as well as bank-external lending standards to address the claims of primary and secondary stakeholders and are impacted by the three interaction factors.





Source: Own representation.

3.3 Empirical Insights

The following section complements the theoretical discussion of CSR in banking with insights into this topic from a comprehensive CSR survey among 479 university students. Section 3.3.1 derives the hypothesis to be tested in the survey. The survey's design in terms of main items as well as control variables are summarized in section 3.3.2. Section 3.3.3 documents the data collection as well as preparation process and characterizes the survey sample in terms of descriptive statistics. The results of the statistical hypothesis testing, which are reported in section 3.3.4, show that stakeholder salience, CSR activity effectiveness, and interaction factors shape the perception of bank as socially responsible companies. The analyses in particular suggest the salience of primary stakeholders and the effectiveness of bank-internal activity programs as well as all the importance of all three interaction factors. These findings are discussed in section 3.3.5.

3.3.1 Derivation of Hypotheses

Figure 15 suggests that CSR in banking can be broken down into stakeholders, CSR channels, and interaction factors. To determine the importance of these three aspects, the theoretical reasoning of section 3.2 is translated into a set of testable hypotheses.

3.3.1.1 Stakeholders

Section 3.2.1.2 derived a refined overview of stakeholders by combining existing approaches to stakeholder management in banking with the three fundamental qualities of CSR: Voluntariness beyond legal obligations, integration of activities within a company's regular operations, and the management of stakeholder claims. As discussed in section 2.2, the concept of CSR – and therefore also the stakeholder claims in scope – are not fixed, but need to be constructed and derived specifically for a given context. The first stakeholder hypothesis therefore seeks to test whether the refined stakeholder overview meets this criterion for a banking setting.

Stakeholder hypothesis H_1 : All stakeholders captured by the refined stakeholder overview are salient for a bank

Introduced in the same section, figure 12 demonstrates that a bank's stakeholders can be distinguished into a primary and a secondary set, with the former referring to a bank's shareholders, customers, and employees and the latter encompassing mainly society, ethics, and the environment. This distinction is likely to inform the – perceived – salience of these stakeholders²². In principle, two effects, which are diametrically opposed, are conceivable: On the one hand, the greater relevance of a bank's primary stakeholders for its core value chain may trigger perceptions of more salient claims. Moreover, in terms of Mitchell, Agle, and Wood's (1997) stakeholder model, a bank's shareholders, customers, and employees are all "definitive stakeholders".

On the other hand, the perceived salience of a bank's secondary stakeholders may be higher: As documented in Brown and Dacin (1997), the public may regard addressing the claims of shareholders not as a CSR activity, but as a regular business activity. Fatma, Rahman, and Khan (2014) replicate this result specifically for the banking industry and find that social or environmental activities are evaluated as more relevant than shareholder-focused activities. This result may imply that the public may consider only those measures which entail "caring about the environment, the welfare of people (...), and other good causes" (Bénabou and Tirole, 2010, 19) as CSR and therefore deem the corresponding stakeholders more relevant – or salient – than a bank's primary stakeholders. These two opposing views are summarized in the second and third stakeholder hypothesis.

Stakeholder hypothesis H_2 : Primary stakeholders are more salient than secondary stakeholders for a bank

Stakeholder hypothesis H_3 : Secondary stakeholders are more salient than primary stakeholders for a bank

²²The following hypotheses and analyses build upon perceptions of stakeholder salience. To improve readability, "salience" is used interchangeably with "perceived salience" as well as "relevance" and "perceived relevance".

Finally, the taxonomy of a bank's stakeholders, shown in figure 14, carries an important implication: The salience of a stakeholder does not only depend on their belonging to the "definitive" or "expectant" class, but can also be described within these classes in terms of their relative power, legitimacy, and urgency. For instance, ethics and morale as well as society and social issues both constitute expectant stakeholders; however, the claims of the former are classified as both more legitimate and urgent, which may be mirrored in a higher perceived salience of this stakeholder. This notion is summarized by the H_4 .

Stakeholder hypothesis H_4 : The salience of a bank's stakeholders is in line with the stakeholder taxonomy

These hypotheses on the first component of CSR in banking – a bank's stakeholders and their relevance – are summarized in table 3.

Hypothesis	Implication
Stalshalder hun ethesis II	All stakeholders captured by the refined stake-
Stakeholder hypothesis H_1	holder overview are salient for a bank
Stakeholder hypothesis H_2	Primary stakeholders are more salient than sec-
	ondary stakeholders for a bank
Stalshalder hun ethesis II	Secondary stakeholders are more salient than pri-
Stakeholder hypothesis H_3	mary stakeholders for a bank
	The salience of a bank's stakeholders is in line with
Stakeholder hypothesis H_4	the stakeholder taxonomy

 Table 3
 CSR Survey Hypotheses: Stakeholders

Source: Own representation.

3.3.1.2 CSR Channels

The analysis conducted in section 3.2.2 establishes that CSR activities of banks can be implemented along either internal or external CSR channels. In a fundamental sense, this suggests that both channels constitute effective means to address claims of a bank's stakeholders. The purpose of the first hypothesis about a bank's CSR channels, which is expressed below, is to test this assumption.

CSR channel hypothesis H_5 : Banks can effectively address their stakeholders along internal and external CSR channels

Taking this analysis one step further yields further hypotheses about the two CSR channels. The first set focuses on the relative effectiveness of activities pursued via either of the two CSR channels: As the findings in section 3.2.2 suggest, external CSR activities in general may be more effective than internal CSR activities. This assumption is driven by both the qualitative aspects as, for instance, the direct environmental impact of the rather non-polluting banking sector is limited (Jeucken, 2004) and by quantitative factors, illustrated by the observation that the reach and relevance of banks is greater when measured in terms of bank credit rather than sectoral employment. This is the position taken by hypothesis H_6 .

However, the internal channel also enables banks to exercise greater control over their CSR activities. This applies to a lesser extent for external activities, which are characterized by a fundamental principal-agent problem of addressing stakeholder claims via lending standards, structural information asymmetries on whether a borrower actually meets these standards, and positive screening and monitoring costs for the bank to generate greater transparency on borrower compliance. As a result, banks may struggle to effectively address certain stakeholders and their claims via lending, as Scholtens (2007) or Wu and Shen (2013) documented for the example of environmental lending standards. Therefore, hypothesis H₇ conjectures – in contrast to H₆ – that CSR activities pursued via a bank's internal CSR channel may in fact be more effective.

CSR channel hypothesis H_6 : CSR activities are more effective when implemented along a bank's external channel rather than its internal channel

CSR channel hypothesis H_7 : CSR activities are more effective when implemented along a bank's internal channel rather than its external channel

A second set of hypotheses is derived from H_2 and H_3 , which concern the perceived salience of primary vis-à-vis secondary bank stakeholders. A similar distinction may hold for the effectiveness of activities taken to address either of the two stakeholders sets: On the one hand, measures targeted at shareholder, customer, and employee claims may be regarded as more effective than initiatives which address the claims of secondary stakeholders due to the greater relevance of primary stakeholders within a bank's value chain. On the other hand, the former actions may be regarded as a basic business activity rather than CSR and therefore be perceived as less effective than programs with a social, ethical, or environmental focus. These contrary positions are summarized in hypothesis H_7 and H_8 .

CSR channel hypothesis H_8 : CSR activities to address primary stakeholders are more effective than CSR activities to address secondary stakeholders

CSR channel hypothesis H_9 : CSR activities to address secondary stakeholders are more effective than CSR activities to address primary stakeholders

The third set combines distinction between primary and secondary stakeholders of hypotheses H_8 and H_9 with the assumptions about the relative effectiveness of the two CSR

channel hypotheses H_2 and H_3 : As already sketched in the conclusion of section 3.2.2, theory suggests that the internal CSR channel is particularly well-suited to address the claims of a bank's primary stakeholders. This hypothesis is based on the argument the internal channel allows the bank to design and implement activities which target the claims of those stakeholders which are of major importance for its core value chain immediately within its corporate structures and processes. In contrast, the external channel may be the more effective way to manage the claims of a bank's secondary stakeholders: As discussed above, society, ethics, and the environment are not of immediate importance to provide banking products and services. At the same time, the lending activities of a bank both match the external character of these stakeholders and allow for a bigger quantitative impact. The resulting hypotheses are summarized in H_{10} and H_{11} .

CSR channel hypothesis H_{10} : Within the internal channel, activities to address the claims of primary stakeholders are more effective than activities to address the claims of secondary stakeholders

CSR Channel hypothesis H_{11} : Within the external channel, activities to address the claims of secondary stakeholders are more effective than activities to address the claims of primary stakeholders

The final set of hypotheses concerns the relative effectiveness of positive and negative screening approaches within the external or bank-lending CSR channel. According to section 3.2.2 finds, the former approach may represent the more profitable investment strategy (Galema, Plantinga and Scholtens, 2008; Kempf and Osthoff, 2007) as positive screening allows for cherry-picking those companies with a superior social and financial performance. However, industry data suggests that the majority of SRI funds managers implement SEE or ESG criteria by means of negative screening (Global Sustainable Investment Alliance, 2015). This may suggest that exclusionary or negative screening practices still constitute the more effective approach. These two opposing positions are translated to a banking context and summarized by hypotheses H_{12} and H_{13} .

CSR channel hypothesis H_{12} : Positive screening within the external channel is more effective than negative screening

CSR channel hypothesis H_{13} : Negative screening within the external channel is more effective than positive screening

Finally, the concept which underlies hypothesis H_4 is likely to matter for a CSR channel context, too: Provided that the taxonomy of a bank's stakeholders, it may also have an impact on the effectiveness of the activities to address the claims of these stakeholders. For instance, implementing ethical and moral standards may be perceived as more effective than CSR with an explicit social or environmental focus due to the former stakeholder's higher legitimacy and urgency. This notion is summarized in hypothesis H_{14} .

CSR channel hypothesis H_{14} : The effectiveness of a bank's individual CSR activities is in line with the stakeholder taxonomy

Table 4 presents an overview of these hypotheses about the effectiveness of a bank's stakeholder management activities along its internal and external CSR channel.

Hypothesis	Implication				
	Banks can effectively address their stakeholders				
CSR channel hypothesis ${\rm H}_5$	along internal and external CSR channels				
	CSR activities are more effective when imple-				
CSR channel hypothesis H_6	mented along a bank's external channel rather than				
	its internal channel				
	CSR activities are more effective when imple-				
CSR channel hypothesis H_7	mented along a bank's internal channel rather than				
	its external channel				
	CSR activities to address primary stakeholders are				
CSR channel hypothesis H_8	more effective than CSR activities to address sec-				
	ondary stakeholders				
	CSR activities to address secondary stakeholders				
CSR channel hypothesis H_9	are more effective than CSR activities to address				
	primary stakeholders				
	Within the internal channel, activities to address				
CSP shapped hypothesis H	the claims of primary stakeholders are more effec-				
CSR channel hypothesis H_{10}	tive than activities to address the claims of sec-				
	ondary stakeholders				
	Within the external channel, activities to address				
CSP shapped hypothesis H	the claims of secondary stakeholders are more effec-				
CSR channel hypothesis H_{11}	tive than activities to address the claims of primary				
	stakeholders				
CSR channel hypothesis H_{12}	Positive screening within the external channel is				
	more effective than negative screening				
CSR channel hypothesis H_{13}	Negative screening within the external channel is				
Cont channel hypothesis Π_{13}	more effective than positive screening				
CSR channel hypothesis H_{14}	The effectiveness of a bank's individual CSR activ-				
Con channel hypothesis fi14	ities is in line with the stakeholder taxonomy				

 Table 4
 CSR Survey Hypotheses:
 CSR Channels

Source: Own representation.

3.3.1.3 Interaction Factors

As shown in section 3.2.3, the effectiveness of a bank's CSR activities may be affected by a range of interaction factors. This section derives the hypotheses to test the impact of three specific factors on stakeholder salience and activity effectiveness in the CSR survey.

The first interaction factor is the dichotomy of "saying" vs. "doing": The discussion in section 3.2.3 suggested that verbal commitments to address the claims of certain bank stakeholders are less effective than action programs with a corresponding focus, driven by bank opacity (Morgan, 2002) and asymmetric information (Akerlof, 1970; Flannery, 1986). This dichotomy is of particular relevance within the internal channel where outsiders face greater costs and difficulties to determine whether a bank's words are followed by actions. This notion is summarized in hypothesis H_{15} .

Interaction factor hypothesis H_{15} : Within a bank's internal channel, commitments are less effective than action programs

Reputation constitutes the second factor, which has the potential to exert significant influence on the social performance of a bank. More specifically, four main hypotheses can be formulated. The first one seeks to generate further insights into the actual reputation of the banking industry. On the one hand, the findings of section 3.2.3 imply that a combination of historical associations and recent events such as the 2007-08 Financial Crisis has resulted in an unfavorable relative reputation of banks. On the other hand, section 3.1.1 suggests that the CSR expenditures of banks outstrip those of other industries and exhibit a strong upward trend. This development may have improved the reputation of the banking industry. Therefore, a sound fact base is required to determine which of these two effects dominates before further exploring the interactions between reputation and CSR in banking. Hypothesis H_{16} , which assumes that the reputation of banks remains relatively unfavorable, summarizes this idea.

Interaction factor hypothesis H_{16} : The reputation of banks is worse in comparison to other industries

The second hypothesis relates a bank's reputation to its perception as a socially responsible company. This relation is based on the observation that institutions often integrate reputational risk management within their CSR strategies as in the case of Deutsche Bank's "Responsible Business" agenda (Deutsche Bank, 2015*b*). This may imply a close connection between CSR activities, the perception as a socially responsible company, and reputation – in other words, CSR may be considered a key vehicle for banks to be perceived as socially responsible and thereby improve their reputation. Yet, CSR represents a comprehensive managerial concept: Integrating stakeholder management within the bank's regular economic activity implies that business decisions need to be taken which

stakeholder claims are addressed and prioritized over others. The reputational impact is likely to be only one aspect which is considered in this process. In other words, CSR goes beyond mere reputation management. Combining these two arguments results in hypothesis H_{17} , which conjectures that that CSR and reputation in banking are strongly related, but ultimately different concepts.

Interaction factor hypothesis H_{17} : There is a positive relation, but not identity, between the reputation of a bank and its perception as socially responsible

In a third step, reputation can be related to the effectiveness of a bank's CSR activities. As section 3.2.3 finds, the stakeholder management activities of companies which enjoy a favorable reputation are typically perceived as particularly effective. In contrast, the pursuit of CSR activities by companies with a poor corporate reputation may trigger public skepticism, yield only muted results, or even prove negative. Hypothesis H_{18} seeks to test whether this relation holds for banks, too.

Interaction factor hypothesis H_{18} : The reputation of a bank and the effectiveness of its CSR activities are positively related

This train of thought can be taken one step further: As explored previously, the perceived effectiveness of a bank's internal CSR activities depends to a critical extent on their credibility, which is in turn driven by its reputation as a trustworthy company. The reason is that external transparency on most of the bank's internal actions, particularly its commitments to meet the claims of certain stakeholders, is limited. Reputation should play a less important role for the effectiveness of a bank's external CSR activities as stakeholders and the interested public may find it easier to hold banks accountable for certain lending standards. As a consequence, the positive relation between reputation and CSR activity effectiveness in banking, described in general by hypothesis H_{18} , may be even stronger for the internal CSR channel and especially "saying" activities. This assumption is described by hypothesis H_{19} .

Interaction factor hypothesis H_{19} : The positive relation between the reputation of a bank and the effectiveness of its CSR activities is stronger for internal activities, in particular commitments

The final interaction factor to be analyzed is the fit between cause and business. Section 3.2.3 concluded in a general sense that, the better the perceived fit between a stakeholder and a company's business operations, the higher is the perceived effectiveness of the activities to address the claims of this stakeholder. At the same time, the distinction between primary and secondary stakeholders cannot be used as a proxy for this interaction factor as all stakeholders were identified on the basis of the criterion that their claims can be addressed within the regular business activity, which implies a fundamental level of

fit. Instead, it needs to be determined on an individual basis whether or not addressing certain stakeholder claims and the banking business match particularly well. Where this is the true, a bank's CSR activities are likely to be perceived as highly effective, compared to cases in which the fit between stakeholders and the banking business is low. This idea is captured by hypothesis H_{20} .

Interaction factor hypothesis H_{20} : CSR activities with a high cause/business fit are more effective than CSR activities with a low cause/business fit

Table 5 summarizes these hypotheses on the three CSR interaction factors in banking.

Hypothesis	Implication		
Internetion footon how otherin II	Within a bank's internal channel, commit-		
Interaction factor hypothesis H_{15}	ments are less effective than action programs		
Interaction factor hypothesis H	The reputation of banks is worse in comparison		
Interaction factor hypothesis H_{16}	to other industries		
	There is a positive relation, but not identity,		
Interaction factor hypothesis H_{17}	between the reputation of a bank and its per-		
	ception as socially responsible		
Interaction factor hypothesis H	The reputation of a bank and the effectiveness		
Interaction factor hypothesis H_{18}	of its CSR activities are positively related		
	The positive relation between the reputation of		
T / /· C / 1 /1 · TT	a bank and the effectiveness of its CSR activ-		
Interaction factor hypothesis H_{19}	ities is stronger for internal activities, in par-		
	ticular commitments		
	CSR activities with a high cause/business fit		
Interaction factor hypothesis H_{20}	are more effective than CSR activities with a		
	low cause/business fit		

Source: Own representation.

3.3.2 Survey Design

The test of these hypotheses draws upon data from a structured survey; a proven instrument in social sciences for explanatory and exploratory investigations in large populations (Rubin and Babbie, 2015; Sudman and Bradburn, 1982). This suggests that a structured survey is particularly well-suited to establish broad perspective on the largely unexplored topic of CSR in banking. At the same time, this scarcity of preliminary work made it necessary to design the CSR survey from scratch²³.

The CSR survey consisted of two main parts, with the first one investigating CSR in banking in terms of stakeholders, CSR channels and activities, and the three interaction factors, as specified by the CSR framework. In line with the stakeholder taxonomy of figure 14, the survey focused on definitive and expectant bank stakeholders.

The first two CSR survey items 1.1 and 1.2 asked the participants to evaluate the consideration of certain stakeholders within banking business activities in general. For each stakeholder, the participants could either state that they regarded this behavior as a legal requirement or indicate how relevant they regarded it for a bank to consider this stakeholder. This distinction was implemented to differentiate between legal compliance and inherently voluntary CSR activities.

Items 2.1-2.4 and their counterparts 3.1-3.4 were constructed as basically identical questions with the former concentrating on the internal and the latter on the external CSR channel of a bank. Items 2.1 and 3.1 broke down the general idea of items 1.1. and 1.2 to determine how important the participants regarded it for a bank to consider certain stakeholders within their internal (2.1) or external (3.1) CSR channel. Alternatively, the participants could indicate that they deemed considering certain stakeholders within business activities compulsory for a bank. Items 2.2 and 3.2 asked the participants to assess how strongly banks currently considered each stakeholder within their regular business activities. In the next two items 2.3 and 3.3, the participants were asked to provide as assessment of the potential damage which a failure to consider certain stakeholders could cause to a bank. These items address one aspect of reputation, introduced as a potential interaction factor in section 3.3.1.3. The third interaction factor discussed in this context - the cause/business fit - is taken up in items 2.4 and 3.4, which ask the participants to indicate their perceptions of fit between a bank's business activity and considering certain stakeholders. For all items, the participants' assessments were measured using a Likert 5-point scale, which is frequently used in similar research purposes (Fatma, Rahman and Khan, 2014; Poolthong and Mandhachitara, 2009; Wu and Shen, 2013).

 $^{^{23}\}mathrm{The}$ full survey is documented in appendix A.1.

Table 6 documents the wording of items 1.1-3.4 in the CSR survey with the counterparts of items 2.1-2.4 and 3.1-3.4 summarized in in the respective same row. The last column captures whether the participants could indicate that they considered the respective activity voluntary ("Vol") or compulsory ("Comp") for a bank.

Item	Wording	Vol / Comp	
1.1	How do you evaluate a general consideration of the following		
	interest groups within a bank's business activities?	Yes	
1.2	How do you evaluate a general consideration of the following	Vez	
1.2	societal topics within a bank's business activities?	Yes	
2.1	How do you evaluate a consideration of the following interest	Yes	
2.1	groups and societal topics within a bank's internal operations?	ies	
3.1	How do you evaluate a consideration of the following interest	Yes	
J.1	groups and societal topics within a bank's lending activities?	165	
	In your view: How strongly do banks currently consider the		
2.2	following interest groups and societal topics within their in-	No	
	ternal operations?		
	In your view: How strongly do banks currently consider the		
3.2	following interest groups and societal topics within their lend-	No	
	ing activities?		
	In your view: How harmful would it be for the public repu-		
2.3	tation of a bank not to consider the following interest groups	No	
	and societal topics within its internal operations?		
	In your view: How harmful would it be for the public repu-		
3.3	tation of a bank not to consider the following interest groups	No	
	and societal topics within its lending activities?		
	In your view: How well does it fit with the business activities		
2.4	of a bank to consider the following interest groups and societal	No	
	topics within its internal operations?		
	In your view: How well does it fit with the business activities		
3.4	of a bank to consider the following interest groups and societal	No	
	topics within its lending activities?		

Source: Own representation.

Note: Item questions translated from German. "Internal operations" were defined as bankinternal processes, a bank's code of conduct, or its mission statement.

Finally, the survey participants were asked to indicate their assessment how effectively a bank could address its stakeholders by pursuing specific CSR activities on a 5-point Likert scale from "very effective" to "very ineffective". Therefore, the corresponding items 2.5 and 3.5 were designed as counterparts to cover the internal and the external CSR channel of a bank: First, item 2.5 distinguished between "saying" and "doing" in the bank-internal CSR channel to account for the first interaction factor and provided a general commitment as well as a specific action program for each stakeholder. Alternatively, the participants could provide another activity and an assessment of its effectiveness. Item 2.5 is summarized in table 7.

Stakeholder	Wording: Action program	Wording: Commitment		
Stakeholder Wording: Retion program The bank launches a program which considers the claims of its shareholders (e.g., to reduce its internal costs)		The bank emphasizes the inter ests of its shareholders in its mis sion statement		
Customers	The bank launches a program which considers the claims of its customers (e.g., to improve the confidentiality of customer data)	The bank emphasizes the inter- ests of its customers in its mission statement		
Employees	The bank launches a program which considers the claims of its employees (e.g., to facilitate the reconciliation of family and work)	The bank emphasizes the inter- ests of its employees in its mission statement		
Ethics	The bank launches a program which considers ethical and moral topics (e.g., for the introduction of ethical criteria in management evaluation and compensation)	The bank emphasizes ethical and moral topics in its mission state- ment		
Society	The bank launches a program which considers social topics (e.g., for the engagement of its employ- ees in courses to improve financial literacy in wider society)	The bank emphasizes social top ics in its mission statement		
Environment	The bank launches a program which considers environmental topics (e.g., for comprehensive re- cycling and upgraded energy effi- ciency of its buildings)	The bank emphasizes environ- mental topics in its mission state- ment		

Table 7CSR Survey: Item 2.5

Source: Own representation.

Note: Items translated from German.

Second, item 3.5 explored the perceived effectiveness of positive and negative screening in bank lending as discussed in section 3.3.1.2. In the survey, the distinction between these two approaches was implemented as preferential lending to borrowers who act in line with the interests of a certain stakeholder (positive screening) or as a denial of credit for those borrowers who fail to meet certain minimum stakeholder-specific requirements (negative screening). Table 8 summarizes the wording of item 3.5.

Stakeholder	Wording: Positive screening	Wording: Negative screening
Shareholders	The bank grants preferential credit to those companies and individuals who pay the highest possible lending rate for a given level of risk	The bank does not grant credit to those companies and individu- als who do not pay a certain mini- mum lending rate for a given level of risk
Customers	The bank grants credit to compa- nies and individuals at the lowest possible lending rate for a given level of risk	The bank does not grant credit above a certain maximum lend- ing rate for a given level of risk to companies and individuals
Ethics and morale	The bank grants preferential credit to companies with the highest possible ethical standards and regularly follows up on their adherence to these standards	The bank defines certain ethical minimum standards and does not grant credit to those companies which do not meet these stan- dards
Society and social causes	The bank grants preferential credit to companies with the highest possible social standards and regularly follows up on their adherence to these standards	The bank defines certain social minimum standards and does not grant credit to those companies which not meet these standards
The environ- ment	The bank grants preferential credit to companies with the highest possible environmental standards and regularly follows up on their adherence to these standards	The bank defines certain environ- mental minimum standards and does not grant credit to those companies which do not meet these standards

Table 8CSR Survey: Item 3.5

Source: Own representation.

Note: Items translated from German.

In the design process of the survey, two aspects were ensured: First, the avoidance of terms with multiple connotations or expressions which might leave room for personal

interpretation and therefore yield biased results: As Sudman and Bradburn (1982) put it, "loaded words produce loaded results" (Sudman and Bradburn, 1982, 5-6). Clearly, this risk exists for key terms such as "CSR", "sustainability" and "socially responsible" due to, inter alia, the lack of authoritative definitions and the controversial debates on the social responsibility of companies. To eliminate – or at least mitigate – these biases, three steps were taken: First, the survey was framed neutrally as a questionnaire on the business activities of banks. Second, the survey provided definitions for particularly relevant and potentially ambiguous concepts. Third, certain items were avoided or circumscribed: For instance, the concept of CSR was described as operationalized in section 2.2 as a voluntary activity to manage stakeholder claims within regular business activities²⁴.

Second, the CSR survey's items needed to be both relevant for the research topic and comprehensible for its participants. In line with previous survey studies (Poolthong and Mandhachitara, 2009; Turker, 2009; Ramasamy and Yeung, 2009), pre-testing and piloting were used validate the design the CSR survey.

In a first step, the survey items were pre-tested and refined in discussions with industry experts on banking, CSR, and SRI. A particular focus of these expert interviews was to validate the representativeness of the specific CSR activities documented in tables 7 and 8, which were derived by combining reviews of CSR reports (Strandberg, 2005; Pérez and del Bosque, 2012), CSR scale development studies (Fatma, Rahman and Khan, 2014; Pérez, Martínez and del Bosque, 2013; Turker, 2009), and own research using banks' CSR reports and websites. In a second step, the survey was piloted in a sample of five undergraduate and graduate students from the same population as the final survey sample as well as among five doctoral students in business and economics from different universities to determine whether the survey was clearly worded and appropriate in length.

The second part of the survey gathered data on control variables to capture the potential impact of certain sociodemographic parameters on perceptions of, for instance, stake-holder salience or CSR activity effectiveness. A person's gender and age constitute the first and second control variables. As previous research indicates, both may affect CSR perceptions (Arlow, 1991; Pérez, Martínez and del Bosque, 2013; Valentine and Fleis-chman, 2008; Ramasamy and Yeung, 2009). The findings point towards an ambiguous influence of age, which is often positively correlated with stronger socially responsible individual behavior on the one hand (Roberts, 1996a) and stronger suspiciousness of corporate CSR activities on the other hand (Fatma, Rahman and Khan, 2014). The impact of gender is clearer and suggest that women value CSR activities higher (Roberts, 1996a).

 $^{^{24} \}rm Similarly,$ the German expression "Nachhaltigkeit" might have yielded biased results due to the lack of an authoritative definition for or multiple personal connotations with this concept (FAZ, 2012) . Therefore, this term used only for control purposes in the CSR survey.

A third control variable can be subsumed under "experience", which constitutes another important predictor of CSR perceptions. As Arlow (1991) argues in an early study, "the longer the work experience, the lower the concern for selfish interest, for "survival of the fittest," and the belief in absolutes" (Arlow, 1991, 68). This suggests a positive correlation between a person's experience in their job and, e.g., the importance they attach to a company meeting the claims of its stakeholders. Taking the sample's composition into account, experience is broken down into two components: The first one operationalizes experience in terms of academic progress and captures whether a participant studies at undergraduate or graduate level as well as their course of studies. Thereby, the first component also proxies to some extent for education, another predictor of socially responsible consumer behavior (Webster Jr, 1975; Lenssen et al., 2006; Ramasamy and Yeung, 2009). The second component is concerned with the respective participant's financial experience, measured by the number of bank relationships by type of bank as well as the number and quality of financial products used.

Data for all control variables was collected at the end of the survey by using either open-ended questions (e.g., about a participant's age) or multiple-choice questions with an option to provide additional information (e.g., about the financial products used). Within the same section, two additional control items were included. As shown in table 9, items C_1 and C_2 asked the survey participants to indicate their agreement with two statements on the reputation of banks and their social performance in comparison to other industries on a 5-point Likert scale from "Strongly Agree" to "Strongly Reject".

Table 9	CSR Survey:	Control Items
---------	-------------	---------------

Item	Wording
C_1	The reputation of banks is worse compared to other industries
C_2	Banks behave in a more socially responsible way than other companies

Source: Own representation.

Note: Items translated from German.

3.3.3 Data Collection and Preparation

The survey was implemented as a pen-and-paper questionnaire among a sample of undergraduate and graduate students of the Faculty of Business Administration and Economics at Heinrich Heine University in Düsseldorf, Germany. To ensure a sufficiently large and varied sample for the subsequent analyses, data was collected during three regular lectures over the course of April 2015.

On each occasion, the data collection followed four identical steps: First, the participants were notified one week in advance that a survey would be conducted during the next lec-

ture. Second, on that date, the participants were introduced to the survey topic and were provided with the operational instructions, a privacy notice regarding the data entered, and the definitions for all stakeholders as well as the business activities of a bank. For this purpose, a standardized text was read out and the introduction slides, documented in appendix A.2, were shown. To avoid multiple participation by the same persons, the participants were asked not to fill out the questionnaire if they had already participated in the survey before. Third, the students were handed out the 7-page questionnaire and granted 20 minutes to complete it. Fourth, the questionnaires were collected and digitalized.

Prior to the actual analysis, the survey data was prepared to eliminate incomplete questionnaires and cleared to identify potentially incorrect data entries in three steps: First, the questionnaires were checked for completeness and discarded if a participant did not complete all items in the main part of the survey – i.e., items 1.1-3.5 – and the items shown in table 9. This exercise resulted in a sample size of 508 surveys. The same logic was applied if participants did not enter their age, gender, or indicated that they did not have at least one bank relationship or a current account. While some analyses might have been possible without this data, incomplete entries was regarded as an indicator of a general lack of rigor in completing the questionnaire or, in case of the items on banking and financial products, an insufficient level of exposure to financial services. Thereby, 16 surveys were eliminated, resulting in a sample size of 492.

In a second step, the data was cleared using an outsider analysis. As defined by Grubbs (1969) "an outlying observation, or "outlier," is one that appears to deviate markedly from other members of the sample in which it occurs" (Grubbs, 1969, 1). As the use of Likert scales in the survey's main part limits the potential for outliers, the open control items on a participant's age was used for this analyses.

To account for natural differences in terms of age between undergraduate and graduate students, two sub-samples were created first. Table 10 describes each of these samples in terms of their measures of location and dispersion for the item "Age". Following Tukey (1977), all observations within the "inner fences" – deviations of more than 1.5 and less than 3 times the interquartile range (IQR) downwards from the lower or upwards from the upper quartile – were regarded as mild or acceptable outliers. Deviations of more than 3 times the IQR beyond the lower or upper quartile – i.e., outside the "outer fences" – were considered extreme outliers. The associated surveys, a total number of 13, were eliminated from the sample.²⁵

 $^{^{25}\}mathrm{The}$ box plots to illustrate this exercise are shown in appendix A.3.

Sample Siz	Sizo Mod	Median	Inner fence		Outer	Outer fence		No. of outliers	
	DIZE	meulan	LB	UB	LB	UB	Mild	Extreme	
BA	415	21	17	25	14	28	16	9	
MA	77	25	21	29	18	32	3	4	

Table 10	CSR Survey:	Outlier	Analysis	for	Item	"Age"
----------	-------------	---------	----------	-----	------	-------

Source: Own representation.

Note: N = 492. "BA" ("MA") denotes undergraduate (graduate) students. "LB" ("UB") denote lower (upper) bounds.

After the first two steps, which affect the aggregate CSR survey data, the sample can be characterized in terms of descriptive statistics as documented in tables 11 and 12. The former suggests that, first, the average participant is between 21 and 22 years old and therefore rather young. Second, a joint analysis of mean, median, and average suggests that the survey participants had on average one – potentially two – bank relationships. This is in line with the characteristics of the German banking market (Bank und Markt, 2010, 5), particularly for the retail customer segment (Wicke, 2013, 55). Third, in spite of their relative youth and a conservative number of bank relationships, the participants used on average two financial products, which suggests at least a basic level of financial sophistication.

Table 11	CSR Survey:	Descriptive	Statistics	(1/2)
----------	-------------	-------------	------------	-------

Variable	Mean	Median	St. Dev.
Age	21.5	21	2.4
No. of bank relationships	1.4	1	0.6
No of. financial products	2.1	2	0.9

Source: Own representation.

Note: N = 479. Values rounded.

The breakdown in table 12 generates additional insights into the sample's demographics: First, male and female participants are almost equally represented with only a slight overweighting of the latter group; in this respect, the sample composition mirrors overall German demographics (German Federal Statistical Office, 2014). Second, the comparably low average age of the participants can be explained by a share of undergraduate students of more than 80%. Third, the survey participants possess at least basic knowledge in business topics with more than 60% of all participants studying for a business degree and about 35% pursuing studies in either economics or business chemistry. Fourth, the participants mostly have bank relationships with savings banks (about 60% of all participants) or commercial banks (about 35%). Finally, in addition to a current account, about 60% of the participants possessed a savings account. Still roughly 20 percent held securities or had taken out a building savings contract, suggesting a certain level of experience with financial products.

Variable	Category	Percent of sample	
Gender	Female	51.8	
Gender	Male	48.2	
Ctl.	Undergraduate	84.8	
Study progress	Graduate	15.2	
	Business	61.0	
Course of studies	Economics	18.0	
Course of studies	Business chemistry	16.7	
	Other course of studies	4.4	
	Savings bank	61.6	
	Commercial bank	34.9	
Bank relationships	Cooperative bank	22.1	
	Direct bank	20.7	
	Other banks	0	
	Current account	100	
	Savings account	56.6	
	Building savings contract	19.6	
Financial products	Securities	19.6	
i manetar producto	Private insurance	8.8	
	Loan	5	
	Other financial products	0.8	

Table 12	CSR Survey:	Descriptive	Statistics	(2/2)
----------	-------------	-------------	------------	-------

Source: Own representation.

Note: N = 479. Values rounded where appropriate. Percentages may therefore not sum to 100.

In a third step, the data can be cleared at the level of individual stakeholders by running a sanity check based on the operationalization of CSR: As shown in table 6, the participants were asked whether they regarded considering certain stakeholders compulsory for a bank in items 1.1 and 1.2 as well as 2.1 and 3.1. As CSR was operationalized as a voluntary business activity in section 2.2, stakeholder-level data can be excluded if a survey participant classified activities to address the same stakeholder as "compulsory" in either of these items. The results of this sanity check are summarized in table 13. Columns 2-4 show the changes in sample sizes after applying the voluntariness criterion for CSR in banking in general (V_{gen}) , for the internal (V_{int}) , and for the external (V_{ext}) CSR channel of a bank, based upon the answers to items 1.1/2.1, 2.1, and 3.1, respectively. In addition, column 5 (V_{all}) reports the delta resulting from a combined application of all three criteria, adjusted for double counting. Columns 6-9 show the samples sizes resulting from the application of these four criteria.

	Deltas by criterion				Result	Resulting sample sizes		
Stakeholder	V_{gen}	V_{int}	V_{ext}	V_{all}	V_{gen}	V_{int}	V_{ext}	V_{all}
Shareholders	-131	-87	-63	-169	348	392	416	310
Customers	-148	-106	-119	-203	331	373	360	276
Employees	-80	-69	_	-109	399	410	479	370
Ethics	-80	-54	-43	-115	399	425	448	364
Society	-41	-31	-31	-70	438	448	448	409
Environment	-36	-27	-18	-54	443	452	461	425

 Table 13
 CSR Survey: Voluntariness Criterion Sanity Checks

Source: Own representation.

Note: N = 479 before sanity checks. CSR activities to address employee claims not implemented within external CSR channel. Double counting across columns 2-4 possible.

Two conclusions can be drawn from the data shown in table 13: First, the voluntariness of stakeholder management activities constitutes a strict criterion, especially with respect to a bank's primary stakeholders. This implies that a positive number of survey participants regarded the consideration of bank customer, shareholder, and employee claims as a compulsory bank activity, as illustrated by the values for these stakeholders under columns V_{all} . Second, the sample sizes remains robust to different combinations of the criteria: Even an application of the voluntariness criterion for all three CSR survey items yields sufficiently large samples, which will be used to complement the following analyses on a selective basis.

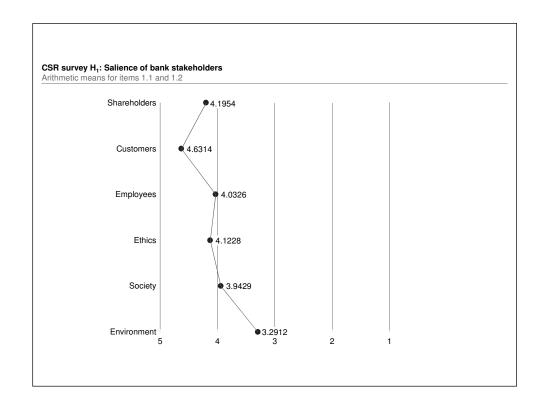
3.3.4 Hypothesis Testing

The following section tests the hypotheses derived in section 3.3.1 using the cleaned and adjusted CSR survey data. In line with the structure of the CSR framework, these tests focus on a bank's stakeholders, CSR channels, and interaction factors in sections 3.3.4.1, 3.3.4.2, and 3.3.4.3. Its findings imply that all stakeholders, CSR channels, and interaction factors matter for banks. In addition, the survey provides differentiated empirical insights into the industry-specific features and mechanics of CSR.

3.3.4.1 Stakeholders

The first hypothesis H_1 posits that all six bank stakeholders which are included in the survey are perceived as salient. In order to determine whether this is true, the data for survey items 1.1 and 1.2 is used: Figure 16 reports the average responses for these items, which capture how important the survey participants regard it for a bank to consider the interests of the individual stakeholder on a Likert scale from "very important" (coded as "5") to "very unimportant" (coded as "1").²⁶

Figure 16 CSR Survey H_1 : Salience of Bank Stakeholders



Source: Own representation.

Note: Total N = 479, adjusted according to V_{gen} in table 13 for individual stakeholders. Values rounded where appropriate.

In line with H_1 , figure 16 suggests that the survey participants consider the claims of all six bank stakeholders salient: The averages for survey items 1.1 and 1.2 are greater than 3 ("neither important nor unimportant") for all stakeholders and even greater than 4 ("rather important") for the three primary stakeholders as well as ethics and morale.

This aspect is analyzed in greater detail in table 14, which extends the analysis of figure 16 in terms of sample medians and the associated measures of dispersion for survey items 1.1

 $^{^{26}\}mathrm{In}$ all CSR survey analyses, the positive end of the Likert scale is coded as "5", the negative end as "1".

and 1.2. As the p-values of a Jarque-Bera test indicate, the hypothesis that the responses to these follow a normal distribution can be rejected at the 0.1% significance level for all six stakeholders. Therefore, the two hypotheses that the survey participants perceive the individual stakeholders as "neither important nor unimportant" (coded as "3") or even "rather important" (coded as "4") for a bank is tested using a non-parametric sign test. As the p-values of this test in the respective first rows under column "p1" indicate, the former hypothesis can be rejected at the 0.1% significance level in all cases. At the same time, the latter hypothesis can be rejected for all three primary stakeholders and ethics at significance levels of $\alpha \leq 5\%$ as the p-values indicate. This implies that the survey participants consider these stakeholders more than "rather important" for a bank while the importance of the society is statistically equal to this level. The overall perceived importance of considering environmental claims is in the middle of the importance interval. A two-sided Wilcoxon signed-rank test of the same null hypotheses yields similar results, which are reported in column "p2". In the case of employees, it fails rejects the second null hypothesis and suggests that the perceived salience of this stakeholder is not statistically different from "rather important". In total, these findings imply that all six stakeholders are salient for a bank.

Stakeholder	Mean	Median	JB	p1	p2
Shareholders	4.1954	4	0.0000	0.0000	0.0000
Shareholders	(0.8329)	(1)		0.0000	0.0000
Customers	4.6314	5	0.0000	0.0000	0.0000
	(0.6720)	(0)		0.0000	0.0000
Employees	4.0326	4	0.0000	0.0000	0.0000
	(0.8947)	(1)		0.0202	0.0897
Ethics	4.1228	4	0.0000	0.0000	0.0000
	(0.9861)	(1)		0.0000	0.0000
Society	3.9429	4	0.0000	0.0000	0.0000
	(1.0120)	(1)		0.1221	0.8850
Fruinonmont	3.2912	3	0.0000	0.0000	0.0000
Environment	(1.1430)	(1)		0.0000	0.0000

 Table 14
 CSR Survey H1: Salience of Bank Stakeholders

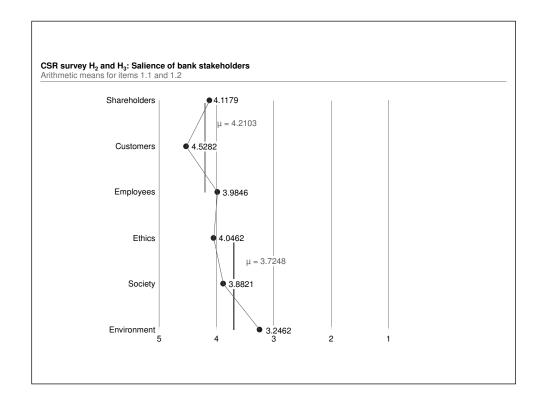
Source: Own representation.

Notes: Total N = 479, adjusted according to V_{gen} in table 13 for individual stakeholders. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived stakeholder salience equals "3" (first row) or "4" (second row).

The second stakeholder hypothesis H₂ conjectures that primary bank stakeholders are

more salient than secondary bank stakeholders and is diametrically opposed to hypothesis H_3 , which claims that the opposite is true. For this reason, these two hypotheses will be tested jointly, using the CSR survey data for items 1.1 and 1.2. This analysis draws only on the observations for those participants that indicated consistently that they regarded the consideration of the claims of all six stakeholders optional for a bank. Figure 17 shows the mean salience by stakeholder for the resulting sample of 195 observations.

Figure 17 CSR Survey H_2 and H_3 : Salience of Bank Stakeholders



Source: Own representation.

Note: N = 195 (observations for participants who regard the consideration of the interests of all six stakeholders optional for a bank). Values rounded where appropriate.

The sample means illustrated in figure 17 illustrate that the survey participants regard it as more important for banks to consider primary stakeholders rather than secondary stakeholders – both on the individual and on the stakeholder set level – in their business activities. Table 15, which draws on the same data sample as figure 17, breaks down this aspect in greater detail.

Stakeholders	Mean	Median	JB	p1	p2
Primary	4.2103	4.3333	0.0000		
	(0.5859)	(0.3333)		- 0.0000	0.0000
Cacandamy	3.7248	3.6667	0.0355	- 0.0000	0.0000
Secondary	(0.8165)	(0.6667)			
Shareholders	4.1179	4	0.0008	0.0000	0.0000
	(0.8382)	(1)			
Customers	4.5282	5	0.0000	0.0000	0.0000
	(0.7482)	(0)			
Employees	3.9846	4	0.0019	0.0314	0.0025
	(0.8995)	(1)			
Ethics	4.0462	4	0.0000	0.8724	0.2532
	(0.9963)	(1)			
Society	3.8821	4	0.0041	0.0290	0.0003
	(0.9904)	(1)			
Environment	3.2462	3	0.0010	0.0000	0.0000
Environment	(1.1625)	(1)			

Table 15 CSR Survey H_2 and H_3 : Salience of Bank Stakeholders (1/2)

Source: Own representation.

Notes: N = 195 (observations for participants who regard the consideration of the claims of all six stakeholders optional for a bank). Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived salience is equal for primary and secondary stakeholders.

Table 15 is in line with the preliminary findings: First, primary bank stakeholders are perceived as more salient than secondary bank stakeholders, as indicated by higher mean and median values for the former set. The results of both non-parametric tests, reported in columns "p1" and "p2, imply that the differences in central tendencies between both groups are statistically significant at the 0.1% level. This supports H_2 rather than H_3 on the level of stakeholder set averages. Second, this analysis can be taken one step further by comparing the perceived salience of the respective other stakeholder set. The results of this test, shown in columns "p1" and "p2" for the individual stakeholders, indicate that each primary bank stakeholder is perceived as more salient than the secondary bank stakeholder set average. For shareholders and customers, the hypothesis of equal perceived salience levels are 5% for the sign test and 1% for a Wilcoxon signed-rank test. For the secondary

stakeholders society and the environment, similar conclusions apply: At high confidence levels, the hypothesis that these stakeholders individually are perceived as equally salient as the primary stakeholders of a bank on average can be rejected. This is not possible for ethics and morale in comparison to the primary bank stakeholder average, which points to the comparatively high perceived salience of this secondary bank stakeholder. Excluding this case, the overall outcome is more in line with the predictions of H_2 rather than H_3 .

As a final test of H_2 against H_3 , the perceived salience of the individual primary and secondary bank stakeholders is compared pairwise. The results of this analysis are summarized in table 16.

Primary	p1			p2		
stakeholder	Ethics	Society	Environment	Ethics	Society	Environment
Shareholders	0.9279	0.0238	0.0000	0.6286	0.0143	0.0000
Customers	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Employees	0.1561	0.4847	0.0000	0.2013	0.3106	0.0000

Table 16 CSR Survey H_2 and H_3 : Salience of Bank Stakeholders (2/2)

Source: Own representation.

Notes: N = 195 (observations for participants who regard the consideration of the claims of all six stakeholders optional for a bank). "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived salience is equal for the individual stakeholders.

Table 16 supports this differentiated picture: First, shareholders are considered significantly more salient for a bank than society and social issues according to both a sign test and a Wilcoxon signed-rank test. However, a statistically significant difference between the perceived salience of this primary bank stakeholder and ethics and morale cannot be detected. Second, the participants regard it as more important for a bank to consider its customers than social or ethical topics. Third, employees – the primary stakeholder with the lowest perceived salience for a bank – are not perceived as more salient than ethics and morale or society and social issues. All primary stakeholders are perceived as more salient than the environment for a bank. At the same time, the test results suggest that the higher salience of ethics and morale in comparison to employees, shown in table 15, is not statistically significant at standard levels. In combination, the outcomes of these analyses at the aggregate level and for more than half of the individual stakeholder comparisons are in line with the predictions of hypothesis H₂. In contrast, hypothesis H₃ can be rejected consistently.

The final stakeholder hypothesis H_4 implies that the perceived salience of a bank's stakeholders follows the stakeholder taxonomy, which carries two implications: First, according to figure 14, all primary bank stakeholders are definitive stakeholders while the three intangible secondary bank stakeholders constitute expectant stakeholders and are therefore characterized by a lower relative level of salience. Due to the implied relation between salience and perceived relevance, H_4 predicts that the survey participants should regard it more important to consider primary rather than secondary stakeholders. The analyses for hypothesis H_2 on the level of stakeholder set averages, illustrated in figure 17 and table 15, suggest that this first part of hypothesis H_4 holds.

Second, figure 14 demonstrates that every stakeholder is characterized by a combination of stakeholder attributes which manifest to a different extent. Assuming that every attribute has the same weight and that a proportional relation exists between stakeholder salience and the relevance of considering this stakeholder's claims, the stakeholder taxonomy implies the ordinal ranking of stakeholder salience (coded "S") of relation 3.1:

$$S_{customers} > S_{shareholders} = S_{employees} > S_{ethics} > S_{society} > S_{environment}$$
(3.1)

Intuitively, figure 17 provides at least partial support for relation 3.1. Table 17 investigates this aspect in greater detail by integrating the stakeholder ranking positions and the perceived salience of the individual stakeholders. Mostly, the evidence is in line with the predictions of hypothesis H₄: Bank customers, the most salient stakeholder group according to figure 14, are also perceived as more salient than shareholders and employees, which are both ranked second in terms of salience. This difference is statistically significant at the 0.1% significance level, as indicated by the first and the second row in columns "p1" and "p2" for customers. In turn, the difference in perceived salience between shareholders and employees is statistically insignificant at the 10% significance level for a sign test and at the 5% significance level according to a Wilcoxon signed-rank test, as p-values of 0.1561 and 0.0915 suggest. This outcome is in line with the predictions of the stakeholder taxonomy, which implies that these two bank stakeholders are equally salient. Comparing the perceived salience of these two stakeholders yields a mixed result: Numerically, shareholders are more salient than ethics and morale, though p-values of 0.9279 and 0.6286 render this difference statistically insignificant. The lower perceived salience of employees relative to ethics and morale, which is at odds with the ranking of this stakeholder, is statistically insignificant. In contrast, as predicted by the stakeholder model, ethics and morale are on average perceived as more salient for a bank than society and social issues, while the latter exceeds the environment in terms of perceived salience. The former result is statistically significant at the 10% level according to a Wilcoxon signed-rank test, the latter is obtained with 99.9% statistical confidence. These findings suggest that the predictions of the stakeholder taxonomy are valid with only one tentative - and statistically insignificant – exception, which corroborates hypothesis H_4 .

Rank	Stakeholder	Mean	Median	JB	p1	p2
1	Customers	4.5282	5	0.0000	0.0000	0.0000
1	Customers	(0.7482)	(0)		0.0000	0.0000
	Shareholders	4.1179	4	0.0008	0.1561	0.0915
2	Shareholders	(0.8382)	(1)		0.9279	0.6286
2	Employees	3.9846	4	0.0019	0.1561	0.2013
	Employees	(0.8995)	(1)			
3	Ethics	4.0462	4	0.0000	0.1410	0.0710
	Ethics	(0.9963)	(1)			
4	Society	3.8821	4	0.0041	0.0000	0.0000
4	4 Society	(0.9904)	(1)			
5		3.2462	3	0.0010	_	_
0	Environment	(1.1625)	(1)			

 Table 17
 CSR Survey H₄: Salience of Bank Stakeholders

Notes: N = 195 (observations for participants who regard the consideration of the claims of all six stakeholders optional for a bank). Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived stakeholder salience is equal across consecutive ranks. Additional rows under "p1" and "p2" for customers and shareholders reproduce the significance levels of these tests for the next two lower-ranked stakeholders.

The results of these statistical tests regarding the salience of stakeholders within a framework of CSR in banking are in line with the predictions of hypotheses H_1 and H_4 . At the same time, the fact that H_3 is supported implies that the opposing hypothesis H_2 needs to be rejected. This outcome suggests that all six bank stakeholders are perceived as salient – primary more than secondary ones – with their relative salience being in line with the predictions of the stakeholder taxonomy.

3.3.4.2 CSR Channels

Similar to H_1 , the first CSR channel hypothesis H_5 puts forward the idea that banks can effectively address their stakeholders along both internal and external CSR channels. The test of this hypothesis draws upon survey items 2.5 and 3.5: As documented in tables 7 and 8, these items capture the perceived effectiveness of internal (item 2.5) and external (item 3.5) CSR activities to address the claims of specific bank stakeholders. Figure 18 illustrates the mean perceived effectiveness of a bank's internal CSR activities according to item 2.5 on the level of individual stakeholders and the internal CSR channel mean.

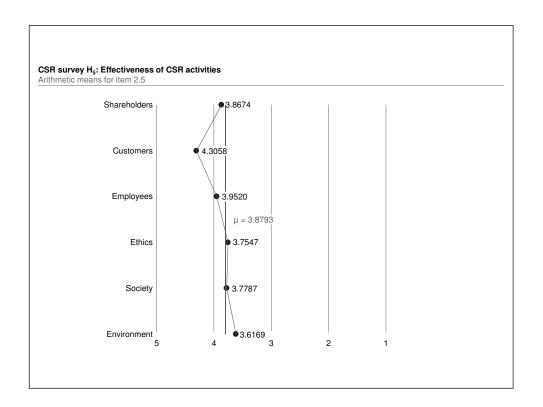


Figure 18 CSR Survey H₅: Effectiveness of CSR Activities

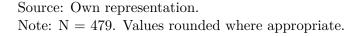


Figure 18 visualizes that the perceived effectiveness of the bank-internal CSR activities on stakeholder level follows a similar structure as the salience of the stakeholders themselves, documented in figure 16: Activities which address the claims of a bank's primary stakeholders – and in particular those with a customer focus – are perceived as more effective than CSR measures which target the claims of secondary bank stakeholders. Still, the overall perceived effectiveness of bank-internal CSR activities appears rather high with an average value close to 4 on the 5-point Likert scale.

These preliminary results are supported by the statistical test results of table 18: On average and across individual stakeholders, bank-internal CSR activities are perceived as generally effective. As the p-values in the first row of columns "p1" and "p2" indicate, the null hypothesis that these activities are perceived as "neither effective nor ineffective" (coded as "3") can be rejected at the 0.1% significance level for all stakeholders as well as the bank-internal CSR channel average. Similarly, the results in the second row of these columns suggest that the null hypothesis that the activities are perceived as "rather effective" (coded as "4") can be rejected at high significance levels for all stakeholders – except

employees – and the internal CSR channel average. In combination with the sample means and medians, this outcome implies that internal CSR activities which address customer claims are perceived as even more impactful than "rather effective". The opposite conclusion applies for internal CSR activities which target the claims of the other stakeholders while internal CSR activities which focus on employee claims are on average perceived as "rather effective". Since the effectiveness of the internal CSR activities on average follows a Gaussian distribution, indicated by a high significance level for the Jarque-Bera test, a parametric t-test of the same two hypotheses is conducted. In line with above results, it finds that the mean perceived internal activity effectiveness is statistically significantly different from both "3" or "4" at the 0.1% significance level. All in all, these results suggest that the hypothesis of activity ineffectiveness can be rejected for commitments as well as action programs and corroborate hypothesis H₅ for the bank-internal CSR channel.

StakeholdersMeanMedianJBp1p2All 3.8793 3.9167 0.2713 0.0000 0.0000 (0.4946) (0.3333) 0.0000 0.0000 0.0000 $Shareholders$ 3.8674 4 0.0004 0.0000 0.0000 (0.6751) (0.5) 0.0000 0.0000 0.0000 $Customers$ 4.3058 4.5 0.0000 0.0000 (0.6806) (0.5) 0.0004 0.0000 0.0000 $Employees$ 3.9520 4 0.0004 0.0000 0.0000 $Ethics$ 3.7547 4 0.0034 0.0000 0.0000 $Society$ 3.7787 4 0.0080 0.0000 0.0000 $Society$ 3.7787 4 0.0080 0.0000 0.0000 $Environment$ 3.6169 3.5 0.0052 0.0000 0.0000 $Environment$ 3.6169 0.5 0.0052 0.0000 0.0000						
All (0.4946) (0.3333) 0.0000 0.0000 $Shareholders$ 3.8674 4 0.0004 0.0000 0.0000 (0.6751) (0.5) 0.0240 0.0006 $Customers$ 4.3058 4.5 0.0000 0.0000 (0.6806) (0.5) 0.0000 0.0000 $Employees$ 3.9520 4 0.0004 0.0000 (0.7288) (0.5) 1.0000 0.0000 $Ethics$ 3.7547 4 0.0034 0.0000 $Society$ 3.7787 4 0.0080 0.0000 $Society$ 3.7787 4 0.0080 0.0000 $Society$ 3.6169 3.5 0.0052 0.0000 0.0000	Stakeholders	Mean	Median	JB	p1	p2
(0.4946) (0.3333) 0.0000 0.0000 Shareholders 3.8674 4 0.0004 0.0000 0.0000 (0.6751) (0.5) 0.0240 0.0006 Customers 4.3058 4.5 0.0000 0.0000 0.0000 (0.6806) (0.5) 0.0004 0.0000 0.0000 Employees 3.9520 4 0.0004 0.0000 0.0000 (0.7288) (0.5) 1.0000 0.0000 0.5145 Ethics 3.7547 4 0.0034 0.0000 0.0000 Society 3.7787 4 0.0080 0.0000 0.0000 Society 3.6169 3.5 0.0052 0.0000 0.0000	A 11	3.8793	3.9167	0.2713	0.0000	0.0000
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	All	(0.4946)	(0.3333)		0.0000	0.0000
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sharahaldara	3.8674	4	0.0004	0.0000	0.0000
Customers (0.6806) (0.5) 0.0000 0.0000 Employees 3.9520 4 0.0004 0.0000 0.0000 (0.7288) (0.5) 1.0000 0.5145 Ethics 3.7547 4 0.0034 0.0000 0.0000 (0.8123) (0.5) 0.0080 0.0000 0.0000 Society 3.7787 4 0.0080 0.0000 0.0000 (0.8106) (0.5) 0.0052 0.0000 0.0000	Shareholders	(0.6751)	(0.5)		0.0240	0.0006
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Customora	4.3058	4.5	0.0000	0.0000	0.0000
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Customers	(0.6806)	(0.5)		0.0000	0.0000
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Employees	3.9520	4	0.0004	0.0000	0.0000
Ethics (0.8123) (0.5) 0.0000 0.0000 Society 3.7787 4 0.0080 0.0000 0.0000 (0.8106) (0.5) 0.0000 0.0000 Environment 3.6169 3.5 0.0052 0.0000	Employees	(0.7288)	(0.5)		1.0000	0.5145
	Ethica	3.7547	4	0.0034	0.0000	0.0000
Society (0.8106) (0.5) 0.0000 0.0000 Benvironment 3.6169 3.5 0.0052 0.0000 0.0000	Ethics	(0.8123)	(0.5)		0.0000	0.0000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Society	3.7787	4	0.0080	0.0000	0.0000
Environment	Society	(0.8106)	(0.5)		0.0000	0.0000
$(0.9351) \qquad (0.5) \qquad 0.0000 \qquad 0.0000$	Environment	3.6169	3.5	0.0052	0.0000	0.0000
	Environment	(0.9351)	(0.5)		0.0000	0.0000

Table 18 CSR Survey H ₅ : Effectiveness of CSR Activitie	Table 18	CSR Survey	H_5 :	Effectiveness	of	CSR Activitie
-----------------------------------------------------------------------------	----------	------------	---------	---------------	----	---------------

Source: Own representation.

Notes: N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness equals "3" (first row) or "4" (second row).

The same approach can be used to test the predictions of hypothesis H_5 for the bankexternal CSR channel or lending channel on the basis of survey item 3.5. Figure 19 provides an overview of the perceived effectiveness described by survey item 3.5 both for the individual stakeholders in scope and for external CSR activities on average.

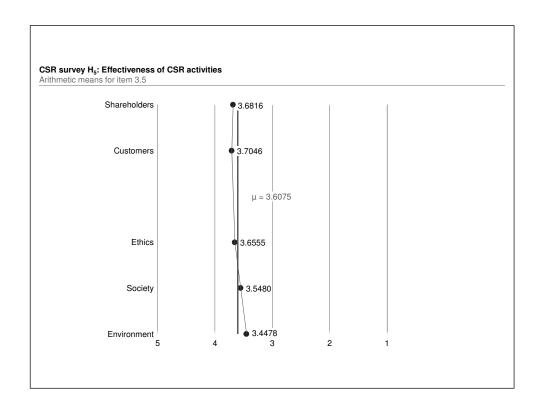


Figure 19 CSR Survey H₅: Effectiveness of CSR Activities

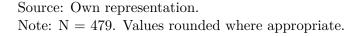


Figure 19 illustrates two main aspects: First, similar to the results for the internal CSR channel, external CSR activities in general are perceived as effective, indicated by an above-average mean effectiveness of 3.6075. Second, the perceptions of external activity effectiveness do not seem to differ substantially across the individual stakeholders with only limited dispersion around the channel mean.

Table 19, which breaks down these figures, provides supporting evidence for both aspects: First, bank-external CSR activities are perceived as effective. This is indicated by the p-values of both non-parametric tests in the first row of columns "p1" and "p2', which show that the null hypothesis that external activities are perceived as "neither effective nor ineffective" can be rejected at the 0.1% significance level. At the same time, the pvalues shown in the second row of these columns suggest that the perceived effectiveness of these activities is statistically significantly different from "rather effective" at the 0.1% significance level. Considering the sample means and medians, this combined result implies is that the average perceived effectiveness of external CSR activities lies in-between of these two boundaries. Second, these conclusions apply across all stakeholders and for the external CSR channel average, which mirrors the unified picture of figure 19. In line with the predictions of hypothesis H_5 , these findings suggest that banks can effectively address the claims of their stakeholders along the external channel.

Stakeholders	Mean	Median	JB	p1	p2
All	3.6075	3.6	0.0420	0.0000	0.0000
All	(0.6103)	(0.4)		0.0000	0.0000
Shareholders	3.6816	3.5	0.0044	0.0000	0.0000
Shareholders	(0.8133)	(0.5)		0.0000	0.0000
C	3.7046	4	0.0252	0.0000	0.0000
Customers	(0.7734)	(0.5)		0.0000	0.0000
Ethics	3.6555	4	0.0001	0.0000	0.0000
Ethics	(0.9812)	(0.5)		0.0000	0.0000
Society	3.5480	3.5	0.0001	0.0000	0.0000
Society	(0.9696)	(0.5)		0.0000	0.0000
Environment	3.4478	3.5	0.0050	0.0000	0.0000
Environment	(1.0127)	(0.5)		0.0000	0.0000

 Table 19
 CSR Survey H₅: Effectiveness of CSR Activities

Source: Own representation.

Notes: N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness equals "3" (first row) or "4" (second row).

The conclusion that stakeholder management activities along both CSR channels of a bank are effective leads to the question which of these two channels constitutes the more effective platform to address stakeholder claims. Hypotheses H_6 and H_7 make diametrically opposed predictions about this topic: While the former hypothesis posits that external CSR activities are perceived as more effective than internal ones, H_7 conjectures that the opposite is true.

While the comparison of figures 18 and 19 intuitively suggests that H_7 rather than H_6 is likely to hold true, this assumption is supported by table 20: The test results in columns "p1" and "p2" indicate that the hypothesis of equal perceived activity effectiveness across a bank's CSR channel can be rejected at the 0.1% significance level. For a bank's primary stakeholders, an identical phenomenon is evident: The differences in perceived effectiveness between internal and external CSR activities which address the claims of shareholders or customers is statistically significant at the 0.1% level. The perception of effectiveness for activities which target environmental or social claims follows a similar pattern, resulting in statistically significant differences between the channel averages as a whole. Only in the case of ethics and morale, the perceptions of activity effectiveness are statistically equal for the internal and the external CSR channel, which supports neither of the two hypotheses. In line with the predictions of H_7 , this suggests that a bank's CSR activities are perceived as generally more effective when implemented along the internal channel.

Stakeholders	Internal ch	annel	External c	hannel	n1	ກາງ
Stakenoiders	Mean	Median	Mean	Median	– p1	p2
All	3.8793	3.9167	3.6075	3.6	0.0000	0.0000
All	(0.4946)	(0.3333)	(0.6103)	(0.4)		
Shareholders	3.8674	4	3.6816	3.5	0.0056	0.0000
Shareholders	(0.6751)	(0.5)	(0.8133)	(0.5)		
Customers	4.3058	4.5	3.7046	4	0.0000	0.0000
Customers	(0.6806)	(0.5)	(0.7734)	(0.5)		
Ethics	3.7547	4	3.6555	4	0.2241	0.1018
Ethics	(0.8123)	(0.5)	(0.9812)	(0.5)		
Society	3.7787	4	3.5480	3.5	0.0006	0.0001
Society	(0.8106)	(0.5)	(0.9696)	(0.5)		
Environment	3.6169	3.5	3.4478	3.5	0.0077	0.0036
Environment	(0.9351)	(0.5)	(1.0127)	(0.5)		

Table 20 CSR Survey H₆ and H₇: Effectiveness of CSR Activities

Source: Own representation.

Notes: N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness is equal across CSR channels.

Hypothesis H_8 draws upon the same data basis to investigate whether CSR activities are perceived as more effective when they address the claims of primary rather than secondary stakeholders. H_9 conjectures that the opposite is true. Figure 20 provides a first overview of the mean CSR activity effectiveness according to survey items 2.5 and 3.5 by stakeholder as well as the two stakeholder set averages.

Figure 20 describes that only limited differences in perceived effectiveness exist between activities which address primary and secondary bank stakeholder claims, which supports neither H_8 nor H_9 . Similar to previous findings, the perceived effectiveness is highest for activities which address the claims of bank customers. Within measures that focus on secondary stakeholders, this is true for ethical and moral CSR initiatives.

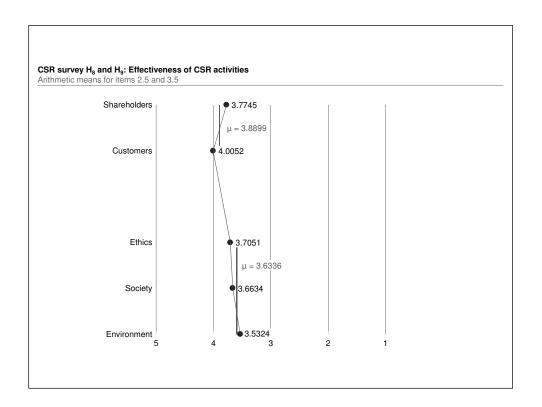
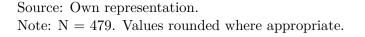


Figure 20 CSR Survey H_8 and H_9 : Effectiveness of CSR Activities



The more granular breakdown reported in table 21 provides a clearer picture. In two ways, it suggests that activities which address the claims of primary rather than secondary bank stakeholders are perceived as more effective: First, the average differences in perceived CSR activity effectiveness between the two stakeholder sets are statistically significant at the 0.1% significance level. Second, the same conclusion applies at the level of individual stakeholders: The perceived effectiveness of CSR activities to address the claims of individual primary stakeholders is consistently and significantly higher than the perceived average effectiveness of CSR measures that target the claims of secondary stakeholders. Conversely, the perceived effectiveness of CSR activities is consistently and significantly lower for measures which address the claims of individual secondary stakeholders in comparison to the average effectiveness of activities addressing the claims of primary bank stakeholders. According to the p-values of both non-parametric tests in columns "p1" and "p2", these outcomes are significant at the 99.9% confidence level and jointly corroborate hypothesis H₈ rather than H₉.

Stakeholders	Mean	Median	JB	p1	p2
Drimony	3.8899	3.875	0.5929		
Primary	(0.4506)	(0.25)		- 0.0000	0.0000
Secondamy	3.6336	3.6667	0.0046	- 0.0000	0.0000
Secondary	(0.6274)	(0.4167)			
Shareholders	3.7745	3.75	0.0302	0.0000	0.0001
Shareholders	(0.6040)	(0.5)			
Customers	4.0052	4	0.0000	0.0000	0.0000
Customers	(0.5351)	(0.25)			
Ethics	3.7051	3.75	0.0020	0.0000	0.0000
Ethics	(0.6993)	(0.5)			
Society	3.6634	3.75	0.0000	0.0000	0.0000
Society	(0.6926)	(0.5)			
Environment	3.5324	3.5	0.0022	0.0000	0.0000
Environment	(0.7844)	(0.5)			

Table 21 CSR Survey H_8 and H_9 : Effectiveness of CSR Activities (1/2)

Notes: N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness is equal for primary and secondary stakeholders.

Table 22, which shows the results of pairwise comparisons between the effectiveness of CSR activities to address the claims of individual primary and secondary bank stakeholders, t suggests that CSR activities which address customer or shareholder claims are consistently perceived as more effective than measures which target the claims of the three secondary stakeholders. This result suggests that CSR activities which focus on the claims of primary bank stakeholders are perceived as more effective, as hypothesis H_8 posits.

Table 22 CSR Survey H_8 and H_9 : Effectiveness of CSR Activities (2/2)

Primary	p1			p2		
stakeholder	Ethics	Society	Environment	Ethics	Society	Environment
Shareholders	0.0664	0.0001	0.0000	0.0828	0.0013	0.0000
Customers	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Source: Own representation.

Notes: N = 479. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness is equal for the individual stakeholders.

The last two analyses of CSR activity effectiveness by channels and stakeholders are combined by hypotheses H_{10} and H_{11} . The former claims that, within the internal channel, CSR activities are perceived as relatively more effective when they address the claims of primary instead of secondary bank stakeholders. As figure 18 already illustrates the sample means of survey item 2.5, this data can be used to directly test the predictions of H_{10} as shown in table 23.

Stakeholders	Mean	Median	JB	p1	p2
Duimanu	4.0418	4	0.0004		
Primary	(0.4885)	(0.3333)		- 0.0000	0.0000
Secondary	3.7168	3.6667	0.1133	- 0.0000	0.0000
Secondary	(0.6943)	(0.5)			
Shareholders	3.8674	4	0.0004	0.0008	0.0002
	(0.6751)	(0.5)			
Customers	4.3058	4.5	0.0000	0.0000	0.0000
Customers	(0.6806)	(0.5)			
Employees	3.9520	4	0.0004	0.0000	0.0000
Employees	(0.7288)	(0.5)			
Ethics	3.7547	4	0.0034	0.0000	0.0000
EtHICS	(0.8123)	(0.5)			
C	3.7787	4	0.0080	0.0000	0.0000
Society	(0.8106)	(0.5)			
	3.6169	3.5	0.0052	0.0000	0.0000
Environment	(0.9351)	(0.5)			

Table 23 CSR Survey H_{10} : Effectiveness of CSR Activities (1/2)

Source: Own representation.

Notes: N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness is equal for primary and secondary stakeholders.

The evidence in table 23 is fully in line with the predictions of hypothesis H_{10} : First, the null hypothesis can be rejected that bank-internal CSR activities which address the claims of primary and secondary stakeholders as a whole are perceived as equally effective. Second, the same is true for the effectiveness of CSR activities which address the claims of individual primary or secondary bank stakeholders in comparison to the average perceptions of CSR activity effectiveness which focus on the claims of the respective other set of bank stakeholders. These conclusions can be drawn at the 0.1% significance level, as indicated by the p-values of both non-parametric tests in columns "p1" and "p2".

In a last step, this analysis can be repeated on the level of individual primary and secondary bank stakeholders. The results, shown in table 24, support the assumption that the perceived effectiveness of a bank's internal CSR activities is higher when the claims of primary rather than secondary stakeholders are addressed. The null hypothesis that internal CSR activities to address the claims of shareholders, customers, or employees are as effective as internal measures to address the claims of either of the three secondary stakeholders can be rejected. For the former two primary stakeholders, this conclusion can be drawn at the 0.1% significance level while the differences in perceived internal CSR activity effectiveness for shareholders in comparison to ethical or social initiatives are statistically significant at confidence levels of at least 90%. This joint evidence implies that, as hypothesized by H_{10} , that a bank's internal CSR activities are particularly effective to address the claims of primary stakeholders.

Primary	p1			p2		
stakeholder	Ethics	Society	Environment	Ethics	Society	Environment
Shareholders	0.0573	0.0893	0.0000	0.0192	0.0564	0.0000
Customers	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Employees	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 24 CSR Survey H_{10} : Effectiveness of CSR Activities (2/2)

Source: Own representation.

Notes: N = 479. Values rounded where appropriate. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness is equal for primary and secondary stakeholders.

Hypothesis H_{11} posits that the opposite is true within a bank's external channel so that CSR activities are perceived as more effective when they focus on the claims of secondary rather than primary stakeholders. As an illustration of the relevant survey item 3.5 is already provided by figure 19, the predictions of H_{11} can be tested immediately. The results of this exercise are reported in table 25. Its findings are mostly not in line with the predictions of hypothesis H_{11} : First, on the aggregate level of primary and secondary stakeholders, the null hypothesis of equal perceived CSR activity can be rejected at the 0.1% significance level. Yet, taking the mean and median values for these stakeholder set into account, this outcome implies that external CSR activities are perceived as more effective when they address the claims of primary instead of secondary stakeholders, which is at odds with the predictions of hypothesis H_{11} . Second, comparing the effectiveness of external CSR activities to address the claims of individual primary or secondary stakeholders to the average effectiveness of external measures which focus on the claims of the respective other stakeholder set on average yields the same conclusion at significance levels between 95% and 99.9%. This is illustrated by the p-values under columns "p1" and "p2" in the rows for the individual stakeholders. The sole exception are external

initiatives with a focus on ethical and moral claims, though the perceived effectiveness of these activities is not statistically significantly different from the average perceived effectiveness of CSR claims which target the claims of a bank's primary stakeholder set.

Stakeholders	Mean	Median	JB	p1	p2
	3.6931	3.75	0.2158	1	
Primary	(0.6171)	(0.5)		0.0002	0.0000
	3.5505	3.6667	0.0011	- 0.0003	0.0009
Secondary	(0.8512)	(0.6667)			
Charah al darra	3.6816	3.5	0.0044	0.0142	0.0115
Shareholders	(0.8133)	(0.5)			
Customers	3.7046	4	0.0252	0.0011	0.0009
Customers	(0.7734)	(0.5)			
Ethics	3.6555	4	0.0001	0.8045	0.6461
Ethics	(0.9812)	(0.5)			
Society	3.5480	3.5	0.0001	0.0007	0.0025
Society	(0.9696)	(0.5)			
Environment	3.4478	3.5	0.0050	0.0000	0.0000
Environment	(1.0127)	(0.5)			

Table 25 CSR Survey H_{11} : Effectiveness of CSR Activities (1/2)

Source: Own representation.

Notes: N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality in distribution. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness is equal for primary and secondary stakeholders.

In line with the above approach for H_{11} , the analysis is completed by a pairwise test of the perceived external CSR activity effectiveness between primary and secondary stakeholder. Table 26 summarizes the results of this exercise.

Primary	p1			p2		
stakeholder	Ethics	Society	Environment	Ethics	Society	Environment
Shareholders	0.8761	0.0090	0.0003	0.8023	0.0120	0.0001
Customers	0.3166	0.0019	0.0000	0.3708	0.0022	0.0000

Table 26	CSR Survey H	H_{11} : Effectiveness	s of CSR Activities	(2/2)
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Notes: N = 479. Values rounded where appropriate. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness is equal for primary and secondary stakeholders.

Another indication to refute hypothesis H_{11} is provided by the results in table 26: The null hypothesis that the perceived effectiveness is equal for external CSR activities which address ethical claims on the one hand and shareholder or customer claims on the other hand cannot be rejected at standard significance levels. However, to corroborate hypothesis H_{11} to be true, the perceived activity effectiveness would need to be higher for this secondary stakeholder than for the two primary stakeholders; the statistical evidence is therefore at best ambiguous. For activities which address social or environmental claims, the hypothesis of equal perceived effectiveness with measures to address the claims of the individual primary stakeholders can be rejected at high significance levels with relatively. This suggests that the relatively high perceived effectiveness of external CSR activities to address the claims of primary stakeholders ultimately results in the rejection of hypothesis H_{11} on statistical grounds. Therefore, external CSR activities are not perceived as particularly effective to manage the claims of secondary bank stakeholders.

The distinction of survey item 3.5 between positive and negative screening within a bank's external CSR channel allows to test hypotheses H_{12} and H_{13} , which make contrary predictions regarding the perceived relative effectiveness of the two screening approaches: H_{12} argues that positive screening is more effective, H_{13} claims that this is true for negative screening. Figure 21 shows that the perceived effectiveness of external CSR activities is higher for every individual stakeholder when implemented in terms of positive screening, resulting in a higher average perceived effectiveness compared to negative screening. This preliminary result is more in line with the predictions of H_{12} than H_{13} .

Table 27 breaks down this data by stakeholder to provide additional evidence which corroborates hypothesis H_{12} : First, for the average of all stakeholders, two non-parametric tests reject the hypothesis that positive and negative screening is perceived as equally effective with 99.9% statistical confidence, as shown in the joint rows for "All" under columns "p1" and "p2". Second, for the individual stakeholders, the perceived effectiveness of positive screening is statistically significantly different from negative screening for all

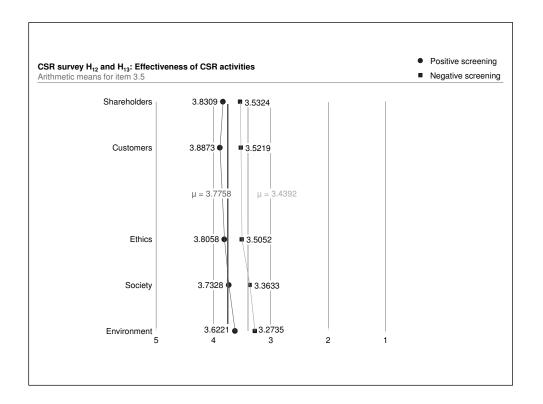


Figure 21 CSR Survey H_{12} and H_{13} : Effectiveness of CSR Activities

Source: Own representation. Note: N = 479. Values rounded where appropriate.

stakeholders on average. Conversely, the null hypothesis of equal perceived effectiveness of negative screening for individual stakeholders and positive screening for all stakeholders on average can be rejected. This is indicated by consistently low values for "p1" and "p2" in the "positive" row at the level of individual stakeholders for a test of the former and in the "negative" row at the same level for a test of the latter assumption. Third, the joint rows under columns "p1" and "p2" at the level of individual stakeholders suggest that, for every stakeholder, the null hypothesis of equal perceived effectiveness between positive and negative screening can be rejected at the 0.1% significance level. As the perceived effectiveness of positive screening is numerically higher for both individual and all stakeholders on average, this unambiguous evidence is in line with the predictions of hypothesis H_{12} and therefore allows to reject H_{13} .

Stakeholders	Screening	Mean	Median	JB	p1	p2
	Positive	3.7758	3.8	0.0001		
All	I OSILIVE	(0.6369)	(0.4)		- 0.0000	0.0000
All	Negative	3.4392	3.4	0.2891	- 0.0000	0.0000
	Negative	(0.7295)	(0.6)			
	Positive	3.8309	4	0.0000	0.0000	0.0000
Shareholders		(1.0118)	(1)		- 0.0000	0.0000
Shareholders	Negative	3.5324	4	0.0000	- 0.0000	0.0000
	negative	(1.0641)	(1)		0.0016	0.0001
Customers	Positive	3.8873	4	0.0000	0.0000	0.0000
		(0.9788)	(1)		- 0.0000	0.0000
	Negative	3.5219	4	0.0025	0.0000	0.0000
		(1.0037)	(1)		0.0004	0.0000
	Positive	3.8058	4	0.0000	0.0000	0.0000
Ethics	1 0510170	(1.0196)	(1)		- 0.0000	0.0000
Lunics	Negative	3.5052	4	0.0000	0.0000	0.0000
	Ivegative	(1.1872)	(1)		0.0029	0.0000
	Positive	3.7328	4	0.0000	0.0000	0.0000
Society	1 0510170	(1.0060)	(1)		- 0.0000	0.0000
boelety	Negative	3.3633	3	0.0000	0.0000	0.0000
	Negative	(1.1488)	(1)		0.0000	0.0000
	Positive	3.6221	4	0.0000	0.0352	0.0001
Environment	1 0510170	(1.0887)	(1)		- 0.0000	0.0000
	Negative	3.2735	3	0.0000	0.0000	0.0000
	TICEAUTIC	(1.1636)	(1)		0.0000	0.0000

Table 27 CSR Survey H_{12} and H_{13} : Effectiveness of CSR Activities

Notes: N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness is equal across screening approaches.

The final CSR channel hypothesis H_{14} posits that the perceived effectiveness of a bank's CSR activities to address different stakeholders mirrors the salience of these stakeholder according to the stakeholder taxonomy. If this is true, the perceived effectiveness of these activities – coded as "E" – should be captured by relation 3.2.

$$E_{customers} > E_{shareholders} = E_{employees} > E_{ethics} > E_{society} > E_{environment}$$
(3.2)

In a first step, the predictions of hypothesis H_{14} are tested on the aggregate level, i.e., for the average perceived effectiveness of a bank's internal and external CSR activities. The results of this analysis are summarized in table 28.

Rank	Stakeholder	Mean	Median	JB	p1	p2
1	Customers	4.0052	4	0.0000	0.0000	0.0000
1	Customers	(0.5351)	(0.25)			
2	2 Shareholders	3.7745	3.75	0.0302	0.0664	0.0828
2 Shareholders	(0.6040)	(0.5)				
3	3 Ethics	3.7051	3.75	0.0020	0.2999	0.1639
9	EtHICS	(0.6993)	(0.5)			
4	Society	3.6634	3.75	0.0000	0.0000	0.0000
4	Society	(0.6926)	(0.5)			
5	Environment	3.5324	3.5	0.0022		
9	Environment	(0.7844)	(0.5)			

Table 28 CSR Survey H_{14} : Effectiveness of CSR Activities (1/3)

Source: Own representation.

Notes: N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness by stakeholder is equal across consecutive ranks.

In principle, the results in table 28 support H_{14} , illustrated by decreasing values of mean and median perceived effectiveness from customers to the environment, which are in line with the ranking of relation 3.2. Moreover, the null hypothesis that a bank's activities are perceived as equally effective can be rejected for pairwise comparisons of ranks 1 and 2, 4 and 5 as well as – at significance level of 10% - 2 and 3. Only the comparison between the effectiveness of activities to address ethical claims on the one hand and social claims on the other hand fails to generate statistically significant differences. Still, these results are qualitatively and in three out of four cases in line with the predictions of H_{14} .

In a second step, H_{14} is investigated separately for the internal and the external CSR channel of a bank. Table 29 reports the results of the former analysis, which echo the cross-channel finding. It shows that activities to address the claims of customers are perceived as more effective than CSR measures which focus on shareholder or employee claims, illustrated by the p-values in the first and in the second row under in the row for "customers". The same conclusion applies for pairwise comparisons between activities to address the claims of both stakeholders ranked second and ethics as well as between initiatives with a social and those with an environmental focus. At the same time, the tests identify statistically significant differences in the perceived effectiveness of activities

which address the claims of shareholders and a bank's employees, which is at odds with the predictions of H_{14} . In addition, there is no statistically significant difference between the perceived effectiveness of ethical and social CSR measures.

Rank	Stakeholder	Mean	Median	JB	p1	p2
1	C	4.3058	4.5	0.0000	0.0000	0.0000
T	Customers	(0.6806)	(0.5)		0.0000	0.0000
	Shareholders	3.8674	4	0.0004	0.0118	0.0120
2	Shareholders	(0.6751)	(0.5)		0.0573	0.0192
2		3.9520	4	0.0004	0.0000	0.0000
	Employees	(0.7288)	(0.5)			
3	Ethics	3.7547	4	0.0034	0.8573	0.6312
ა	Ethics	(0.8123)	(0.5)			
4	Society	3.7787	4	0.0080	0.0005	0.0001
4	Society	(0.8106)	(0.5)			
5	Environment	3.6169	3.5	0.0052	_	_
0	Environment	(0.9351)	(0.5)			

Table 29 CSR Survey H_{14} : Effectiveness of CSR Activities (2/3)

Source: Own representation.

Notes: N = 479. Mean standard deviations and median absolute deviations in parentheses. Values rounded where appropriate. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness by stakeholder is equal across consecutive ranks. Additional rows under "p1" and "p2" for customers and shareholders reproduce the significance levels of these tests for the next two lower-ranked stakeholders.

Table 30 illustrates the outcomes of the same analysis for the external CSR channel of a bank. It suggests that, qualitatively, the perceived effectiveness of these activities to address the claims of a bank's stakeholders via the external CSR channel is fully in line with the salience of these stakeholders as described by relation 3.2. At the same time, the null hypothesis that these activities are perceived as equally effective cannot be rejected for pairwise comparisons across ranks 1 and 2 as well as 2 and 3. In combination, this evidence corroborates hypothesis H_{14} mostly for a bank's CSR activities in general as well as qualitatively for the bank-external or lending channel. For the internal CSR channel, the evidence is mixed.

Rank	Stakeholder	Mean	Median	JB	p1	p2
1	Customers	3.7046	4	0.0252	0.8290	0.9173
1	Customers	(0.7734)	(0.5)			
2 Shareholders	3.6816	3.5	0.0044	0.8761	0.8023	
	(0.8133)	(0.5)				
3	3 Ethics	3.6555	4	0.0001	0.0012	0.0010
5	Ethics	(0.9812)	(0.5)			
1	Society	3.5480	3.5	0.0001	0.0043	0.0020
4 Socie	Society	(0.9696)	(0.5)			
5	Environment	3.4478	3.5	0.0050	_	_
5 En	Епупоншени	(1.0127)	(0.5)			

Table 30 CSR Survey H_{14} : Effectiveness of External CSR Activities (3/3)

Notes: N = 479. Mean standard deviations and median absolute deviations in parentheses. Values rounded where appropriate. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness by stakeholder is equal across consecutive ranks.

In summary, the analyses conducted in this section yield three main results concerning the effectiveness of activities along a bank's CSR channels: First, the test of hypothesis H_5 implies that both CSR channels constitute effective platforms for banks to address the claims of their stakeholders. Second, the pairwise testing of hypotheses H_6 to H_{13} suggests that CSR activities are perceived as particularly effective when they are implemented as bank-internal action programs, address the claims of primary bank stakeholders, or combine both aspects. Within the external channel, participants perceive positive lending standards as more powerful than exclusionary approaches. Third, the results for hypothesis H_{14} indicate that the salience of stakeholders according to figure 14 and the perceived effectiveness of activities to address their claims are most strongly related for a bank's CSR measures across its two channels.

3.3.4.3 Interaction Factors

The last set of hypotheses concerns the role of interaction factors in the framework of CSR in banking. The first one – the distinction between "saying" and "doing" – is captured by hypothesis H_{15} , which posits that bank-internal commitments are perceived as less effective than action programs. To test whether this is true, survey item 2.5 is broken down as illustrated in figure 22. As predicted by hypothesis H_{15} , it suggests that the perceived effectiveness of internal CSR activities to address the claims of the individual stakeholders is higher when implemented in terms of action programs rather than commitments. Consequently, the average perceived effectiveness of the former strategy is higher, too.

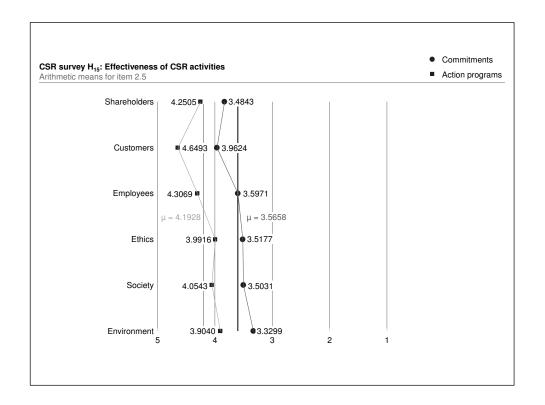


Figure 22 CSR Survey H_{15} : Effectiveness of Internal CSR Activities

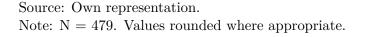


Table 31 indicates that statistical evidence strongly corroborates hypothesis H_{15} : First, for the average of all stakeholders, the null hypothesis that "saying" and "doing" are perceived as equally effective can be rejected at the 0.1% significance level. This is indicated by p-values of 0.0000 in the joint rows for "All" under columns "p1" and "p2". Second, the same conclusion applies for the six stakeholders: Commitments to address their individual claims are consistently perceived as less effective than action programs on average, with the tentative exception of customer-focused "saying" activities. This is suggested by consistently low p-values in the "saying" rows for the individual stakeholders while the finding for customers illustrates that CSR measures to address the claims of this stakeholder are generally perceived as rather effective, even in the form of verbal commitments. Similarly, the test results in the six "doing" rows indicate that the null hypothesis of equal perceived effectiveness between action programs which target individual stakeholder claims and "saying" activities on average can be rejected at the 0.1%significance level. Third, the significance levels reported in the joint rows under columns "p1" and "p2" at stakeholder level suggest that statistically relevant differences exist in the perceptions of effectiveness between "doing" activities and "saying" activities which focus on the claims of the same stakeholder.

Stakeholders	Strategy	Mean	Median	JB	p1	p2
	Souring	3.5658	3.6667	0.0000		
All	Saying	(0.7084)	(0.3333)		- 0.0000	0.0000
All	Doing	4.1928	4.1667	0.0000	- 0.0000	0.0000
	Doing	(0.5105)	(0.3333)			
	Saying	3.4843	4	0.0070	0.0000	0.0000
Shareholders	Saying	(0.9827)	(1)		- 0.0000	0.0000
Shareholders	Doing	4.2505	4	0.0000	- 0.0000	0.0000
	Doing	(0.7173)	(0)		0.0000	0.0000
	Souring	3.9624	4	0.0000	0.7375	0.0018
Customers	Saying	(1.0180)	(1)		- 0.0000	0.0000
Customers	Doing	4.6493	5	0.0000	- 0.0000	0.0000
	Doing	(0.6222)	(0)		0.0000	0.0000
	Saying	3.5971	4	0.0033	0.0000	0.0000
Employees		(0.9992)	(1)		- 0.0000	0.0000
Employees	Doing	4.3069	4	0.0000	- 0.0000	0.0000
		(0.7707)	(1)		0.0000	0.0000
	C	3.5177	4	0.0002	0.0000	0.0000
Ethics	Saying	(1.1031)	(1)		- 0.0000	0.0000
Ethics	Daina	3.9916	4	0.0000	- 0.0000	0.0000
	Doing	(0.9102)	(1)		0.0000	0.0000
	Corrigo	3.5031	4	0.0022	0.0000	0.0000
Society	Saying	(1.0567)	(1)		0.0000	0.0000
Society	Doing	4.0543	4	0.0000	- 0.0000	0.0000
	Doing	(0.9016)	(1)		0.0000	0.0000
	Source	3.3299	3	0.0003	0.0000	0.0000
Environment	Saying	(1.1296)	(1)		0.0000	0.0000
Environment	Doing	3.9040	4	0.0000	- 0.0000	0.0000
	Doing	(1.0100)	(1)		0.0000	0.0000

Notes: N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness is equal across CSR strategies.

The second interaction factor within the framework of CSR in banking is reputation. A test of H_{16} , which conjectures that the reputation of banks is worse in comparison to other industries, can immediately draw upon the survey participants' level of agreement with this statement in control item C_1 . In line with the predictions of the first reputation hypothesis, table 32 implies that there is a positive average level of agreement with C_1 as both the median and mean equal exactly or slightly less than "mostly agree" (coded as "4" on the 5-point Likert scale). However, columns "p1" and "p2" show that the average level of agreement is statistically significantly different from and greater than "neither agree nor disagree" (coded as "3"), but also different from and lower than "mostly agree" at the 1% significance level. This suggests that the CSR survey participants perceive the reputation of banks as only moderately worse in comparison to other industries.

Table 32	CSR Survey	H_{16} :	Reputation	of Banks
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Survey item	Mean	Median	JB	p1	p2
C	3.8351	4	0.0002	0.0000	0.0000
01	(0.8845)	(1)		0.0185	0.0018

Source: Own representation.

Notes: N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a one-sided sign test (two-sided Wilcoxon signed-rank test) that the perceived activity effectiveness is equal to "3" in the first row or equal to "4" in the second row.

The second reputation hypothesis H_{17} postulates that there is a positive relation – but not identity – between the external perceptions of reputation and social responsibility in banking. Both aspects are captured by survey items C_1 , already introduced in the previous paragraph, and C_2 , which denotes the statement that banks behave in a more socially responsible way than other companies. The test of H_{17} is conducted in two steps, the first of which investigates whether the average perception of banks as socially responsible companies varies systematically with their reputation. The results of this exercise are summarized in table 33. It illustrates that, first, the overall average level of agreement with item C_2 is numerically close to "mostly disagree" (coded as "2"). However, the test results in columns "p1" and "p2" suggest that the survey participants on average have a neither neutral (coded as "3", first row) attitude towards nor "mostly disagree" (second row) with items C_2 at the 0.1% significance level. Combined, these observations suggest a tendency to perceive banks not as more socially responsible than other companies.

Survey item C_2	Mean	Median	JB	p1	p2
All C_1	2.3633	2	0.0160	0.0000	0.0000
All O_1	(0.9134)	(1)		0.0000	0.0000
C = 5 (N - 111)	2.0270	2	0.0108	0.4340	0.7344
$C_1 = 5 (N=111)$	(1.0398)	(1)			
C = A (N = 210)	2.3624	2	0.1036	0.0000	0.0000
$C_1 = 4 \ (N=218)$	(0.8324)	(1)			
$C_1 = 3 (N=113)$	2.6372	3	0.8125	0.0000	0.0000
$C_1 = 3$ (N=113)	(0.8352)	(1)			
C = 2 (N-24)	2.4706	3	0.4210	0.0075	0.0031
$C_1 = 2 (N=34)$	(0.8956)	(1)			
$C_{-1} (N_{-2})$	3.3333	3			
$C_1 = 1 (N=3)$	(0.5774)	(0)			

Table 33 CSR Survey H_{17} : Social Responsibility and Reputation of Banks (1/2)

Notes: Total N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. For $C_1 = 1$ to $C_1 = 5$, "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the level of agreement with item C_2 is equal across consecutive levels of agreement with item C_1 . For "All C_1 ", p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the level of agreement with item C_2 is equal across consecutive levels of agreement with item C_1 . For "All C_1 ", p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the level of agreement with item C_2 is equal to "3" (first row) or "2" (second row).

Second, the analysis is broken down for different levels of agreement with C_1 . According to hypothesis H_{17} , the values for C_2 should increase as the level of agreement with C_1 decreases. The results in table 33 are mostly in line with this prediction: Pairwise comparisons across consecutive levels of agreement with C_1 show that decreasing levels of agreement with the reputation of banks being relatively unfavorable correspond to higher levels of agreement with the statement that banks behave in a more socially responsible way than other companies, with the exception of those participants who "mostly disagree" with the former statement $(C_1 = 2)$. However, this result may suffer from a small sample bias, as only 37 observations exist for $C_1 = 2$ and $C_1 = 2$. For two out of the three remaining levels of agreement with C_1 , these differences are statistically significant at high levels of confidence, as the p-values in columns "p1" and "p2" indicate. Since normality in distribution cannot be rejected for $C_1 = 4, 3, and 2, additional t-tests$ for pairwise equal levels of agreement with item C_2 can be conducted across these categories. These tests corroborate previous conclusions: Equal levels of agreement with item C_2 can be rejected at the 0.1% significance level for a comparison of categories $C_1 = 4$ and $C_1 = 3$ on the one hand and at the 5% significance level categories $C_1 = 3$ and C_1 .

To generate clearer evidence, the level of agreement with item C_2 is compared between the participants who mostly or fully agree with C_1 ($C_1 > 3$, coded as "positive category") and those who mostly or fully disagree with this item ("negative category", $C_1 < 3$). The results of this analysis, summarized in table 34, corroborate hypothesis H_{17} : Both tests reject the null hypothesis of equal average agreement levels with survey item C_2 between the negative and the positive category at significance levels of 5% and 10%. Instead, the mean and median values suggest that participants who (mostly) disagree that the reputation of banks is relatively unfavorable perceive banks as significantly more socially responsible than those who (mostly) agree with the statement on the reputation of banks. In line with the predictions of hypothesis H_{17} , this suggests that there is a systematic, positive relation between the perceptions of reputation and social responsibility in banking.

Table 34	CSR Survey	H ₁₇ :	Social	Responsibility	and Reputation	of Banks	(2/2)	
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Survey item C_2	Mean	Median	JB	p1	p2
$C_1 > 3 (N=329)$	2.2492	2	0.0100		
$C_1 > 3 (N-329)$	(0.9199)	(1)		— 0.0368	0.0681
$C_1 < 3 (N=37)$	2.5405	3	0.4094	- 0.0308	0.0001
$U_1 < 3$ (M=37)	(0.9005)	(1)			

Source: Own representation.

Notes: Total N = 366. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided Wilcoxon rank-sum test (two-sided t-test) that the level of agreement with item C_2 is identical across the two categories of agreement with item C_1 .

Hypothesis H_{18} , which posits that a positive relation between the reputation of a bank and the perceived effectiveness of its CSR activities, can be tested using a similar approach. The first step is an investigation whether the perceived effectiveness of a bank's CSR activities, computed as the average of survey items 2.5 and 3.5, decreases as the level of agreement with survey item C_1 increases. The results of this analysis, which are summarized in table 35, are inconclusive: On the one hand, the perceived CSR activity effectiveness qualitatively is higher among participants who "neither agree nor disagree" $(C_1 = 3)$ or "fully disagree" $(C_1 = 1)$ with item C_1 in comparison to the respective next higher level of agreement with C_1 . Yet, this result is statistically insignificantly at standard levels, except for a sign-test between $C_1 = 4$ and $C_1 = 3$. On the other hand, a one-level decrease in agreement with item C_1 from "fully agree" $(C_1 = 5)$ or "neither agree nor disagree" $(C_1 = 3)$ corresponds to – statistically insignificant – decreases in CSR activity effectiveness perceptions: This is at odds with the predictions of H_{18} .

Activity effectiveness	Mean	Median	JB	p1	p2
All C ₁	3.7487	3.7143	0.1743	0.0000	0.0000
All O_1	(0.4400)	(0.2857)		0.0000	0.0000
C = 5 (N - 111)	3.7623	3.8095	0.5327	0.2898	0.1665
$C_1 = 5 (N=111)$	(0.4787)	(0.3810)			
$C_1 = 4 (N=218)$	3.7280	3.7143	0.0390	0.0609	0.4237
$O_1 = 4 (N - 210)$	(0.4317)	(0.2381)			
$C_1 = 3 (N=113)$	3.7826	3.7619	0.5285	0.1319	0.0313
$O_1 = 3$ (N=113)	(0.4166)	(0.3333)			
$C_1 = 2 (N=34)$	3.7227	3.6905	0.9786	0.3915	0.2968
$O_1 = 2 (N - 34)$	(0.4671)	(0.2857)			
$C_1 = 1 (N=3)$	3.7619	3.8095			
$O_1 - I (N=3)$	(0.0824)	(0)			

Table 35 CSR Survey H_{18} : Effectiveness of CSR Activities and Reputation of Banks (1/2)

Notes: Total N = 479. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality in distribution. For $C_1 = 1$ to $C_1 = 5$, "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived level of CSR activity effectiveness is equal across consecutive levels of agreement with item C_1 . For "All C_1 ", "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the (perceived) level of CSR activity effectiveness is equal to 3 (first row) or 4 (second row).

The second step is the comparison of perceived CSR activity effectiveness between the participants who mostly or fully agree with C_1 ($C_1 > 3$, "positive category") and those who mostly or fully disagree with this item ("negative category", $C_1 < 3$). This analysis simultaneously addresses the potentially confounding factor of limited sample sizes for categories $C_1 = 2$ and $C_1 = 1$. As table 36 indicates, both tests fail to reject the null hypothesis that the perceived effectiveness of CSR activities is equal between the positive and the negative category. This combined evidence gives reason to reject hypothesis H₁₈ and assume that there is no systematic, positive relation between the reputation of a bank and the perceived effectiveness of its CSR activities.

Activity effectiveness	Mean	Median	JB	p1	p2
$C_1 > 3 (N=329)$	3.7396	3.7143	0.0685		
$U_1 > 3 (N=329)$	(0.4477)	(0.2857)		- 0.7987	0.8595
$C_1 < 3 (N=37)$	3.7259	3.7143	0.9370	- 0.1901	0.0090
$C_1 < 5 (N=57)$	(0.4477)	(0)			

Table 36 CSR Survey H_{18} : Effectiveness of CSR Activities and Reputation of Banks (2/2)

Notes: Total N = 366. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided Wilcoxon rank-sum test (two-sided t-test) that the perceived level of CSR activity effectiveness is identical across the two categories of agreement with item C_1 .

Hypothesis H_{19} focuses on the same relation between reputation and CSR activity effectiveness, but claims that a strong positive association exists between the reputation of a bank and the perceived effectiveness of internal CSR activities, in particular commitments.

This is investigated in two steps: First, the perceived effectiveness of a bank's CSR activities is broken by levels of reputation for the internal and the external CSR channel as shown in table 37. It illustrates that the data does not support hypothesis H_{19} as a negative relation between reputation and CSR activity effectiveness does not exist within the internal channel. The results of pairwise comparisons across consecutive levels of agreement with C_1 , summarized under columns "p1" and "p2", show that less negative perceptions of a bank's reputation do not correspond to higher levels of perceived internal CSR activity effectiveness. For $C_1=5$ and $C_1=2$, the null hypothesis of identical perceived effectiveness, compared to their respective counterparts $C_1=4$ and $C_1=1$, cannot be rejected. While the remaining two comparisons across agreement levels yield statistically significant results, numerically smaller values of perceived activity effectiveness for $C_1=2$ vis-à-vis $C_1=3$ run contrary to the predictions of H_{19} . Therefore, evidence for a positive relation between reputation and internal CSR activity effectiveness cannot be identified.

Activity ef-	Internal	channel		Externa	l channel			
fectiveness	Mean	Median	JB	Mean	Median	JB	- p1	p2
$C_1=5$	3.8649	3.8333	0.4010	3.6604	3.6	0.3780	0.4262	0.3246
(N=111)	(0.5368)	(0.3333)		(0.6491)	(0.4000)			
$C_1=4$	3.8406	3.8333	0.0879	3.6050	3.6	0.2754	0.0013	0.0000
(N=218)	(0.4605)	(0.3333)		(0.6214)	(0.4000)			
$C_1=3$	3.9867	4	0.2022	3.5637	3.6	0.6516	0.0004	0.0000
(N=113)	(0.5248)	(0.4167)		(0.5176)	(0.3000)			
$C_1=2$	3.8162	3.75	0.4628	3.5971	3.6	0.1511	0.3616	0.9114
(N=34)	(0.4423)	(0.25)		(0.7230)	(0.5)			
$C_1=1$	3.8889	3.8333		3.6	3.5			
(N=3)	(0.2546)	(0.1667)		(0.2646)	(0.1000)			

Table 37 CSR Survey H_{19} : Effectiveness of CSR Activities and Reputation of Banks (1/2)

Notes: Total N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness is equal across consecutive levels of agreement with item C_1 .

In a second step, the relation between reputation and the perceived effectiveness of CSR commitments relative to action programs is investigated. While reputation and overall internal CSR activity effectiveness are seemingly unrelated, it may be that this result is driven by two opposing relations with reputation for "saying" and "doing" activities, which cancel each other out in the aggregate. To determine whether this is the case, the perceived internal CSR activity effectiveness is broken down by levels of bank reputation and activity types as shown in table 38. The results with respect to the predictions of hypothesis H_{19} are ambiguous: On the one hand, CSR commitments are perceived as less effective than action programs for all levels of perceived reputation. As the p-values in the respective first row under columns "p1" and "p2" indicate, equal perceived effectiveness for "saying" and "doing" activities can be rejected at significance level of 0.1% for $C_1=5$, 4, and 3 and 1% for $C_1=2$. The sole exception is the lowest level of agreement with C_1 $(C_1=1)$, for which differences in perceived activity effectiveness are numerically in line with the predictions of hypothesis H_{19} , but – most likely driven by the limited number of observations – statistically insignificant at standard levels. On the other hand, there is no evidence for a systematic, negative relation between the level of agreement with item C_1 and the perceived effectiveness of CSR commitments: Lower perceived reputation levels mostly do not seem to correspond to higher levels of perceived effectiveness for a bank's "saying" CSR activities. The results of pairwise comparisons across consecutive levels of agreement with C_1 , reported in the second row under columns "p1" and "p2", show that equal perceptions of activity effectiveness cannot be rejected across C_1 agreement levels of 5 and 4, 3 and 2, as well as 2 and 1. Only the pairwise comparison of C_1 agreement levels 4 and 3 yields statistically significant results in line with the predictions of H_{19} .

Table 38	CSR Survey H ₁₉	: Effectiveness	of CSR	Activities a	and Reputation	of Banks	(2/2)
Labie 00	Control into	· Lincourrences	OI COIU	11001110100 0	ma reepatation	or Danno	(-, -)

Activity ef-	Commitments	Action	programs	n1	n 0
fectiveness	Mean Median JI	B Mean	Median JB	- p1	p2
$C_1=5$	3.4760 3.5 0.	0.0095 4.2538	4.3333 0.0499	0.0000	0.0000
(N=111)	(0.8489) (0.5)	(0.5039)) (0.3333)	0.2664	0.6317
$C_1=4$	3.5237 3.5 0.	0.0000 4.1575	4.1667 0.0007	0.0000	0.0000
(N=218)	(0.6373) (0.3333)	(0.5107)) (0.3333)	0.0000	0.0000
$C_1=3$	3.7139 3.8333 0.	0.5434 4.2596	4.1667 0.2326	0.0000	0.0000
(N=113)	(0.7215) (0.5000)	(0.5015)) (0.3333)	0.2853	0.7177
$C_1=2$	3.6324 3.6667 0.	0.8182 4	4.1667 0.3985	0.0037	0.0015
(N=34)	(0.5471) (0.3333)	(0.5334)) (0.3333)	1.0000	0.4772
$C_1=1$	3.6111 3.6667 —	- 4.1667	4.1667 —	0.2500	0.1088
(N=3)	(0.4194) (0.3333)	(0.1667)) (0.1667)		

Source: Own representation.

Notes: Total N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness is equal across activity types (first row) and that, within "saying" activities, the perceived activity effectiveness is equal across consecutive levels of agreement with item C_1 .

The tests of hypotheses H_{16} to H_{19} are based on the assumption that reputation is an interaction factor in the framework of CSR in banking. As shown in figure 15, this implies that reputation influences, for instance, external perceptions of a bank as a socially responsible company or the effectiveness of its CSR activities. As shown in section 3.2.3, companies may also decide to use CSR initiatives strategically to improve their reputation. To explore this relation according to the CSR survey, table 39 inverts the analysis reported in table 33 and breaks down the perceived reputation of banks in terms of survey item C_1 by different categories of item C_2 , which captures their level of social responsibility.

Survey item C_1	Mean	Median	JB	p1	p2
C = 5 (N-5)	4.4	5			
$C_2 = 5 (N=5)$	(0.8944)	(0)		- 0.0529	0.0493
$C_2 = 4 (N=43)$	3.5581	4	0.1907	-0.0529	0.0495
$C_2 = 4 (N=43)$	(0.8811)	(1)		- 0.5793	0.5985
$C_2 = 3 (N=159)$	3.6415	4	0.1228	- 0.0795	0.5965
$C_2 = 3 (N - 139)$	(0.9297)	(1)		-0.0427	0.0259
$C \rightarrow 0$ (N 196)	3.8441	4	0.0568	- 0.0427	0.0239
$C_2 = 2 (N=186)$	(0.7515)	(0)		— 0.0000	0.0000
C = 1 (N = 2C)	4.2791	5	0.0011	- 0.0000	0.0000
$C_2 = 1 \ (N=86)$	(0.9030)	(0)			

 Table 39
 CSR Survey: Reputation and Social Responsibility of Banks

Notes: Total N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided Wilcoxon rank-sum test (two-sided t-test) that the level of agreement with item C_1 is equal across consecutive levels of agreement with item C_2 .

This analysis yields an inconclusive result: If CSR systematically drives reputation, the average agreement with the statement that the reputation of banks is worse in comparison to other industries or item C_1 , documented in columns 2 and 3, should increase from the first to the last row. Excluding the five observations for those participants who "strongly agree" with item C_2 ($C_2 = 5$), this seems to be the case. On the other hand, statistically significant differences in perceptions of reputation across different levels of perceived social responsibility exist according to both tests only between C_2 agreement levels of 3 and 2 as well as 2 and 1. This suggests a dual conclusion: CSR activities may indeed be an effective instrument for reputation management – but only one determinant of a bank's public image alongside other drivers such as a favorable track record (Walsh et al., 2009; Washington and Zajac, 2005; Weigelt and Camerer, 1988) or a bank's communication strategy (Deephouse, 2000; Balmer and Gray, 1999). As discussed in section 3.2.3, some reputational factors such as the historical industry image or recent events may also be beyond the immediate control of a bank.

The third and final interaction factor – the cause/business fit – is captured by hypothesis H_{20} . It posits that the perceived effectiveness of CSR activities positively depends on the perceived fit between the stakeholder whose claims are addressed – the "cause" – and the business of a bank. To test this claim, the perceived effectiveness of a bank's CSR activities is broken down for every stakeholder and their perceived levels of fit according

to survey item 2.4. Table 40 shows the results of this analysis for a bank's shareholders, which corroborate hypothesis H_{20} : Both within the internal and the external CSR channel of a bank, the perceived effectiveness of shareholder-focused activities increases qualitatively with the perceived fit of addressing the claims of this stakeholder (coded "F") within the regular operations of a bank. The pairwise comparisons of perceived CSR activity effectiveness across consecutive levels of fit C_1 , summarized in the first row under columns "p1" and "p2" for the internal and in the second row for the external CSR channel of a bank, show that the cause/business fit is an important driver behind the perceived effectiveness of a bank's shareholder management activities, particularly along the external channel: Within the internal channel, the differences in perceived activity effectiveness are statistically significant at standard levels for comparisons of F=5 and F=4(denoting a "very good" and a "rather good" fit) as well as F=4 and F=3 (referring to "rather good" and "neither good nor bad" levels of fit). Within the external CSR channel, equal perceived activity effectiveness between consecutive levels of cause/business fit can be rejected consistently at high confidence levels, though for the comparison of F=4 and F=3 only according to one of the two tests.

Fit of stake-	Internal	channel		External	l channel		n1	n 9
holder	Mean	Median	JB	Mean	Median	JB	p1	p2
F=5	4.0378	4	0.0000	3.8416	4	0.0456	0.0340	0.1326
$(\mathbf{N}_{int}=238,$	(0.6403)	(0.5)		(0.8239)	(0.5)		0.0000	0.0000
$N_{ext}=202)$								
F=4	3.75	4	0.0467	3.6132	3.5	0.3349	0.0000	0.0000
$(\mathbf{N}_{int}=168,$	(0.6900)	(0.5)		(0.7553)	(0.5)		0.1401	0.0452
$N_{ext}=190)$								
F=3	3.5938	3.5	0.5627	3.4797	3.5	0.4288	0.4514	0.2378
$(N_{int}=64,$	(0.5410)	(0.5)		(0.8776)	(0.5)		0.0001	0.0000
$N_{ext}=74)$								
F=2	3.5	3.5	0.8854	3.3462	3	0.8902		
$(N_{int}=9, \\ N_{ext}=13)$	(0.9682)	(0.5)		(0.6578)	(0.5)			

Table 40 CSR Survey H₂₀: Effectiveness of CSR Activities and Fit of Shareholders

Source: Own representation.

Notes: Total N = 479. Values rounded where appropriate. No observations for F=1. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived effectiveness of internal (first row) and external (second row) CSR activities is equal across consecutive levels of fit.

The same analysis for claims to address the claims of bank customers yields similar outcomes, which are summarized in table 41: First, it reproduces the result that the perceived effectiveness of both internal and external CSR activities generally increases with the perceived cause/business fit of the stakeholder in scope. Second, as the results of both statistical tests indicate, these conclusions can be drawn on high confidence levels for a perceived cause/business fit between "very good" to "neither good nor bad", i.e., at fit levels of F=5, 4, and 3, for both CSR channels. At the same time, insufficient sample sizes impede meaningful analyses for the two lowest levels of fit. Taking this constraint into account, this evidence corroborates hypothesis H_{20} for bank customers.

Fit of stake-	Internal	channel		External	l channel		1	0
holder	Mean	Median	JB	Mean	Median	JB	p1	p2
F=5	4.4288	4.5	0.0000	3.7699	4	0.0938	0.0000	0.0000
$(N_{int}=274,$	(0.6557)	(0.5)		(0.7690)	(0.5)		0.0000	0.0000
$N_{ext}=276)$								
F=4	4.2148	4	0.0899	3.6490	3.5	0.3786	0.0017	0.0001
$(N_{int}=142,$	(0.6313)	(0.5)		(0.7589)	(0.5)		0.0548	0.0152
$N_{ext}=151)$								
F=3	4.0636	4	0.4530	3.5385	3.5	0.9102	0.7428	0.4305
$(N_{int}=55,$	(0.6876)	(0.5)		(0.8381)	(0.5)		0.1996	0.0458
$N_{ext}=39)$								
F=2	3.9	4		3.375	3.25	0.1372	0.0625	0.0394
$(N_{int}=5,$	(0.5477)	(0)		(0.7111)	(0.25)		0.0063	0.0035
$N_{ext}=12)$								
F=1	2.5	2.5		4.5	4.5			
$(N_{int}=3,$	(1)	(1)		(—)	(0)			
$N_{ext}=1)$								

Table 41 CSR Survey H₂₀: Effectiveness of CSR Activities and Fit of Customers

Source: Own representation.

Notes: Total N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived effectiveness of internal (first row) and external (second row) CSR activities is equal across consecutive levels of fit.

Table 42 shows that a bank's measures to address the claims of its employees are perceived as more effective when the cause/business fit perceptions for this stakeholder are higher, too. Yet, as the test results for the different pairwise comparisons indicate, the differences in perceived effectiveness are only statistically significant at standard levels between fit levels F=5 and F=4 as well as F=3 and F=2. This corroborates H_{20} rather qualitatively.

Fit of stakeholder	Mean	Median	JB	p1	p2
F=5 (N=135)	4.1296	4.5	0.0070	0.0124	0.0144
r = 0 (1 = 150)	(0.7629)	(0.5)			
F=4 (N=194)	3.9613	4	0.0830	0.9291	0.6799
	(0.6477)	(0.5)			
F=3 (N=109)	3.8119	4	0.0519	0.0448	0.0106
$\Gamma = 3 (11 - 109)$	(0.7064)	(0.5)			
F=2 (N=37)	3.7432	4	0.4527	0.7428	0.8539
$\Gamma = 2 (\Pi = 37)$	(0.7960)	(0.5)			
$F_{1}(N_{4})$	3.25	3.75			
F=1 (N=4)	(1.6583)	(0.75)			

Table 42CSR Survey H_{20} : Effectiveness of CSR Activities and Fit of Employees

Notes: Total N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived effectiveness of internal CSR activities is equal across consecutive levels of fit.

The outcomes of an investigation into the perceptions of cause/business fit and CSR activity effectiveness for ethics and morale are summarized in table 43. At least in part, these results are in line with the predictions of hypothesis H₂₀: Both within the internal and the external channel of a bank, the perceived effectiveness of ethical CSR measures increases with perceptions of fit between this stakeholder the banking business. However, the differences in activity effectiveness perceptions between fit levels F=5 and F=4 as well as F=2 and F=1 are not statistically significant at levels of $\alpha \leq 5\%$. Similar to the findings of table 42, this suggests a rather qualitative relation between the cause/business fit of ethics and moral in banking as well as CSR activities with an ethical focus.

Fit of stake-	Internal	channel		External	l channel		1	
holder	Mean	Median	JB	Mean	Median	JB	p1	p2
F=5	3.9923	4	0.0342	3.9661	4	0.0078	0.7877	0.8838
$(N_{int}=65,$	(0.8315)	(0.5)		(0.9951)	(0.5)		0.3916	0.5027
$N_{ext}=59)$								
F=4	3.86	4	0.0339	3.7225	4	0.0921	0.0000	0.0000
$(N_{int}=150,$	(0.7168)	(0.5)		(0.8717)	(0.5)		0.0032	0.0007
$N_{ext}=173)$								
F=3	3.7	3.5	0.0397	3.5392	3.5	0.0827	0.0009	0.0007
$(N_{int}=155,$	(0.8070)	(0.5)		(0.9468)	(0.5)		0.0000	0.0000
$N_{ext}=153)$								
F=2	3.5977	3.5	0.5574	3.6	4	0.0246	0.0769	0.1451
$(N_{int}=87,$	(0.8100)	(0.5)		(1.0874)	(1)		0.3284	0.3465
$N_{ext}=75)$								
F=1	3.3409	3.5	0.5027	3.2368	3.5	0.2223		
$(N_{int}=22,$	(1.1168)	(0.5)		(1.4178)	(1.5)			
$N_{ext}=19$)								

Table 43CSR Survey H_{20} : Effectiveness of CSR Activities and Fit of Ethics

Notes: Total N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived effectiveness of internal (first row) and external (second row) CSR activities is equal across consecutive levels of fit.

Table 44 documents the results of the same analysis for society and social issues. For the internal channel, it suggests that a positive relation exists between the cause/business fit of society and banking as well as the perceived effectiveness of a bank's activities to address the claims of this stakeholder. Across fit levels F=5 and F=4 as well as F=3 and F=2, these differences in perceived activity effectiveness are statistically significant as well. For fit levels F=4 and F=3 as well as F=2 and F=1, the differences in perceived activity effectiveness are qualitatively in line with the predictions of hypothesis H_{20} , but statistically insignificant at standard levels. The picture for the external channel is mixed: Pairwise tests identify significantly higher perceptions of activity effectiveness for cause/business fit levels between F=4 and F=3. The differences in perceived activity effectiveness are insignificant between fit levels F=5 and F=4 as well as F=3 and F=2. A comparison between F=2 to F=1 finds statistically significantly higher levels of perceived activity effectiveness in the latter category, which contradicts hypothesis H_{20} . A positive relation between the cause/business fit of society in banking and the perceived effective-

ness of a bank's activities to address the claims of this stakeholder therefore holds only and mostly qualitatively for the internal CSR channel of a bank.

	Intornal	channel		Fretownal	channel			
Fit of stake-	Internal				channel		p1	p2
holder	Mean	Median	JB	Mean	Median	JB	T	1
F=5	4.3056	4.5	0.0457	4.0946	4	0.0026	0.0428	0.0202
$(N_{int}=36,$	(0.7395)	(0.5)		(0.8647)	(0.5)		0.4583	0.2455
$N_{ext}=37)$								
F=4	3.9407	4	0.0846	3.7283	4	0.0628	0.9212	0.6091
$(\mathbf{N}_{int}=135,$	(0.7582)	(0.5)		(0.8460)	(0.5)		0.0014	0.0008
$N_{ext}=138)$								
F=3	3.75	4	0.0609	3.3470	3.5	0.0507	0.0017	0.0000
$(N_{int}=174,$	(0.7004)	(0.5)		(0.9770)	(0.5)		0.4064	0.1386
$N_{ext}=183)$								
F=2	3.5302	3.5	0.4470	3.4785	3.5	0.0389	0.5900	0.5637
$(N_{int}=116,$	(0.8554)	(0.5)		(0.9293)	(0.5)		0.0005	0.0000
$N_{ext}=93)$								
F=1	3.3889	3.5	0.2906	3.4821	4	0.1472		
$(N_{int}=18,$	(1.2194)	(0.5)		(1.3297)	(1)			
$N_{ext}=28)$								

Table 44 CSR Survey H₂₀: Effectiveness of CSR Activities and Fit of Society

Source: Own representation.

Notes: Total N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived effectiveness of internal (first row) and external (second row) CSR activities is equal across consecutive levels of fit.

Table 45 breaks down the perceived effectiveness of CSR activities by different levels of cause/business for the environment, the last stakeholder in scope. Provided that the analyses can draw upon sufficiently large samples – i.e., neglecting the perceived activity effectiveness a cause/business fit level of F=5 – a higher fit between the business of a bank and the environment translates into a higher level of perceived effectiveness for a bank's environmentally-focused CSR activities in both of its channels. In all pairwise comparisons, this conclusion can be drawn with statistical confidence levels $\geq 90\%$ for at least one of the tests conducted. This evidence mostly corroborates hypothesis H_{20} for the environment as a stakeholder in banking.

Fit of stake-	Internal	channel		External	l channel		1	
holder	Mean	Median	JB	Mean	Median	JB	p1	p2
F=5	4.0577	4	0.4369	4.3438	5	0.1596	0.6476	0.5775
$(N_{int}=26,$	(0.7659)	(0.5)		(0.8892)	(0)		0.1796	0.1461
$N_{ext}=16)$								
F=4	4.0753	4	0.0635	3.8357	4	0.2906	0.0000	0.0000
$(N_{int}=73,$	(0.8687)	(1)		(0.8753)	(0.5)		0.0032	0.0018
$N_{ext}=70)$								
F=3	3.6172	3.5	0.2227	3.4004	3.5	0.1638	0.1425	0.0398
$(N_{int}=209,$	(0.8795)	(0.5)		(0.9006)	(0.5)		0.0680	0.1338
$N_{ext}=226)$								
F=2	3.4323	3.5	0.4291	3.3584	3.5	0.0624	0.0000	0.0000
$(N_{int}=133,$	(0.8829)	(0.5)		(1.0553)	(0.5)		0.0026	0.0006
$N_{ext}=113)$								
F=1	3.0789	3	0.8211	3.0648	3	0.0671		
$(N_{int}=38,$	(1.1539)	(0.5)		(1.2703)	(1)			
$N_{ext}=54)$								

Table 45CSR Survey H20: Effectiveness of CSR Activities and Fit of Environment

Notes: Total N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived effectiveness of internal (first row) and external (second row) CSR activities is equal across consecutive levels of fit.

This section illustrates the differentiated role of the three interaction factors within a framework and of CSR in banking. The first one – the dichotomy of "saying" and "doing" within the internal CSR channel of a bank – manifests in a significantly higher perceived effectiveness for bank-internal action programs relative to commitments. This is in line with the predictions of hypothesis H_{15} .

The results for the reputation of a bank, the second interaction factor, need to be discussed individually: In comparison to other industries, banks tend to have a rather worse reputation, as implied by hypothesis H_{16} . In line with the predictions of hypothesis H_{17} , there is evidence that perceptions of reputation and socially responsible behavior in banking are positively related, especially when differentiating between – positive and negative – categories of reputation rather than reputation levels. In contrast, the relative reputation of a bank does not seem to inform the perceived effectiveness of its CSR activities in general, which allows to reject H_{18} . The tests of hypothesis H_{19} yield an ambiguous result: On the one hand, the perceived effectiveness of internal action programs is higher than for commitments across all levels of reputation. On the other hand, there is only little evidence for a systematic relation between the reputation of a bank and the perceived effectiveness of its internal CSR activities. In combination with the additional analysis, the existent though imperfect relation between perceived social responsibility and reputation suggests that, while an unfavorable reputation does not necessarily harm a bank's CSR profile, a strong social performance is not the sole driver of a favorable reputation.

The cause/business, the third interaction factor are capable of explaining the phenomenon that a bank's CSR activities are perceived as more effective when the fit between the banking business and the management of certain stakeholders is perceived as higher. Particularly strong evidence in line with the predictions of hypothesis H_{17} exists for shareholders as well as – to a lower extent – for the remaining stakeholders and CSR channels of a bank, with the sole exception of bank-external activities to address social claims.

The results of the statistical tests for all three sets of hypotheses within a framework of CSR in banking are summarized in table 46. For the first set – the stakeholders of a bank – it demonstrates that the test results are in line with the predictions of hypotheses H_1 and H_4 . At the same time, the fact that H_2 is supported necessarily implies that the opposing hypothesis H_3 needs to be rejected.

For the second set of hypotheses, which are concerned with the CSR channels of a bank, there are three main takeaways: First of all, both CSR channels represent effective means for a bank to address the claims of its stakeholders. This is indicated by supporting evidence for hypothesis H₅. Second, the pairwise testing of hypotheses H₆ to H₁₃ yields clear and significant results: The perceived effectiveness of CSR activities is higher when implemented using a bank's internal CSR channel and address the claims of a bank's primary stakeholders. These results hold in isolation, as suggested by the results for hypotheses H₇ and H₈ and in combination, as H₁₀ is supported, too. Within the external CSR channel, the data suggests that positive screening represents a particularly effective strategy to address primary and secondary stakeholders' claims alike, which is in line with the predictions of hypothesis H₁₂ rather than H₁₃. Third, the predictions of the stakeholder model apply mostly on the overall level, as the results for hypothesis H₁₄ show. This suggests that that the salience of a stakeholder is not the most important single driver behind the perceived effectiveness of the activities to address their claims.

The findings concerning the third set of hypotheses highlight the role of each of the three interaction factors. The results for the first one – the dichotomy of "saying" and "doing" within the internal CSR channel of a bank – support hypothesis H_{15} that action programs are perceived as more effective than commitments. The impact of the second interaction

factor – reputation – requires a differentiated discussion: While banks appear to have a rather unfavorable reputation in comparison to other industries, this result is compromised by a lack of both definitive clarity and statistical significance. This finding therefore corroborates hypothesis H_{16} mostly directionally. In contrast, the evidence that a bank's relative reputation and its perception as a socially responsible company are positively related, as claimed by hypothesis H_{17} , is stronger – especially when differentiating between binary reputation categories (i.e., favorable and unfavorable reputation) instead of individual reputation levels. In contrast, neither reputation levels nor categories support that a systematic, positive relation exists between the reputation of a bank and the perceived effectiveness of its CSR activities, which suggests that hypothesis H_{18} should be refuted. Similarly, there is no unambiguous evidence in line with the predictions of hypothesis H_{19} that there is a positive relation between the reputation of a bank and the perceived effectiveness of its CSR activities – neither on the overall level of nor within the internal channel. The cause/business, the third interaction factor, seems to play an important role for CSR in banking; in particular, shareholder management CSR activities are perceived as more effective when the fit between addressing the claims of this stakeholder and a bank's operations is higher. To a lesser extent – with the exception of bank-external social measures – there is similar evidence for the remaining bank stakeholders.

Hypothesis and implication	Supported	Scope	
H_1 : All stakeholders captured by the refined	Yes*	Individual SH	
stakeholder overview are salient for a bank	105		
H ₂ : Primary stakeholders are more salient than	Yes^*	Overall	
secondary stakeholders for a bank	(Mostly) yes [*]	Individual SH	
H ₃ : Secondary stakeholders are more salient than	No*	Overall	
primary stakeholders for a bank	No*	Individual	
H ₄ : The salience of a bank's stakeholders is in	Yes*	Overall SH	
line with the stakeholder taxonomy	(Mostly) yes [*]	Individual SH	
H ₅ : Banks can effectively address their stakehold-	Yes*	Int	
ers along internal and external CSR channels	Yes*	Ext	
H ₆ : CSR activities are more effective when im-	No*	Overall	
plemented along a bank's external channel rather	No*	Primary SH	
than its internal channel	No*	Secondary SH	
H ₇ : CSR activities are more effective when im-	Yes*	Overall	
plemented along a bank's internal channel rather	Yes*	Primary SH	
than its external channel	$(Mostly) yes^*$	Secondary SH	
H ₈ : CSR activities to address primary stakehold-	Yes*	Overall	
ers are more effective than CSR activities to ad-	$(Mostly) yes^*$	Individual SH	
dress secondary stakeholders			
H ₉ : CSR activities to address secondary stake-	No*	Overall	
holders are more effective than CSR activities to	No*	Individual SH	
address primary stakeholders			
H_{10} : Within the internal channel, activities to ad-	Yes*	Overall	
dress the claims of primary stakeholders are more	Yes*	Individual SH	
effective than activities to address the claims of			
secondary stakeholders			
H_{11} : Within the external channel, activities	No*	Overall	
to address the claims of secondary stakeholders	No*	Individual SH	
are more effective than activities to address the			
claims of primary stakeholders			
	Yes*	Overall	
H_{12} : Positive screening within the external chan-	Yes*	Prim	
nel is more effective than negative screening	Yes*	Sec	
H_{13} : Negative screening within the external chan-	No*	Overall	
nel is more effective than positive screening	No*	Prim, Sec	
her is more encouve than positive bereening	110		

Table 46 CSR Survey: Results of Hypothesis Tests

H_{14} : The effectiveness of a bank's individual CSR activities is in line with the stakeholder taxonomy	(Mostly) yes [*]	Overall
	(Mostly) no *	Int
activities is in fine with the stakeholder taxonomy	(Mostly) yes [*]	Ext
H_{15} : Within a bank's internal channel, commit-	Yes*	Overall
ments are less effective than action programs	Yes*	Individual SH
H_{16} : The reputation of banks is worse in compar-		
ison to other industries	(Mostly) yes	Overall
H_{17} : There is a positive relation, but not identity,	(Mostly) yes [*]	Rep. levels
between the reputation of a bank and its percep-	Yes*	Rep. categories
tion as socially responsible		
H_{18} : The reputation of a bank and the effective-	No	Rep. levels
ness of its CSR activities are positively related	No*	Rep. categories
H_{19} : The positive relation between the reputation	(Mostly) no	Int
of a bank and the effectiveness of its CSR activi-	(Mostly) no	Commitments
ties is stronger for internal activities, in particular		
commitments		
	Yes*	Sha
H_{20} : CSR activities with a high cause/business	(Mostly) yes [*]	Cus, Env
fit are more effective than CSR activities with a	Yes	Emp
low cause/business fit	(Mostly) yes	Eth, Soc int
	(Mostly) no	Soc, ext. channel

Source: Own representation.

Note: "SH" denotes stakeholders. "Sha"/"Cus"/"Emp"/"Eth" /"Soc"/"Env" denote shareholders/customers/employees/ ethics/society/environment.. "Int" and "Ext" denote bank-internal and -external CSR channels. "Prim" and "Sec" denote primary and secondary stakeholders. "Rep." denotes reputation. "*" indicates statistical significance at standard significance levels ($\alpha \leq 5\%$).

3.3.5 Discussion

This section discusses the results of the hypothesis tests in three steps: First, section 3.3.5.1 validates the CSR survey findings in terms of internal and external criteria as well against previous research. Second, section 3.3.5.2 proposes a set of avenues for further research. Third, section 3.3.5.3 derives the potential implications of the survey outcomes for banks and their management.

3.3.5.1 Validity

The first criterion in the discussion of the CSR survey's findings is their internal validity, referring to the general "objectivity of the research" (Pérez and del Bosque, 2012, 153).

Shadish, Cook, and Campbell (2002) argue that the quasi-experimental survey methodology generally enables the collection of data in a mostly controlled environment. This suggests that valid inferences can be drawn from this research design. In addition, two factors should enhance the internal validity of the specific survey used in the present study, the first of which is a clear sectoral scoping: As Simpson and Kohers (2002) argue, "focusing on a single industry emphasizes internal validity rather than the external validity of multiple industry analyses" (Simpson and Kohers, 2002, 99). Second, all hypothesis tests draw upon reasonably large samples of observations, which not only increases the statistical significance of the results, but also mitigates the impact of individual outliers, as shown in section 3.3.3. Still, the internal validity of survey-based research can be compromised when the survey's design and administration or individual questions trigger specific response biases. In the following, the CSR survey is evaluated against these biases as documented by Choi and Pak (2005).

First, to minimize the distorting potential of ambiguous items, technical terms, or jargon, the survey was piloted within a relevant sample as described in section 3.3.2 and certain critical expressions were replaced with clearer wording. Inherently ambiguous terms such as the intangible secondary stakeholders were explicitly defined before conducting the survey. Where necessary, short paragraphs introduced the topic of the following items – for instance, internal or external stakeholder management activities of a bank – before expanding on the individual survey items.

Second, to ensure data consistency, survey items 1.1-3.5 focused on attitudes and evaluations rather than actual behaviors. The outcomes for these items were measured using a Likert 5-point scale: Its frequent use in similar survey studies in banking (Fatma, Rahman and Khan, 2014; Poolthong and Mandhachitara, 2009; Wu and Shen, 2013) suggests this instrument's sufficient discriminatory power. The format used for the response options was forced choice, which implies that the survey participants are not provided with a "nonresponse" option. Both early research into CSR surveys and more recent general findings suggest that forced choice is a valid approach which may reduce biases (Pinkston and Carroll, 1996; Aupperle, Carroll and Hatfield, 1985) and trigger deeper processing of the response options (Smyth et al., 2006). The sociodemographic information at the end of the survey was collected in continuous formats such as age in terms of years rather than age categories to avoid data degradation. For all items, the range of response choices was comprehensive and non-overlapping.

Third, the formatting was consistent throughout survey items 1.1-3.5 with all response options in horizontal alignment and the stakeholders in scope listed vertically. As calculated after the piloting, it took the participants around 15 minutes to complete the survey, which is fully in range for administered questionnaires (Choi and Pak, 2005, 19). Therefore, survey fatigue is unlikely, but may have manifested in two ways, the first one being incomplete surveys. As described above, all incomplete questionnaires were discarded and did not enter the data analyses. Second, participants who are tired of answering questions may choose to "agree" or "disagree "with all items. Strictly speaking, this "acquiescence bias" should play only a limited role for survey items 1.1-3.5, which did not capture "agreement" in the narrow sense of the word. More generally, it has been shown that a "yea-saying" or "nay-saying" bias is weaker among well-informed and educated participants (Pew Research Center, 2015). Therefore, this bias should not be critical due to the survey participants' relatively high level of general and business-related education.

The fourth cluster are biases caused by the survey's administration process. Non-objectivity on the part of the administrator was ruled out as individual interactions with the survey participants did not take place and no additional data was gathered on a selective basis. In contrast, subconscious attitudes of the participants may have resulted in a "central tendency bias" or an avoidance of extreme responses. In this case, the revealed responses of a survey's participant understate their true assessments. Yet, for three reasons, the central tendency bias should not be critical: First, most analyses conducted in section 3.3.4 yield statistically significant results, implying sufficient levels of variation in responses. Second, the central tendency bias does not revert the fundamental direction of an answer – for instance, from "strongly agree" to "strongly disagree" – but rather constrains the range such as from "strongly agree" to "agree". These actual analyses remain qualitatively unaffected. Third, comparative analyses of multiple items are most likely unaffected, unless the central tendency bias is systematically correlated with individual items. If anything, the central tendency bias may therefore have resulted in an inflated number of alpha errors in the hypothesis tests of individual items and excessively restrictive hypothesis tests.

In addition, conscious biases may distort a survey's results: For instance, survey participants are unlikely to provide sincere answer to items on intrusive or sensitive topics, particularly in combination with a forced-choice approach. None of the items in the CSR survey fell into this category. An attenuated version of this bias describes the tendency of a survey's participants to choose answers which portray themselves in a good light, known as the "social desirability bias". In principle, the impact of this bias should be limited in a one-time anonymous survey without outcome-based follow-ups or incentives to answer in a certain way. Moreover, avoiding expressions such as "CSR" or "social responsibility" should further reduce the potential for answers in line with these presumably socially desirable concepts. Moreover, social desirability biases typically play a greater role in telephone or face-to-face interviews than in self-administered paper-based questionnaires such as the CSR survey (Pew Research Center, 2015). Finally, cultural differences and different ethnicities may have existed within the sample, though only to a minor extent as the survey data was not collected across geographies. Instead, all participants were students of business-related subjects from the same university. This suggests that cultural differences are negligible and rather introduce a desirable element of variation, which increases the external validity of the results.

The second criterion, external validity, denotes the "capacity of generalizing the conclusions from the case study" to a specific population (Pérez and del Bosque, 2012, 153). Bardsley (2010) introduces two general challenges to the external validity of any study, the first of which are mismatches between the characteristics of the sample investigated and the population of interest. According to the descriptive statistics of the survey sample – documented in table 12 – the average CSR survey participant is a student at a German university who is characterized by above-average knowledge in business matters and a certain level of financial experience. While the sample is broadly in line with Germany's overall demographics in terms of gender balance (German Federal Statistical Office, 2014), this characterization suggests that the survey's findings cannot be generalized to the general public without qualifications.

At the same time, the survey sample – and consequently the findings which are based on it, too – are particularly relevant for banks in three ways: First, section 3.3.3 showed that all survey participants are customers of one or more banks. In this way, the sample captures the assessments of a group which is already connected to the banking industry. Second, the demographics of the survey participants imply that their evaluations of a bank's CSR activities represent informed assessments. While university students should not be put on the same level as, for instance, financial sector professionals, research suggests that the survey participants may constitute valid proxies for nonprofessional financial sector agents, particularly due to the limited complexity of the survey tasks (Elliott et al., 2007, 2004). Third, the survey participants share a number of common features with socially responsible consumers, which are typically rather young, often female, and mostly well-educated (Özkan, 2009; Roberts, 1996a; Diamantopoulos et al., 2003; Roberts, 1996b). Therefore, the CSR survey's findings may not be representative of the general public, but even more so for the "relevant public"; the young and financially savvy people with above-average knowledge in business matters who may have, judged upon their sociodemographic characteristics, a particularly positive attitude towards corporate social responsibility. Banks which already engage in CSR activities or contemplate taking a more active stakeholder management stance may consider this sub-sample highly relevant.

According to Bardsley (2010), the second challenge to a study's external validity is an unrepresentative decision. For two reasons, the relevance of this aspect for the present study is rather limited: First, the survey participants did not face a decision problem in

the narrow economic sense of the word, which would involve scarce resources and trade-off decisions. Instead, the CSR survey focused on assessments of general phenomena rather than performance in a specific task, which should in principle facilitate the generalization of the findings beyond the student sample. Second, as documented in section 3.3.2, the key survey items 2.5 and 3.5 were designed to mirror the most representative stakeholder management activities of banks.

Considering these two potential challenges to external validity yields two main takeaways for the CSR survey: First, an unrepresentative decision problem is unlikely to pose a major challenge. Second, the CSR survey outcomes may not be fully valid for the general public, but even more so for the relevant public, a key sub-set for banks. Ultimately, the decision whether the experiment's findings can be generalized beyond this sub-set needs to be taken on an individual basis and consider potential differences between the characteristics of the survey sample and the population of interest.

While the concepts of internal and external validity across different empirical research methodologies, the validity of surveys in particular can be broken down into three major criteria as suggested by Litwin (1995): The first and most basic criterion of "face validity" implies that the survey items are approved by "untrained individuals" (Litwin, 1995, 35). The design of the survey addressed this criterion by piloting the entire questionnaire among a relevant sample as documented in section 3.3.2. In addition, all items were pretested and aligned with a number of industry experts on banking, CSR, and SRI. Making sure that the survey items are regarded as appropriate by a set of knowledgeable reviewers simultaneously met the second criterion of "content validity". The practical relevance and usefulness of a survey is captured by its "construct validity": As Litwin argues, this criterion is probably the most relevant factor, but "difficult to understand, to measure, and to report" (Litwin, 1995, 43). While the CSR survey's overall construct validity can therefore not be determined, emphasizing practical insights during its entire design and enhancement process should result in meeting this criterion. In addition, Pérez and del Bosque (2012) argue that eclectic approaches, which combine different data sources result in high construct validity (Pérez and del Bosque, 2012, 153): As documented in section 3.3.2, CSR reports, CSR scale development studies, and own research using banks' CSR reports and websites were used to design the CSR survey items. Taken together, the CSR survey is characterized by rather high levels of both face and content validity and should possess sufficient construct validity.²⁷

²⁷As a fourth form of validity, Litwin introduces "criterion validity", for which the performance of a research method in comparison to other instruments is crucial. As the CSR survey was exploratory and not, e.g., predictive in nature, this performance-based criterion is not of major relevance to determine its validity.

A discussion of the CSR survey's results against previous research faces the fundamental challenge that studies with a similar focus are scarce and diverse in terms of their methodology and regional focus, as shown in section 3.2.1.1. Therefore, the survey results are compared to individual scholarly findings for a bank's stakeholders, CSR channels, and relevant CSR activity interaction factors in the following. Where possible, this review shows that the CSR survey yields findings which are mostly corroborated by the literature. In selected cases, results such contradict established assumptions.

The first topic – a bank's stakeholders – has mostly been discussed in the literature from two angles, the first of which is concerned with identifying the salient stakeholders in banking. Section 3.2.1.2 showed that the majority of these studies focuses on individual stakeholders in-depth. One exception is Pérez, Martínez, and del Bosque (2013) who develop a CSR scale for the banking industry which abstracts from suppliers or the media and identifies a bank's shareholders, customers, and employees as well society, including the environment, and one category encompassing general legal and ethical responsibilities as relevant for Spanish banks. This is in line with the stakeholder overview of figure 12, except for legal responsibilities due to the distinction between CSR and legal compliance, drawn in section 2.2. The finding that customers, shareholders, employees and society, including the environment, are the most salient bank stakeholders is supported by follow-up studies for the Spanish banking industry (Pérez and del Bosque, 2012, 2013). Similarly, the scale for CSR in banking designed by Fatma, Rahman, and Khan (2014) encompasses precisely those stakeholders which are included in the CSR survey, except for ethics and morale. The authors find that employees of different banks in India consider all five stakeholders relevant for a bank. Finally, Poolthong and Mandhachitara (2009) show that community support, product- and service orientation, employee relations, and environment support are the most important aspects in the CSR expectations of Thai retail bank customers. As the first two factors overlap with social and customer-related CSR activities, these outcomes corroborate the CSR survey's outcomes for four stakeholders. The relevant literature therefore supports individual findings for hypothesis H_1 and suggests that a relatively robust set of salient bank stakeholders exists. While no previous study identifies the exact stakeholders as the CSR survey, alternative CSR concepts – which may include legal obligations or charity activities – and alternative samples as well as geographies may account for these differences.

The second angle is concerned with the relative salience of the individual stakeholders. As most studies do not distinguish between the salience of stakeholders and the effectiveness of activities to address them, both aspect are discussed jointly in the following. Again, selected previous results are in line with the theoretical discussion of section 3.2 and the empirical findings of section 3.3.4: For instance, Pérez, Martínez, and del Bosque (2013) conclude that shareholders and customers are "definitive" bank stakeholders while CSR activities with an environmental or social focus are evaluated as less important for a bank (Pérez, Martínez and del Bosque, 2013, 471). Similar studies support the assumption that banks emphasize customer centricity and shareholder-value driven efficiency within their operations (Pérez and del Bosque, 2012, 161), suggesting the major salience of these two stakeholders and their claims, as also identified by the CSR survey. The exclusion of other – mostly intangible – stakeholders or their combination into one stakeholder as in case of society and the environment in Pérez, Martínez, and del Bosque (2013) may imply the relatively lower salience of their claims, which is in line with the outcomes of section 3.3.4.1. This evidence corroborates the findings for hypotheses H_2 and H_8 according to which primary stakeholders are perceived as more salient than secondary stakeholders, which translates into a higher perceived effectiveness of CSR activities to address the claims of the former.

To some extent, the survey outcomes are also in with the predictions of hypotheses H_4 and H_{14} that the stakeholder taxonomy in figure 14 informs perceptions of both perceived stakeholder salience and CSR activity effectiveness. As Fatma, Rahman, and Khan (2014) argue on a theoretical grounds, customer-focused bank initiatives are more visible than measures which address the claims of shareholders or employees. This mirrors the implicit relative ranking of the stakeholder taxonomy for primary stakeholders, captured by equations 3.1 and 3.2. However, the authors find that social CSR measures are valued most, followed by activities which target the claims of employees, customers, the environment, and shareholders. At least partly, this outcome can be explained by structural differences between Fatma, Rahman, and Khan's (2014) study and the CSR survey: First, the authors include charitable donations in a bank's social CSR activities and conduct their survey among bank employees, which is likely to yield inflated perceptions of salience for activities to address the claims of these two stakeholders. Second, shareholder management activities are not defined as a CSR component, which may result in their low evaluation. The survey outcomes are more in line with the results of Pérez, Martínez, and del Bosque (2013), who find that shareholders are the most salient stakeholders for a bank, followed by customers, employees, and society while legal and ethical responsibilities are evaluated as the second most important stakeholder.

In contrast to these findings, the CSR survey's results for hypotheses H_6 and H_7 contradict established assumptions about the relative effectiveness of internal and external stakeholder management activities. While previous research on CSR in banking suggests that bank-external CSR activities are more effective than internal ones (Herzig and Moon, 2012; Viganò and Nicolai, 2009; Jeucken, 2004), the survey finds evidence in favor of the opposite. This result may be driven by the CSR survey's explicit focus on effectiveness in meeting stakeholder claims rather than the impact potential of CSR activities, differences in research methodologies – between, for instance, survey data and mostly theoretical reasoning and outside-in estimates as in Jeucken (2004) – or the use of data from financial sector nonprofessionals rather than industry experts as in Viganò and Nicolai (2009).

Finally, the result in favor of hypothesis H_{12} that positive screening is perceived as more effective than negative screening is in line with the theoretical SRI literature such Landier and Nair (2009) or empirical findings for the French (Capelle-Blancard and Monjon, 2014) and the US (Fowler and Hope, 2007; Kempf and Osthoff, 2007) SRI market. As the latter findings show, positive screening-based asset classes such as the Dow Jones Sustainability Index may be capable of outperforming their benchmarks. The CSR survey result also implies that negative screening, the largest and most common approach in SRI, may not only be inferior in terms of risk diversification or financial returns, but also be perceived as relatively less effective in addressing stakeholder claims.

The CSR survey's outcomes for the three interaction factors can be discussed to a varying degree against previous research. First, the result of hypothesis H_{15} that "doing" is perceived as more effective than "saying" echoes, for instance, Wu and Shen's (2013) finding that commitments to socially responsible lending standards alone are ineffective or the conclusion of Viganò and Nicolai's (2009) survey that tangible CSR activities and instruments have greater impact.

Similarly, the findings for the second interaction factor – the reputation of a bank – confirm and extend previous research: First, the result that the reputation of banks is relatively unfavorable, as described by hypothesis H_{16} , is consistent with post-2007-08 Financial Crisis evidence presented by, for instance, Herzig and Moon (2012) and Pérez and del Bosque (2012), who both cite global survey results, or Brown and Whysall (2010) as well as Decker and Sale (2010) specifically for the UK. The CSR survey suggests that this result holds for a sample of financial sector nonprofessionals in Germany, too. Second, the finding that a bank's reputation and its perception as a socially responsible company are connected – as claimed by H_{17} – is in line with Wu and Shen (2013), Pérez and del Bosque (2012), or Poolthong and Mandhachitara (2009), who find indirect relations between CSR and reputation. Third, the CSR survey's results for H_{18} indicate that the perceived effectiveness of CSR activities varies only to a limited extent across different levels of reputation. This suggests that previous findings, which do not have an explicit financial industry focus - such as Du, Bhattacharya, and Sen (2010), Yoon, Gürhan-Canli, and Schwarz (2006), or Sen and Bhattacharya (2001) – may not be generalized to the banking industry without qualifications.

Finally, the CSR survey's results suggest that the cause/business fit of a stakeholder significantly determines the perceived effectiveness of CSR activities to address their claims, as captured by hypothesis H_{20} . In principle, this mirrors general findings by Whitehouse (2006), Becker-Olsen, Cudmore, and Hill (2006), or Bhattacharya and Sen (2004) as well as theoretical arguments for the banking industry by Pérez and del Bosque (2012).

This discussion illustrates once again that that studies with a similar focus as the CSR survey are rare and mostly characterized by significant variations in their research methodologies and scope, the definitions of CSR, and the composition of the underlying samples in terms of geography and professional background. Still, there are two major takeaways: On the one hand, where possible, the CSR survey yields findings -which are mostly corroborated by the literature. For instance, the higher perceived salience of primary vis-à-vis secondary stakeholders, a higher perceived effectiveness of activities to address the claims of the former stakeholder set, or an unfavorable relative reputation of the banking industry, which is closely related to the perception as a socially responsible company are all in line with previous research.

On the other hand, the CSR survey generates a set of novel insights into aspects which were neglected so far: One case is the dedicated introduction of ethics and morale within a bank's CSR activities. Considering the results in section 3.3.4.1 that ethics and morale are regarded as the most salient secondary bank stakeholder, this decision seems justified. In selected cases, results such as the higher effectiveness of bank-internal CSR activities or of positive standards in socially responsible lending contradict established assumptions. In addition, this highlights the need for more granular research approaches which, for instance, clearly differentiate between stakeholder salience and activity effectiveness.

3.3.5.2 Further Research

As CSR in banking is a topic which has been studied only to a limited extent to date, the survey's overall topic and its specific research approach on the level of individual stakeholders, CSR channels, and interaction factors create multiple avenues for further research. Efforts to further increase the survey's internal and external validity represent particularly promising starting points.

To begin with, the CSR survey's internal validity could be enhanced in two ways: First, by using a Likert scale with a higher or an even number of response categories – i.e., without a "neutral" category – which could mitigate the potential for central tendency biases, as suggested in Choi and Pak (2005). This particular focus should be on those hypotheses which may have been affected by a central tendency bias in the underlying survey, resulting in inconclusive outcomes. Even Likert scales may be an effective tool to mitigate this bias in, for instance, CSR survey item 3.5, where central tendencies may have resulted in a lack of statistically significant results for H_{14} , which claims that the (perceived) effectiveness of the individual CSR activities is in line with the characterization of the stakeholder

taxonomy. Another example is item C_1 , the responses for which provided only moderate support in favor of hypothesis H_{16} , which posits that the reputation of banks is worse in comparison to other industries. Ideally, this follow-up analysis should be conducted among a participants with similar characteristics as the sample used for the present study to enable meaningful comparisons.

Second, the CSR survey's current response format could be changed; for instance, by requiring the survey participants to distribute a certain number of points within every survey item to indicate their perceptions of stakeholder importance or CSR activity effectiveness. This approach is inspired by early research into CSR such as Aupperle, Carroll, and Hatfield (1985) or Pinkston and Carroll (1996), who asked survey participants to allocate 10 points to a set of four statements, each related to the four components of Carroll's CSR model and thereby indicate their relative importance. Applying this logic on the level of individual stakeholders and CSR activities would, on the one hand, create even more granular insights and, on the other hand, introduce an element of scarce resources and consequently trade-off decisions as one stakeholder can only be prioritized at the expense of another. Since the latter aspect mirrors some fundamental characteristics of actual corporate decision-making, the points-based assessment logic would simultaneously contribute to the CSR survey's external validity, too.

This aspect of external validity provides two additional starting points for further research. The first one focuses on the characteristics of the underlying sample. As discussed in section 3.3.5.1, previous studies into CSR in banking predominantly surveyed bank employees and managers or socially responsible investors. This suggests that the survey on CSR in banking could be repeated among financial sector professionals to both validate the conclusions drawn from the student sample and to eventually arrive at a comprehensive picture of CSR in banking. This exercise would help identify focal points for CSR in banking – if, for instance, their perceptions of different participant overlap – or, should their views be contradictory, potential trade-offs for a bank's CSR strategy. As a by-product, this follow-up investigations would also facilitate the comparability of the CSR survey's results to previous research. The successive enlargement of the evidence base should also extend across geographies to account for potential cultural differences in survey response behaviors (Choi and Pak, 2005) as well as social constructions of CSR and thereby enhance the robustness of the CSR survey's results.

A second starting point for further research within external validity are the CSR activities of a bank, which can be approached from three angles: First, those CSR activities which are perceived as highly effective and address particularly salient bank stakeholders – such as bank-internal measures which address the claims of primary stakeholders or ethics and morale – could be studied in greater detail to determine, for instance, the relative effective-

ness of different action programs with a focus on bank customers or ethical standards in business conduct. This investigation would both better capture the full spectrum of CSR activities which are currently pursued by banks and allow to derive an actionable catalog of CSR measures in banking. Second, the range of banking activities could be extended: While the CSR survey focuses on retail and commercial banking - i.e., deposit-taking and lending – capital market activities such as investment banking, asset and wealth management, or securities trading could be included going forward. One example activity, which individual survey participants identified as important, are investment standards to rule out food speculation. In addition to upgrading the stakeholder management toolkit of a bank, this extension would also facilitate a comparison of the CSR survey's results to the SRI literature. Third, an enhanced CSR survey might introduce CSR activities which result in trade-offs between stakeholder interests. One example are activities which address the claims of the three intangible secondary stakeholders – such as the standards to curb certain investment behaviors – at the potential expense of a bank's financial profitability and thereby its shareholders. Alternatively, a bank might decide to achieve excellence in customer service, resulting in in extra efforts for its employees. In addition to contributing to a higher degree of realism, this aspect would enable more differentiated conclusions concerning the salience of stakeholders and the effectiveness of CSR activities.

3.3.5.3 Implications

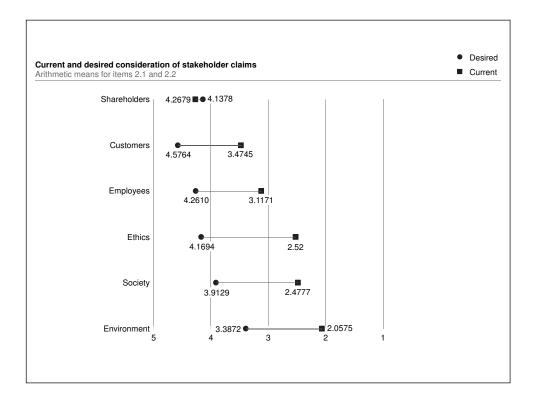
Beyond their contribution to the academic debate on CSR in banking, the CSR survey's results may be used as an indication for bank managers how to build or strengthen their CSR profile in terms of key stakeholders as well as effective activities and which interaction factors should be considered in particular. These aspects are discussed in the following.

First, the stakeholder shortlist used in the CSR survey provides some initial guidance to set the overall scope for a bank's CSR activities. Depending on business characteristics, these primary and secondary stakeholders can be broken down further; for instance, into retail or corporate customers according to the respective bank's segmentation logic. Similarly, a bank may decide to neglect or to consider additional stakeholders depending on the specific characteristics of its business. This decision should be taken on an individual basis and follow a consistent logic such as the stakeholder taxonomy of figure 14. This instrument, the predictions of which have been corroborated by the findings of the CSR survey, may also be used to determine the salience of further stakeholders, to derive their characteristics, and to prioritize their claims.

Yet, prior to translating the outcomes of this exercise into CSR initiatives, banks should carefully review their current portfolio of stakeholder management measures: At first glance, figure 23 suggests a need for banks to intensify their efforts to address the claims

of all stakeholders along their internal CSR channel, except for their shareholders. Yet, the largest gaps between the perceived extent to which banks currently consider the claims of their stakeholders and how much the survey participants desire them to do so exist for the three secondary stakeholders, in particular ethics and morale. This result has a dual implication for banks: First, it shows that their current efforts are more in line with outside expectations for primary rather than for secondary stakeholders. Going forward, banks might even consider a slight underweighting of shareholder interests. Second, it illustrates that CSR is not a one-off measure, but an ongoing process in which banks need to define the stakeholders in scope, determine an ambition level of social responsibility as well as their status quo, and implement initiatives to achieve this goal, which are tracked continuously.





Source: Own representation.

Note: N = 392 (Shareholders)/373 (Customers)/410 (Employees)/425 (Ethics)/448 (Society)/452 (Environment). Values rounded where appropriate.

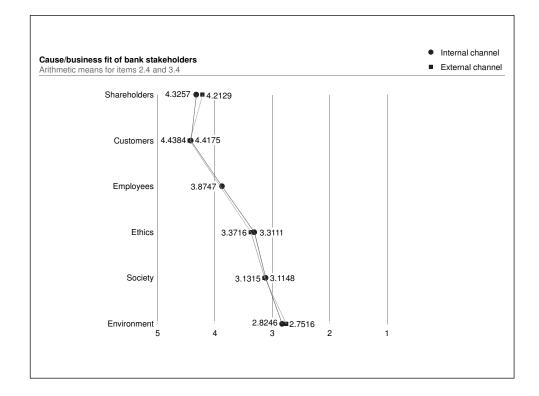
Second, the present study's results may inform managerial decisions on identifying and implementing effective stakeholder management activities in banking. One takeaway from the CSR survey is that, where possible, banks should consider internal action programs to address the claims of their stakeholders, especially of their shareholders, customers, and employees. Possible drivers behind the comparatively high perceived effectiveness of this type of activities may be their stronger credibility and higher tangibility vis-àvis bank-internal commitments as well as enhanced control and monitoring possibilities in comparison to bank-external activities. Considering the greater impact potential of lending standards and their ubiquity in contemporary banking, as discussed in section 3.2.2, this result may contradict expectations. However, as outlined above, banks should investigate thoroughly whether this conclusion holds for their specific business model before restructuring their CSR portfolio on a large scale towards internal activities.

Another implication is that, should banks decide to address the claims of their stakeholders along the external CSR channel, it seems advisable to implement a positive rather than a negative screening strategy. First, portfolio selection theory (Markowitz, 1959, 1952) implies that superior risk diversification can be achieved by granting preferential loan conditions to certain borrowers instead of excluding other sectors, companies, or projects ex-ante according to their CSR performance. As section 3.3.5.1 illustrates, the empirical literature corroborates this assumption. Second, the survey outcomes suggest that positive screening approaches are perceived as more effective across all stakeholders. While exclusionary strategies are more common these days – at least in socially responsible investing – the CSR survey's result may inform the debate on how banks can and should implement address the claims of their stakeholders via lending.

Third, additional practical insights can be derived from the CSR survey's findings for the three interaction factors: On the one hand, there is evidence that the reputation of the banking industry is, compared to other sectors, rather poor and related to perceptions of a weak social performance. On the other hand, the relation between a bank's reputation and the perceived effectiveness of its CSR activities is limited. Similarly, a strong social performance is not the sole driver of a favorable reputation. This implies that that banks should be able to address the claims of their stakeholders effectively, irrespective of their public image. At the same time, these activities in isolation may not suffice to improve corporate reputation. Therefore, a bank's management should align on a joint motivation to pursue CSR activities and consider their limited reputational impact potential.

In addition, the analysis suggests that the perceived effectiveness of CSR activities depends on a stakeholder's cause/business fit or the degree to which a stakeholder's characteristics and the banking business are considered to match. While the CSR survey finds a higher cause/business for primary stakeholders along both the internal and the external channel, as illustrated by figure 24, this outcome does not imply that banks should concentrate solely on the claims of shareholders, customers, and employees: The cause/business is not a constant parameter, but can rather be understood as a strategic lever which companies can pull to enhance the perceived effectiveness of their CSR activities (Du, Bhattacharya and Sen, 2010). To render, for instance, activities with an ethical and moral focus more effective, banks could therefore increase the perceived fit between this stakeholder and their business – and publicly promote traditional banking principles such as trust and integrity – before implementing the actual initiatives to introduce ethical criteria in executive compensation or ethical lending standards.

Figure 24 Cause/Business Fit of Bank Stakeholders



Source: Own representation.

Note: N = 479. Values rounded where appropriate.

This discussion demonstrates that the CSR survey's outcomes can add practical value in three ways: First, by providing recommendations on the concrete design and implementation of a bank's stakeholder management measures as, for instance, in the case of internal CSR activities. Second, by introducing instruments to support banks in approaching and structuring the complex issue of CSR such as the framework of CSR in banking of figure 15 or the adapted stakeholder model by Mitchell, Agle, and Wood (1997) to determine, characterize, and prioritize the claims of a bank's stakeholders. Third, some results which are at odds with established assumptions – such as the higher effectiveness of bank-internal CSR activities or of positive lending standards – may function as a discussion starter. In either case, before translating the CSR survey's findings into action, it seems advisable to incorporate insights from two additional analyses: On the one hand, further research may help to validate the results of the present study's exploratory analysis. On the other hand, due to the conceptual features of CSR, banks need to determine the conclusions derived in this section which fully apply for their specific setting and the necessary adjustments.

3.4 Conclusions

This chapter applies the operationalization of CSR – stakeholder management beyond legal obligations within a company's regular operations – to the banking industry to provide answers to the first research question: What does CSR means for banks? In line with its semantics, this topic is initially broken down into two components: First, the relevance of CSR for banks and, second, the industry-specific features of CSR.

The former aspect is discussed in section 3.1. It demonstrates that CSR is a de-facto meaningful aspect of banking in three ways: First, banks' nonprofit expenditures are significant as well as increasing over the recent years. Banks are also found to engage in a wide range of CSR activities with social, environmental, or educational purposes. Second, industry initiatives such as the United Nations Environment Programme Finance Initiative, the Equator Principles, or the Global Reporting Initiative have increasingly institutionalized socially responsible practices. In addition, these regimes have raised the profile of CSR within the overall industry as well as for specific financing activities or in reporting standards. Third, a lack of social responsibility has been identified as a trigger or a reinforcing factor in the 2007-08 Financial Crisis by some scholars while others argue that misguided good intentions – such as financial inclusion in the subprime segment – laid the foundations for these developments.

Section 3.2 establishes a framework of CSR in banking to investigate the second aspect: Combining a literature review with an analysis of a bank's value chain yields an overview of key bank stakeholders, which are then classified according to the stakeholder model by Mitchell, Agle, and Wood (1997) in terms of their power as well as the legitimacy and the urgency of their claims on a bank. This exercise suggests that shareholders, customers, and employees are definitive bank stakeholders with immediate value chain relevance and high salience. In addition, ethics and morale, society and social issues, and the environment constitute dependent and less salient bank stakeholders. The former are therefore defined as primary, the latter as intangible secondary stakeholders. To address the claims of both groups, banks can implement internal measures by making commitments or launching action programs or establish positive or negative screens in their external lending channel. At the same time, three interaction factors – the distinction between CSR commitments and actions, the reputation of a bank, and the fit between a bank's business and the stakeholders in scope of its CSR activities – may impact perceptions of both stakeholder salience and CSR activity effectiveness.

To determine whether the predictions of this framework hold true in practice, a comprehensive CSR survey is conducted among 479 university students. Sections 3.3.1 to 3.3.4 discuss the design of this study and the results of the hypothesis testing. The findings suggest that the meaning of CSR in banking is adequately captured by the framework: All six bank stakeholders are perceived as relevant with their relative salience being in line with the predictions of the stakeholder taxonomy. CSR activities are perceived as particularly effective when implemented as bank-internal action programs which address the claims of primary bank stakeholders. Within the external channel, participants perceive positive lending standards as more powerful than exclusionary approaches. The interaction factors are capable of explaining additional phenomena such as stronger perceptions of CSR activity effectiveness when the fit between the banking business and the management of certain stakeholders is perceived as higher. At the same time, an existent though imperfect relation between perceived social responsibility and reputation suggests that, while an unfavorable reputation does not necessarily harm a bank's CSR profile, a strong social performance is not the sole driver of a favorable reputation. These findings provide a set of empirical insights into the banking-specific features of CSR, which answers the first research question.

The discussion of these results in section 3.3.5 finds that the CSR survey's scope, design, and administration process minimize the impact potential of typical survey response biases such survey fatigue or the tendency to answer in a socially desirable way. In combination with a sufficiently large sample, this most likely ensured a reasonably high level of internal validity. In addition, pre-testing and piloting among both students and subject matter experts addresses Litwin's (1995) survey-specific validity criteria. Within its inherent boundaries, the student sample can also be considered diverse and representative of socially responsible consumers, who are mostly young and well-educated. While the CSR survey results may therefore not be representative of the general public, they may capture the preferences of a sub-sample which is highly relevant for banks.

As studies with a similar focus as the present one are scarce and diverse, the survey results are compared to individual scholarly findings for a bank's stakeholders, CSR channels, and relevant CSR activity interaction factors. Where possible, this review shows that the CSR survey yields findings – among others, regarding the salience of stakeholders or the higher effectiveness of positive screening – are mostly corroborated by the literature. In selected cases, results such as the higher effectiveness of bank-internal CSR activities or of positive standards in socially responsible lending contradict established assumptions. At the same time, it highlights the need for more granular research approaches which, for instance, clearly differentiate between stakeholder salience and activity effectiveness.

The exploratory approach of the CSR survey opens up multiple avenues for future research: On the one hand, by implementing methodological adjustments such as more granular, even scales or alternative response regimes, the internal robustness of the survey's findings could be validated. To better capture both the business of banks and their CSR activities, the scope of the survey could be extended in different ways – for instance, by gathering the perspectives of banking professionals and participants from other geographies or by introducing additional banking services and CSR activities as well as trade-offs among stakeholder management decisions. As the objective behind these efforts should be to arrive at a comprehensive picture of CSR in banking, the results of these investigations should complement rather than substitute the CSR survey's findings.

As set of implications for practitioners is summarized in section 3.3.5.3. It shows how recommendations on the concrete design and implementation of a bank's stakeholder management measures can be derived from the theoretical and empirical findings on stakeholder salience and activity effectiveness. To approach and structure the complex issue of CSR, the framework of CSR in banking or the stakeholder taxonomy provide banks with an actionable methodology to determine, characterize, and prioritize the claims of their stakeholders or to evaluate CSR activities. To ensure that these actions neither exceed nor fall short of public expectations, continuous monitoring on stakeholder level during their implementation is crucial. Ultimately, banks seeking to enhance their public image through CSR should consider that social performance is only one driver of reputation. This illustrates the importance of pursuing an integrated approach to CSR in which the voluntary management of stakeholder claims and the overall business activities of a bank are aligned and consistent.

4 CSR and Bounded Rationality of Bank Investors

This chapter introduces the element of finance into the framework of CSR in banking. More specifically, it sets a focus on the investors of banks to investigate the second and the third research question: How do the CSR activities of banks affect the decisions of their investors and what is the impact of bounded rationality on these investment decisions?

To provide answers, section 4.1.1 first establishes expected utility theory and building blocks of portfolio selection theory (Markowitz, 1952, 1959), the two standard frameworks for rational decision-making and investing. Section 4.1.2 then discusses the relations between corporate social performance and financial performance as well as the impact of CSR on investment decisions, in particular within a banking setting. The theoretical framework is complemented by section 4.2, which presents three key behavioral phenomena – halo effects, mental accounting, and endowment effects – and their potential interactions with CSR in investment decisions. Section 4.3 describes the design and the results of an experiment in which 100 university students decide on investments into different types of banks. It finds evidence that investors both maximize their financial utility and show behaviors which are in line with theories of bounded rationality. In response to the two research questions, these findings suggest that, first, CSR activities are taken into account by investors and, second, CSR carries the potential to trigger, reinforce, or mitigate certain biases and heuristics in their investment decisions. The discussion shows that the experimental findings represent a valid contribution to the academic debate, indicate possible avenues for further research, and carry important implications for CSR and banking practitioners. Section 4.4 concludes.

4.1 CSR and Rational Investors

If investors are rational and maximize their expected utility, as described by portfolio selection theory (Markowitz, 1959, 1952), only CSR activities which are related to a bank's risk and returns profile should affect investment decisions. Both aspects are discussed in the following: Section 4.1.1 focuses on rational decision-making and investing while section 4.1.2 discusses the relations between corporate social performance and financial performance, particularly for banks.

4.1.1 Rational Decision-Making and Investing

As summarized in DellaVigna (2009), expected utility theory (EUT) describes that individuals make decisions by optimizing their expected utility over all possible states of the world, each weighted with their individual probability of occurrence. This idea is described in equation 4.1.

$$\max_{x_i^t \in X_i} \sum_{t=0}^{\infty} \delta^t \sum_{s_t \in S_t} p(s_t) U(x_i^t | s_t)$$
(4.1)

The index *i* denotes the individual who maximizes expected utility $p(s_t)U(x_i^t|s_t)$ at time t = 0 for all future periods, discounted with the constant factor δ .²⁸ The main term consists of the probability that, out of all possible states S_t , state s_t occurs with probability $p(s_t)$ and the function U, which specifies the utility which individual *i* derives from the corresponding payoff x_t .

In their 1979 paper, Kahneman and Tversky show that EUT implies three tenets for choices among risky "prospects" or gambles which yield a given outcome x_i with a probability p_i :

The first tenet is "expectation", which is captured by equation 4.2 and implies that the utility U of the prospect $(x_1, p_1; \ldots; x_n, p_n)$ is equal to the sum of the utilities of the individual outcomes, each weighted by their probability of occurrence (Kahneman and Tversky, 1979, 263).

$$U(x_1, p_1; \dots; x_n, p_n) = p_1 u(x_1) + \dots + p_n u(x_n)$$
(4.2)

The second tenet, "asset integration" shows that an individual will only accept a prospect $(x_1, p_1; \ldots; x_n, p_n)$ if integrating it with their existing assets A increases utility (Kahneman and Tversky, 1979, 264), as illustrated by equation 4.3.

$$U(A + x_1, p_1; \dots; A + x_n, p_n) > u(A)$$
(4.3)

Third, "risk aversion" describes the phenomenon that a risk averse individual will reject a risky prospect if offered the expected value of the prospect for sure. Risk aversion manifests in a concave utility function U (Kahneman and Tversky, 1979, 264), which is shown in equation 4.4.

$$U''(x) < 0 \tag{4.4}$$

²⁸The discounting of future payoffs is neglected in the subsequent analyses, which are concerned with decisions concerning the respective subsequent period.

The principles of EUT apply for rational decision-making in general. To derive the relevant parameters specifically for an investment setting, in which payoffs are exclusively generated by returns on assets, Markowitz' (1959; 1952) portfolio selection theory – which also rests upon the fundamental assumption of individual rationality – is used.

To reconcile the two theories, the payoff parameter x_i^t from equation 4.1 can be written for an investment setting as follows:

$$x_i^t = \sum_{j=1}^N R_j^t Y_j \tag{4.5}$$

Equation 4.5 implies that, for a given state t, the individual investor's payoffs x_i^t are equal to the sum of the returns R_j^t on asset j in this state, each multiplied with Y_j , the relative amount invested into the respective asset – with $Y_j \ge 0$ to rule out short sales – over all assets $j = 1, \ldots, N$ held in the investor's portfolio.

For a portfolio of N assets and a given state t, Markowitz (1952) defines the expected return E^t as shown in equation 4.6. μ_j^t denotes the expected return of the individual asset j in state t, which is equal to the product of the probability p_t that this state occurs and the corresponding return R_j^t on asset j.

$$E^t = \sum_{j=1}^N \mu_j^t Y_j \tag{4.6}$$

Equation 4.7 shows the variance of the portfolio V^t with $\sigma_{j,k}^t$ denoting the covariance of returns between and $Y_{j,k}$ describing the relative investments into the assets held.

$$V^{t} = \sum_{j=1}^{N} \sum_{k=1}^{N} \sigma_{j,k}^{t} Y_{j} Y_{k}$$
(4.7)

According to the so-called "*E-V rule*" an investor seeking to maximize their utility for fixed probability assumptions underlying $\mu_j, \sigma_{j,k}$ should choose $Y_j \forall j = 1, ..., N$ to construct an efficient portfolio with the lowest possible portfolio variance *V* for a given expected portfolio return *E* or the highest possible *E* for a given *V* (Markowitz, 1952, 82).

This implies that, ultimately, the random variables which determine the payoffs of a portfolio are E and V. In turn, the utility which an investor derives from these payoffs can be simplified as in equation 4.8, which reproduces Markowitz' basic idea: Irrespective of the total number of assets held, investor utility depends positively on expected returns (E) and negatively on variance – or risk – (V).

$$U = f(E, V)$$
(4.8)

4.1.2 Corporate Social and Financial Performance

Having established that investors value higher expected returns and dislike risk, the next step is to determine the relation between these two financial parameters and a bank's corporate social performance, the aggregate of its CSR activities. According to Bénabou and Tirole (2010) as well as Wu and Shen (2013), this relation can be captured by the question whether a bank's CSR activities pursued for their positive or in spite of their negative financial impact or whether they are unrelated to a bank's economic performance. While, in principle, various motivations can be envisaged, these driving forces can be grouped into three different clusters – strategic choices, altruism, and greenwashing – depending on their relation between a bank's corporate social performance (CSP) and its corporate financial performance (CFP).

The first cluster – "strategic choices" – captures the motive of companies to pursue CSR companies to improve their CFP. This takes up Porter and Kramer's (2006) concept of strategic CSR, which was introduced in section 2.2 and describes how companies can "do good to do well". Herzig and Moon (2012) document how banks eventually began to leverage certain CSR activities to create firm value. According to Wu and Shen (2013), the positive relation of CSP and CFP can mainly be explained via reputation: CSR activities are likely to improve the reputation of a bank and increase both its differentiation from competitors and overall public awareness. This results in a competitive advantage which facilitates the attraction of high-quality borrowers and loyal depositors – which drives interest income – as well as customers who are willing to pay higher fees for banking products and advice, which increases a bank's non-interest income. While CSR activities may entail additional costs for banks, the strategic choices motive posits that an overarching profit-maximizing objective dominates. Therefore, a positive net impact on CFP can be expected (Wu and Shen, 2013, 3531-3532).

The second possible motive behind a bank's CSR activities is "altruism", which refers to CSR activities pursued for the sake of doing good without considering their financial dimension. This motive evokes Friedman's (1970) argument that CSR always comes at the expense of a company's profitability. As Wu and Shen (2013) find, this objection applies to some extent for a bank's altruistic CSR activities: On the one hand, a bank's revenues are likely to benefit from CSR activities which may, as discussed above, increase a bank's competitive advantage in terms of greater public awareness and a more favorable reputation (Wu and Shen, 2013, 3531). The absence of financial considerations may even result in higher CSR investments when banks are driven by altruism rather than strategic choices, resulting in stronger positive gross CFP effects for the former. Yet, the absence of financial considerations among altruistic banks may result in overinvestments into or the pursuit of financially inefficient CSR activities, resulting in excessive CSR costs. While the overall financial evaluation of altruistic CSR requires knowledge of the magnitude of revenue and cost effects in the specific case, their net CFP impact is unlikely to be positive: For instance, Wu and Shen (2013) argue that the overall effect of altruistic CSR activities on a bank's profit is *"close to non-positive"* (Wu and Shen, 2013, 3532). In contrast, Dam, Koetter, and Scholtens (2009) emphasize that altruistic CSR activities are inherently cost-inefficient and therefore have a negative net CFP impact.

Finally, the motivation of companies which seek to enhance their corporate image through CSR without changing their business can be described as "greenwashing" or "window dressing" in the literature (Clarkson, 1995, 95). The most convenient activities are verbal commitments to meet the claims of certain stakeholders, for which the CSR survey found a rather low perceived effectiveness. In addition, a greenwashing bank's CSR activity portfolio is typically rather narrow, which additionally limits the potential to both generate additional revenues or extra costs. In consequence, there is no systematic relationship between a greenwashing bank's CSP and its CFP (Wu and Shen, 2013, 3532-3533).

The relation between CSR activities which are driven by either of these three motivations and a bank's net CFP is illustrated in figure 25. It demonstrates that strategic choices CSR has a net positive impact on a bank's CFP. For altruism, this relation is less equivocal; the possible net profit impact of CSP on CFP can therefore range from almost zero to a slightly negative relation. Finally, greenwashing activities neither systematically decrease nor increase CFP as illustrated by the constant, dashed curve.

Figure 25 can be reconciled with the E-V regime in two steps: First, by determining those CFP components which may be both influenced by a bank's CSP and affect its expected returns. Second, by introducing the element of risk: While Wu and Shen's (2013) CSP-CFP framework does not consider risk, it can be assumed that, ceteris paribus, higher risk is associated with an inferior CFP. This reconciliation can be structured in terms of a bank's balance sheet: On the assets side, investors may expect CSR banks to yield a systematically different return on assets (ROA). For instance, compared to non-CSR banks, returns may be higher if socially responsible banks are able to charge higher fees or interest rates. Conversely, the ROA may be lower for those socially responsible banks which excessively invest into CSR activities or exclude certain asset classes due to negative screening. Similarly, different lending standards or the exclusion of certain financial products may result in different risk profiles for the portfolios of socially responsible and non-socially responsible institutions. In addition, CSR activities which are perceived as insincere may backfire and reinforce the volatility of returns and downside risks (Relano and Paulet, 2014; Becker-Olsen and Hill, 2006; Sen and Bhattacharya, 2001).

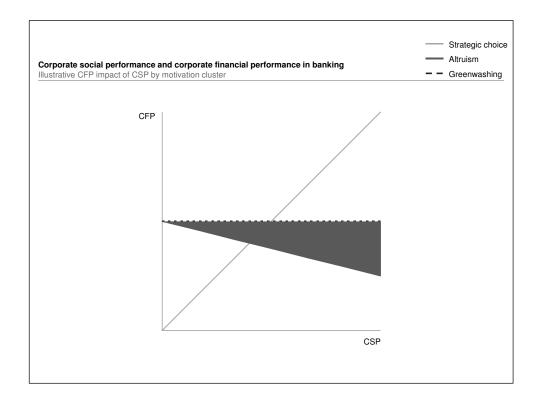


Figure 25 Corporate Social Performance and Corporate Financial Performance in Banking

Source: Own representation based on Bénabou and Tirole (2010) and Wu and Shen (2013).

Likewise, a bank's CSP may impact both parameters of the E-V regime via the liabilities side of its balance sheet: First, a bank's operating costs may depend on the level of social responsibility with higher costs for banks which excessively invest into CSR and lower costs if CSR measures help cut expenditures. In either case, investors may expect an inverse relation between costs and returns as higher costs ultimately impact net income, which in turn raises or lowers shareholders' equity. Similarly, if a strong CSP facilitates the attraction of capital, investors can expect higher relative returns from investments into socially responsible banks. The opposite impact on returns can be expected if, for instance, investors disagree on a bank's CSR priorities, which increases the cost of capital for a bank. Second, CSR can affect the risk profile of a bank, in particular when used as a hedging instrument: As discussed above, strategic CSR activities may improve a bank's reputation, which can in turn render an institution more robust to fluctuations in revenues and returns as well as limit the potential for losses. Table 47 summarizes these core CSP levers and their impact within Markowitz' (1959; 1952) E-V regime on both sides of a bank's balance sheet. These CSP levers may be interrelated and reinforce each other: For instance, investor expectations of a superior ROA for socially responsible banks may lower the cost of capital for these institutions and enable above-average returns.

Danamatan	Balance sheet		
Parameter	Assets	Liabilities	
Е	ROA	Operating costs	
		Cost of capital	
V	Volatility of ROA	Strategic hedging	

 Table 47
 CSP Levers and Balance Sheet Impact in Banking

Source: Own representation.

Note: Operating costs considered under liabilities due to income statement impact on shareholders' equity.

In the following, the CSP-CFP relations implied by strategic choices, altruism, and greenwashing motives is discussed in terms of these levers and their impact on a bank's risk and expected returns. Across industries, the empirical evidence for this relationship remains mixed, in spite of a substantial body of research into this issue: In an early study, Ullmann (1985) finds no clear relationship between the social and economic performance of large US companies. This result is corroborated by comprehensive meta-analyses (Griffin and Mahon, 1997; Margolis and Walsh, 2003; Orlitzky, Schmidt and Rynes, 2003). Subsequent cross-industry studies have contributed to a more differentiated understanding of the subject matter: For instance, Hull and Rothenberg (2008) conclude that low-innovation companies or firms in sectors with little differentiation – captured by R&D and advertising expenditures – are more capable of using CSP to build a competitive advantage and increase profits. A quadratic, U-shaped relation between CSP and CFP is suggested by Brammer and Millington (2008) for companies listed on the London Stock Exchange over the 1990s and by Barnett and Solomon (2012) for publicly-traded US firms tracked by KLD between 1998 and 2006. Both studies find that the CFP is better for low-CSP companies than for medium-CSP companies, but best for high-CSP firms. Other scholars have argued that a positive CSP-CFP link may exist for large US companies, but that this relationship runs from a firm's prior financial performance to its subsequent social performance rather than vice versa (McGuire, Sundgren and Schneeweis, 1988). Taking this one step further, Hillman and Keim (2001) show for S&P 500 firms that the ambiguous aggregate findings for the relation between CSP and CFP depend on the specific CSR activity so that shareholder value is created by relationship-building with primary stakeholders rather than unspecific social activities. Ultimately though, it remains unclear which factors impact the relationship between CSP and CFP, as Marom (2006) points out. Acknowledging this, Barnett (2007) admits that after "more than thirty years of research, we cannot clearly conclude whether a one-dollar investment in social initiatives returns more or less than one dollar in benefit to the shareholder" (Barnett, 2007, 794).

Similarly, the picture for banking is inconclusive and characterized by a scarcity of scholarly, empirical studies (Wu and Shen, 2013; Hoepner and Wilson, 2010; Simpson and Kohers, 2002). First, a number of studies suggests a domineering strategic choices motive behind CSR activities in banking: For instance, Wu and Shen (2013) investigate 162 banks in 22 countries over the 2003-09 period to find that CSR is positively related to a bank's interest- as well as non-interest income and negatively related to the share of non-performing loans, which ultimately increases their ROA and ROE. For the US, Simpson and Kohers (2002) demonstrate that banks with the highest possible Community Reinvestment Act (CRA) rating²⁹ achieve a significantly higher ROA compared to institutions with a CRA rating in the second lowest category. In a recent paper, Bolton (2013) finds that the ROA of banks increases with their CSP according to the KLD database, particularly when banks pursue activities which have a strong fit with their own business. In a study for the Spanish market, Callado-Muñoz and Utrero-González (2011) identify lower absolute interest rate elasticities for deposit and mortgage decisions by customers of Savings banks, which are considered more socially responsible than commercial banks. This is in line with the hypothesis of both lower costs of capital and a higher ROA, driven by higher interest income. Further evidence is provided by El Ghoul el al. (2011): For a sample of 12,915 US firms dominated by banks, the authors conclude that certain CSR activities – mainly the implementation of responsible employee policies as well as high environmental and product safety standards – can significantly reduce a company's cost of equity as well as its perceived risk. Similarly, Karl (2015) finds that alternative banks³⁰ from OECD and EU countries are less risky in terms of both overall and downward volatility in their ROA than conventional banks.

Evidence for the operating costs lever is provided by Herzig and Moon (2012): Investigating CSR practices in the wider financial sector after the 2007-08 Financial Crisis, the authors find that particularly environmental activities – such as general recycling and efficiency programs, the use of video conferences instead of air travel, or reduced heating and paper expenses – may constitute a meaningful way to both address this stakeholder's claims and to generate a positive CFP impact. In addition, the authors emphasize the role of hedging against in particular reputational risks as an original motive for CSR in banking. Further examples of how banks use CSR activities to mitigate environmental or reputational risks are documented in Jeucken (2004).

²⁹In addition to compliance with legal lending requirements, the CRA rating aggregates information on the services which a bank provides to its local community (Simpson and Kohers, 2002, 100).

³⁰The author defines alternative banks as "those banks that pursue ethical, social, sustainable, environmental or other "added social value" goals as a core part of their business strategy" and matches them to conventional banks according to their country of origin, the bank's total assets and type (e.g., savings, cooperative, or commercial bank) as well as data availability (Karl, 2015, 6-16).

As discussed in section 3.2.2, the implementation of CSR in terms of lending standards renders banks similar to SRI funds. For this this capital market segment, Galema, Plantinga, and Scholtens (2008) demonstrate that US-based SRI portfolios outperform non-SRI assets, driven by lower average book-to-market ratios of the underlying stocks.

Second, support for the altruistic CSR motive in banking – which implies a negative relation between a bank's CSP and its CFP – is provided by Scholtens and Dam (2007): The authors investigate the CSP and CFP of large banks, using their membership of the Equator Principles as a proxy for social responsibility. The authors find that the higher operating costs, resulting from the implementation of the Equator Principles, on average reduce operational profits.

For the SRI segment, Renneboog, Ter Horst, and Zhan (2008) cite evidence that funds in Continental Europe and Asia-Pacific have underperformed conventional benchmarks. Schröder (2007) finds that a majority of 29 global SRI stock indexes is characterized by higher risk in comparison to their benchmarks, measured in terms of the Capital Asset Pricing Model's β . Finally, Climent and Soriano's (2011) demonstrate that environmental US funds are outperformed by conventional peers over a period from 1987 to 2009.

Third, some researchers find no systematic relation between CSP and CFP in banking: Soana (2011) concludes that there is "no clear evidence of a significant relationship between CSP and CFP" (Soana, 2011, 144) when capturing social responsibility by ethical ratings and modeling financial performance in terms of, among other indicators, a bank's ROA and cost-income ratio. Further banking-specific studies corroborate these findings: For instance, El Mosaid and Boutti (2012) find no evidence that a higher level of CSR, measured by the extent of CSR disclosures, increases the ROE or ROA of Islamic banks. Similarly, Shen and Chang (2010) show that socially responsible Taiwanese banks outperform non-socially responsible peers in terms of their ROE and ROA, but do not exhibit a stronger overall financial performance as, for instance, higher equity-to-assets and lower loan-loss-reserves ratios have a negative impact on the risk profiles of these CSR banks. In addition, anecdotal evidence suggests that greenwashing activities are commonly used in contemporary banking (Relano and Paulet, 2014; Wu and Shen, 2013).

Similar findings exist for the SRI industry: For instance, Benson and Humphrey (2008) or Scholtens (2009) argue that, when adjusting for risk, the returns of SRI and conventional funds do not differ significantly. More specifically, Renneboog, Ter Horst, and Zhan (2008) find only little evidence for differences in risk-adjusted returns between US- or UKbased SRI funds and conventional funds. Focusing on risk, Lewis and Mackenzie (2000) show that nearly 60% of the 1,146 ethical investors surveyed in the UK consider their investments and conventional investments equally risky while almost identical proportions evaluate either of the two investment classes more risky. Similarly, Nilsson (2008) finds for a sample of 2,200 Swedish investors that perception of returns are similar for SRI funds and conventional funds while SRI funds are considered only slightly less risky.

This analysis yields two takeaways: First, each of the three clusters – strategic choices, altruism, and greenwashing – can be supported in terms of previous research, most of which focuses on expected returns rather than variance or risk. As a result, the relation between CSP and CFP in banking remains ambiguous, even when considering additional evidence for the SRI industry. Ex-ante, it is therefore unclear how a bank's CSP impacts its expected returns and volatility or risk, which in turn drive a rational investor's utility and ultimately determine if and how CSR is considered in their investment decisions. This is captured by equation 4.9, which denotes a bank's CSP by S.

$$U = f(E, V, S)$$
^{+,-,?} (4.9)

Instead, the – indirect – impact of CSP on decisions of rational investors is different for each of the three CSP-CFP clusters: In a greenwashing scenario, CSR activities of a bank should be irrelevant for rational investors due to their lack of financial impact, as described by equation 4.10, which ultimately reduces to equation 4.8.

$$U = f(E, V, S) \text{ if } cov(E, S) = 0 \text{ and } cov(V, S) = 0$$

$$(4.10)$$

When assuming a strategic choices motive instead, investor utility can be described by equation 4.11. It illustrates that investors derive positive utility from a bank's CSP when it is either positively related to expected returns, negatively related to variance or risk, or both.

$$U = f(E, V, S) \text{ if } cov(E, S) > 0 \text{ or } cov(V, S) < 0$$

$$(4.11)$$

Similarly, rational investors derive negative utility from a bank's CSP in case of an altruistic motivation, which implies a negative relation between CSP and expected returns or a positive relation between CSP and variance – or risk – or both. This is shown in equation 4.12.

$$U = f(E, V, S) \ if \ cov(E, S) < 0 \ or \ cov(V, S) > 0$$

$$(4.12)$$

Going forward, rational investor behavior is understood in terms of these three complementary equations, which imply the following: A rational investor should not consider a bank's CSP which is unrelated to its CFP in their investment decisions (equation 4.10). The impact of a bank's CSP on rational investment decisions should be positive in case of a positive relation with CFP (equation 4.11) and negative if it is negatively related to expected returns or variance – or risk – or both (equation 4.12). Two features need to be considered for all three equations: First, a bank's CSR activities are assumed to have no influence on a rational investor's utility and decisions unless they impact at least one financial performance parameter. Second, all three formulas represent specific cases of one single function (equation 4.9) for alternative CSP-CFP relations.

Second, the relation between a bank's social and its financial performance is mostly investigated on the aggregate level of both parameters. In three ways, this does not seem optimal: First, section 3.3.4 shows that significant differences exist between perceptions of relevance for the individual stakeholders of a bank and the effectiveness of the different CSR activities to address their claims. Against the background of this finding, aggregating all bank's stakeholder management activities into "CSP" appears inadequate. Instead, as Wu and Shen (2013, 3546) argue, it is necessary to break down a bank's CSP into its components to better understand its relations to financial performance. Second, the consolidation of all financial information into a bank's "CSP" seems similarly inaccurate: On the one hand, countervailing financial effects of individual CSR activities may cancel each other out, suggesting no relation between CSP and CFP on the aggregate. On the other hand, to manage CSR activities effectively, transparency on their individual financial impact is key. Third, the amalgamation of information makes the comparison of results across studies and the identification of consistent patterns significantly more difficult. This result carries two implications for the subsequent analyses – first, a bank's CSP should be disaggregated into individual stakeholders as well as CSR activities and, second, its CFP should be represented by a delimited set of relevant financial parameters.

4.2 Bounded Investor Rationality

The key assumption which underlies both expected utility and portfolio selection theory is that investors are rational. For the longest time, scholars assumed that economic subjects process information and take decisions only to maximize their expected utility – particularly in financial markets (Fama, 1991, 1965; Shleifer, 2000). However, since the 1970s, this paradigm has come under scrutiny as psychologists and economists alike observed that human behavior often contradicts the predictions of standard economic theory³¹: For instance, Crockett points out that individual information processing may be rational, but significantly influenced by interaction and herding phenomena on the aggregate (Crockett, 2002, 980–981); a view which echoes Keynes' idea of "animal spir-

³¹As already discussed by Simon (1959), these behaviors may also be considered rational, depending on the parameters of the utility function: If, for instance, individuals derive utility from fair wealth distributions (Fehr and Schmidt, 1999), maximizing individual payouts may not be rational. In the following, it is assumed that only individual, monetary payouts enter the utility function as described by Markowitz (1959; 1952). Therefore, rational choice is used synonymous with the maximization of individual expected financial utility.

its" (Keynes, 1936, 161–162). More fundamentally, "bounded rationality" (Simon, 1972) has been shown to affect individual cognition and decision-making in a manner that is incompatible with rationality assumptions. Financial markets and banking have been a preferential area of these studies which, as Thaler (1992) suggests, require the existence of theories that make "crisp predictions" and the abundance of market data to test them (Thaler, 1992, 2).

So far, this behavioral approach to finance has mostly neglected the relatively new research topic of corporate social responsibility. Yet, as discussed before, CSR represents a concept with multiple, personal, and possibly affective connotations; a quality that may trigger systematic biases and heuristics in information processing and investment decisions. In the following, this aspect is investigated in greater detail: Sections 4.2.1, 4.2.2, and 4.2.3 discuss three behavioral phenomena. The first one is prospect theory, chosen for representing one of the most important theories of behavioral decision-making (List, 2004; Fennema and Wakker, 1997) which "manages to capture an enormous amount of psychological wisdom" (Thaler, 2000, 137). Mental accounting, the second phenomenon in scope, basically represents an application of prospect theory to financial contexts and therefore seems particularly suited to study the decisions of bank investors. Halo effects, which have been shown to trigger both favorable and unfavorable perceptions of and consequently responses to CSR, are investigated as a third phenomenon. As the subsequent discussion illustrates, these three well-established phenomena should also play an important role for CSR in banking. At the same time, the potential importance of bounded rationality for the decision problem of interest contrasts with the limited amount of previous research in this area.

At this stage, it should be noted that research into behavioral economics and finance has not been spared from criticism. Three main lines of argumentation are particularly common, the first of which relates to the theoretical quality of behavioral approaches: Critics pointed out that this strand of research often represented a collection of anomalies and multiple theories for special cases and that it had failed to produce a unified, coherent framework which is capable of explaining multiple phenomena at the same time (Financial Times, 2014; Camerer and Loewenstein, 2004). Second, expected utility theory has been defended by positions similar to Friedman's (1953) famous as-if argument that "the relevant question to ask about the "assumptions" of a theory is not whether they are descriptively "realistic", for they never are, but whether they are sufficiently good approximations for the purpose in hand" (Friedman, 1953, 15). This implies that, for EUT to be valid, individuals do not need to actually maximize their expected utility as long as as they behave as if they would and their behaviors are in line with the predictions of equation 4.1 (Berg and Gigerenzer, 2010). The third argument is that bounded rationality is restricted to artificial, experimental settings, but should be rendered a temporary phenomenon by market forces in real settings: For instance, Fama (1965) argues that non-rational decision-making in financial markets creates arbitrage opportunities for rational investors. Irrational investors who do not learn from their experience should then yield consistently inferior returns and will exit the market in the long run.

This critique has in turn triggered a differentiated set of responses: First, Camerer and Loewenstein (2004) agree that behavioral economics does not consist of one, but of multiple theories. Yet, the same is true for neoclassical economics as, for instance, expected utility theory requires various additional and sometimes even contradictory features to capture different phenomena (Arrow, 1986). While behavioral theories may still be less mathematically precise than "formal normative models of belief and choice, (...) this is just another way of saying that rational models are psychologically unrealistic" (Kahneman, 2003a, 1449). At the same time, Thaler clarifies that the objective of behavioral economics is precisely to establish models which are tailored to specific purposes since the breadth of economic decision-making cannot be captured sufficiently accurate by one general model (Financial Times, 2014). Second, behavioral economists have found fault with the behavioral underpinnings of neoclassical theory (Sen, 1977): At odds with Friedman's (1953) as-if argument as-if argument, these scholars argue that realistic psychological assumptions improve the quality of economic theory as well as its predictions and policy advice (Camerer and Loewenstein, 2004, 3-4). Third, research into behavioral economics and finance is not confined to experimental settings. Instead, persistent arbitrage opportunities (Froot and Dabora, 1999; Rosenthal and Young, 1990), the disproportionate volatility of stock prices relative to changes in dividends (Shiller, 1981), or the excess returns premium for shares (Benartzi and Thaler, 1995) – phenomena which are at odds with efficient markets and the predictions of rational investors – have been demonstrated on the basis of secondary financial market data.

Ultimately, it needs to be stressed that the objective of behavioral economics and finance is not and should not be to comprehensively dispose of neoclassical frameworks and theories such as EUT (Bloomberg View, 2015; Financial Times, 2014). In fact, Rubinstein (2006) points out that most behavioral models still assume "agents who maximize a preference relation over some space of consequences and the solution in most cases still involves standard equilibrium concepts" (Rubinstein, 2006, 246); in other words, considerable common ground exists between behavioral and neoclassical economics. The introduction of insights from other academic disciplines such as psychology and sociology should therefore be understood as a value-adding step to advance research into economics and finance and to contribute to a better understanding of real-world phenomena (Camerer, Loewenstein and Rabin, 2004). This is in line with the approach to the specific behavioral theories in the subsequent sections of this study.

4.2.1 Prospect Theory

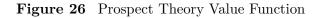
Kahneman and Tversky's "prospect theory" has proven capable of explaining several observed phenomena in human decision-making which were irreconcilable with the predictions of EUR. This section first outlines the building blocks of prospect theory and then discusses its relevance for CSR, banking, and finance. It finds that, while Kahneman and Tversky's theory has been applied to CSR and finance issues in isolation, the literature lacks an integrated study of all three components.

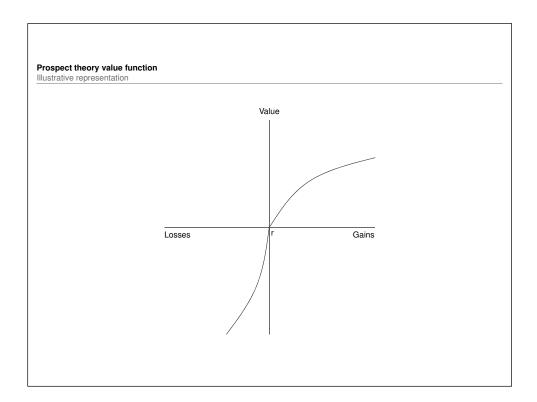
4.2.1.1 Theoretical Foundations

In their seminal 1979 paper, Kahneman and Tversky present a multitude of evidence which challenges the assumption that expected utility theory gives an accurate account of people's preferences. In particular, the authors conjecture that the risky choice (x, p; y, 1-p) is not evaluated according to equation 4.2, but as shown in equation 4.13:

$$\pi(p)v(x-r) + \pi(1-p)v(y-r)$$
(4.13)

This simple equation describes four important principles of individual decision-making under prospect theory: First, the outcomes x, y are evaluated relative to a reference point r. This phenomenon, referred to as "reference dependence", implies that relative gains and losses determine individual choice and conflicts with the asset integration principle described in equation 4.3 by substituting overall wealth considerations with changes in wealth. The reference point – which may be, for instance, the current, desired, or expected level of wealth – can change over time (Kahneman and Tversky, 1979, 266-267). Second, the value function v is kinked at the reference point and steeper for losses than for gains, resulting in loss aversion. In contrast, standard theory only allows for general risk aversion, as illustrated by equation 4.4. Third, the value function's concavity in the domain of gains and its convexity over losses results in a diminishing sensitivity to both gains and losses which are further away from the reference point. Fourth, the function π transforms probabilities by underweighting very large probabilities and overweighting very small probabilities of occurrence (Kahneman and Tversky, 1979, 280-283). Combining these four principles yields further insight: On the one hand, the value function's concavity over gains and the weighting of probabilities result in the "certainty effect", which denotes the phenomenon that people overweight and therefore prefer safe gains over risky gains. On the other hand, the "reflection effect" implies that people's preferences are the mirror image when prospects involve losses: The convexity of the value function and a transformation of probabilities suggest that risky prospects are preferred to safe outcomes (Kahneman and Tversky, 1979, 265-269). Both effects combined imply risk aversion for positive outcomes and risk-seeking behaviors for negative outcomes. These properties of the value function are illustrated in figure 26.





Source: Kahneman and Tversky (1979).

4.2.1.2 Relevance for CSR, Banking, and Finance

Prospect theory has been able to explain a range of observed phenomena³² which represented serious challenges to expected utility theory: The combination of its first two principles suggests that loss aversion relative to a reference point is an important factor in judgment and choice. Camerer et al. (1997) argue that this hypothesis is supported by the work patterns of New York cab drivers, who typically define a daily target income and end their shift as soon as they reach that target. This behavior implies that labor supply is high when demand for taxi rides and therefore hourly wages are low and vice versa, which contradicts the rational prediction that cab drivers will work less on unprofitable days and compensate for the resulting losses on good days. In terms of prospect theory, the high labor supply on bad days can be explained by loss aversion due to a value function that is kinked sharply at the reference point, constituted by the daily target income (Camerer, 2004, 151). Similarly, a low labor supply on profitable days results from the value function's concavity in the domain of gains, which implies that "losses loom larger than gains" (Kahneman and Tversky, 1979, 280). Locke and Mann (2009) find similar behaviors among professional commodities traders, who increase trading efforts and take

³²This section focuses on results with immediate relevance for CSR, banking, and finance. Camerer (2004) and Barberis (2013) provide comprehensive overviews of prospect theory and its applications in further contexts.

higher risks during the afternoon in response to losses during the first half of the day while morning gains reduce trading activity in the second half of the day. This result suggests that daily income targeting and reference point considerations may be important factors in investor behavior, too.

Another phenomenon, which is incompatible with the assumptions of rational portfolio selection, is the tendency of investors to sell well-performing stocks early while keeping underperforming assets, referred to as the "disposition effect" (Shefrin and Statman, 1985, 778). The disposition effect can be explained by prospect theory: As Odean (1998) argues, taking the purchase price of a stock as its reference point implies that price increases relative to this point are perceived as gains. A concave value function for gains implies risk aversion and a tendency to sell winning stocks early. Conversely, price decreases shift an investor's perspective to the convex part of the value function, resulting in risk-seeking behavior and a tendency to retain these stocks even in case of underperformance. While recent findings suggest that the original disposition effect may be affected by investor experience (Da Costa et al., 2013), requires an ex-ante assumption that investors hold stocks in the first place (Hens and Vlcek, 2011), or exists only for certain asset classes and investor groups (Ben-David and Hirshleifer, 2012), its impact on academic discussions remains significant (Barberis and Xiong, 2009; Li and Yang, 2013).

Despite a considerable body of literature on both topics in isolation, there are only few applications of prospect theory to corporate social responsibility research. One exception is Jawahar and McLaughlin (2001) who argue on theoretical grounds that prospect theory drives a company's stakeholder management activities across its organizational life cycle: During its emerging growth phase, a company typically perceives its resource allocation decisions as gains and therefore pursues a risk averse strategy by proactively dealing with key stakeholders such as investors, employees, or suppliers. When loss frames prevail during the transition or decline phase, companies mostly act as risk-seekers when dealing with non-critical stakeholders such as environmental activist groups and manage the claims of these stakeholders in a reactionary or defensive manner. Focusing on reference points, Crever (1997) shows that consumers require financial compensation in terms of lower prices to purchase the goods of a company should its ethical performance falls short of a certain benchmark. Evidence for relations between loss aversion and CSR is provided by Hartmann (2011), who summarizes evidence that consumer are much more likely to respond to unfavorable rather than favorable CSR information. Similarly, Van der Laan, Van Ees, and Van Witteloostuijn (2008) investigate S& P 500 corporations over the 1997-2002 period to identify that the negative financial impact of bad CSP is larger than the positive financial impact of good CSP, driven by asymmetric evaluations of potential gains and losses. Finally, Lankoski, Smith, and Van Wassenhove (2011) introduce "stakeholder value", defined as "the subjective judgment of a stakeholder (...) depending on the situation, of the total monetary and non-monetary value experienced as a result of one or more of a firm's actions" (Lankoski, Smith and Wassenhove, 2011, 13). The authors conjecture that, in line with prospect theory decision-making, stakeholder value is evaluated in terms of losses and gains relative to reference states of CSP rather than absolute corporate social performance. One implication is that influencing reference points and addressing stakeholder claims are equally required for an effective CSR strategy.

This analysis illustrates three insights: First, there is ample evidence which suggests that prospect theory is a relevant concept which accurately captures people's preferences and behavior, even when dealing with risk-free choices (Tversky and Kahneman, 1991) or only judgments (Kahneman, 2003b). Second, prospect theory is sufficiently flexible and capable of integrating issues from both finance and CSR: On the one hand, loss aversion or reference point dependence can explain financial and investment decisions which are incompatible with rational behavior according to expected utility and in particular portfolio selection theory. On the other hand, research into corporate social responsibility may be extended by prospect theory to explain why a company pursues a specific CSR strategy or how its CSP is perceived by certain stakeholders. Third, however, there is a scarcity of research which combines both perspective and thereby follows the suggestion of Agle et al. (2008) and Wood (2010) to advance CSR and stakeholder management theory by integrating insight from other disciplines and fields of research. Possible application areas include an investigation of the general interactions between prospect theory, investment decisions, and CSR or the specific analysis of whether the impact of prospect theory on financial decisions is affected by certain stakeholder management activities – and, if so, whether these activities reinforce or moderate bounded rationality.

4.2.2 Mental Accounting

While prospect theory is concerned with general principles of judgment and choice, Thaler's (1999; 1985) theory demonstrates the specific impact of bounded rationality on financial decision-making. In principle, "mental accounting" is an umbrella concept which encompasses a number of theories – yet, all of these share the common idea that financial decision-making tends to violate the principle of fungibility, according to which money is perfectly substitutable, irrespective of its purpose or origin.

4.2.2.1 Theoretical Foundations

According to the definition by Thaler, "mental accounting is the set of cognitive operations used by individuals and households to organize, evaluate, and keep track of financial activities" (Thaler, 1999, 183). Building upon prospect theory, Thaler derives the three main components – decision-making, budgeting, and choice bracketing – which capture how people execute mental accounting operations. The subsequent review finds that, while mental accounting has been studied extensively within financial contexts, applications of this theory by CSR scholars are rare.

The first component describes the evaluation of financial outcomes and decisions. Thaler stresses that mental accounting decision-making is topical, meaning that the outcomes of a specific financial decision are related to a context-specific reference level or "frame". In contrast, standard economic theory postulates that financial decisions follow comprehensive accounting principles and take "all other factors including current wealth, future earnings, possible outcomes of other probabilistic holdings, and so on" (Thaler, 1999, 186) into consideration. One result of topical accounting under prospect theory decision theory is hedonic framing, which implies that people prefer different aggregation levels for different changes to their wealth due to the value function's concavity over gains and its convex shape over losses: If, for instance, individuals face a small loss and a larger gain, their integration is preferred as it may balance out loss aversion. At the same time, the high degree of steepness near the reference point may be exploited to offset the adverse utility of a large loss when separating it from a small gain (Thaler, 1999, 187).

In addition, mental accounting provides theoretical support for the disposition effect introduced in the previous section by assuming that only "realized" gains and losses – calculated as the difference between the purchase price and the price at which an asset is ultimately sold – are relevant for investors. "Paper" gains and losses, which occur by price changes while the asset is held, do not matter. In consequence, investors are unwilling to realize painful losses by selling an underperforming asset (Thaler, 1999, 188-193).

The second component of Thaler's theory explains how different mental accounts for expenditures, wealth, or income may affect financial decisions. Under mental accounting, monetary operations are tracked in a two-step process: First, they are noticed – unless they are, e.g., too small – and second, they are assigned to a certain account according to their category and similarity with other operations. The assignment to the mental account is crucial as funds are not fungible and can therefore not be transferred from one account to another. Therefore, a person may be less likely to purchase, for instance, a theater ticket after having spent a certain amount from their "leisure activities" account before, compared to a situation in which they have paid the same amount for a parking ticket, which affects another mental account. Different mental accounts can also be set up for purposes such as to increase saving by transferring funds to retirement savings accounts. Similarly, separate accounts and individual budget constraints for regular labor income and windfall profits can explain why people tend to spend most of the latter, but are more likely to save a higher proportion of their labor income (Thaler, 1999, 193-197).

The handling of mental accounts over time and dynamic choice bracketing is described by the third component: For instance, previous gains can encourage risk-seeking behavior in the same account, a phenomenon referred to as "house money" in allusion to money won at a casino. In addition, investors may exhibit myopic loss aversion, which implies that, the more frequently an account is evaluated, the more risky its assets are considered. Thaler argues that myopic loss aversion also helps to explain the "equity premium puzzle", i.e., the observation that stocks yield excessively high returns in comparison to safe assets, which would require implausibly high levels of risk aversion under assuming expected utility theory. If investors, however, evaluate their portfolios frequently – for instance, on an annual basis – the perceived level of volatility for stocks is relatively high so that a significant equity premium is required to induce investors to hold them (Thaler, 1999, 197-200).

The final aspect within the third mental accounting component is the diversification heuristic which implies that people tend to make biased financial decisions when faced with multiple options: For instance, successive and simultaneous investment decisions are often systematically different with the latter often being characterized by excessive diversification. Similarly, employee retirement savings are often remarkably evenly distributed across all possible investment options, suggesting that heuristics rather than risk and return preferences govern investment decisions. Other investors establish separate mental accounts according to the individual asset classes which are available for retirement savings and assign an equal amount to each of these accounts. It is worth noting that stocks from someone's employer may represent a distinct account, which can ultimately result in an allocation that is not mutually exclusive and may overweight stocks (Thaler, 1999, 201-202).

4.2.2.2 Relevance for CSR, Banking, and Finance

The inherent focus of mental accounting on financial decision-making already suggests the relevance of this theory for financial contexts. In addition to the examples summarized in the previous section, Thaler's (1999; 1985) theory has influenced a number of research efforts in finance.

Investigating the first component of mental accounting, Lim (2006) finds for a period from 1991 to 1996 that investors of a major discount brokerage company tend to integrate losses by bundling the sales of stocks which trade below their purchase prices on single days and separate gains by spreading the sales of winning stocks over several days. This outcome is consistent with the predictions of hedonic framing. Ranyard et al. (2006) conclude that the evaluation of instalment credits follows a similar principle: Individual future repayments are not separated and discounted according to their due date, but integrated

as a whole into the mental account for this loan. This evidence both corroborates the idea of hedonic framing and suggests that mental accounting violates rational discounting principles of EUR according to equation 4.1. Grinblatt and Han's (2005) empirical model identifies disposition effects as a main driver behind momentum in prices of stocks, systematic spreads between their fundamental value and equilibrium prices, and the limited incorporation of new information into the prices of these assets.

Evidence in favor of the second component – distinct mental accounts – is provided, for instance, by Ater and Landsman (2013) who argue that "overage aversion" can induce customers to choose a non-cost-minimizing current account contract³³. For a large dataset of 70,000 fee-based current accounts over 30 months, held by customers of a large commercial bank in a Western OECD country, the authors identify a strong preference for flat rate payments – the authors' estimates suggest that the overage fee elasticity is 3.5 times as big as the sensitivity to fixed plan fee payments – which is robust to learning effects as well as switching opportunities. Ater and Landsman explain this observation in terms of two different mental accounts for overages and contract fees, each associated with a different level of disutility for payments.

Focusing on dynamic choice bracketing within the third component of mental accounting, Haigh and List (2005) show experimentally that people who they are informed about individual gains or losses and can place new bets after every gamble bet less in risky lotteries than those participants who receive aggregated feedback and can place new bets after three scenarios, which models the impact of frequent vis-à-vis infrequent portfolio evaluations. This result, which is stronger for professional derivatives traders than for university students, suggests that myopic loss aversion exists and may substantially influence investment decisions. Similarly, Benartzi and Thaler (1999) suggest that investors favor fixed-income securities over volatile stocks in the short run – associated with frequent portfolio evaluations and high volatility – and exhibit preferences for the opposite over long-term horizons, characterized by infrequent portfolio evaluations and lower volatility.

Finally, Choi, Laibson, and Madrian (2009) identify diversification heuristics in the portfolio choices for employees at a large US firm, which shifted from matching employee retirement contributions with own stocks by default – after which the participants could rebalance their portfolios – to a regime in which employees are required to actively select an asset allocation for both their own and their employer's contribution. As employees' own-contribution allocations to employer stock before the regime shift are exactly equal to the sum of own- and employer-contributions after the regime shift, this corroborates

³³Overages describe those transactions which exceed a bank customer's monthly allowance of transactions (which include check deposits and transactions via internet, telephone, call center, or in-person) and need to be paid for individually by the customer (Ater and Landsman, 2013).

the assumption that employees indeed hold different mental accounts, which are defined neither holistically over total wealth nor according to asset classes, which may give rise to inconsistent preferences.

In addition, different components of mental accounting have been combined to explain phenomena in financial markets which are incompatible with rational choice: For instance, Barberis and Huang (2001) find that the high average returns of individual stocks and their excessive volatility can be explained in terms of *"individual stock accounting"* (Barberis and Huang, 2001, 1249). This concept is informed by multiple features of mental accounting such as the assumption that investors derive utility from the gains and losses, which are narrowly bracketed for individual stocks and assessed in relation to the respective stock's past performance as a reference point.

In contrast to banking and finance, research into CSR has incorporated mental accounting only to a limited extent so far. The few exceptions to date include, for instance, Mishina et al. (2010) who find that house money effects – modeled as a high corporate performance relative to aspirations between 1990 and 1999 – increase the likelihood that S&P 500 manufacturing companies behave in a socially irresponsible way and pursue illegal activities. At the same time, companies which underperform aspirations are less likely to engage in illegal activities. Basil and Runde (2007) argue that the level of employee volunteering strongly follows mental accounting principles as volunteering efforts during working hours is mentally booked as a work activity and therefore does not reduce personal-time volunteering. Dillard et al. (2010) find that mental accounting may influence choices between different environmentally-friendly or "green" products: The willingness of consumers to pay a premium for a green product is greater when this product is the reference point – and losing the green feature is perceived as an aversive loss – than in a situation in which the non-green product is the benchmark and eco-friendliness represents a gain, which triggers more muted reactions. Similarly, Sonnenberg, Erasmus, and Schreuder (2014) discuss that consumer preferences for the brand and price of new household appliances - rather than their long-run financial and environmental impact – can be explained by dynamic mental accounting, which excessively discounts future implications relative to immediate gains. Other scholars explain the result that consumers are willing to pay a single large premium for socially responsible products which are not purchased every day, but not multiple small premiums for frequently purchased products, as a hedonic framing preference for integrating losses (Gielissen, 2011)

The review of evidence for mental accounting yields three takeaways: First, due to the inherent focus of Thaler's (1999; 1985) theory, mental accounting has informed behavioral finance research to a considerable extent. Second, CSR research has mostly neglected mental accounting theory so far with the tentative exception of consumer choice. In addition, some approaches do not clearly distinguish mental accounting from related concepts such as prospect theory or yield results which could be explained by multiple theories: For instance, Mishina et al. (2010) admit that they "cannot adjudicate which process – loss aversion, the house money effect, and/or hubris – is operating in a given situation" (Mishina et al., 2010, 705). Third, a finance setting or an investment decision could provide an effective instrument to combine mental accounting and CSR research.

4.2.3 Halo Effects

Halo effects describe the phenomenon that certain clusters or correlations may exist in human judgments about distinct categories. In contrast to prospect theory and mental accounting, this cognitive bias constitutes a long-standing phenomenon with roots in cognitive psychology. Yet, the lack of an authoritative definition and the associative quality of CSR on the one hand and the opacity of banks on the other hand may render them particularly important for an investigation which combines both topics. While multiple studies illustrate how halo effects theory can inform and enhance CSR research, the dedicated banking and finance literature lacks similar examples. One possible way to integrate CSR, finance, and halo effects to derive new insights is illustrated by the concept of "financial performance halos" in the following.

4.2.3.1 Theoretical Foundations

The establishment of halo effects in the literature is mostly attributed to Edward Thorndike (1920), who found strong, systematic correlations between the favorable ratings of physical and personal qualities among soldiers. Thorndike concluded that their evaluators were probably *"unable to treat an individual as a compound of separate qualities and to assign a magnitude to each of these in independence of the others"* (Thorndike, 1920, 28).

Taking this approach one step further, Balzer and Sulsky (1992) introduce a distinction between two kinds of halo biases: First, the "general impression halo" is defined as an "impression bias whereby a rater's overall evaluation or impression of a ratee leads the rater to evaluate all aspects of performance in a manner consistent with this general evaluation or impression" (Balzer and Sulsky, 1992, 976) and represents an extension of the original concept by Thorndike which additionally captures average or neutral assessments. Second, the "dimensional similarity halo" refers to the propensity of an evaluator to assess individual dimensions, which they perceive as related, in a similar manner. Within this halo effect, Smith, Read, and López-Rodríguez (2010) additionally distinguish between inferences within and across domains.

According to Cooper (1981), both kinds of halos which are observed in practice can have a true and an illusory component: True halos refer to existing correlations or overlaps between the categories which are evaluated. In contrast, illusory halos occur when observed halo effects exceed a true halo due to assumed or illusory covariances between categories. Cognitive and confirmation biases – which denote the tendency to focus on similarity and discounting inconsistent information – are often regarded as main drivers behind illusory halos (Smith, Read and López-Rodríguez, 2010; Cooper, 1981).

Early literature reviews find that halo effects are mostly operationalized by measures of intercategory correlation as dimensional similarity halos are more frequently used than general impression halos in research. In addition, various studies employ Cooper's (1981) concept of true and illusory halo effects. In contrast, there is limited support for Thorndike's (1920) idea that evaluations of specific categories are correlated to more general assessments (Balzer and Sulsky, 1992, 977).

Originally, halo effects are rooted in cognitive psychology to describe, for instance, assumed relationships between physical attractiveness and intelligence (Feingold, 1992) or desirable personality traits and overall happiness (Dion, Berscheid and Walster, 1972). Yet, research has identified halo effects within business contexts, too, with the majority of corroborating evidence focusing on marketing and consumer choice: For instance, Erickson and Johansson (1985) describe how consumers who only know the price of a product assume that its quality increases with the price. Erickson, Johansson, and Chao's (1984) study suggests that the country of origin of a car influences perceptions of, for instance, quality and fuel efficiency. Wirtz (2003) argues that the image or brand of a company can affect customer satisfaction while Park, Park, and Dubinsky (2011.) find that the attitude of consumers towards a retailer's own brand is driven by a company's image, especially when consumers are unfamiliar with the relevant product. While these results suggest that halo effects are restricted to the impact of known attributes on assumptions about unknown ones, halo effects can occur even when ample information on both attributes is available (Nisbett and Wilson, 1977) or when the evaluators are aware of their existence (Wetzel, Wilson and Kort, 1981).

4.2.3.2 Relevance for CSR, Banking, and Finance

Halo effects phenomena have been studied at some length in the CSR literature, with most studies taking a marketing perspective on this topic: For instance, Schuldt, Muller, and Schwarz (2012) find that food products which are labeled as produced according to high social or ethical standards are evaluated as relatively healthy. Wiedmann et al. (2014) show that consumers rate identical wines higher and indicate a higher willingness to pay if the beverage is labeled "organic", a result which the authors explain in terms of positive halo effects. In a summary of these findings, Sörqvist et al. (2015) conclude that "the ecolabel effect (...) arises across a wide range of judgmental dimensions, including sensory

judgments (e.g., taste), nutrition judgments (e.g., calories and health) and value-related judgments (e.g., willingness to pay)." (Sörqvist et al., 2015, 7).

Further studies illustrate the role of CSR halos: As Klein and Dawar (2004) show, consumer perceptions of a product-harm crisis – in their example, a faulty car engine lubricant – are less unfavorable if the company behind this product has a CSR halo, particularly when consumers have a strong preference for CSR matters. Smith, Read, and López-Rodríguez (2010) summarize two studies which suggest that assumptions about a company's CSP can trigger halo effects both within domains – as statements about corporate recycling practices affect consumer assessments regarding the eco-friendliness of a company's production processes – and across domains, such as the perception that environmentally-friendly companies are more active within the local community. Finally, Hong and Liskovich (2014) explain the finding that corporate prosecutors sentence socially responsible firms to lower fines for acts of bribery as CSR halos in a legal context.

In contrast to these findings, the literature suggests CSR halos may also be unfavorable for companies: As discussed in Luchs et al. (2010), even consumers who have a positive attitude towards CSR in general may assume that sustainable products are not sufficiently safe or healthy and therefore prefer conventional products, which they expect to perform better on strength-related attributes. The authors describe this phenomenon as a "sustainability liability" (Luchs et al., 2010, 18). In line with their results, Sen and Bhattacharya (2001) show how consumers may draw adverse inferences from CSR activities about product performance, even if the specific CSR measures are implemented in domains which are fully unrelated to the specific product. Further examples how CSR activities may trigger associations of lower business competence levels and inadequate product functionality are summarized in Chernev (2015).

Research on banking has barely investigated halo effects and their potential impact on financial decision-making. One exception is Mohsin Butt and Aftab (2013), whose findings suggest that a "halal" halo may exist for Islamic banks and drive perceptions of quality as well as customer satisfaction. In contrast, the literature provides indications for CSR halo effects in finance. The most important example is given by Brown and Perry (1994), who show that the ratings of Fortune magazine's "Most Admired" ranking are strongly influenced by a company's financial performance. Using the company ratings as a proxy for corporate reputation or social performance, the authors argue that halo effects establish a connection between a company's – unknown or constructed – CSP and its – observable – CFP and refer to this observation as the "financial performance halo" (Brown and Perry, 1994, 1347). As demonstrated by Roberts and Dowling (2002), this type of halo effect may create a virtuous circle of reputation and financial performance. Similarly, Eberl and Schwaiger (2005) find financial performance halos for German DAX 30 companies.

This evidence shows that halo effects have been investigated by the CSR literature and mostly neglected by banking scholars. From a theoretical point of view, halos – typically characterized as inferences under imperfect knowledge (Erickson and Johansson, 1985) – should play a role for both fields of research due to the opacity of the banking industry (Flannery, Kwan and Nimalendran, 2004, 2013; Morgan, 2002) and the features of CSR as a concept (Brummer, 1991; Jensen, 2001; Herzig and Moon, 2012). Research into financial performance halos suggest one way to integrate these three concepts. However, the majority of these studies share the methodological weakness of capturing CSP in terms reputation in these studies, though the empirical results in section 3.3.4.3 suggest that only an imperfect relation exists between reputation and CSR perceptions. Financial performance halos therefore remain a controversial topic, as summarized in Wood (2010). In combination, this outcome illustrates the potential of a research approach which models CSR explicitly to analyze the impact of halo effects on financial decision-making.

4.3 Empirical Insights

The previous two sections each produced one important outcome: First, section 4.1 concluded that it is unclear whether and how a bank's individual CSR activities affect the financial performance of a bank and therefore the investment decisions of rational investors who maximize their expected utility. Second, section 4.2 found that three behavioral phenomena may trigger, reinforce, or mitigate certain biases and heuristics within the domains of CSR as well as banking and finance. This section build upon these outcomes to investigate the impact of CSR activities as well as bounded rationality on the decisions of bank investors empirically in an experiment.

Section 4.3.1 derives these hypotheses from the theoretical discussion of rational choice, bounded rationality, and the CSR survey's findings. The design of an experiment in which 100 university students decide on investments into different types of banks is described in section 4.3.2. Section 4.3.3 gives an overview of the data collection and preparation process. The results of the statistical hypothesis tests are summarized in section 4.3.4, which finds evidence that investors both maximize their financial utility and show behaviors which are in line with theories of bounded rationality. The discussion in section 4.3.5 shows that the experimental findings represent a valid contribution to the academic debate, indicate possible avenues for further research, and carry important implications for CSR and banking practitioners.

4.3.1 Derivation of Hypotheses

Sections 4.1 and 4.2 make contrary predictions how the CSR activities of a bank may influence the decisions of its investors, depending on whether or not investor rationality

is considered bounded. In addition, investment decisions may be consistent with certain preferences identified by the CSR survey. The following three subsections derive a set of hypotheses for each of these aspects: Section 4.3.1.1 focuses on CSR and investor rationality, section 4.3.1.2 on CSR and bounded investor rationality, and the final section 4.3.1.3 on the CSR survey's results.

4.3.1.1 CSR and Investor Rationality

Assuming bank investor rationality provides the theoretical foundation to derive hypotheses for the experiment in two steps: First, according to expected utility theory and the E-V rule – shown in equations 4.1 and 4.8 – rational investors value higher expected returns and lower variance or risk³⁴. This implies that investor preferences should be consistent with their investment decisions, so that preferring one bank over another translates into higher investments into the former institution. Going forward, banks which exhibit relatively higher expected returns and/or lower risk will be characterized as "favorable" in terms of their risk/returns profile while banks with relatively lower expected returns and/or higher risk will be referred to as investment alternatives with an "unfavorable" risk/returns profile. Combining the fundamental principle of rational investor decisionmaking with this terminology yields the first hypothesis H₁, which is summarized below. While the hypothesis does not make references to CSR, it is consistent with the underlying logic of the three investor rationality equations 4.10 to 4.12 that investors should consider a bank's CSP only if it is related to financial performance parameters.

Investor rationality hypothesis H_1 : Investors invest higher amounts into banks with a more favorable risk/returns profile

Second, as shown in section 4.1.2, the preferences of a rational investor for socially responsible banks should depend only on the relation between the social and the financial performance of these institutions. Again, these preferences can be translated into investment patterns to derive the corresponding hypotheses³⁵: First, equation 4.10 implies that CSR activities which are unrelated to a bank's financial performance – captured by the decision parameters expected returns and risk – should not have an impact on a rational investor's decisions. Therefore, investors should be indifferent between a socially responsible bank and a non-socially responsible institution with identical risk/returns profiles. Second, rational investors should derive a negative utility from a bank's CSP which has a negative impact on its financial performance, as described by equation 4.12. Therefore, these investors should invest lower amounts into these socially responsible banks than into non-socially responsible banks with more favorable financial performance. Both assumptions are summarized in hypotheses H_2 and H_3 .

 $^{^{34}\}mathrm{In}$ the following, the general term "risk" is used to account for different concepts which capture investment risk.

³⁵This exercise focuses on the aspect of how CSP and CFP in banking are related and does not investigate potential inconsistencies between CSR commitments and actions such as "window dressing".

Investor rationality hypothesis H_2 : Investors invest the same amounts into socially responsible banks and non-socially responsible banks with the same risk/returns profiles

Investor rationality hypothesis H_3 : Investors invest lower amounts into socially responsible banks with less favorable risk/returns profiles than non-socially responsible banks

All three hypotheses are summarized in table 48. It suggests that only CSR activities which are related to a bank's risk and returns profile should affect investment decisions.

Hypothesis	Implication
Uupothogia U	Investors invest higher amounts into banks with a more favor-
Hypothesis H_1	able risk/returns profile
	Investors invest the same amounts into socially responsi-
Hypothesis H_2	ble banks and non-socially responsible banks with the same
	risk/returns profiles
	Investors invest lower amounts into socially responsible banks
Hypothesis H_3	with less favorable risk/returns profiles than non-socially re-
	sponsible banks

 Table 48
 Experiment Hypotheses: CSR and Investor Rationality

Source: Own representation.

4.3.1.2 CSR and Bounded Investor Rationality

As shown in section 4.2, a bank's CSR activities need not be related to its CFP to have an impact on investment decisions when investors exhibit bounded rationality. To address the lack of integrated research on this topic, a set of hypotheses for each of the three behavioral phenomena is derived in the following.

Prospect theory may inform the decisions of a bank's investors in two ways: First, reference dependence and loss aversion may trigger myopic targeting behaviors as documented by Camerer (1997) for New York cab drivers as well as Locke and Mann (2009) for financial sector professionals. Similarly, investors may set a certain target return per period and, after achieving this target, reduce their efforts or deprioritize the importance of the financial performance criterion in their investment decisions – possibly in favor of a bank's generally valued social performance. In a portfolio selection problem with a finite set of banks, this implies that, should CSR activities be negatively related to financial performance, investors are more likely to invest higher amounts into socially responsible banks if non-socially responsible investment alternatives allow to achieve their financial target. H_4 translates this argument into the first bounded investor rationality hypothesis.

Bounded investor rationality hypothesis H_4 : Investors invest higher amounts into socially responsible banks with an unfavorable risk/returns profile when non-socially responsible banks offer a more favorable risk/returns profile

Second, the CSR activities of a bank may reinforce the disposition effect, i.e., the phenomenon that investors tend to keep underperforming stocks, but sell profitable stocks early. One theoretical foundation of this hypothesis is the conception of CSR as appraisive as discussed in section 2.2, which implies that investors may derive non-rational utility – utility from parameters other than expected returns and risk – from holding the stocks of socially responsible banks. In addition, CSR activities may shift the reference point r higher up the prospect theory value function, shown in figure 26. This increases the domain of losses and reinforces the loss aversion phenomenon, which in turn drives the disposition effect. Both aspects combined suggest that investors may be even more unwilling to sell the stocks of a socially responsible bank in case of a deterioration in its financial performance, resulting in even more muted portfolio allocations compared to their responses to identical changes in the risk/returns profile of a non-socially responsible bank. This hypothesis is expressed in H₅.

Bounded investor rationality hypothesis H_5 : Identical deteriorations of previously identical risk/returns profiles trigger lower divestments for socially responsible banks than for non-socially responsible banks

Mental accounting constitutes the second behavioral phenomenon. The focus of this theory suggests that, in principle, it may impact the decisions of a socially responsible bank's investor in multiple ways. Yet, as Thaler's (1999; 1985) theory has not been investigated for CSR in banking so far, the subsequent hypotheses focus on the fundamental component of different mental accounts.

The second component of mental accounting describes how people assign their financial operations to different mental accounts, depending on their category and their similarity with other operations. As funds cannot be transferred between these accounts, the principle of the fungibility of money is violated. For investors deciding on the allocation of their funds, this may carry two implications: First, it is conceivable that investors possess two different major mental accounts for investments into socially and non-socially responsible banks. Driven by diversification heuristics, these investors might then allocate constant amounts to both kinds of banks, as summarized in hypothesis H_6 .

Bounded investor rationality hypothesis H_6 : Investors invest constant amounts into socially responsible banks

Taking this idea one step further yields the second hypothesis that investors possess individual mental accounts for different kinds of socially responsible banks, distinguished by the different CSR activities which these banks pursue. If this is true, the amounts which investors allocate to these banks should vary only insignificantly across institutions with the same stakeholder focus, but different risk/returns profiles. This is expressed in hypothesis H_7 .

Bounded investor rationality hypothesis H_7 : Investors invest constant amounts into socially responsible banks which pursue specific CSR activities, irrespective of their risk/returns profiles

Halo effects constitute the third behavioral phenomenon in scope of the present study. As described in section 4.2.3.1, the related literature mostly concentrates on dimensional similarity halos. Inferences about a bank's financial performance, based on its CSR activities – which constitute inferences across domains (Smith, Read and López-Rodríguez, 2010) – can be captured by this concept, too.

The evidence for financial performance halos (Brown and Perry, 1994; Roberts and Dowling, 2002; Eberl and Schwaiger, 2005) suggests that positive inferences from a bank's CSR about its CFP appear more likely than assumptions of a negative relation between CSP and CFP according to the sustainability liability (Luchs et al., 2010; Sen and Bhattacharya, 2001; Chernev and Blair, 2015). In addition, this relation may be assumed even when complete information – for instance, on a bank's financial performance – is available (Nisbett and Wilson, 1977). In the investment decision problem, this type of CSR halo effect may manifest in different magnitudes: First, it is possible that investor assessments of socially responsible banks, positively influenced by their CSR activities, translate into higher investments into these banks than into to non-socially responsible – but financially identical – banks. H₈ summarizes this "weak version" of the halo effects hypothesis.

Bounded investor rationality hypothesis H_8 : Investors invest higher amounts into socially responsible banks than into non-socially responsible banks with identical risk/returns profiles

Second, strong CSR halos may even overcompensate potential weaknesses in a socially responsible bank's financial profile. This could imply that investors allocate similar amounts to socially responsible and non-socially responsible banks even if the former are dominated by the latter in terms of financial performance. Intuitively, the size of these differences should limit the impact potential of strong CSR halos: Ordinal differences in financial performance – such as qualitative descriptions of a bank's financial performance as more or less favorable – or minor differences in risk and returns are more likely to be outweighed by CSR activities than highly salient, quantitatively large differences between the financial performance of socially and non-socially responsible banks. This is expressed in the "strong version" of the halo effects hypothesis H_9 , which implements a qualitative description of risk and returns to ensure consistency with the CFP terminology used before.

Bounded investor rationality hypothesis H_9 : Investors invest similar amounts into socially responsible banks and non-socially responsible banks with more favorable risk/returns profiles

These hypotheses suggest that bounded investor rationality carries the potential to trigger, reinforce, or mitigate certain biases and heuristics within the domains of CSR as well as banking and finance. Table 49 summarizes the potential impact of prospect theory, mental accounting, and halo effects on the decisions of a bank's investors.

 Table 49 Experiment Hypotheses: CSR and Bounded Investor Rationality

Hypothesis	Implication
	Investors invest higher amounts into socially responsible banks
Hypothesis H_4	with an unfavorable risk/returns profile when non-socially re-
	sponsible banks offer a more favorable risk/returns profile
	Identical deteriorations of previously identical risk/returns pro-
Hypothesis H_5	files trigger lower divestments for socially responsible banks
	than for non-socially responsible banks
Hypothesis H ₆	Investors invest constant amounts into socially responsible
Trypotnesis II ₆	banks
	Investors invest constant amounts into socially responsible
Hypothesis H_7	banks which pursue specific CSR activities, irrespective of their
	risk/returns profiles
	Investors invest higher amounts into socially responsible
Hypothesis ${\rm H}_8$	banks than into non-socially responsible banks with identical
	risk/returns profiles
	Investors invest similar amounts into socially responsible
Hypothesis H_9	banks and non-socially responsible banks with more favorable
	risk/returns profiles

Source: Own representation.

4.3.1.3 CSR Survey Results

The final set of hypotheses can be derived from the CSR survey's results in section 3.3.4. In contrast to the previous two sections, which are based on normative theories about an investor's judgment and choice, this approach takes a positive research perspective.

First, a combination of multiple CSR survey hypotheses which were supported by the findings in the previous chapter carry the potential to impact investment decisions, too: First of all, the outcomes for hypothesis H_2 suggest that the claims of primary stakeholders on a bank – i.e., shareholders, customers, and employees – are perceived as more relevant than the claims of a bank's intangible secondary stakeholders, referring to ethics and morale, society and social issues, and the environment.³⁶ Similarly, the results for CSR channel hypotheses H_8 and H_{10} suggest that perceptions of effectiveness are higher for activities which address the claims of primary bank stakeholders both in general and specifically for the internal channel of a bank.³⁷ All other things being equal, this finding may imply that higher amounts are invested into banks which address the claims of primary rather than secondary stakeholders in their CSR activities, as stated by hypothesis H_{10} .

CSR survey results hypothesis H_{10} : Assuming identical risk/returns profiles, investors invest higher amounts into socially responsible banks which address the claims of primary rather than secondary stakeholders

Second, the CSR survey found that the cause/business fit between a bank's business and a certain stakeholder is a main driver behind the effectiveness of a bank's CSR activities to address the respective stakeholder's claims. The empirical evidence which supports this positive relation, described by hypothesis H_{20} , is particularly pronounced for the claims of a bank's shareholders.³⁸ If a similar rationale informs investment decisions, investors should allocate relatively higher amounts to banks which address the claims of stakeholders with a high cause/business fit, assuming identical financial performance characteristics. This idea is expressed in hypothesis H_{12} .

CSR survey results hypothesis H_{11} : Assuming identical risk/returns profiles, investors invest higher amounts into socially responsible banks which address the claims of stakeholders with a high rather than a low cause/business fit

A third outcome of the CSR survey which may inform investment decisions is the relative salience of stakeholders and their claims according to the stakeholder model of Mitchell, Agle, and Wood (1997) and the bank stakeholder taxonomy of figure 14. As the empirical analyses for hypothesis H_4 show, stakeholder claim salience can be approximated by overall stakeholder relevance and, according to the results for H_{14} , informs to a certain extent the effectiveness of bank's activities which address the claims of the individual stakeholders.³⁹ As a consequence, an investor's decision how much to invest into different

 $^{^{36}\}mathrm{Tables}$ 15 and 16 as well as figure 17 report these findings.

 $^{^{37}{\}rm The}$ evidence is documented in figure 20 and tables 21 and 22 for ${\rm H}_8$ as well as tables 23 and 24 for ${\rm H}_{10}.$

³⁸Tables 40 to 45 summarize this evidence by stakeholder.

 $^{^{39}}$ This evidence is summarized in figure 17 and table 17 for hypothesis $\rm H_4$ as well as tables 28 to 30 for hypothesis $\rm H_{14}.$

socially responsible banks – distinguished in terms of the stakeholders whose claims they address – which differ only in terms of their risk/returns profiles may be in line with the relative salience of a stakeholder. Hypothesis H_{11} summarizes this idea.

CSR survey results hypothesis H_{12} : Assuming identical risk/returns profiles, investors invest higher amounts into socially responsible banks which address the claims of more rather than less salient stakeholders

All three hypotheses are reported in table 50. This roundup shows that and how certain preferences identified in the CSR survey may influence the decisions of socially responsible banks' investors.

	T 14		
Hypothesis	Implication		
	Assuming identical risk/returns profiles, investors invest higher		
Hypothesis H_{10}	amounts into socially responsible banks which address the		
	claims of primary rather than secondary stakeholders		
	Assuming identical risk/returns profiles, investors invest higher		
Hypothesis H_{11}	amounts into socially responsible banks which address the		
Hypothesis Π_{11}	claims of stakeholders with a high rather than a low		
	cause/business fit		
	Assuming identical risk/returns profiles, investors invest higher		
Hypothesis H_{12}	amounts into socially responsible banks which address the		
	claims of more rather than less salient stakeholders		

 Table 50
 Experiment Hypotheses: CSR Survey Results

Source: Own representation.

4.3.2 Experimental Design

This section introduces the experimental framework to test the hypotheses derived in the previous section. The CFP and CSP decision parameters are described in section 4.3.2.1. Section 4.3.2.2 discusses the sociodemographic and attitudinal investor characteristics which the experiment controls for. The operationalization of both aspects in the experiment's scenarios is documented in section 4.3.2.3.

4.3.2.1 Investment Decision

The experimental literature on CSR in banking and its interactions with bounded investor rationality is sparse. The sole relevant exception to date is Consolandi, Innocenti, and Vercelli (2009), who investigate whether and how investors respond to a stock's inclusion in or its exclusion from an ethical index. Yet, the authors do not focus on banks and neither implement different CSR activities nor test hypotheses on specific behavioral phenomena.

Therefore, the experimental setting of the present study was designed from scratch. For its investment decision, two dimensions of a bank need to be modeled: First, its financial performance in terms of risk and returns, and, second, the bank's CSP, which encompasses the CSR activities to address the claims of different bank stakeholders.

To start with the former aspect, several hypotheses in section 4.3.1 require one bank's financial profile to be unambiguously more or less favorable than another one's. The experiment implements this idea in three steps: The first one addresses the positive relation between risk and returns, postulated by neoclassical finance (Fama, 1965; Markowitz, 1952, 1959): This trade-off impedes clear hierarchies in financial attractiveness since a high risk/high returns asset may be regarded as superior to a low risk/low returns security by some investors, but as inferior by others, depending on their individual preferences. In the experiment, risk is therefore operationalized as downside risk, which allows to relax the ex-ante assumption of a trade-off between risk and returns.

This modeling of experimental risk as downside variability is motivated by both theoretical and practical considerations: First, from a theoretical point of view, downside risk measures represent the more flexible risk measure than the variance or standard deviation of returns: Nawrocki (1999) discusses that variance and semi-variance measures – which focuses on the downside potential of returns – yield consistent results when returns follow a normal distribution. In contrast, only semi-variance enables unbiased decisions in case of non-normal or non-symmetric distributions.

Empirical findings suggest that the prevalence of the latter type of distributions is higher than often assumed in neoclassical finance: In an early paper, Longin (1996) shows that US stock market returns over a 100-year period follow an asymptotic Fréchet rather than a Gaussian distribution, resulting in more extreme price movements and higher risk for investors. Similarly, Jondeau and Rockinger's (2003) study of stock returns for 20 different financial markets at various levels of development suggests that the null hypothesis of normality in distribution can be rejected at high significance levels for all countries except the US. In a more recent paper, Karoglou (2010) investigates the period after the 2007-08 Financial Crisis to find considerable deviations from normality in the returns of stock-market indices across 27 OECD countries. These results seem to support theories such as Taleb's (2007) concept of "black swans", which describes fattailed distributions and extreme outliers that are compatible with a power law regime rather than with a Gaussian distribution: In either case, Huang et al. (2012) conclude that "extreme losses are encountered far more frequently than predicted by traditionally assumed return distributions" (Huang et al., 2012, 1494). This evidence implies that the underlying assumptions for an efficient risk measurement in terms of the variance or standard deviation of returns may not be met.

In this context, it is worth noting that also Markowitz deemed downside-focused parameters such as the semi-variance a more appropriate measure of risk: Formally, he shows that "variance considers extremely high and extremely low returns equally undesirable" whereas a portfolio selection according to semi-variance "concentrates on reducing losses" and therefore "tend(s) to produce better portfolios" (Markowitz, 1959, 194). While the widespread acceptance and use of variance is based on the fact that it represents a cost-efficient, convenient, and familiar measure, the concept of downside risk has become increasingly popular among finance scholars and practitioners alike (Estrada, 2008).

Markowitz also established the second argument in favor of downside risk measures: In his 1993 paper, he argues that because "an investor worries about underperformance rather than overperformance, semideviation is a more appropriate measure of investor's risk than variance" (Markowitz et al., 1993, 307). In other words, investors are not generally averse to variability, but exhibit asymmetric risk preferences and only consider the downside potential of an asset as "risk". Instead, the right-hand side of a returns distribution constitutes desirable upside potential (Grootveld and Hallerbach, 1999). This idea is supported by Gooding (1975), who shows that downside risk is the critical parameter which is used particularly by experienced portfolio managers to evaluate assets. Subsequent studies, summarized in Nawrocki (1999), suggest that downside risk is a relevant decision parameter for financial sector practitioners in general (Rom and Ferguson, 1994; Sortino and Van Der Meer, 1991).

As most risk concepts, a downside-based measure can be represented in terms of multiple ways and parameters: One possibility are gambles with specific probabilities and discrete outcomes, as typically implemented by economic experiments (Camerer, Loewenstein and Rabin, 2004; Barberis and Huang, 2001; Kahneman and Tversky, 1979). Yet, the empirical results by Vlaev, Chater, and Stewart (2009) suggest to use a measure of variability to mirror how humans conceptualize risk. At the same time, semi-variances or semi-standard deviations may raise new problems for being interval-based concepts: As a considerable body of evidence suggests, interval estimates are often inaccurate and, in the case of a confidence interval (CI), particularly affected by overconfidence, resulting in "excessive certainty regarding the accuracy of one's beliefs" (Moore and Healy, 2008, 502): Asking participants numerical questions as well having them provide 90% confidence intervals around these answers yields the robust result that these CIs are excessively narrow and typically contain the right answer in less than half of all cases (Soll and Klayman, 2004; Klayman et al., 1999). As shown by Speirs-Bridge et al. (2010), overprecision phenomena also impact the estimates of experts. Using an interval-based risk measure may therefore trigger significant biases in judgment and choice with a tendency to underestimate the true extent of risk.

One alternative approach can be derived from Slovic (2001; 1972): Citing experimental evidence, the author argues that investment decisions under uncertainty are mostly not based on variance, but governed by rules such as minimizing potential returns below a certain target. Locke and Martin (2009) document a similar behavior for professional commodities traders, who seek to achieve the lowest possible losses relative to a target yield. From this perspective, risk captures the extent to which the returns on an asset may fall below a certain benchmark such as historical averages or current values.⁴⁰ This risk measure may be more in line with the reasoning of financial sector practitioners, who are likely to be guided by an intuitive idea of an asset's downside potential, but may not be able to describe possible outcomes and their probability weights or accurate standard deviation intervals. A straightforward implementation of this risk measure is suggested by Estrada (2006), who describes downside risk by "conditional returns": This parameter is computed as the lower value of 0 and the difference between an asset's mean - or expected – and actual returns. For instance, if the mean rate of return on an asset equals 12% and its actual returns are 12% or higher, conditional returns are 0. Should actual returns be 7%, the conditional returns are equal to 5 percentage points. Hence, conditional returns can be considered an actionable measure of risk which both captures people's risk conceptualizations – for being a basic measure of variability – and should be intuitively understandable in particular for nonprofessional investors due to expressing downside potential in clear percentage points rather than intervals. At the same time, the concept is similar to Markowitz' (1959) semi-variance concept in a way that both can either be 0 or negative. Based upon this combined evidence, risk in the experiment is therefore implemented as a partial, downside-focused measure of conditional returns which describes by how many percentage points actual returns may fall below a pre-defined level.

In a second step, the differences in financial performance of the banks in the experiment are modeled in terms of returns rather than risk. Two observations motivate this approach: First, returns are likely to constitute the more salient parameter in financial decisionmaking (Chalmers, Kaul and Phillips, 2013; Hoffmann and Post, 2015; Sirri and Tufano, 1998). In addition, information on increases or decreases in returns is mostly processed without major biases while risk perceptions may be substantially affected by affective or emotional factors (Weber, Siebenmorgen and Weber, 2005). As a result, a manipulation of returns rather than risk in an experimental setting appears more effective.

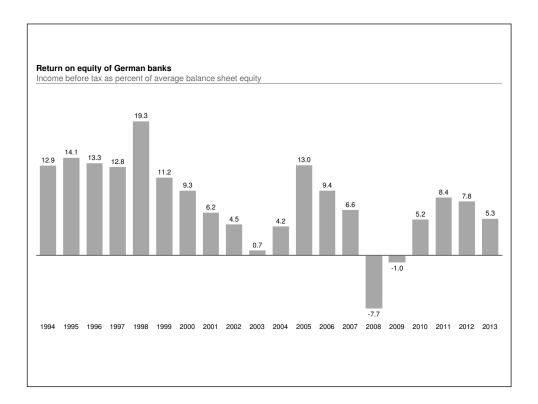
Second, recent findings call the trade-off between returns and risk into question: For instance, Ghysels, Guérin, and Marcellino (2014) find that the positive relation between the two financial parameters may reverse when ex-post returns are low and volatility is high. Focusing on the 2007-08 Financial Crisis and the ensuing Great Recession, Ghysels, Plazzi, and Valkanov (2013) argue that there is no indication of a positive or negative trade-off between risk and returns. Similarly, Salvador, Floros, and Arago's (2014) study

 $^{^{40}}$ Several possible critical return levels are discussed in Grootveld and Hallerbach (1999).

for 11 European markets identifies only weak evidence for a linear risk/returns trade-off. This suggests that a trade-off between risk and returns cannot necessarily be assumed ex-ante. To reflect this outcome, the experiment assumes that downside risk is constant across different rates of return, which eliminates the challenge that a bank's financial performance consists of two, potentially conflicting parameters. This approach is in line with Consolandi, Innocenti, and Vercelli (2009), who model for four stocks with different average expected returns and identical variances.

The third step is to clarify the hierarchy in financial attractiveness between the banks in the experiment. Therefore, the experiment introduces an additional qualitative description of every bank's risk/returns profile as "basic", "medium", or "high". Since downside risk is held constant, these profiles differ only with in terms of different levels of return. For the experiment, both parameters are calibrated using macro data on the ROE of German banks from 1994 to 2013, as illustrated in figure 27.

Figure 27 Return on Equity of German Banks



Source: Own representation based on Deutsche Bundesbank (2015).

To simultaneously capture a wide range of possible ROE outcomes and to avoid excessively high or low values, the first, second, and third quartile of the range of the ROE distribution in figure 27 are used to derive the returns for a basic, medium, and high risk/returns profile in the experiment. After excluding the outlying observations for the years 2008 and 2009 – which are exceptionally low returns, driven by the 2007-08 Financial Crisis – this exercise yields rounded values of 5.5, 8.8, and 12.8 percent for the first, second, and third quartile.⁴¹ Building upon the outcome of the above discussion, downside risk is operationalized as the extent to which returns may fall below a pre-defined target return. In line with Markowitz (1959), this target return is defined as the mean of the returns distribution, which equals $9.1\%^{42}$. Computing the average negative deviation of returns from this target return yields a value of $5.5\%^{43}$.

To facilitate their operationalization in the experiment, the values for returns and risk are rounded to integer numbers with two additional adjustments: First, the value for returns in the "high" profile is rounded off to 12% to ensure that returns consistently change by three percentage points across subsequent risk/returns profiles. Second, risk is represented as a range from 0 to 5 percentage points to account for the fact that the return values in all profiles constitute quartiles and therefore the highest possible values. Assuming that risk manifests in a decrease in expected returns by 2.5 percentage points – the middle of the interval – yields an average actual return of 6.5% across all three profiles. This figure is close to the 30-year average ROE of 6% for German banks (McKinsey & Company, 2016, 47), which suggests that the quantitative dimension of the experiment's investment decision is realistic. The risk/returns figures for all profiles are summarized in table 51.

Risk/returns profile	Financial parameters		
nisk/returns prome	Returns	Risk	
Basic	6%	0-5 percentage points	
Medium	9%	0-5 percentage points	
High	12%	0-5 percentage points	

Source: Own representation.

⁴¹Not controlling for the impact of the 2007-08 Financial Crisis yields quartile values of 5.0, 8.1, and 12.9 percent, suggesting that the results are robust to adjustments for outliers.

 $^{^{42}7.8\%}$ when including outlying observations.

 $^{^{43}5.1\%}$ including outliers.

The second aspect of this section – the implementation of a bank's CSP within the experiment – builds upon the outcomes of the CSR survey. As section 3.3.4 finds, bank-internal CSR activities an in particular action programs are perceived as particularly effective. Table 52 reproduces this result by breaking down the CSR survey outcomes for "doing" activities of item 2.5 by stakeholder. It shows that both a two-sided sign test (column "p1") and a Wilcoxon signed-rank test (column "p2") reject the null hypothesis that the perceived effectiveness of action programs to address the claims of primary stakeholders equals "3" (first row, indicating neutral effectiveness) or "4" (second row, indicating rather high effectiveness) on a 0.1% significance level. Combined with the mean and median values, this outcome implies that these activities are perceived as particularly effective. In principle, the same conclusion also holds for secondary stakeholders as both statistical tests suggest that a bank's ethical, social, or environmental action programs are consistently perceived as more effective than "3". At a 5% significance level, equality with a perceived effectiveness of "4" can be rejected for social activities according to both tests and for ethical activities according to a sign test. For bank-internal activities that address environmental claims, both statistical tests fail to reject the null hypothesis of identity with a perceived activity effectiveness of "4" on standard significance levels for, indicating that these CSR activities are on average perceived as "rather effective". While a bank's internal commitments to address the claims of its customers still outstrip environmental action programs in terms of mean effectiveness perceptions⁴⁴, a two-sided sign test and a Wilcoxon signed-rank test fail to identify statistically significant differences between the two activities. This suggests that perceptions of effectiveness according to the CSR are de-facto highest for the CSR activities documented in table 52, which are therefore used to define different socially responsible banks in the experiment.

Activity	Mean	Median	JB	p1	p2
Shareholders	4.2505	4	0.0000	0.0000	0.0000
Shareholders	(0.7173)	(0)		0.0000	0.0000
Customore	4.6493	5	0.0000	0.0000	0.0000
Customers	(0.6222)	(0)		0.0000	0.0000
Employees	4.3069	4	0.0000	0.0000	0.0000
	(0.7707)	(1)		0.0000	0.0000
Ethics	3.9916	4	0.0000	0.0000	0.0000
Ethics	(0.9102)	(1)		0.0387	0.2419
Society	4.0543	4	0.0000	0.0000	0.0000
	(0.9016)	(1)		0.0012	0.0121

 Table 52
 CSR Survey: Effectiveness of Internal Action Programs

⁴⁴As shown in table 31, the mean perceived effectiveness of these bank-internal commitments to address customer claims equals 3.9624 with a median value of 4.

	3.9040	4	0.0000	0.0000	0.0000
Environment	(1.0100)	(1)		0.5282	0.4763

Source: Own representation.

Notes: N = 479. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided sign test (Wilcoxon signed-rank test) that the perceived activity effectiveness equals "3" (first row) or "4" (second row).

Defining socially responsible banks in terms of these CSR activities has three benefits: First, their high perceived effectiveness should effectively distinguish socially responsible banks from non-socially responsible institutions and therefore ensure that these activities are considered in investment decisions. Second, the activity set is both balanced and comprehensive as the claims of all six bank stakeholders are each addressed by one specific measure. In addition, all activities represent bank-internal action programs and are therefore homogeneous in scope and nature. Third, the limited total number of CSR activities allows to systematically vary other parameters within the narrow time frame of an economic experiment.

The descriptions of all six activities were slightly updated vis-à-vis their original versions – documented in table 7 – to facilitate their understanding and to reflect the occasional feedback gathered in the CSR survey. Subsequently, the wording was refined in discussions with undergraduate, graduate, and doctoral students in business and economics from various universities. The final versions of all six activities are shown in table 53.

Table 53Experiment: CSR Activities

Stakeholder	Activity wording
Shareholders	The bank reduces its internal costs
Customers	The bank improves the security of its customer data
Employees	The bank facilitates the reconciliation of family and work for employees
Ethics	The bank uses ethical criteria in executive evaluation and compensation
Society	The bank offers courses to improve the financial literacy in wider society
Environment	The bank improves on recycling and building energy efficiency

Source: Own representation.

Note: Items translated from German.

4.3.2.2 Control Variables

Section 3.3.2 described that certain sociodemographic characteristics may inform CSR assessments in banking. The same may be true for decisions on investments into socially responsible banks within the experiment. Therefore, the experiment introduces a set of sociodemographic and attitudinal control variables in a separate questionnaire.

The sociodemographic control variables are the same as in the CSR survey: As age and gender may be relevant for SRI investment decisions (Barber and Odean, 2001; Berry and Yeung, 2013; Nilsson, 2008), the experiment controls for both parameters. In addition, investment decisions may be informed by a participant's experience (Cheah et al., 2011; Roberts, 1996*a*). In the experiment, this variable is split: To determine academic experience, a participant's study progress and course of studies is measured while financial experience is captured by bank relationships and use of different financial products.

The attitudinal control variables can be broken down into four major topics: First, it is possible that investors consider profits rather than social responsibility to be the only relevant decision parameter for both their own investments and for banks, which echoes Friedman's (1970) argument introduced in section 2.1. This attitude is captured for both an investor's and a bank's perspective, using the company profit-maximization scale introduced by Sela, Simonson, and Kivetz (2013). The authors document a Cronbach's alpha value (Cronbach, 1951) of 0.79 for this scale, which can be interpreted as a good to acceptable internal consistency and reliability (George and Mallery, 2003). To match the decision problem of the experiment, the scale's original three items were slightly adapted in wording as shown in table 54. In the experiment, these items are measured on a 5-point Likert scale from "Strongly Agree" to "Strongly Reject" to determine the extent to which participants think that the responsibility of investors or banks is to maximize their profits.

Table 54Experiment:	Profit	Maximization	Scales
---------------------	--------	--------------	--------

Scope	Item wording	
	As an investor, I want to make profits	
Investors	As an investor, I want to achieve the highest possible returns	
	As an investor, I want to make profits even at the expense of others	
	I think banks should make profits	
Banks	I think banks should achieve the highest possible returns	
	I think banks should make profits even at the expense of others	

Source: Own representation based on Sela, Simonson, and Kivetz (2013). Note: Items translated from German. The second control factor captures to which extent the experiment's participants regard socially responsible behavior as important for a bank. This aspect is controlled for in two items which both understand socially responsible behavior as operationalized in section 2.2: In the first item, the participants are asked to indicate their level of agreement with the statement that the consideration of stakeholders within the regular operations and beyond legal obligations is important for a bank on a 5-point Likert scale from "Strongly Agree" to "Strongly Reject". The second item measures to which extent the participants regard a consideration of the individual stakeholders' claims within a bank's internal operations – which represents the type of CSR activities implemented in the experiment – as important on a 5-point Likert scale from "Very Important" to "Very Unimportant". Both items are documented in table 55.

A participant's attitude towards socially responsible behavior may inform their investment decisions in the experiment in two ways: On the one hand, the more important an experimental participant considers the social responsibility of banks, the higher amounts they may invest into institutions which implement CSR activities. This pattern has been demonstrated for decisions of SRI investors and CSR in general (Cheah et al., 2011) and may hold on the level of individual stakeholders, too. On the other hand, it may be that investors exhibit an "attitude-behavior gap", which has been discussed at some length particularly in the CSR-related consumer research literature (Pomering and Dolnicar, 2006*b*; Papaoikonomou, Ryan and Ginieis, 2011; Shaw, McMaster and Newholm, 2015). It denotes the phenomenon that consumers who value CSR activities may not necessarily purchase the products of a socially responsible company, typically due to CSR-induced price premia. In the experiment, investors may therefore express a positive attitude towards CSR in banking according to the control items, but mostly focus on a bank's financial performance when making investment decisions.

Table 55 Experiment: Socially Responsible Behavior Item	ıs
-----------------------------------------------------------------	----

Scope	Item wording
Overall CSR	It is important for me that banks consider certain interest groups and
Overall USA	societal topics within their regular operations beyond legal obligations
Individual	How do you evaluate a consideration of these interest groups and soci-
stakeholders	$etal \ topics \ within \ a \ bank's \ internal \ operations \ beyond \ legal \ obligations?$

Source: Own representation.

Notes: Items translated from German. Second item requires evaluations on stakeholder level.

The third attitudinal variable focuses on perceived consumer effectiveness (PCE). Originally, Roberts (1996a) defines PCE as a "measure of the subject's judgment in the ability of individual consumers to affect environmental resource problems" (Roberts, 1996a, 219).

In a broader sense, this concept can be understood as the extent to which individuals perceive their personal consumption choices to have an impact on corporate actions. Research suggests that PCE is an important moderator of socially responsible behaviors: Consumers who exhibit low levels of PCE are likely to consider CSR only to a limited extent in their judgments and actions (Webster Jr, 1975; Ellen, Wiener and Cobb-Walgren, 1991; Roberts, 1996a). The same may be true for SRI investment decisions (Nilsson, 2008; Cheah et al., 2011). In banking, these perceptions should be particularly relevant as transparency on the actual impact on a bank's operations may be limited by opacity, as discussed in section 2.1. To operationalize PCE in the experiment, the scale used in Nilsson (2008) was adapted to capture the banking setting and the present study's conception of CSR as shown in table 56. This instrument, the reliability of which is illustrated by an alpha of 0.78, is mostly line with previous PCE scales in terms of content and wording (Webster Jr, 1975; Ellen, Wiener and Cobb-Walgren, 1991; Roberts, 1996a) and measures PCE along four items on a 5-point Likert scale from "Strongly Agree" to "Strongly Reject".

Scope	Item wording
	It is useless for the individual investor to do anything about certain
	interest groups and societal topics
	Every person has the power to influence certain problems by taking
Investors	appropriate investment decisions
Investors	It does not matter how I as an investor invest my money since one
	person acting alone cannot make a difference
	Every investor can have a positive effect on certain interest groups and
	societal topics via their investments

Source: Own representation based on Nilsson (2008).

Note: Items translated from German.

The fourth set of control variables encompasses two constructs which may drive a critical view of banking: First, it may be that a participant has a negative attitude towards banks in general. Second, participants may assume that socially responsible banks are driven by self-interest motives and do not care about the respective stakeholder whose claims they address. The intuitive result in both cases is an unfavorable image of banking which may result in lower investments into socially responsible banks. The two constructs are measured using established instruments: First, the attitude towards banks is captured in line with Homer's (1995) 5-point Liker scale with nine items, which measures an attitudes towards a company. Due to an alpha value of 0.97, the internal consistency of this scale is excellent. Second, the scale by Simmons and Becker-Olsen (2006) is used to measure

the degree of assumed self-interest motivation behind a bank's CSR activities. This instrument has an alpha value of 0.70, suggesting an acceptable reliability, and consists of six items which are measured on a 5-point Likert scale from "Strongly Agree" to "Strongly Reject". The self-interest motivation scale was framed by asking the participants to evaluate a bank which implements bank-internal CSR activities. All items, which were slightly adapted for the experiment's setting, are summarized in table 57.

Scope	Item Wording		
	Negative / Positive		
	Unpleasant / Pleasant		
	Disagreeable / Agreeable		
	Worthless / Valuable		
Attitude towards banks	Bad / Good		
	Foolish / Wise		
	Unfavorable / Favorable		
	Dislike a lot / Like a lot		
	Useless / Useful		
	The bank has self-serving motives		
	The bank has unselfish motives		
Self-Interest motivation	The bank is simply trying to inform the public		
Sen-Interest motivation	The bank is a trustworthy source of information		
	The bank is trying to win people's liking		
	The bank is trying to make itself look better than it is		

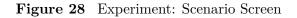
 Table 57 Experiment: Attitude towards Banks and Self-Interest Motivation Scales

Source: Own representation based on Homer (1995) and Simmons and Becker-Olsen (2006). Note: Items translated from German.

4.3.2.3 Scenarios

In the experiment, the frame for investors to allocate their funds to socially and nonsocially responsible banks is provided by different scenarios. These scenarios were programmed as individual screes in z-Tree (Fischbacher, 2007), which are exemplified by figure 28.

The structure and type of information, presented in different content boxes and denoted by indices 1 to 4 in figure 28, is identical for every scenario screen: The investment decisions are taken within box 1. In every scenario, this box presents three banks which are defined in terms of two parameters: First, their financial performance, captured by the



	esentation							
Szenar	io 1 von 24						Verble	ibende Zeit: 58
hr Bud	get (in Euro)	1000	Aktionäre			Rendite-/ Risikoprofil	Erw. Maximal- rendite	Risiko
	investiert (in Euro)	0	Kunden Mitarbeiter Ethik und M	oral	\rightarrow \rightarrow \rightarrow	Basis	6%	0-5%punkte
Verbleil	bendes Budget (in Euro) 1000	Soziales	Uldi	\rightarrow	Mittel	9%	0-5%punkte
		·	Uniweit		\rightarrow	Hoch	12%	0-5%punkte
Bank A	Rendite/Risikoprofil Mittel	Die Bar	Aktivitäten hk senkt ihre len Kosten	Ihre Inves	tition (in Euro)		Investition A b	estätigen
в	Mittel	I	Keine				Investition B b	estätigen
с	Hoch		Keine				Investition C b	estätigen

Source: Own representation. Note: Numbers 1 to 4 shown for illustrative purposes only.

risk/return profiles shown in the first column of table 51. Second, their CSR performance, represented by one of the six CSR activities summarized in table 53. For each of these banks, a – positive – investment can be entered in the final column of box 1.

The information shown in boxes 2 to 4 is meant to inform this investment decision: First, box 2 summarizes the budget at the beginning of the respective scenario as well as the invested and remaining amounts. Second, box 3 replicates the information about different risk/returns profiles in the experiment from table 51. The third information box, denoted by index 4 in figure 28, is a stakeholder dashboard: Depending on the relative amounts that a participant in the experiment invests into a bank which addresses the claims of a particular stakeholder, the arrows next to this stakeholder change their orientation.

From one scenario to another, the information in boxes 2 and 4 changes endogenously, i.e., depending on the investment decisions of the individual participant. In the first scenario, denoted by time index t, a participant's budget equals their endowment of experimental EUR 1,000. The budget at the beginning of all following scenarios B_{t+1} is determined by a participant's previous investment decisions as shown in equation 4.14: At time t+1, this budget consists of the amounts invested into the different banks x_i at time t, multiplied with their respective returns r_t^i and adjusted for the actual downside risk d as well as those amounts T_t which were not invested in the previous scenario.

$$B_{t+1} = \sum_{i=1}^{3} x_t^i (1 + (r_t^i - d)) + T_t$$
(4.14)

Equation 4.14 illustrates three additional aspects: First, the different rates of return r constitute maximum expected rates, which is in line with their derivation from quartiles in section 4.3.2.1. Second, downside risk is implemented as a constant parameter d which determines the extent to which actual returns deviate from maximum expected rates across all risk/returns profiles. In the experiment, d is calibrated to the middle of the range of possible outcomes between 0 and 5 percentage points such that all rates of return are de-facto 2.5 percentage points lower than indicated. This approach both enables rational investors – who might assume that downside risk follows a normal or uniform distribution and therefore expect d to equal, on average, 2.5 – to take unbiased decisions and models a certain stochastic element. Third, both risk and returns are assumed to be unaffected by diversification effects to encourage participants to invest in line with their preferences rather than allocate only marginally different amounts to all three banks.

In order to rule out diversification effects, two assumptions are required: The first one is that investors hold a well-diversified portfolio so that the marginal diversification impact of adding one to three bank stocks is negligible. Findings suggest that this is not an unrealistic assumption since proper portfolio diversification may be attainable already with a limited number of stocks (Goetzmann and Kumar, 2008; Statman, 1987). Second, bank stock returns should exhibit ideally strong positive correlations so that investing the same amount into one, two, or all three banks carries an equivalent portfolio-level impact. As studies show, the correlations between the returns of individual bank stocks are generally positive in Europe and the US (Hartmann, Straetmans and De Vries, 2005). Additional evidence is provided by investigations into the systemic risk of banks, which can be explained by herding behavior in bank lending or the tendency of banks to engage in similar lending activities. This phenomenon results in strong correlations across the asset portfolios of different banks and ultimately their returns as well (Acharya and Yorulmazer, 2003; Schaeck, Silva Buston and Wagner, 2013; Frey and Hledik, 2014). This suggests that the elimination of diversification effects, which is likely to promote clearer investment patterns in the experiment, can be justified on theoretical grounds.

Box 4 focuses on the CSR aspect of a participant's investments by visualizing the extent to which the individual stakeholders and their claims have been considered in these decisions. Each of the CSR activities in the experiment can be mapped to the six bank stakeholders, who are shown in box 4 with a corresponding arrow to represent the CSR orientation within investments in the form of a dashboard. As described in Yigitbasioglu and Velcu

(2012), dashboards "can be regarded as a data driven decision support system, which provides information in a particular format to the decision maker" (Yigitbasioglu and Velcu, 2012, 42). The authors emphasize that, for dashboards to be effective managerial tools, a set of functional and visual criteria needs to be met: The first criterion implies that there needs to be a strong fit between the functional features and the purpose of a dashboard (Yigitbasioglu and Velcu, 2012, 44). For the stakeholder dashboard, it can be assumed that the purpose – providing feedback on the extent to which the claims of certain stakeholders activities have been considered in previous investment decisions – and the features – a visualization of the relative amounts invested into banks which address the claims of these stakeholders – are consistent. Second, the main visual criterion for a dashboard is whether it facilitates information encoding and decoding by presenting all information on a single page or screen, using familiar and simple objects, and eliminating obsolete features (Yigitbasioglu and Velcu, 2012, 46–47). The experiment's stakeholder dashboard, which consists of single-colored arrows arranged in a tabular layout, is most likely visually effective. In addition, cognitive fit theory (Vessey, 1991) suggests that graphical information displays such as dashboards in particular facilitate so-called spatial tasks: In these tasks, the identification, understanding, and comparing of relationships in the data rather than the extraction of specific – e.g., monetary – values is required (Vessey, 1991). Since the processing of both CSR activities and the stakeholder-level impact of previous decisions can be regarded as a spatial task, theory suggests that the dashboard in box 2 should constitute an effective instrument.

As Yigitbasioglu and Velcu (2012) argue, the prevalence of dashboards in corporate contexts is reflected only to a limited extent in the scholarly literature. It is worth noting that some studies which suggest that dashboards are effective tools specifically for stakeholder management: For instance, Strand (2006) argues that dashboards are instrumental for effective corporate stakeholder management and that graphical representations are particularly well-suited for limited numbers of stakeholders. Similarly, Perrini and Tencati (2006) assign sustainability dashboards a key role in their framework, which enables companies to understand stakeholder requirements and to evaluate their own CSR performance. Yet, as these studies do not provide a stakeholder dashboard which could be implemented within the experiment, a novel design, which incorporates the functional and visual principles discussed in the previous paragraph, is developed for the experiment. Box 2 in figure 28 illustrates the final stakeholder dashboard. The changes of the individual arrows, depending on the relative amounts which a participant invests into banks that address this stakeholder's claims, are shown in table 58. The boundaries in columns 2 and 3 imply that, for instance, should a participant invest their entire budget into a bank which addresses customer claims in one scenario, but nothing into a bank with the same CSR activity in the next scenario – resulting in a total relative investment of 50% for this stakeholder – the arrow behind "customer" changes from 90° to a horizontal position.

Amon orientation	Boundaries for relative investments			
Arrow orientation	Lower bound	Upper bound		
↑	$\geq 80\%$	_		
~	$\geq 60\%$	<80%		
\rightarrow	$\geq 40\%$	$<\!60\%$		
$\overline{\mathbf{Y}}$	$\geq 20\%$	<40%		
Ļ		<20%		

Source: Own representation.

Note: Averages of relative investments by stakeholder across scenarios. Arrows change one scenario after investment decisions have been taken.

In addition to the endogenous parameter changes in boxes 2 and 4, the financial and the social performance of the different banks – shown in box 1 – are varied exogenously across the scenarios. The possible values for both parameters are given in tables 51 and 53. In the following, the four different combinations of these parameters for the three banks, shown in table 59, are referred to as "scenario configurations". Since every configuration is implemented for all six different types of socially responsible banks, there are in total 24 scenarios in the experiment.

Scenario con-	Risk/returns profile					
figuration	CSR bank 1	Non-CSR bank 2	Non-CSR bank 3			
A	Basic	Basic	Medium			
В	Medium	Medium	High			
С	Basic	Basic	High			
D	Deteriorates from	Deteriorates from	Deteriorates from			
D	"Medium" to "Basic"	"Medium" to "Basic"	"High" to "Medium"			

 Table 59
 Experiment: Risk/Returns Profiles by Scenario Configuration

Source: Own representation.

Figure 59 illustrates two more commonalities of all scenarios: First, in every scenario, there is one socially responsible bank, defined in terms of a specific CSR activity. Second, this socially responsible bank and one non-socially responsible bank always share the same risk/returns profile while a third, also non-socially responsible, bank is characterized by a superior risk/returns profile. These variations in the financial parameters are based on the finding of section 4.1.2 that the relation between CSP and CFP in banking is ambiguous. Therefore, the risk/returns profile of a socially responsible bank may be equal or inferior to the financial performance of a non-socially responsible bank in the experiment. The

last possible option – a superior risk/returns profile for the socially responsible bank – is not required to test a specific hypothesis. In addition, scenario configuration D describes a special case as the risk/returns profiles of the three banks are identical to configuration B prior to the deterioration in risk and returns and to configuration A afterwards. For every CSR activity, configuration D therefore shows the participants their previous investments from scenario B and gives them the opportunity to take three new investment decisions.

In the experiment, the 24 scenarios and the individual banks within these scenario are presented in a certain sequence. In principle, this may trigger order (Hogarth and Einhorn, 1992) or learning effects on the part of the participants, which may systematically bias investment decisions. At the same time, a full randomization of scenarios is not possible: For instance, scenario configurations A and B need to be shown prior to configuration D for every CSR activity to establish the two benchmarks before combining them in the deterioration scenario. Therefore, the scenario order is quasi-random to ensure three criteria: First, scenarios A and B are shown prior to scenario D for every CSR activity. Second, the four scenario configurations alternate across consecutive scenarios. Third, the six CSR activities alternate across consecutive scenarios: The latter two criteria aim at raising the arousal level to mitigate boredom and fatigue elements (Drost, 2011). The resulting general scenario for the experiment is shown in table 60.

Scenario con-	General CSR activity					
figuration	Ι	II	III	IV	V	VI
A	5	12	16	20	3	9
В	1	6	13	17	21	4
С	10	2	7	14	18	23
D	8	15	19	22	24	11

 Table 60
 Experiment: Scenario Order

Source: Own representation.

In the experiment, the general CSR activities denoted by numbers I to VI in table 60 are replaced by the specific CSR measures shown in table 53. The alternative allocations of activities to numbers – which represent an additional randomization element – create different versions of the experiment. As shown in table 61, the experiment is implemented in three versions, each of which maps a different CSR measure – distinguished by the stakeholder whose claims are addressed – to the general CSR activity I to VI.

V	Stakeho	Stakeholder claims in scope of general CSR activity							
Version	Ι	II	III	IV	V	VI			
1	Sha	Cus	Emp	Eth	Soc	Env			
2	Cus	Emp	Sha	Soc	Env	Eth			
3	Eth	Soc	Env	Sha	Cus	Emp			

Table 61	Experiment:	CSR	Activities	by	Experiment	Version
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Source: Own representation.

Notes: "Sha"/"Cus"/"Emp"/"Eth"/"Soc"/"Env" denote CSR activities which address the claims of shareholders/customers/employees/ethics/society/environment as defined in table 53.

As a final step to address order effects in the experiment, the position of the socially responsible bank alternates between banks A, B, and C in alphabetical order: This implies that, in the first scenario, bank A is socially responsible while bank B pursues a certain CSR activity in scenario 2 and bank C in scenario 3. This logic is repeated for the entire experiment. The two remaining banks are defined as non-socially responsible bank with the letter which comes first in the alphabet is financially superior while the same bank is defined as financially inferior in all scenarios with an odd number.

4.3.3 Data Collection and Preparation

The experiment was conducted among undergraduate and graduate social sciences students in the DICE Lab for Experimental Economics at Heinrich Heine University in Düsseldorf, Germany, over the course of January 2016. To run the experiment's program, z-Tree (Fischbacher, 2007) was used. The experimental procedures were identical for all sessions: First, after showing up, the participants were randomly assigned to a workplace by drawing a number and were then granted ten minutes to read the experimental instructions, documented in appendix A.4. Second, the experimenter answered possible questions before launching the program. Third, the participants completed three control questions⁴⁵ within the program to proceed to the actual scenarios. Fourth, having finished the experimental section, the participants filled in a questionnaire to gather data about the control variables introduced in section 4.3.2.2. Fifth, the participants received their payouts. For showing up and completing the questionnaire, all participants were paid EUR 7.5. Depending on their investment decisions in the experiment, additional variable payouts between EUR 2.7 and EUR 6.3 could be achieved. To determine this variable component, every participant's experimental budget was divided by 1,000 and then paid out at the end of the experiment. These amounts were calibrated to match the usual range of payouts at the DICE Lab and to thereby ensure an effective incentivization.

⁴⁵These control questions concerned the number of risk/returns profiles in the experiment, the differences between these profiles, and the absence of diversification effects.

In seven experimental sessions, responses from 102 participants were gathered. This initial data set was then cleared by running completeness checks on the experiment's questionnaire section to eliminate the records of those participants that did not enter, for instance, their age or gender or indicated that they did not have at least one bank relationship or a current account. The rationale is that incomplete entries may be driven by a participant's lack of interest in the experiment or their insufficient familiarity with even basic financial products, so that the experimental decisions of these participants might be internally or externally invalid. These completeness checks led to the exclusion of the records of two participants, resulting in an adjusted sample size of 100. As the similar study of Consolandi, Innocenti, and Vercelli (2009) draws on a sample half the size, the number of observations for the experiment can be considered appropriate.

The descriptive statistics of the experiment's final sample are reported in tables 62 and 63. As table 62 illustrates, the average participant of the experiment is in their mid-twenties, has a relationship with between one and two banks, and uses two financial products. There are two takeaways from these findings: First, as already discussed in section 3.3.3, this conservative number of bank relationships is typical for German retail banking customers. Second, the two financial structural parameters are in the same range for the CSR survey sample – shown in table 11 – and the experiment's participants, which suggests that both participant groups are broadly comparable.

Variable	Mean	Median	St. Dev.
Age	25.3	24	6.7
No. of bank relationships	1.3	1	0.6
No. of financial products	2	2	1

Table 62 Experiment: Descriptive Statistics (1/2)

Source: Own representation.

Note: N = 100. Values rounded where appropriate.

Table 63 provides additional evidence in line with this conclusion: For instance, the comparison to table 12 shows that the share of male and female participants is almost equally balanced in the experiment's as well as in the CSR survey's sample. Moreover, in both cases, most participants have an account with a savings bank (about 60% of the sample) or a commercial bank (about 35%) while direct banks and cooperative banks are represented in lower and almost equal proportions (about 20%). Finally, in addition to a current account, nearly sixty percent of both the CSR survey's and the experiment's participants hold money in a savings account. About one fifth of both samples' participants own securities. This corroborates the assumption that the level of financial experience is broadly comparable across the two samples. In addition, table 63 illustrates two particular features of the experimental sample: First, the observation that its test persons are, on average, slightly older than the CSR survey participants can be explained by a relatively higher share of graduate students (nearly 40% in the experiment and 15% in the CSR survey). Second, the experimental sample is more diverse in terms of academic backgrounds with about 45% of all participants pursuing non-business- or economics-related degrees.⁴⁶. Still, this distribution implies that more than half of the experiment's participants are students of business administration, economics, or business chemistry. Therefore, at least basic knowledge in business topics can be assumed for the majority of the sample.

Variable	Category	Percent of sample
Caradan	Male	51
Gender	Female	49
Cturder and second	Undergraduate	63
Study progress	Graduate	37
	Business	28
Course of studies	Economics	24
Course of studies	Business chemistry	2
	Other course of studies	46
	Savings bank	54
Pault relationships	Commercial bank	34
Bank relationships	Direct bank	23
	Cooperative bank	21
	Current account	100
	Savings account	54
	Securities	23
Financial products	Building savings contract	12
	Private insurance	9
	Loan	5

Table 63Experiment: Descriptive Statistics (2/2)

Source: Own representation. Note: N = 100.

⁴⁶The sub-group "other course of studies" encompasses students of law (45% of the sub-group), social and political science (22%), history (13%), mathematics, engineering, and computer science (11%), and psychology (9%).

The internal consistency and reliability of the five control variable scales was evaluated in terms of Cronbach's alpha. Where appropriate, confirmatory factor analyses were run and individual items were eliminated to achieve alpha values above the critical threshold of 0.7 (George and Mallery, 2003). Table 64 shows using all items defined in section 4.3.2.2 yields good alpha values for the bank profit maximization (*"Bank Prof Max"*), perceived consumer effectiveness (*"PCE"*), and attitude towards banks (*"Att Banks"*) scales. Within the investor profit maximization scale (*"Inv Prof Max"*), one item was eliminated while the final self-interest motivation scale for banks (*"Self-Int Mot"*) consists of three items. For the analyses, the answers to the items shown in table 64 were coded to compute participant-level means within each scale.

 Table 64
 Experiment: Control Variables Scales

Scale	Items	Alpha
Inv Prof	As an investor, I want to make profits	0.82
Max	As an investor, I want to achieve the highest possible returns	
Bank Prof Max	I think banks should make profits	0.76
	I think banks should achieve the highest possible returns	
	I think banks should make profits even at the expense of others	
PCE	It is useless for the individual investor to do anything about	
	certain interest groups and societal topics	
	Every person has power to influence certain problems by taking	
	appropriate investment decisions	0.76
	It does not matter how I as an investor invest my money since	
	one person acting alone cannot make a difference	
	Every investor can have a positive effect on certain interest	
	groups and societal topics via their investments	
Att Banks	Unpleasant / Pleasant	0.86
	Disagreeable / Agreeable	
	Worthless / Valuable	
	Bad / Good	
	Foolish / Wise	
	Unfavorable / Favorable	
	Dislike a lot / Like a lot	
	Useless / Useful	
Self-Int Mot	The bank has self-serving motives	0.70
	The bank has unselfish motives	
	The bank is a trustworthy source of information	

Source: Own representation.

Note: Values rounded. All control variables in the experiment are summarized in appendix A.5.

4.3.4 Hypothesis Testing

The following section draws upon experimental data to test the hypotheses derived in section 4.3.1. In doing so, the latter section's structure is replicated with sections 4.3.4.1, 4.3.4.2, and 4.3.4.3 analyzing CSR and investor rationality, CSR and bounded investor rationality, and the role of the CSR survey results for investment decisions in the experiment.⁴⁷ This section finds evidence that investors both maximize their financial utility and show behaviors which are in line with theories of bounded rationality.

4.3.4.1 CSR and Investor Rationality

The first hypothesis H_1 posits that investors allocate higher amounts to banks with a better financial performance, which describes the fundamental investor rationality principle that underlies equations 4.10 to 4.12. If this is true, the average relative amounts invested should decrease from banks with a "high" risk/returns profile to those institutions with a "medium" or a "basic" profile. Figure 29 provides a first indication in line with this prediction: It shows that the mean and the median relative amounts allocated to a bank, measured as percentages of the available budget by scenario, decrease in line with the attractiveness of its risk/returns profile. The average ratio of investments into institutions with a "high" risk/returns profile is more than 1.5 times higher than the share of funds allocated to banks with a "medium" risk/returns profile, which in turn exceed the relative investments into banks with a "basic" risk/returns profile by a factor of 4 to 5.

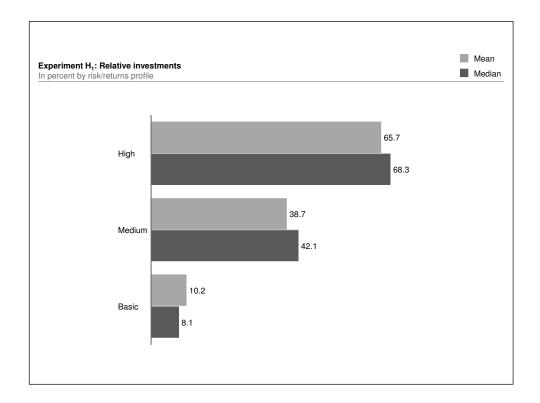
Risk/returns profile	Mean	Median	JB	p1	p2
High	65.6833	68.3333	0.0121	0.0000	0.0000
	(26.0467)	(19.1667)			
Medium	38.7292	42.0833	0.0156	0.0000	0.0000
Medium	(12.1383)	(7.9167)			
Basic	10.1806	8.0556	0.0045	0.0000	0.0000
	(9.0955)	(5.5556)			

Source: Own representation.

Notes: N = 100 participants/1,200/2,400/3,600 observations. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided Wilcoxon-Mann-Whitney test (non-parametric K-sample test on the equality of medians) that the relative investments are equal across consecutive risk/returns profiles.

⁴⁷To improve the legibility of the text, banks which address the claims of a certain stakeholder – such as a bank's customers – are occasionally denoted by this stakeholder in the following. In the above example, the credit institution is therefore referred to as a "customer bank".





Source: Own representation. Note: N = 100 participants/1,200/2,400/3,600 observations. Values rounded.

Two analyses provide additional evidence in line with hypothesis H_1 : The first one breaks down the central tendencies of figure 29 as shown in table 65. Due to the results of a Jarque-Bera test, which rejects the null hypothesis of a normal distribution on high significance levels for all three profiles, a two-sided Wilcoxon-Mann-Whitney test and a non-parametric K-sample test on the equality of medians are conducted. The results of both tests in columns "p1" and "p2" suggest that the numerical differences between relative investments into banks with a "high" and a "medium" risk/returns profile on the one hand and banks with a "medium" and a "basic" profile on the other hand are statistically significant at the 0.1% level.

The second analysis investigates whether and to which extent a bank's risk/returns profile impacts investment decisions by fitting an ordinary least squares (OLS) model to the experimental data with the relative investments of the participants (Rel_{Inv}), measured in percent, as the dependent variable. The results of this exercise are reported in table 66.

Dependent:	Model specification	
Rel_{Inv}	Restricted	Extended
	10.1806***	-5.6289**
RRP_{Bas}	(0.3210)	(2.3531)
RRP_{Med}	38.7292***	22.9197***
nnr _{Med}	(0.8014)	(2.3168)
DDD	65.6833***	49.8739***
RRP_{Hig}	(1.0232)	(2.5163)
Gender	—	-2.8501***
Genuer		(0.7068)
$ProfMax_{Inv}$	—	3.0817***
I TOJ Max _{Inv}		(0.4797)
Sum_{Banks}	—	2.0623***
SumBanks		(0.6409)
F	2487.49	1273.81
Adj. \mathbb{R}^2	0.5831	0.5862

Table 66Experiment H_1 : Relative Investments Regressions

Notes: N = 100 participants/7,200 observations. Values rounded where appropriate. Robust standard errors in parentheses. */**/*** indicate significance at the 5%/1%/0.1% level.

The first model, shown in column "restricted", limits the range of predictors to three mutually exclusive variables (RRP_{Bas} , RRP_{Med} , and RRP_{Hig}), which each take a value of 1 for banks with the respective risk/returns profile and 0 otherwise. Specifying the model without a constant implies that the coefficients on these three variables, which are numerically identical to the means reported in table 65, can be interpreted as relative mean investments into a bank with the respective risk/returns profile. All coefficients are individually statistically significant at the 0.1% level and jointly capable of explaining a significant proportion of the variance in relative investments: This is indicated by a high F-statistic and adjusted \mathbb{R}^2 , though the model's no-intercept specification implies that the latter indicator needs to interpreted with caution (Kvålseth, 1985).

Column "extended" reports the results of the second model, which additionally controls for the potential impact of sociodemographic and attitudinal variables on investment decisions. This specification is derived by running a forward-stepwise OLS regression of Rel_{Inv} on the risk/returns indicators of the restricted configuration as well as those control variables which are unrelated to CSR and exceed a statistical significance threshold of 10%.

The extended estimation yields three major takeaways all of which support the notion that a bank's risk/returns profile is a key predictor for investment decisions: First, the coefficients on the three risk/returns profile indicators are highly significant and both their rank order and the relative differences in magnitude between them remain broadly unaffected by the extended model specification. Second, the model's fit – measured in terms of adjusted \mathbb{R}^2 – improves only slightly in comparison to the restricted model. This implies that the three indicators alone already explain a major proportion of the variance in relative investments. Third, only three more predictors are added to the model, each with a relatively low weight: As the coefficient on *Gender* indicates, female participants invest on average about 3 percentage points less into banks in general than male participants. At the same time, every additional bank relationship that a participant possesses - captured by Sum_{Banks} - corresponds to an increase in relative investments by about 2 percentage points. Finally, a one-category increase in a participant's investor profit maximization attitude also increases their investments by about 3 percentage points, as the coefficient on $ProfMax_{Inv}$ shows. When interpreting the risk/returns profile indicators quantitatively, the average values of these three control variables also need to be considered: For instance, the mean of $ProfMax_{Inv}$ equals 4.7 and the values for Sum_{Banks} range between 1 and 3. This implies that, on average, these effects overcompensate the negative coefficient on RRP_{Bas} .

All three analyses reject the null hypothesis that the financial performance of a bank does not play a role for its investors. Instead, there is evidence that investments are higher for banks with a more favorable risk/returns profile, as described by hypothesis H_1 .

Hypothesis H_2 , which also assumes investor rationality, claims that investors invest the same amounts into socially responsible banks which have the same risk/returns profiles as non-socially responsible institutions. The formal foundation for this hypothesis is equation 4.10. Based on figure 30, this seems unlikely: For every scenario configuration, shown in the first column, it illustrates that the average relative investments are lower for non-CSR banks than for their socially responsible peers with identical risk/returns profiles.⁴⁸

Testing these differences in investments for statistical significance corroborates this finding: As shown under column "p1" in table 67, the null hypothesis of a Wilcoxon-Mann-Whitney test that CSR and non-CSR banks are from populations with the same distribution can be rejected at the 0.1% significance level. Similarly, the assumption that relative investments are equal for these two types of banks can be refuted according to a non-parametric K-sample median test, the results of which are reported under column "p2". This combined evidence is at odds with the predictions of hypothesis H₂.

⁴⁸In scenarios A, C, and D, this is a "basic" risk/returns profile and a "medium" risk/returns profile in scenario B.

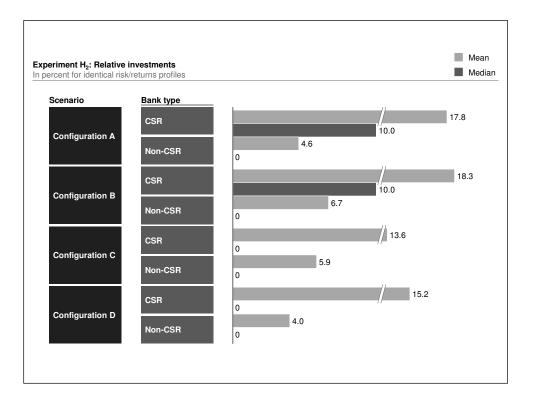
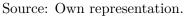


Figure 30 Experiment H_2 : Relative Investments



Note: $\mathcal{N}=100~\mathrm{participants}/600$ observations by scenario configuration and bank type. Values rounded.

This result strongly suggests that investors in the experiment consistently and systematically differentiate between socially responsible and non-socially responsible banks with identical risk/returns profiles. Hypothesis H_2 , which conjectures that this should not be the case, can therefore be rejected at high statistical confidence levels.

Scenario	Bank type	Mean	Median	JB	p1	p2
	enario Bank type CSR	17.8	10	0.0000		
А	CSR	(24.5798)	(10)		- 0.0000	0.0000
A	Non CSD	4.6	0	0.0000	- 0.0000	0.0000
	Non-OSK	(11.0624)	(0)			
В	CCD	18.3333	10	0.0000		
	USh	(23.9132)	(10)		0.0000	0.0000
	Non CCD	6.6667	0	0.0000	- 0.0000	
	Non-OSK	(14.4651)	(0)			
	CCD	13.6333	0	0.0000	- 0.0000	0.0000
С	USh	(21.2419)	(0)			
U	Non CSD	5.85	0	0.0000		
	Non-OSK	(15.0329)	(0)			
D	CSD	15.2333	0	0.0000		
	USIL	(23.3063)	(0)		- 0.0000	0.0000
D	Non-CSR	3.9667	0	0.0000	- 0.0000	
	non-Ost	(9.8367)	(0)			

Table 67Experiment H_2 : Relative Investments

Notes: $N = 100 \text{ participants}/600 \text{ observations by scenario configuration and bank type. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided Wilcoxon-Mann-Whitney test (non-parametric K-sample test on the equality of medians) that the relative investments are equal across bank types.$

The final investor rationality hypothesis H_3 conjectures that investors invest less into socially responsible banks if altruistic motives behind their CSR activities result in inferior risk/returns profiles relative to non-socially responsible banks. This hypothesis builds on equation 4.12. The test of H_3 follows the same structure as the above analysis of H_2 , but with a different benchmark: Figure 31 reproduces the central tendencies of relative investments into socially responsible banks from figure 30 and compares them to the mean and median proportions allocated to non-socially responsible banks with a superior risk/returns profile.⁴⁹

⁴⁹In scenarios A and D, this implies that a socially responsible bank with a "basic" risk/returns profile is compared to a non-socially responsible bank with a "medium" risk/returns profile. In scenarios B and C, a non-socially responsible bank with a "high" risk/returns profile is compared to a socially responsible bank with a "medium" (scenario B) or a "basic" (scenario C) risk returns/profile.

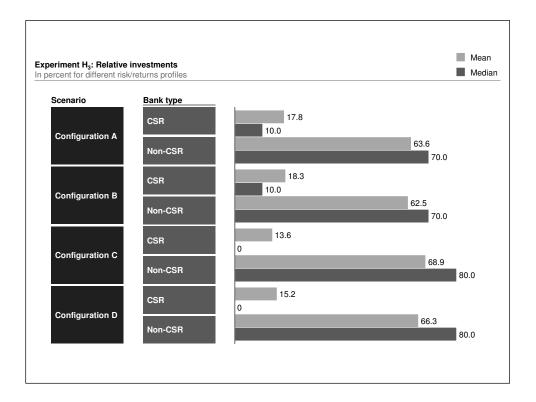
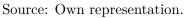


Figure 31 Experiment H₃: Relative Investments



Notes: N = 100 participants/600 observations by scenario configuration and bank type. Values rounded.

Figure 31 gives a strong indication which corroborates hypothesis H_3 : It shows that, in all scenario configurations, the mean and median relative investments into non-socially responsible banks with relatively favorable risk/returns profiles exceed the average percentages allocated to socially responsible – and financially inferior – banks.

Table 68 suggests that this result is statistically significant: As the relative investments into all sub-samples non-normally distributed, a Wilcoxon-Mann-Whitney test and a non-parametric K-sample test are conducted. The p-values of both non-parametric tests – reported under columns "p1" and "p2" – illustrate that identical central tendencies for socially responsible and non-socially responsible banks with superior risk/returns profiles within scenario configurations can be rejected at confidence levels of 99.9%. This intermediate result is in line with the predictions of hypothesis H₃.

Scenario	Bank type	Mean	Median	JB	p1	p2
	CSR	17.8	10	0.0000		
А	Con	(24.5798)	(10)		- 0.0000	0.0000
Λ	Non-CSR	63.6333	70	0.0000	- 0.0000	0.0000
	Non-OSK	(35.9484)	(30)			
В	CSR	18.3333	10	0.0000		
	CSR	(23.9132)	(10)		- 0.0000	0.0000
	Non-CSR	62.4833	70	0.0000	- 0.0000	
	Non-Con	(36.0486)	(30)			
	CSR	13.6333	0	0.0000		0.0000
С	Con	(21.2419)	(0)		- 0.0000	
U	Non-CSR	68.8833	80	0.0000	0.0000	
	Non-Con	(34.5772)	(20)			
	CSR	15.2333	0	0.0000		
D	USIL	(23.3063)	(0)		- 0.0000	0.0000
D	Non-CSR	66.2833	80	0.0000	0.0000	
	11011-0.011	(35.6718)	(20)			

Table 68Experiment H₃: Relative Investments

Notes: $N = 100 \text{ participants}/600 \text{ observations by scenario configuration and bank type. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided Wilcoxon-Mann-Whitney test (non-parametric K-sample test on the equality of medians) that the relative investments are equal across bank types.$

Both analyses allow to reject the null hypothesis that identical relative amounts are allocated to socially responsible, financially inferior banks and non-socially responsible banks with a more favorable risk/returns profile. Instead, there is reason to assume that banks which pursue CSR activities for altruistic motives receive lower amounts of capital from their investors, as predicted by hypothesis H_3 .

Taken together, the tests of hypotheses H_1 to H_3 imply a significant potential for the following analyses of CSR in banking: On the one hand, there are strong indications that the risk/returns profile of a bank plays an important role for the investment decisions of the experiment's participants, as described by hypothesis H_1 . In addition, investors seem to shun socially responsible banks if these institutions are associated with an inferior financial performance; a result which is line both with the predictions of hypothesis H_3 and principles of rational portfolio selection according to equation 4.12. On the other hand, the data does not support hypothesis H_2 and suggests instead that CSR in banking matters per se as investors distinguish between banks that differ only in terms of their social – but not their financial – performance. This outcome illustrates that the decision problem of interest may encourage behaviors which are still systematic, but cannot be adequately captured by assumptions of investor rationality.

4.3.4.2 CSR and Bounded Investor Rationality

This section investigates whether and to which extent the combination of bounded rationality and bank's CSR activities influences the decisions of an experimental investor. In doing so, the hypothesis tests follow the structure of section 4.3.1.2 to test three behavioral phenomena, starting with prospect theory.

The first prospect theory hypothesis H_4 claims that higher returns of a non-socially responsible bank induce investors to increase their allocations to non-socially responsible banks which are associated with less favorable risk/returns profiles. A test of this hypothesis draws upon scenarios A and C as the only difference between these configurations is the risk returns/profile of the financially superior non-socially responsible bank, which is "medium" in scenario A and "high" in scenario C. As a first indication, figure 32 illustrates the average relative amounts invested into the four types of banks in scope.

The bar chart illustrates that, in absolute terms, average investments into a socially responsible bank are lower when a non-CSR bank offers a more favorable risk/returns profile. At the same time, the share of funds allocated to the non-socially responsible bank increases with the attractiveness of its risk/returns profile. In combination, this evidence runs contrary to the returns targeting behavior predicted by hypothesis H_4 .

Taking this analysis one step further, the average relative investments into these types of banks are broken down and tested for statistical equality as shown in table 69. Therefore, the variable *Delta* is used, which measures the absolute difference between relative investments into the socially responsible and the non-socially responsible – but financially inferior – bank in the respective scenario configuration in percent. According to hypothesis H₄, *Delta* should be significantly greater in absolute terms in scenario A than in scenario C. However, while the p-values of both non-parametric tests – reported under columns "p1" and "p2" – imply that the null hypothesis of equal values for *Delta* across scenario configurations can be rejected, higher absolute values for *Delta* in configuration C are diametrically opposed to the predictions of hypothesis H₄.

This picture slightly changes when the sample is restricted to those participants whose allocation is directionally "correct" in a way that their investments into the financially inferior socially responsible bank are lower than for the non-socially responsible bank

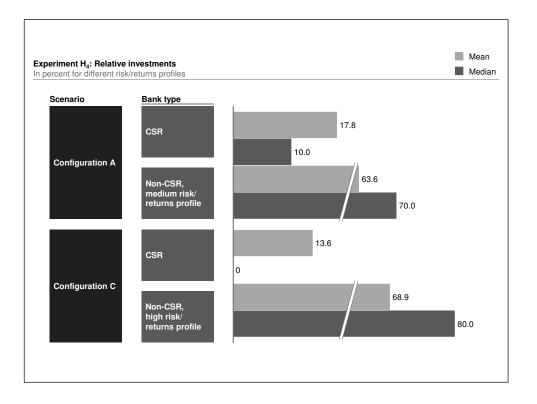


Figure 32 Experiment H₄: Relative Investments

Note: $\mathcal{N}=100~\mathrm{participants}/600$ observations by scenario configuration and bank type. Values rounded.

with a more favorable risk returns profile. Rows A_C and C_C in table 69 summarize the outcomes of this analysis. It illustrates that the exclusion of participants with a strong exante preference for CSR – captured by higher relative investments into socially responsible banks in spite of their financial inferiority – yields two main findings: First, the absolute differences between the relative amounts allocated to CSR and non-CSR banks increase in absolute terms and amount to more than 70 percentage points in both scenarios. Second, both non-parametric tests fail to reject the null hypothesis that this difference is equal in scenario configurations A_C and C_C at confidence levels of 95% or higher. While this result is still not in line with the predictions of the first prospect theory hypothesis – which would imply a smaller absolute value for *Delta* in scenario C – it qualifies the clear rejection of H₄ to some extent.

Scenario	Bank type	Mean	Median	JB	p1	p2
•	Delta	-45.8667	-60	0.0000		
A	Dena	(55.0997)	(40)		-0.0059	0.009
C De	Delta	-55.05	-70	0.0000	- 0.0059	0.009
U	Dena	(50.8426)	(30)			
٨	Dolto	-71.2889	-90	0.0000		
A_C	Delta	(33.0570)	(10)		0 1610	0.060
C_C	Dolto	-74.6074	-90	0.0000	- 0.1610	0.060
	Delta	(31.7999)	(10)			

Notes: N = 100 participants/600/600 and 450/484 observations. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided Wilcoxon-Mann-Whitney test (non-parametric K-sample test on the equality of medians) that the differences between investments into a CSR bank and the respective financially superior non-CSR bank are equal across scenarios.

As a third step to test prospect theory hypothesis H_4 , four regression models are fitted to the sample of socially responsible banks as well as their respective non-socially responsible and financially superior peers. Table 70 reports the outcomes of these estimates for two different configurations: The first one draws on all relevant observations of scenarios A and C, shown under columns "A" and "C". In the second configuration, documented under columns "A_C" and "C_C", the observations for all financially superior non-CSR banks as well as for socially responsible banks which receive lower investments are considered.

 Table 70 Experiment H₄: Relative Investments Regressions

Dependent:	Scenario confi	guration			
Rel_{Inv}	А	С	A_C	C_C	
Constant	35.1694***	48.4129***	25.9046***	37.8440***	
Constant	35.1694*** 48.41 (7.0318) (5.92 -45.8333*** -55.2	(5.9274)	(7.7065)	(6.5070)	
CSR	-45.8333***	-55.25***	-56.8520***	-63.0534***	
	(1.7481)	(1.6357)	(1.5477)	(1.4521)	
р	0.	.0001	0.0033		
Grad	4.6166*		4.8712*	4.3279*	
Graa	(2.0208)		(1.9021)	(1.7884)	
Con dour	-5.2349**	-3.5316*	-5.3495**	-4.1826*	
Gender	(1.8527)	(1.7120)	(1.8085)	(1.6690)	

DrofMan	5.4358***	4.4919***	6.8182***	5.0418***
F TOJ Max _{Inv}	(1.4269)	(1.2239)	(1.5998)	(1.3107)
Davala	4.5389*	5.3938**	9.3730***	7.9065***
$Bank_{Dir}$ $Bank_{Sav}$ $Prod_{Loa}$ $Prod_{Sec}$ $Prod_{Ins}$ $Prod_{Sav}$ $Prod_{Bui}$	(2.1476)	(1.7214)	(2.0222)	(1.7779)
$Bank_{Dir}$ $Bank_{Sav}$ $Prod_{Loa}$ $Prod_{Sec}$ $Prod_{Ins}$ $Prod_{Sav}$	3.2563		6.2679***	5.7680***
	(1.8369)		(1.7737)	(1.6814)
Prod _{Loa}	-9.9426**	-13.3765***	-12.8537**	-11.5859**
	(3.8279)	(3.2197)	(4.0614)	(3.8444)
$Prod_{Sec}$ $Prod_{Ins}$	3.1335		5.2503**	
	(2.0691)		(1.8641)	
$\begin{array}{c} Prof Max_{Inv} & (1.4269) \\ \hline \\ Bank_{Dir} & 4.5389^* \\ (2.1476) \\ \hline \\ Bank_{Sav} & (1.8369) \\ \hline \\ Prod_{Loa} & -9.9426^{**} \\ (3.8279) \\ \hline \\ Prod_{Sec} & (3.8279) \\ \hline \\ Prod_{Sec} & (2.0691) \\ \hline \\ Prod_{Ins} & - \\ \hline \\ Prod_{Sav} & - \\ \hline \\ Prod_{Sav} & - \\ \hline \\ Prod_{Bui} & (2.6769) \\ \hline \\ F & 85.34 \\ \end{array}$			-5.9204*	
		(2.9749)		
Durad				5.0552**
$Prod_{Sec}$ $Prod_{Ins}$ $Prod_{Sav}$ $Prod_{Bui}$				(1.7307)
Drad	6.2234*	4.3086	7.7483**	5.8934*
PT0a _{Bui}	(2.6769)	(2.3918)	(2.5284)	(2.4761)
F	85.34	203.92	156.55	239.52
Adj. \mathbb{R}^2	0.3777	0.4941	0.5275	0.5985

Notes: N = 100 participants/1,200/1,200/1,050/1,084 observations. Values rounded where appropriate. Robust standard errors in parentheses. */**/*** indicate significance at the 5%/1%/0.1% level. "p" is the significance level of a generalized Hausman test that the regression coefficient on CSR is equal across scenarios A and C or A_C and C_C.

Two insights can be derived from table 70: When the risk/returns profile of a non-socially responsible bank is more favorable, the participants invest on average lower amounts into a socially responsible bank with an inferior risk/returns profile. This is shown by the p-value of a generalized Hausman test, which rejects the null hypothesis of equal coefficients on CSR across scenarios A and C at the 0.1% significance level. While the coefficients are more similar in absolute magnitude across scenarios A_C and C_C , the assumption that the coefficients on CSR are equal can be refuted with 99% statistical confidence.

Where permitted by a sufficient number of underlying observations, a set of additional inferences can be drawn from the estimation results in table 70: First, a more favorable attitude towards investor profit maximization triggers higher overall investments. As the coefficient on $Prof Max_{Inv}$ demonstrates, a one-category improvement corresponds to increases in relative investments of 4 to 5 percentage points. Second, in line with previous findings, *Gender* has an overall negative impact on relative investments: Female participants in the experiment allocated on average between 3.5 and 5.5 percentage points less to

both types of banks than male participants. Third, the coefficient on Grad suggests that, in three out of four configurations, graduate students allocate about 4 percentage points more to both socially responsible and non-socially responsible banks than undergraduate students. All four estimations provide a satisfactory fit to the data, in particular models A_C , and C_C , which draw exclusively on directionally correct investments for CSR banks.

These analyses mostly suggest that relative investments into socially responsible banks with inferior risk/returns profiles are significantly lower when the financial attractiveness of the non-socially responsible bank is higher. This finding is contrary to the predictions of the first prospect theory hypothesis, which conjectures that allocations to CSR banks are higher when financially highly attractive investment alternatives allow to meet a return on investments (ROI) target on portfolio level. H_4 is therefore rejected. In principle, this may happen when investors target even higher returns than implicitly assumed in this analysis: For instance, if only the yield of a "high" risk/returns profile is sufficient to meet an investor's financial aspirations, return targeting is unlikely to be observed. Yet, the previous section illustrated that the risk/returns figures are derived from time series data, which is why the room for significant increases in returns while ensuring an externally valid approach is limited. This aspect is discussed at greater detail in section 4.3.5.2.

The second prospect theory hypothesis conjectures that CSR activities reinforce the disposition effect so that the same deteriorations in previously identical risk/returns profiles trigger lower divestments for socially responsible than for non-socially responsible banks. This analysis compares the relative investments into the CSR and the non-CSR bank with the same risk/returns profiles across scenarios B and D: In the first configuration, the risk/returns profiles are "medium" for both institutions. In scenario D, their risk/returns profiles deteriorate by one notch to a "basic" profile. To give a first indication whether the investment patterns of the experiment's participants are in line with this prediction, figure 33 summarizes the average investments into the four types of banks in scope.

In principle, the pattern illustrated in figure 33 corroborates H_5 : As risk/returns profiles deteriorate from scenario B to scenario D, the relative investments decrease for both CSR and non-CSR banks. Mean investments fall from 18% to 15% of available funds for socially responsible and from about 7% to 4% for non-socially responsible institutions. In relative terms, these changes are bigger for non-CSR banks which see initial investments reduced by about 40% while the mean proportion of funds allocated to CSR banks is reduced by only about 17%. This suggests that the unwillingness to sell losing stocks is even stronger when the bank associated with this asset is socially responsible and is in line with the predictions of a CSR-reinforced disposition effect.

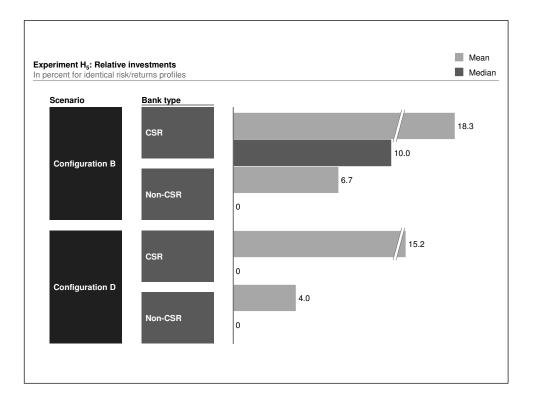
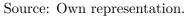


Figure 33 Experiment H₅: Relative Investments



Notes: N = 100 participants/600 observations by scenario configuration and bank type. Values rounded.

At the same time, figure 33 suggests that two more aspects should be considered: First, it is possible that a comprehensive view across all observations is inaccurate as cases in which a participant did not invest into a bank in the baseline scenario B are considered as well. This is illustrated by a median investment of 0% into non-CSR banks scenario configuration B. Second, the initial relative amounts invested into CSR and non-CSR banks with the same risk/returns profiles in scenario B differ significantly. Therefore, percentage changes from these initial proportions rather than absolute changes in investments should be analyzed. Both aspects are taken into account in the following analyses.

First, figure 34 documents how many times the differences in investments between scenarios B and D are greater than, smaller than, or equal to zero. For both socially responsible and non-socially responsible banks, the results are broken down into two samples for all observations and those cases with positive baseline investments in scenario B.

Figure 34 illustrates that the results depend on whether or not a positive investment in baseline scenario B is assumed. Considering all observations yields ambiguous results as investments decrease from scenario B to scenario D in 192 cases for socially responsible

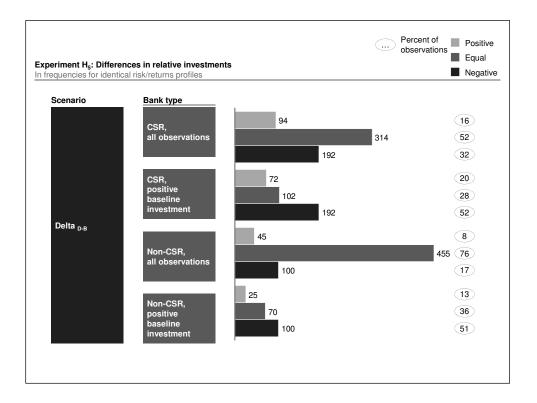


Figure 34 Experiment H₅: Differences in Relative Investments

Source: Own representation. Notes: N = 100 participants/600/366/600/195 observations. Values rounded.

banks decrease and in 100 cases for non-socially responsible banks. This may suggest that CSR mitigates rather than reinforces disposition effects, which is at odds with the predictions of H_5 . Yet, in about 16% out of all observations, the relative amounts allocated to CSR banks even increase after a deterioration in risk/returns while this is true in only 8% of the situations for non-CSR banks. It therefore seems possible that CSR activities in banking can trigger "inverse disposition effects" for some participants.

Restricting the sample to observations with positive baseline investments changes this picture: Both for socially responsible and non-socially responsible banks, relative investments are reduced in about half of the relevant cases. At the same time, the proportion of observations in which relative investments increase from scenario D to B amounts to 20% for CSR banks and is considerably higher than for non-CSR banks, for which this behavior can be observed in only 13% of all observations. Three conclusions can be derived from this outcome: First, the positive baseline approach better aligns the issue to be investigated and the characteristics of the sample since decreases in investments can only be identified when initial investments are greater than zero in an experiment which does not allow for short selling. Second, the results suggest that the estimates constant investments across scenarios D and B on the basis of all observations in figure 34 are up-

wardly biased. Third, there are some indications that disposition effects may trigger even higher relative investments into CSR banks should their risk/returns profiles deteriorate.

Second, the differences in relative investments between scenario configurations D and B are analyzed in terms of percentage differences rather than changes in percentage points to take the impact of different baseline investments into account.⁵⁰ This approach simultaneously ensures that only cases with positive baseline investments, which can actually be decreased in response to deteriorating risk/returns profiles, are considered. Table 71 applies this logic for CSR and non-CSR banks.

Scenario	Bank type	Mean	Median	JB	p1	p2
$Delta_{D-B}$	GOD	21.4913	-30.4978	0.0000		
	CSR	(277.8238)	8) (43.2768)		-0.0075	0.007
	Non-CSR	-14.0094	-48.1420	0.0000	- 0.0075	0.007
	Non-Con	(152.6125)	5) (47.7017)			

Table 71 Experiment H_5 : Differences in Relative Investments (1/3)

Source: Own representation.

Notes: N = 100 participants/366/195 observations. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided Wilcoxon-Mann-Whitney test (non-parametric K-sample test on the equality of medians) that the differences in relative investments between scenarios D and B are equal across bank types.

In line with the predictions of H_5 , the results in table 71 support the notion of CSRreinforced disposition effects as the decreases in relative investments from scenario B to scenario D are stronger for non-CSR banks: First, for these banks, a deterioration in risk/returns profiles translates into a mean change in investments of about -14% while relative mean investments into CSR banks increase by more than 20%. Second, the median changes are negative for both types of banks, but smaller in absolute terms for the latter bank type, which is also in line with the disposition effect hypothesis. As the p-values of both tests show, this result is statistically significant at the 1% level.

Strictly speaking, higher mean investments in response to deteriorating risk/returns profiles, as in the case of CSR banks, are at odds with the disposition effect. To eliminate the risk that these outliers affect overall results, the data sample was adjusted symmetrically for excessively high or low values in two steps: As suggested in Tukey (1977), those percentage changes in investments between 1.5 and 3 times the interquartile range beyond

 $^{^{50}{\}rm This}$ implies that a decrease from 60% to 30% in relative investments is interpreted as a 50% decrease rather than a decrease by 30 percentage points.

the lower or upper quartile are considered mild outliers (MO). Deviations of more than 3 times the interquartile range downwards from the lower or upwards from the upper quartile constitute extreme outliers (EO). Table 72, which summarizes the percentage changes in investments after adjusting separately for these outliers, illustrates two insights: First, in line with the expected responses, investors reduce their mean and median investments into both types of banks when their financial attractiveness decreases. Second, the overall result that these divestments are more muted for CSR banks remains unaffected by the sample adjustments. The differences between changes in allocations to socially responsible and non-socially responsible institutions are statistically significant at the 5% significance level in the MO-adjusted sample and at the 1% significance level when eliminating only extreme outliers. This suggests that CSR-reinforced disposition effects are a robust finding and not driven by individual cases of extreme behavior.

Scenario	Bank type	Mean	Median	JB	p1	p2
Delta _{$D-B$} , MO- adjusted	CSR	-35.7398	-37.2313	0.0000		
	Con	(53.6302)	(37.0885)		0.0133 0.02	0.023
	Non-CSR	-46.8048	-55.1094	0.0001	- 0.0133	0.023
	Non-Con	(51.2729)	(44.2678)			
Delta _{$D-B$} , EO- adjusted	CSR	-23.9066	-33.3970	0.0000		
	Con	(72.1151)	(38.7244)		-0.0043	0.004
	Non-CSR	-41.0910	-53.0523	0.0000	- 0.0045	0.004
	Non-OSK	(152.6125)) (44.1253)			

Table 72	Experiment H ₅ :	Differences in	Relative	Investments ((2/3))
	Exportation 119.	Differences in	1001001100	III VODUIIUIUD ((4)0	/

Source: Own representation.

Notes: N = 100 participants/330/181/349/186 observations. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality in distribution. "p1" ("p2") is the significance level of a two-sided Wilcoxon-Mann-Whitney test (non-parametric K-sample test on the equality of medians) that the differences in relative investments between scenarios D and B are equal across bank types.

In a final step, the analysis of disposition effects is implemented for those participants who decreased their investments into socially responsible and non-socially responsible banks from scenario D to scenario B. Table 73 summarizes the results of this exercise.

Scenario	Bank type	Mean	Median	JB	p1	p2
	CSR	-64.9515	-65.681			
$Delta_{D-B}$	CSR	(30.4972)	(34.319)		- 0.0019	0.059
$Denta_{D-B}$	Non-CSR	-76.4109	-92.8821	0.0036	- 0.0019	0.059
		(26.8823)	(7.1179)			

Table 73	Experiment I	H ₅ : Differences	in Relative	Investments	(3	/3)
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Notes: N = 100 participants/192/100 observations. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Shapiro-Wilk W test for normality. "p1" ("p2") is the significance level of a two-sided Wilcoxon-Mann-Whitney test (non-parametric K-sample test on the equality of medians) that the differences in relative investments between the scenarios D and B are equal across bank types.

Table 73 yields a clear result: It shows that both the median and the mean percentage decreases in relative investments from scenario B to scenario D are higher in absolute terms for non-CSR banks than for CSR banks when their previously identical risk/returns deteriorate by the same amount. Both a two-sided Wilcoxon-Mann-Whitney test and a non-parametric K-sample test reject the null hypothesis of equal decreases at significance levels of 1% and 10%, respectively. This outcome implies that CSR activities may reinforce disposition effects for those investors who respond to deteriorating risk/returns profiles as expected and reduce their investments.

All things considered, the analyses suggest that disposition effects may be reinforced by a bank's social performance in two ways: First, when considering those cases in which the participants decrease their investments in response to a deterioration in a bank's CFP and assessing these changes in relation to the initially invested amounts, the divestments are significantly stronger for non-CSR banks. Second, it may be that CSR activities even trigger inverse disposition effects as investors are more likely to increase their allocations to socially responsible rather than to non-socially responsible banks when the identical risk/return profiles of both types of banks deteriorate by the same amount. This combined evidence corroborates the disposition effect hypothesis H_5 .

The second behavioral phenomenon to be investigated for investors of socially responsible banks is mental accounting. As hypothesis H_6 conjectures, mental accounting may result in constant relative investments into socially responsible banks, irrespective of the specific stakeholders whose claims they address. The average relative investments by stakeholder, summarized in figure 35, provide preliminary evidence in line with this assumption: It shows that the mean relative investments into the six CSR banks all fall into a narrow range between approximately 14% and 17%, which in turn translates into a low dispersion around the mean relative proportion invested into CSR banks in general of about 16%.

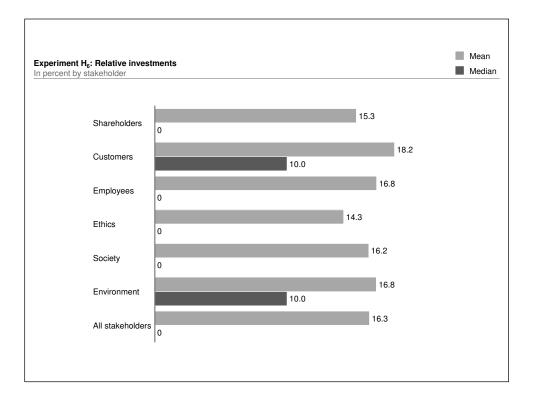


Figure 35 Experiment H_6 : Relative Investments

Source: Own representation. Notes: N = 100 participants/400 observations by stakeholder. Values rounded.

To determine the quality of this preliminary outcome, hypothesis H_6 is tested in a threestep approach: First, table 74 breaks down the average investments by stakeholder to establish whether these relative proportions are statistically equal to a CSR benchmark investment. For each stakeholder, this reference value is calculated as the relative amount invested into those CSR banks which address the claims of the respective other five stakeholders. As the results of two non-parametric tests – reported in columns "p1" and "p2" – suggest, statistical equality cannot be rejected on standard significance levels for four out of six analyses. Only the medians and distributions of the relative investments into banks which focus on the claims of either customers or ethics and morale differ from their individual CSR benchmarks.

Scenario	Bank type	Mean	Median	JB	p1	p2
	CSR	16.25	0	0.0000		_
	CSR	(23.3577)	(0)			
	Shareholders	15.275	0	0.0000	0.3736	0.454
	Shareholders	(22.6651)	(0)			
	Customers	18.15	10	0.0000	0.0213	0.006
	Customers	(24.2807)	(10)			
All Scenarios	Employees	16.8	0	0.0000	0.6662	0.812
	Employees	(23.7417)	(0)			
	Ethics	14.3	0	0.0000	0.0442	0.022
	Ethics	(21.7415)	(0)			
	Society	16.2	0	0.0000	0.5355	0.391
	Society	(24.1146)	(0)			
	Fnvironmont	16.775	10	0.0000	0.4311	0.371
	Environment	(23.4569)	(10)			

Table 74Experiment H_6 : Relative Investments (1/2)

Notes: N = 100 participants/400 observations by stakeholder. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided Wilcoxon-Mann-Whitney test (non-parametric K-sample test on the equality of medians) that the relative investments by stakeholder are equal to the average relative investments into the other five stakeholders.

This outcome has two implications: First, it shows that the experimental investment patterns can be explained in terms of mental accounting in two thirds of the cases. Second, the observation that this result is not fully unequivocal suggests that differences or similarities in investments may exist at the level of individual bank types. To investigate this aspect in greater detail, the second step in the test of hypothesis H_6 compares the relative investments pairwise between the different CSR banks as shown in table 75.

Stakeholder	Stakeholder				
Stakenolder	Cus	Emp	Eth	Soc	Env
Shareholders	0.0399	0.3929	0.4561	0.8738	0.2746
Shareholders	0.215	0.524	0.320	0.944	0.322
Customers		0.2377	0.0054	0.0618	0.3381
Customers		0.514	0.001	0.215	0.717
Employees			0.1116	0.5049	0.8243
Employees			0.103	0.479	0.671
Ethics				0.3627	0.0692
Ethics				0.356	0.040
Society					0.3675
Society					0.258

Table 75	Experiment H ₆ :	Relative Investments	(2/2)
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Notes: N = 100 participants/400 observations by stakeholder. Values rounded where appropriate. "Sha"/"Cus"/"Emp"/"Eth" /"Soc"/"Env" denote banks which address the claims of shareholders/customers/employees/ ethics/society/environment. The first (second) row reports the significance level of a two-sided Wilcoxon-Mann-Whitney test (non-parametric K-sample test on the equality of medians) that the relative investments are equal for the two stakeholders.

The test results in table 75 identify a clearer pattern in the data: In 13 out of 15 pairwise comparisons, the assumption that the relative investments into the two socially responsible banks in scope have the same distributions or medians cannot be rejected at standard significance levels ($\alpha \leq 5\%$). Only when comparing customer banks or environmental banks to ethical and moral institutions, both non-parametric tests find statistically significant differences between the proportions allocated to these banks. In addition, only one of the tests finds statistically significant differences between investments into banks which address the claims of either shareholders or customers. Therefore, the overall pattern is mostly in line with the predictions of hypothesis H₆.

The third step investigates whether relative allocations to socially responsible banks do not vary systematically across different CSR activities when controlling for potentially confounding factors by fitting a set of linear OLS regression models to the data. Each of the models regresses the relative investments Rel_{Inv} into CSR banks on a binary stakeholder indicator as well as a those attitudinal and sociodemographic control variables which exceed the significance level threshold of 10% of a forward-stepwise OLS regression. Table 76 documents the results of this exercise.

Dependent:	Stakeholder					
Rel_{Inv}	Sha	Cus	Emp	Eth	Soc	Env
Constant	32.7517***	32.1767***	32.4467***	32.9467***	32.5667***	32.4517***
	(2.0546)	(2.0413)	(2.0600)	(2.0512)	(2.0490)	(2.0373)
Stakeholder	-1.17	2.28	0.66	-2.34*	-0.06	0.63
Stakenoider	(1.2000)	(1.2792)	(1.2565)	(1.1598)	(1.2461)	(1.2409)
	-2.7778**	-2.7778**	-2.7778**	-2.7778**	-2.7778**	-2.7778**
RRP_B	(1.0748)	(1.0745)	(1.0742)	(1.0736)	(1.0744)	(1.0745)
Crad	-2.2052*	-2.2052*	-2.2052*	-2.2052*	-2.2052*	-2.2052*
Grad	(1.0661)	(1.0665)	(1.0661)	(1.0659)	(1.0664)	(1.0661)
DrofMan	-1.6566**	-1.6566**	-1.6566**	-1.6566**	-1.6566**	-1.6566**
$ProfMax_{Inv}$	(0.5443)	(0.5439)	(0.5446)	(0.5449)	(0.5448)	(0.5447)
Park	-9.199***	-9.199***	-9.199***	-9.199***	-9.199***	-9.199***
$Bank_{Dir}$	(1.1146)	(1.1161)	(1.1142)	(1.1166)	(1.1148)	(1.1151)
Park	-8.790***	-8.790***	-8.790***	-8.790***	-8.790***	-8.790***
$Bank_{Sav}$	(0.9707)	(0.9699)	(0.9709)	(0.9696)	(0.9707)	(0.9706)
Drad	-3.561***	-3.561***	-3.561***	-3.561***	-3.561***	-3.561***
$Prod_{Sav}$	(1.0251)	(1.0252)	(1.0253)	(1.0248)	(1.0255)	(1.0255)
Drad	4.6604**	4.6604**	4.6604**	4.6604**	4.6604**	4.6604**
$Prod_{Ins}$	(1.6799)	(1.6827)	(1.6792)	(1.6820)	(1.6803)	(1.6812)
F	32.10	32.49	32.00	32.51	32.01	32.04
Adj. \mathbb{R}^2	0.0721	0.0731	0.0719	0.0732	0.0718	0.0719

Table 76 Experiment H₆: Relative Investments Regressions (1/2)

Notes: N = 100 participants/2,400 observations. Values rounded where appropriate. Robust standard errors in parentheses. "Sha"/ "Cus"/"Emp"/"Eth"/"Soc"/"Env" denote banks which address the claims of shareholders/customers/employees/ethics/society/environment. */**/*** indicate significance at the 5%/1%/ 0.1% level.

According to hypothesis H_6 , there should be no strong, systematic differences in relative investments into different socially responsible banks. If this is true, the coefficient on *Stakeholder* in table 76, which captures how much the relative investments differ between a bank which addresses the claims of this specific stakeholder and those institutions which focus on the claims of the other five stakeholders, should either be zero or of a similar magnitude across the estimations. To some extent, the regression results support this assumption: The coefficients on *Stakeholder* are small and range, in absolute terms, from approximately 0 to 2. In addition, these coefficients are statistically insignificant at standard levels only with the exception of the estimate which juxtaposes investments into ethically-focused banks and into the remaining five CSR banks on average. At the same time, all models are characterized by rather low levels of fit. This suggests that comparisons across the six estimations rather than interpretations of absolute coefficient values are more appropriate.

Building on the outcomes of these estimations, the coefficients on *Stakeholder* are compared pairwise across the six regressions in table 76 to determine whether there are statistically significant variations in relative investments into CSR banks which address different stakeholders. Table 77 reports the outcomes of this analysis.

Stakeholder -	Stakeholder				
Stakenolder	Cus	Emp	Eth	Soc	Env
Shareholders	0.0726	0.3351	0.5168	0.5567	0.3392
Customers		0.4120	0.0142	0.2337	0.3999
Employees			0.1070	0.7109	0.9876
Ethics				0.2180	0.1075
Society					0.7204

Table 77 Experiment H_6 : Relative Investments Regressions (2/2)

Source: Own representation.

Notes: N = 100 participants/2,400 observations. Values rounded where appropriate. "Sha"/ "Cus"/"Emp"/"Eth"/"Soc"/"Env" denote banks which address the claims of shareholders/ customers/employees/ ethics/society/environment. "p" is the significance level of a generalized Hausman test that the regression coefficient on *Stakeholder* is equal across the two stakeholder estimations in table 76.

The results in table 77 provide additional support for the assumption that mental accounting informs investments into different CSR banks: As the p-values of a generalized Hausman test show, the null hypothesis that the coefficients on *Stakeholder* are the same across the models reported in table 76 cannot be rejected at standard significance levels in all cases except for a comparison between the "customers" vis-à-vis the "ethics and morale" configuration. This suggests that systematic differences exist only between the relative investments into those banks which address the claims of either of these two stakeholders and the average amounts allocated to the respective other five CSR banks.

The combined results of these analyses are mostly in line with the predictions of the first mental accounting hypothesis H_6 as variations in relative investments across different socially responsible banks are limited. Hence, there is reason to assume that participants allocate constant amounts to CSR banks, irrespective of the specific stakeholders whose claims they address. This finding is qualified only for customer banks or ethical and moral banks, as investors allocate higher relative amounts to the former and lower relative

amounts to the latter. One possible explanation for this pattern may be that investors hold multiple mental accounts for different socially responsible banks which are differentiated according to, for instance, the personal materiality of a bank's CSR measures.

Hypothesis H_7 focuses the second aspect of mental accounting and conjectures that the relative investments into banks which address the claims of a certain stakeholder do not vary significantly across the different risk/returns profiles of these banks. To test this assumption, table 78 shows the relative investments into CSR banks, differentiated by the stakeholders whose claims they address and their risk/returns profiles. The results of two non-parametric tests whether these investments are statistically significantly different across risk-returns profiles are reported in columns "p1" and "p2". They suggest that the extent to which the results are in line with the predictions of hypothesis H_7 depends on the specific stakeholder in scope: For shareholder banks or ethical and moral banks, at least one of the tests identifies statistically significant differences in relative investments across that the risk/returns profile of the institutions. For socially responsible banks on average, shown in row "CSR", this is true according to both tests. In contrast, the null hypothesis that the relative proportions allocated to banks which address either customer, employee, social, or environmental claims and have different risk/returns profiles cannot be rejected at standard significance levels.

In a final analysis for hypothesis H_7 , the relative investments into the six socially responsible banks are regressed separately on a risk/returns profile indicator – which takes a value of 1 for banks with a "basic" profile and 0 otherwise – as well as those additional control variables which exceed an inclusion threshold of 10% in a forward-stepwise approach. Table 79 reports the outcomes of this exercise.

$ \begin{array}{c} {\rm Sha} & \begin{array}{ccccccccccccccccccccccccccccccccccc$	Stakeholder	RRP	Mean	Median	JB	p1	p2
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		Dagia	13.8667	0	0.0000		
Medium 19.5 10 0.0000 Q5.8346 (10) (10) (10) Cus Basic 18 10 0.0000 (24.7800) (10) Medium 18.6 10 0.0000 0.2981 0.814 Medium 15.733 0 0.0000 0.814 Emp Basic 15.733 0 0.0000 0.073 Medium 20.3727 (0) 0.0580 0.073 Medium 16.7333 0 0.0000 0.073 Medium 13.6333 0 0.0000 0.073 Eth Basic 13.6333 0 0.0000 0.048 Medium 16.3 10 0.0000 0.048 Soc Medium 15.6 0 0.0000 0.772 Soc Basic 16.5 10 0.0000 0.772 Env Basic 16.5 10 0.0000 0.314 (23.9157) (10)	Sha	Dasic	(21.3675)	(0)		0_0260	0.064
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sila	Madium	19.5	10	0.0000	- 0.0500	0.004
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		Medium	(25.8346)	(10)			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		Dagia	18	10	0.0000		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Cug	Dasic	(24.7800)	(10)		0 9091	0.914
	Cus	Madium	18.6	10	0.0000	- 0.2981	0.814
EmpBasic (23.3727)(0).005800.073Medium20100.00000.05800.073(24.6593)(10)(10).0000.0000.0000EthBasic13.633300.0000.05950.048Medium16.3100.0000.05950.048Medium16.3100.0000.05950.048SocBasic15.600.0000.05990.073Medium1800.0000.05990.772Medium16.5100.0000.05990.772EnvBasic16.5100.0000.011Medium17.6100.0000.0314Medium15.55600.0000.0110.001CSRBasic15.55600.0000.00110.001		Medium	(22.8310)	(10)			
Emp (23.3727) (0) 0.0580 0.073 Medium 20 10 0.0000 0.0580 0.073 Medium (24.6593) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (10) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11) (11)		Dagia	15.7333	0	0.0000		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Fmp	Dasic	(23.3727)	(0)		0.0590	0.072
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Ешр	Madium	20	10	0.0000	- 0.0580	0.075
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		Medium	(24.6593)	(10)			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		Dagia	13.6333	0	0.0000		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	F +b	Dasic	(22.1533)	(0)		0.0505	0.049
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	EtH	Madium	16.3	10	0.0000	— 0.0595	0.048
Soc $\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$		Medium	(20.4325)	(10)			
Soc (23.5476) (0) 0.5590 0.772 Medium180 0.0000 0.5590 0.772 (25.7807) (0) (0) (23.3359) (10) (10) EnvBasic16.510 0.0000 0.6664 0.314 Medium17.610 0.0000 0.6664 0.314 Medium15.556 0 0.0000 0.0000 CSRBasic15.556 0 0.0000		Desia	15.6	0	0.0000		
	Sec	Dasic	(23.5476)	(0)		0 5500	0.779
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	500	Madium	18	0	0.0000	- 0.5590	0.772
Env $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		Medium	(25.7807)	(0)			
Env $\frac{(23.3359) (10)}{Medium} = \frac{(23.3359) (10)}{17.6} = 0.6664 = 0.314$ $\frac{17.6}{(23.9157)} (10) = 0.0000$ $\frac{15.5556}{(23.1346)} = 0.0000$ $0.0000 = 0.0011 = 0.001$		Dagia	16.5	10	0.0000		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Env – N CSR –	Dasic	(23.3359)	(10)		0 6664	0.914
$\begin{array}{c} (23.9157) & (10) \\ \hline \\ CSR & \begin{array}{c} Basic \\ \hline \\ (23.1346) \\ \end{array} & \begin{array}{c} (0) \\ \hline \\ 0.0000 \\ \hline \\ 0.0011 \\ 0.0011 \end{array} \end{array}$		Modium	17.6	10	0.0000	- 0.0004	0.314
CSR (23.1346) (0) 0.001 0.001		meann	(23.9157)	(10)			
$CSR \qquad (23.1346) (0) \qquad 0.0011 \qquad 0.001$		Decia	15.5556	0	0.0000		
		Dasic	(23.1346)	(0)		0.0011	0.001
$18\ 3333$ 10 0 0000		Madim	18.3333	10	0.0000		0.001
(23.9132) (10)		Medium	(23.9132)	(10)			

Table 78Experiment H_7 : Relative Investments

Notes: $N = 100 \text{ participants}/300/100 \text{ observations by basic/medium risk/returns profile. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "Sha"/"Cus"/"Emp"/ "Eth"/"Soc"/"Env" denote banks which address the claims of shareholders/customers/employees/ ethics/society/environment. "RRP" denotes risk/returns profiles. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided Wilcoxon-Mann-Whitney test (non-parametric K-sample test on the equality of medians) that the relative investments are equal across risk/returns profiles.$

Dependent:	Stakeholder					
Rel_{Inv}	Sha	Cus	Emp	Eth	Soc	Env
Constant	37.7351***	57.2038***	30.6223***	40.7497***	38.7050***	39.1777***
Constant	(5.2156)	(13.1267)	(3.5138)	(6.1715)	(4.7365)	(4.9178)
	-5.63333*	-0.6	-4.2667	-2.6667	-2.4	-1.1
RRP_B	(2.7267)	(2.6067)	(2.6952)	(2.2917)	(2.7610)	(2.5859)
Crad		-5.8563*	_	_	-5.9897*	_
Grad		(2.6597)			(2.6434)	
Drag f Mara		-4.5619		-2.0938	-2.7651*	-5.164***
$ProfMax_{Inv}$		(2.4029)		(1.1253)	(1.2237)	(1.2925)
PCE	-3.995***	-2.1324				
F C E	(1.2020)	(1.2908)				
SolfInt				-2.4980		
SelfInt				1.4165		
Park	-11.53***	-8.2459**	-10.17***	-10.06***	-11.81***	-10.07***
$Bank_{Dir}$	(2.3680)	(2.8877)	(2.7525)	(2.2629)	(2.4710)	(2.3820)
Park	-9.013***	-8.435***	-8.999***	-12.97***	-8.958***	-6.565***
$Bank_{Sav}$	(2.3295)	(2.5003)	(2.3994)	(2.4363)	(2.4565)	(2.2939)
D area la	4.7062*	_	-4.2498	-6.8295**	_	_
$Bank_{Com}$	(2.3315)		(2.5752)	(2.5841)		
Drad		-3.7831	-3.6746		-4.6682	
$Prod_{Sav}$		(2.5129)	(2.6909)		(2.6233)	
Drad	8.2642		7.8676			_
$Prod_{Ins}$	(4.2385)		(4.4481)			
	6.6548*	12.9437*				
$Prod_{Loa}$	(2.7611)	(6.0891)				
Drod			-5.8518*	-4.3329*		
$Prod_{Bui}$			(2.5056)	(2.2072)		
F	9.98	5.52	5.86	6.60	12.41	11.02
Adj. \mathbb{R}^2	0.1196	0.0733	0.0601	0.0780	0.1017	0.0786

Table 79Experiment H_7 : Relative Investments Regressions

Notes: N = 100 participants/400 observations by stakeholder. Values rounded where appropriate. Robust standard errors in parentheses. "Sha"/ "Cus"/"Emp" / "Eth"/"Soc"/"Env" denote banks which address the claims of shareholders/ customers/employees/ethics/society/environment. */**/*** indicate significance at the 5%/1%/0.1% level.

According to hypothesis H_7 , the coefficient on the risk/returns profile indicator RRP_B should be statistically insignificant. Table 79 shows that this true in five out of six cases with the sole statistically significant exception being the estimations for shareholder banks: It suggests that investments into shareholder-focused banks claims are on average 5.6 percentage points lower in case of a "basic" rather than a "medium" risk/returns profile. An intuitive interpretation of this result is that achieving a certain ROI is particularly important for the investors of banks which focus on the claims of its shareholders as CSP and CFP are considered as immediately connected in this case. In contrast to the analyses in table 78, the regressions identify no statistically significant differences between investments into banks with different risk/returns profiles which concentrate on ethical or moral claims. Similar to previous outcomes, these estimations suggest that participants who have a relationship with a direct or a savings bank exhibit a more conservative overall investment pattern: At the 1% significance level, these participants invest between 6.5 and nearly 12 percentage points less than customers of other banks. Determining the influence of further control parameters is impeded by considerable variations in the best-fit model specifications across the six estimations.

To some extent, this outcome corroborates hypothesis H_7 : In statistical terms, investors allocate on average the same amounts to institutions which address either social, environmental, or customer claims, irrespective of their risk/returns profiles. The evidence is similar, though less unequivocal, for employee-focused banks. The regression analyses suggest that investments are constant on stakeholder level across risk/returns profiles with the exception of institutions which address stakeholder claims. A conservative interpretation of both results combined is that the investment patterns in the experiment are in line with the predictions of H_7 for four to five types of socially responsible banks.

The final behavioral phenomenon in scope are halo effects. The first hypothesis derived from this theory conjectures that CSR halos trigger higher relative investments into socially responsible banks than into non-socially responsible banks with the same risk/returns profiles. A test of H_8 can build on the previous outcome that hypothesis H_2 was rejected with high statistical confidence as documented in figure 30 and table 67. This finding, which may already indicate that CSR halo effects have an impact on investment decisions, is taken one step further in the following.

To determine whether the differences in investments – identified in the test of H_2 – imply that higher relative amounts are allocated to socially responsible banks while controlling for attitudinal and sociodemographic investor parameters, two different OLS regression models are estimated. Table 80 summarizes the outcomes of the first model specification, which sets relative investments into the different banks (Rel_{Inv}), measured in percent, as the dependent variable and the binary variable CSR, which takes a value of 1 if a bank is socially responsible and 0 otherwise, as the sole predictor variable besides a constant. This restricted model is estimated separately for all four scenario configurations A-D and only for those banks with identical risk/returns profiles. According to H_8 , CSR should have a systematic, positive influence on the amounts invested. The estimation results in table 80 corroborate this hypothesis as the coefficient on CSR is positive and statistically different from zero at significance levels of 0.1% for all four models. Numerically, it suggests that investors allocate on average about 8 to 13 percentage points more to a socially responsible than to a non-socially responsible institution with the same risk/returns profile.

Dependent:	Scenario con	Scenario configuration						
Rel_{Inv}	А	В	С	D				
Correct and	4.6***	6.6667***	5.85***	3.9667***				
Constant	(0.4516)	(0.5905)	(0.6137)	(0.4016)				
CSR	13.2***	11.6667***	7.7833***	11.2667***				
CSR	(1.1004)	(1.1410)	(1.0624)	(1.0328)				
F	143.89	104.56	53.67	119.01				
Adj. \mathbb{R}^2	0.1065	0.0795	0.0421	0.0896				

Table 80 Experiment H_8 : Relative Investments Regressions (1/2)

Source: Own representation.

Notes: N = 100 participants/1,200 observations by scenario configuration. Values rounded where appropriate. Robust standard errors in parentheses. */**/*** indicate significance at the 5%/1%/0.1% level.

While the restricted model is an effective instrument to illustrate that financially identical banks may receive a greater share of funds when they pursue CSR activities, the adjusted R^2 values in table 80 imply that a significant proportion of the variation in the relative investments cannot be explained by CSR alone. The model's predictions for the four scenario configurations therefore need to be interpreted with caution. To address this issue, all four regression models are extended in terms of predictor variables, provided that they exceed an individual statistical significance level of 10%, and re-estimated stepwise. The results of this second model specification are reported in table 81.

Dependent:	Scenario configuration						
Rel_{Inv}	А	В	С	D			
<i>a</i>	11.1536***	19.8243***	16.8511***	10.3161***			
Constant	(1.2044)	(4.3891)	(2.0325)	(0.9869)			
CCD	13.2***	11.6667***	7.7833***	11.2667***			
CSR	(1.0736)	(1.1101)	(1.0307)	(0.9992)			
Cmad	-2.5284*		-3.6559***				
Grad	(1.1807)		(1.1061)				
Drof Mar-		-1.5354					
$ProfMax_{Inv}$		(0.9042)					
DrofMan			-1.4365*				
$ProfMax_{Bnk}$			(0.5680)				
$Bank_{Dir}$	-3.8505**	-6.8062^{***}	-4.2711***	-7.3941***			
	(1.2921)	(1.2750)	(1.1281)	(1.0516)			
	-5.5947***	-5.9809***	-4.9923***	-5.4293***			
$Bank_{Sav}$	(1.1488)	(1.1813)	(1.0795)	(1.0704)			
D am la				-1.9844			
$Bank_{Coo}$				(1.1813)			
Drad	7.9784**	5.8358**	8.1640**	9.1833**			
$Prod_{Loa}$	(2.7436)	(2.2526)	(2.8935)	(2.9823)			
Drad	-2.9683*						
$Prod_{Sec}$	(1.1826)						
$Prod_{Sav}$	-2.6437**	-3.3842**	-3.7162***	-3.2581**			
1 / OuSav	(1.1688)	(1.1887)	(1.1066)	(1.0686)			
$Prod_{Ins}$		4.3260					
I I OuIns		(2.3995)					
F	32.48	26.58	18.65	29.54			
Adj. \mathbb{R}^2	0.1495	0.1287	0.0983	0.1477			

Table 81 Experiment H_8 : Relative Investments Regressions (2/2)

Notes: N = 100 participants/1,200 observations by scenario configuration. Values rounded where appropriate. Robust standard errors in parentheses. */**/*** indicate significance at the 5%/1%/0.1% level.

The estimation results reported in table 81 are in line with the predictions of H_8 : In all four model specifications, the null hypothesis that the coefficient on CSR is equal to zero can be rejected at the 0.1% significance level. Instead, the regressions suggest that this variable has a major positive impact on relative investments when controlling for sociodemographic and attitudinal factors: The size of the coefficient implies that the average differences in relative investments into CSR and non-CSR banks with identical risk/returns profiles range between about 10 and 20 percentage points.

In addition, while the best-fit specifications differ across scenario configurations, the regression models point to some robust patterns in the data: For instance, relative investments into both kinds of banks are on average between 5 and 6 percentage points lower for participants who possess a relationship with a savings bank in real life, as demonstrated by the coefficient on $Bank_{Sav}$. Holding money in a savings account – captured by the variable $Prod_{Sav}$ – is related to decreases in relative investments of about three percentage points. In scenarios A and C, graduate students are found to invest between 2.5 and approximately 3.5 percentage points less than undergraduate students, demonstrated by the coefficient on Grad.

The coefficients on the remaining variables need to be interpreted with caution due to the underlying sample sizes: One example is that the consistently negative and statistically significant coefficients on $Bank_{Dir}$ should be regarded only as an indication that customers of direct banks might invest approximately 4 to 7 percentage points less in general than customers of other banks since only 23% of the participants have a relationship with a direct bank. Similarly, the numerically large values for $Prod_{Loa}$ may suggest that real-life borrowers invest on average about 5 to 9 percentage points more in the experiment than participants without loan obligations; however, as table 63 shows, this result draws on observations for only five participants.

Both regression model specifications find that participants consistently allocate a significantly greater share of their funds to socially responsible rather than non-socially responsible banks with the same risk/returns profiles. This behavior contradicts rational portfolio selection theory as social responsibility does not translate into a stronger financial performance. Instead, the investment patterns can be explained in terms of CSR halos and are in line with the predictions of hypothesis H_8 .

The second halo effects hypothesis H_9 claims that strong CSR halos may result in identical investments into financially inferior CSR banks and non-CSR banks with a superior risk/returns profile. As the comparison of central tendencies for hypothesis H_3 found, there are statistically significant differences between the central tendencies of investments into these two types of banks. In order to determine the robustness of this result, the following analysis first introduces an alternative methodology and then controls for the influence of potential confounding factors. Mirroring the approach to test hypothesis H_8 , two sets of regression models are specified for a sample of CSR banks and non-socially responsible institutions with a more favorable risk/returns profile. In scenarios A and D, the sample therefore consists of CSR banks with a "basic" and of non-CSR banks with a 'medium" risk/returns profile. Investment decision data for non-CSR banks with a "high" risk/returns profile is complemented by observations for CSR banks with a "medium" risk/returns profile in scenario B and with a "basic" risk returns/profile in scenario C. The first model isolates the impact of whether or not a bank is socially responsible on relative investments into the respective banks within each scenario configuration. The first estimation results are reported in table 82.

Dependent:	Scenario confi	Scenario configuration						
Rel_{Inv}	А	В	С	D				
Comstant	63.6333***	62.4833***	68.8833***	66.2833***				
Constant	(1.4676)	(1.4717)	(1.4116)	(1.4563)				
CSR	-45.8333***	-44.15***	-55.25***	- 51.05***				
USK	(1.7779)	(1.7660)	(1.6567)	(1.7396)				
F	664.62	624.97	1112.18	861.21				
Adj. \mathbb{R}^2	0.3563	0.3423	0.4810	0.4177				

Table 82	Experiment	H9:	Relative	Investments	${\rm Regressions}$	(1/2)
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Source: Own representation.

Notes: N = 100 participants/1,200 observations by scenario configuration. Values rounded where appropriate. Robust standard errors in parentheses. */**/*** indicate significance at the 5%/1%/0.1% level.

Table 82 illustrates three main insights: First, the negative coefficients on CSR are both large in absolute terms and statistically significant at the 0.1% level. Their size suggests that, on average, investors allocate approximately 45 to 55 percentage points less to CSR banks than to non-CSR institutions with a more favorable risk/returns profile. As the comparatively low standard errors illustrate, the underlying investment decision data is rather homogeneous. Second, the estimation outcomes within these scenario configurations are remarkably consistent as both the coefficients on the intercept and the slope parameter fluctuate within a narrow range of six and ten percentage points. Third, all models exhibit a good fit – in particular when considering the univariate model specification – as illustrated by the adjusted R^2 values. This combined evidence constitutes a highly significant result which is at odds with the predictions of H₉.

The second set of regression models, documented in table 83, additionally controls for certain investor characteristics and attitudes to explain relative investments into the two bank types in scope. All models are specified as multivariate OLS regressions and estimated using forward-stepwise OLS regressions with a significance level threshold of 10%.

Dependent:	Scenario configuration						
Rel_{Inv}	А	В	С	D			
Correct and	35.1694***	41.1865***	48.4129***	43.3932***			
Constant	(7.0318)	(6.0211)	(5.9274)	(7.8829)			
CCD	-45.8333***	-44.15***	-55.25***	-51.05***			
CSR	(1.7481)	(1.7509)	(1.6357)	(1.6958)			
4				-0.2624*			
Age				(0.1288)			
Card	4.6166*			5.5667**			
Grad	(2.0208)			(2.0753)			
C I	-5.2349**		-3.5316*	-6.0811***			
Gender	(1.8527)		(1.7120)	(1.8081)			
Dr. a f Mara	5.4358***	4.3620***	4.4919***	6.2123***			
$ProfMax_{Inv}$	(1.4269)	(1.2661)	(1.2239)	(1.4588)			
Drugh	4.5389*		5.3938**	6.2865**			
$Bank_{Dir}$	(2.1476)		(1.7214)	(2.0420)			
Dl.	3.2563						
$Bank_{Sav}$	(1.8369)						
DI	-9.9426**	-9.0492**	-13.3765***	-13.6995**			
$Prod_{Loa}$	(3.8279)	(3.2825)	(3.2197)	(4.4498)			
Dr d	3.1335	5.4252**					
$Prod_{Sec}$	(2.0691)	(2.0389)					
Drad		_ _	— <u>-</u>	-6.1484*			
$Prod_{Ins}$				(3.1280)			
Drad	6.2234*		4.3086	8.7009***			
$Prod_{Bui}$	(2.6769)		(2.3918)	(2.1830)			
F	85.34	168.86	203.92	117.11			
Adj. \mathbb{R}^2	0.3777	0.3535	0.4941	0.4467			

Table 83 Experiment H_9 : Relative Investments Regressions (2/2)

Notes: N = 100 participants/1,200 observations by scenario configuration. Values rounded where appropriate. Robust standard errors in parentheses. */**/*** indicate significance at the 5%/1%/0.1% level.

The four regression models replicate the finding that CSR activities cannot compensate for an inferior financial performance as the large, negative, and highly significant coefficients on CSR demonstrate. The minor improvements in fit over the univariate estimates of table 82 suggest that a bank's social performance alone is capable of capturing a significant share of the variations in investments. In addition, $ProfMax_{Inv}$ affects relative investments in the anticipated positive way: The statistically significant coefficients on this parameter suggest that, depending on the respective scenario, a one-category increase in a participant's attitude towards investor profit maximization corresponds to an average increase in investments between 4 and 6 percentage points. The coefficient on *Gender* suggests that female participants invested on average between 3.5 and about 6 percentage points less than male experimental investors in scenarios A, C, and D. In addition, the regression results may be interpreted that the possession of a building loan agreements or a relationship with a direct bank, captured by the coefficients on $Prod_{Bui}$ and $Bank_{Dir}$, corresponds to lower relative investments while participants who have entered a loan agreement invested higher amounts, as the coefficient on $Prod_{Loa}$ implies. Yet, this conclusion is qualified by underlying sample sizes of 12, 23, and 5 participants for these three parameters. As the four best-fit models vary – in part considerably – with respect to whether or not additional variables are included and have a significant impact on investments, a systematic influence of further factors seems unlikely.

Both regressions in unison refute the strong version of the CSR halo effects hypothesis, which claims that a superior corporate social performance can compensate for an inferior risk/returns profile. Instead, the regressions corroborate the conclusion that investors allocate significantly lower proportions of their funds to financially underperforming socially responsible banks. Therefore, hypothesis H_9 is rejected at high significance levels.

To conclude the analysis of halo effects, H_8 and H_9 can be combined to test the hypothesis that the differences in relative investments between banks with inferior and superior risk/returns profiles are smaller when the former type of bank is socially responsible. When that CSR halos inform investment decisions, this pattern should be observable across scenario configurations as the test for H_8 found that higher amounts are allocated to banks with the same financial performance in case they are socially responsible. The evidence in table 84 is in line with this reasoning: It shows that, in all scenario configurations, there are greater deviations from the amount allocated to the financially superior bank for CSR than for non-CSR banks. As the p-values reported in columns "p1" and "p2" imply, at least one of the non-parametric tests rejects the null hypothesis of equal differences for the two bank types at standard significance levels in all scenario configurations. Notwithstanding the results for H_9 , this last finding underscores the overall relevance of halo effects.

Scenario	Bank type	Mean	Median	JB	p1	p2
A	CSR	-45.8667	-60	0.0000		0.024
		(55.0997)	(40)		0.0017	
	Non-CSR	-59.0167	-70	0.0000	- 0.0017	
		(41.3164)	(30)			
В	CSR	-44.1167	-50	0.0000		0.028
		(54.4196)	(50)		- 0.0019	
	Non-CSR	-56.0167	-70	0.0000	- 0.0019	
		(43.9832)	(30)			
С	CSR	-55.05	-70	0.0000		0.184
		(50.8426)	(30)		- 0.0436	
	Non-CSR	-62.9167	-80	0.0000	- 0.0430	
		(43.7132)	(20)			
D	CSR	-50.8333	-70	0.0000		
		(53.2638)	(30)		-0.0059	0.133
	Non-CSR	-62.2833	-75	0.0000	- 0.0009	
		(39.9618)	(25)			

Table 84 Experiment H_8 and H_9 : Differences in Relative Investments

Notes: N = 100 participants/600 observations by bank type. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided Wilcoxon-Mann-Whitney test (non-parametric K-sample test on the equality of medians) that the differences in relative investments are equal across bank types.

The analyses conducted in this section yield two findings: First, CSR activities of banks may trigger, reinforce, or mitigate certain biases and heuristics in an investor's decisions. While the first prospect theory hypothesis H_4 finds limited support in the data, investors show a lower willingness to sell underperforming stocks of CSR banks; a response predicted by the disposition effect hypothesis H_5 . Moreover, the experiment's participants tend to invest similar amounts across different socially responsible banks as well as into certain types of CSR banks with different risk/returns profiles. This is in line with the conjectures of hypotheses H_6 and H_7 that investments into socially responsible banks are organized in discrete mental accounts. At the same time, investors may hold multiple mental accounts within this category such as a "customers" account for activities which have a direct impact on their own well-being. Finally, CSR halos in the sense of hypothesis H_8 may help to explain why investors prefer the socially responsible option when deciding between two banks with equal financial performance. Still, the outcomes for hypothesis H_9 show that social performance cannot compensate an inferior risk/returns profile. Especially the last two results point to a second finding: The observed investor behaviors are the result of tension between a bank's social performance – which is likely to be impacted by trigger bounded rationality – and its financial performance, which may limit the extent to which certain behavioral phenomena translate into investment decisions. If social and financial performance overlap, these phenomena may be reinforced, as demonstrated for disposition effects. In case of a conflict between these dimensions, the question which of the two dominates the other cannot be settled ex-ante and strongly depends on the size of the trade-off between risk/returns and CSR in the specific situation.

4.3.4.3 CSR Survey Results

The final set of hypotheses is derived from the CSR survey's findings. In contrast to the previous two sections, this implies that the theoretical foundations are not assumptions concerning investor rationality, but the revealed preferences of a similar group of participants. The corresponding analyses focus on disparities between investments into socially responsible banks, which are distinguished by the stakeholders whose claims are addressed. To some extent, the strength of this evidence is limited ex-ante by the results for the hypothesis H_6 that investors tend to allocate constant amounts to different CSR banks. The tests of hypotheses H_{10} to H_{12} therefore focus on more nuanced differences in investments and whether they are in line or at odds with the CSR survey's outcomes.

As the first CSR survey hypothesis H_{10} conjectures, higher proportions are invested into a socially responsible bank which addresses the claims of primary rather than secondary stakeholders. As a first indication, figure 36 illustrates the central tendencies of relative investments into CSR banks by stakeholder as well as the average allocations for primary and secondary stakeholders. These investment patterns are mostly in line with the predictions of hypothesis H_{10} : The mean relative amounts allocated to customer or employee banks exceed the average relative investments into banks which address the claims of secondary stakeholders. As a consequence, mean as well as median relative investments into banks which address the claims of primary rather than secondary stakeholders are higher. Only the mean proportions invested into shareholder banks are smaller than the secondary stakeholder bank investment average.

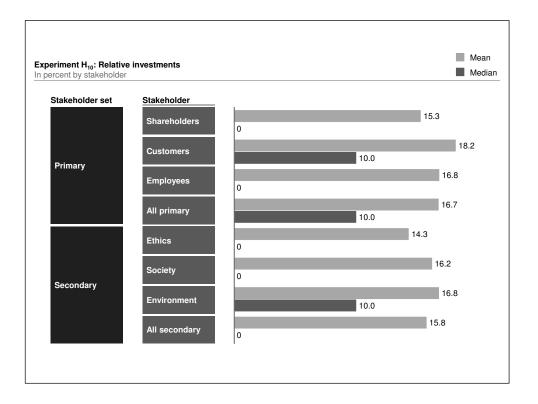


Figure 36 Experiment H_{10} : Relative Investments

Source: Own representation.

Note: N = 400 observations by stakeholder. Values rounded.

To determine the statistical significance of this result, the relative investments into those banks which address the claims of a certain primary or secondary stakeholder are compared to the secondary or primary stakeholder bank investment average. In addition, the average investments into primary and secondary stakeholder banks are tested for equality. Table 85 summarizes the outcomes of this analysis, which yields an inconclusive result with two statistically relevant findings: First, significantly higher relative sums are allocated to customer banks than to the average of institutions which address the claims of secondary stakeholders, as implied by p-values of 0.0213 and 0.006. Second, the proportions invested into ethical and moral banks are significantly lower than the investment average for institutions with a focus on primary stakeholders and their claims. In addition, a test on the equality of their medians suggests that the differences in investments between banks that concentrate on the claims of primary or secondary stakeholders on average are statistically significant at least at the 10% significance level. In the remaining cases, the statistical tests fail to identify significant differences between relative investments into banks which address the claims of individual primary or secondary stakeholders and the average of investments into banks targeting claims of secondary or primary stakeholders. Overall, this mixed outcome suggests that the statistical significance of the previous result that investment behaviors are mostly in line with the predictions of hypothesis H_{10} is limited.

Set	Stakeholder	Mean	Median	JB	p1	p2
	A 11	16.7417	10	0.0000	0.1691	0.094
	All	(23.5817)	(10)			
	Shareholders	15.275	0	0.0000	0.8312	1.000
Primary	Shareholders	(22.6651)	(0)			
1 miary	Customers	18.15	10	0.0000	0.0213	0.006
	Customers	(24.2807)	(10)			
	Employees	16.8	0	0.0000	0.4081	0.435
		(23.7417)	(0)			
	All	15.7583	0	0.0000	0.1691	0.094
	All	(23.1309)	(0)			
	Ethics	14.3	0	0.0000	0.0375	0.017
Secondary	Ethics	(21.7415)	(0)			
Secondary	Society	16.2	0	0.0000	0.3303	0.204
	Society	(24.1146)	(0)			
	Environment	16.775	10	0.0000	0.8896	0.744
	Environment	(23.4569)	(10)			

Table 85Experiment H_{10} : Relative Investments

Source: Own representation.

Notes: N = 100 participants/400 observations by stakeholder. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of two-sided Wilcoxon-Mann-Whitney test (non-parametric K-sample test on the equality of medians) that the relative investments by primary (secondary) stakeholder are equal to the average relative investments into secondary (primary) stakeholders.

The test of hypothesis H_{10} is concluded by two sets of regression models. The first one focuses on differences in relative investments between banks which address the claims of primary or secondary stakeholders. As shown in table 86, the relative investments (Rel_{Inv}) into socially responsible banks are regressed on the binary variable *Stakeholder*, which takes a value of 1 if a bank addresses the claims of those stakeholders specified in the column header and 0 otherwise. All additional control variables are determined using linear forward-stepwise OLS regressions with a variable inclusion threshold of 10%.

Dependent:	Stakeholders in scope		
Rel_{Inv}	Primary	Secondary	
C t t	32.0651***	33.0484***	
Constant	(2.1071)	(2.0749)	
Stakeholder	0.9833	-0.9833	
Stakenoiaer	(0.9185)	(0.9185)	
p		0.2836	
Grad	-2.2052*	-2.2052*	
Grau	(1.0663)	(1.0663)	
DrofMax	-1.6566**	-1.6566**	
$ProfMax_{Inv}$	(0.5446)	(0.5446)	
$Bank_{Dir}$	-9.1987***	-9.1987***	
$Dan\kappa_{Dir}$	(1.1146)	(1.1146)	
$Bank_{Sav}$	-8.7904***	-8.7904***	
	(0.9706)	(0.9706)	
$Prod_{Ins}$	4.6604**	4.6604**	
I TOUIns	(1.6800)	(1.6800)	
$Prod_{Sav}$	-3.5608***	-3.5608***	
1 TOUSav	(1.0254)	(1.0254)	
F	32.16	32.16	
Adj. \mathbb{R}^2	0.0722	0.0722	

Table 86 Experiment H_{10} : Relative Investments Regressions (1/2)

Source: Own representation.

Notes: N = 100 participants/2,400 observations by stakeholder. Values rounded where appropriate. Robust standard errors in parentheses. */**/*** indicate significance at the 5%/1%/0.1% level. "p" is the significance level of a generalized Hausman test that the regression coefficient on *Stakeholder* is equal across model specifications.

Three conclusions can be drawn from the results in table 86: First, banks which address the claims of primary rather than secondary stakeholders still receive higher relative investments after controlling for additional factors. This is illustrated by the sign of the coefficient on *Stakeholder*, which is positive for primary and negative for secondary stakeholders. Second, this result is not statistically significant as the null hypothesis that this coefficient is equal to zero cannot be rejected at standard significance levels in either of the two specifications. Third, the p-value of a generalized Hausman tests suggests that no statistically significant differences exist between the coefficient on *Stakeholder* across the two estimations. This mirrors the outcome of the two mean and median analyses: The results are directionally in line with the predictions of hypothesis H₁₀, but not to a statistically significant extent. The second set of regressions breaks down these estimations for the individual six stakeholders. As reported in table 87, the binary variable *Stakeholder* takes a value of 1 in these models if a bank addresses the claims of the stakeholder specified in the column header and 0 otherwise. Again, all remaining variables are determined in a forwardstepwise approach which requires an individual significance level of at least 10% for a variable to be included.

Dependent:	Stakeholder	- -				
Rel_{Inv}	Sha	Cus	Emp	Eth	Soc	Env
Constant	32.7517***	32.1767***	32.4467***	32.9467***	32.5667***	32.4517***
Constant	(2.0546)	(2.0413)	(2.0600)	(2.0512)	(2.0490)	(2.0374)
Stakeholder	-1.17	2.28	0.66	-2.34*	-0.06	0.63
Stukenoluer	(1.2000)	(1.2792)	(1.2565)	(1.1598)	(1.2461)	(1.2409)
p	0.9168	0.0833	0.3758	0.0582	0.5747	0.8488
RRP_B	-2.7778**	-2.7778**	-2.7778**	-2.7778**	-2.7778**	-2.7778**
nnrB	(1.0748)	(1.0745)	(1.0742)	(1.0736)	(1.0744)	(1.0745)
Grad	-2.2052*	-2.2052*	-2.2052*	-2.2052*	-2.2052*	-2.2052*
Gruu	(1.0661)	(1.0665)	(1.0661)	(1.0659)	(1.0664)	(1.0661)
DrofMan	-1.6566^{**}	-1.6566^{**}	-1.6566**	-1.6566^{**}	-1.6566^{**}	-1.6566**
$ProfMax_{Inv}$	(0.5443)	(0.5439)	(0.5446)	(0.5449)	(0.5448)	(0.5447)
Damla	-9.199***	-9.199***	-9.199***	-9.199***	-9.199***	-9.199***
$Bank_{Dir}$	(1.1146)	(1.1161)	(1.1142)	(1.1166)	(1.1148)	(1.1151)
Dank	-8.790***	-8.790***	-8.790***	-8.790***	-8.790***	8.790***
$Bank_{Sav}$	(0.9707)	(0.9699)	(0.9709)	(0.9696)	(0.9707)	(0.9706)
$Prod_{Sav}$	-3.561***	-3.561***	-3.561***	-3.561***	-3.561***	-3.561***
FTOUSav	(1.0251)	(1.0252)	(1.0253)	(1.0248)	(1.0255)	(1.0255)
Prod _{Ins}	4.6604**	4.6604**	4.6604**	4.6604**	4.6604**	4.6604**
1 / OuIns	(1.6799)	(1.6827)	(1.6792)	(1.6820)	(1.6803)	(1.6812)
F	32.10	32.49	32.00	32.51	32.01	32.04
Adj. \mathbb{R}^2	0.0721	0.0731	0.0719	0.0732	0.0718	0.0719

Table 87	Experiment	H_{10} :	Relative	Investments	${\rm Regressions}$	(2/2)
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Source: Own representation.

Notes: N = 100 participants/2,400 observations by stakeholder. Values rounded where appropriate. Robust standard errors in parentheses. "Sha"/ "Cus"/"Emp" / "Eth"/"Soc"/"Env" denote banks which address the claims of shareholders/ customers/employees/ethics/society/environment. */**/*** indicate significance at the 5%/1%/0.1% level. "p" is the significance level of a generalized Hausman test that, for individual primary (secondary) stakeholders, the regression coefficient on *Stakeholder* is equal to the coefficient on *Stakeholder* for secondary (primary) stakeholders in table 86. In principle, table 87 reproduces the results of table 76, but adds the outcomes of a generalized Hausman test whether the regression coefficients on *Stakeholder* in the estimates for shareholders, customers, and employees are statistically equal to this coefficient for secondary stakeholders on average from table 86. The same test is performed for investments into ethical, social, and environmental banks in comparison to the regression coefficient for primary stakeholders on average. The results, reported in row p, show that investments into customer banks or ethical and moral banks are both in line with the predictions of hypothesis H_{10} as the coefficient on *Stakeholder* is positive in the former and negative in the latter estimation and statistically significant. Similarly, the result that this coefficient is positive in the estimations for employees and negative in the model for society also supports the assumption that relative investments are higher if a bank addresses the claims of primary stakeholders; however, both coefficients are not statistically significantly different from the benchmark coefficients of table 86. For shareholders and the environment, the sign of the coefficient on *Stakeholder* is at odds with the predictions of H_{10} while the effect itself is also not statistically significant either.

The overall results for H_{10} , which claims that investments are higher when a bank addresses the claims of primary rather than secondary stakeholders, are therefore mixed: On the one hand, when comparing primary and secondary stakeholders on average and for four out of six individual stakeholders, participants invest their funds as predicted by H_{10} . On the other hand, consistent and statistically significant effects exist only for investments into customer banks or ethical and moral banks. This outcome cautiously suggests that participants may exhibit a tendency – though not a clear pattern – to overweight banks if they focus on certain primary stakeholders and their claims.

These findings provide an empirical foundation for a combined test of the second and third CSR survey hypothesis. As both H_{11} and H_{12} predict that relative investments into socially responsible banks follow a certain ranking, both hypotheses are treated as alternatives in the following analyses.

According to H_{11} , there is a direct, positive relation between the cause/business fit of a stakeholder in banking and the relative investments into banks which address the claims of this stakeholder. This implies that the cause/business fit of the six stakeholders for the bank-internal CSR channel, which is documented in figure 24, should translate into relative investments into the corresponding types of socially responsible banks – coded as I – as follows:⁵¹

⁵¹Both a one-sided sign test and a Wilcoxon signed-rank test find statistically significant differences between the values of perceived cause/business fit for the individual stakeholders in figure 24. Therefore, relation 4.15 assumes inequality across investments.

$$I_{customers} > I_{shareholders} > I_{employees} > I_{ethics} > I_{society} > I_{environment}$$
 (4.15)

Table 88 investigates the cause/business fit hypothesis for the experimental data in two steps: First, the relative investments into the different socially responsible banks are ranked according to the cause/business fit of the stakeholders whose claims they address in the first column. Second, the last two columns report the results of two pairwise tests for statistically significant differences between these investments in line with the predictions of relation 4.15.

Rank	Stakeholder	Mean	Median	JB	p1	p2
1	Customers	18.15	10	0.0000	0.0399	0.215
1	Customers	(24.2807)	(10)			
2	Shareholders	15.275	0	0.0000	0.3929	0.524
2	Shareholders	(22.6651)	(0)			
3	Employees	16.8	0	0.0000	0.1116	0.103
5	Employees	(23.7417)	(0)			
5	Ethics	14.3	0	0.0000	0.3627	0.356
	Ethics	(21.7415)	(0)			
4	Society	16.2	0	0.0000	0.3675	0.258
4	Society	(24.1146)	(0)			
6	Environment	16.775	10	0.0000		
0	Environment	(23.4569)	(10)			

Table 88Experiment H11: Relative Investments

Source: Own representation.

Notes: N = 100 participants/400 observations by stakeholder. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided Wilcoxon-Mann-Whitney test (non-parametric K-sample test on the equality of medians) that investments are equal across consecutive ranks.

Two major conclusions emerge from the results in table 88: First, the average relative investments do not seem to increase with the cause/business fit of a stakeholder. While higher relative amounts are allocated to customer banks in comparison to shareholder banks, mean relative investments into the latter type of bank are lower than for banks which address the claims of employees; a stakeholder with a relatively lower cause/business fit. Similarly, the differences in relative investments between banks which focus on the claims of employees or ethics and moral are in line with H_{11} , but not the increases in investments across cause/business fit rankings 4 to 6. Second, statistically significant differences exist only between relative investments into the banks ranked first and second.

All subsequent pairwise tests fail to reject the null hypothesis of identical population mean ranks or medians across ranks. For five out of six stakeholders, this result is therefore strongly at odds with the predictions of H_{11} .

In contrast, H_{12} conjectures that the proportions invested into socially responsible banks increase with the salience of the stakeholder whose claims are addressed. If this is true, relation 3.1 from section 3.3.4.1 implies that these relative investments – coded as I – into different socially responsible banks can be ranked as follows:

$$I_{customers} > I_{shareholders} = I_{employees} > I_{ethics} > I_{society} > I_{environment}$$
(4.16)

Relations 4.15 and 4.16 imply nearly the same pattern of investments into the different socially responsible banks with the only distinguishing feature of the latter being the assumption of equal allocations to shareholder and employee banks. As table 89 illustrates, the ranking from relation 4.16 does not seem to consistently capture the investment patterns either: On the one hand, the highest relative amounts are allocated to customer banks. As a Wilcoxon-Mann-Whitney test suggests, these investments are statistically different from the relative amounts allocated to shareholder banks at the 5% level. In addition, both non-parametric tests do not identify statistically significant differences between the average investments into banks which address the claims of shareholders and employees: These findings are in line with the predictions of H_{12} . On the other hand, the observation that mean investments increase – though again to a statistically insignificant extent – for the three secondary stakeholders ranked third, fourth, and fifth in terms of their salience is diametrically opposed to the hierarchy expressed in relation 4.16.

Rank	Stakeholder	Mean	Median	JB	p1	p2
1	1 0 4	18.15	10	0.0000	0.0399	0.215
1	Customers	(24.2807)	(10)		0.2377	0.514
	Shareholders	15.275	0	0.0000	0.3929	0.524
2	Shareholders	(22.6651)	(0)		0.4561	0.320
2	Employees	16.8	0	0.0000	0.1116	0.103
	Employees	(23.7417)	(0)			
3	Ethics	14.3	0	0.0000	0.3627	0.356
5	Ethics	(21.7415)	(0)			
4	Society	16.2	0	0.0000	0.3675	0.258
4	Society	(24.1146)	(0)			
5	Environment	16.775	10	0.0000	_	_
5	Environment	(23.4569)	(10)			

Table 89 Experiment H_{12} : Relative Investments (1/2)

Source: Own representation.

Notes: N = 100 participants/400 observations by stakeholder. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality. "p1" ("p2") is the significance level of a two-sided Wilcoxon-Mann-Whitney test (non-parametric K-sample test on the equality of medians) that investments are equal across consecutive ranks. Additional rows under "p1" and "p2" for customers and shareholders reproduce the significance levels of these tests for the next two lower-ranked stakeholders.

Still, this result may imply that the salience of stakeholders and investments into banks which address their claims follow a consistent pattern, but that the perceptions of relative stakeholder salience differ between the experiment and the CSR survey. To explore this aspect, table 90 summarizes the experimental data for stakeholder salience according to the socially responsible behavior scale for individual stakeholders from section 4.3.2.2.

Rank	Stakeholder	Mean	Median	JB	p1	p2
1	1	3.7	4	0.0368	0.4007	0.7654
Ţ	Customers	(1.1146)	(1)			
2	Society	3.66	4	0.0223	0.2983	0.5244
Δ	Society	(1.0845)	(1)			
3	Ethics	3.57	4	0.0164	0.2005	0.3228
5	L'UNCS	(1.2330)	(1)			
4	Environment	3.46	4	0.0332	0.3101	0.5951
4	Environment	(1.2179)	(1)			
5	Employage	3.39	4	0.0705	0.0000	0.0001
0	Employees	(1.1182)	(1)			
6	Sharahaldara	2.76	3	0.0032		
U	Shareholders	(1.2563)	(1)			

Table 90Experiment H_{12} : Stakeholder Salience

Source: Own representation.

Notes: $N = 100 \text{ participants}/100 \text{ observations by stakeholder subset. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality in distribution. "p1" ("p2") is the significance level of a one-sided sign test (Wilcoxon signed-rank test) that stakeholder relevance is identical across consecutive ranks.$

Table 90 illustrates that, first, the salience ranking of the six stakeholders differs significantly from relations 4.15 and 4.16. While the experiment's participants also attribute the highest level of salience to customers and their claims, the three secondary stakeholders are considered more salient than the remaining two primary stakeholders. Second, statistically significant differences exist only between the salience of employees and shareholders. This combination results in the stakeholder ranking of relation 4.17, which both differs strongly from the previous findings and implies a remarkable degree of internal consistency.

$$S_{customers} = S_{society} = S_{ethics} = S_{environment} = S_{employees} > S_{shareholders}$$
(4.17)

To determine whether and to which extent the salience of stakeholders is consistent with investments into banks that address their claims, table 91 compares the relative investments into different socially responsible banks by rank. It shows that, to some extent, the stakeholder salience ranking according to relation 4.17 translates directly into investment decisions: In line with the ranking of this stakeholder, the highest share of funds is allocated to customer banks. Similarly, statistically significant differences exist neither between the rankings of customers, society and social issues, the environment, and employees nor between the relative investments into banks which address the claims of these stakeholders. However, there are two exceptions: First, ethics and morale are attributed relatively high bank stakeholder salience, but the investments into ethical and moral banks are disproportionately low. Second, while higher mean investments into banks which address the claims of employees rather than shareholders are in line with the salience of these two stakeholders, the differences in investments are – unlike ranks – not statistically significantly different.

Rank	Stakeholder	Mean	Median	JB	p1	p2
1	Customers	18.15	10	0.0000	0.0618	0.215
1	Customers	(24.2807)	(10)			
2	Society	16.2	0	0.0000	0.3627	0.356
2	Society	(24.1146)	(0)			
3	Ethics	14.3	0	0.0000	0.0692	0.040
	Ethics	(21.7415)	(0)			
4	Environment	16.775	10	0.0000	0.8243	0.671
4	Environment	(23.4569)	(10)			
5	Employees	16.8	0	0.0000	0.3929	0.524
5	Employees	(23.7417)	(0)			
6	Shareholders	15.275	0	0.0000		
0	Snarenoiders	(22.6651)	(0)			

Table 91 Experiment H_{12} : Relative Investments (2/2)

Source: Own representation.

Notes: N = 100 participants/100 observations by stakeholder. Values rounded where appropriate. Mean standard deviations and median absolute deviations in parentheses. "JB" is the significance level of a Jarque-Bera test for normality."p1" ("p2") is the significance level of a two-sided Wilcoxon-Mann-Whitney test (non-parametric K-sample test on the equality of medians) that investments are equal across consecutive ranks.

While this outcome provides not fully unequivocal support for hypothesis H_{12} , the salience of stakeholders may still influence the decision if and how much to invest into bank which address their claims. To establish the importance of stakeholder salience for investment decisions, a set of OLS regression models is specified for relative investments into each of the six socially responsible banks. Additional variables are determined by using a forward-stepwise approach with a 10% significance level threshold for variable inclusion. The results of this exercise are reported in table 92.

Dependent:	Stakeholder	•				
Rel_{Inv}	Sha	Cus	Emp	Eth	Soc	Env
Constant	29.0241***	52.7615***	12.1712**	18.1716***	11.7976*	20.7147***
Constant	(5.5954)	(13.4004)	(4.3234)	(5.3161)	(5.0063)	(5.1381)
Polonamoo	2.6653**	3.0806**	4.1979***	4.0734***	5.7093***	3.9621***
Relevance	(0.9250)	(1.0015)	(0.9957)	(0.8727)	(0.9593)	(0.8607)
DDD	-5.6333*					
RRP_B	(2.6747)					
Crad		-5.8720*				
Grad		(2.6205)				
1.00		—			-0.3254*	
Age					(0.1389)	
PCE	-3.4027**	-3.0186*				
$I \cup L$	(1.1698)	(1.3478)				
$D_{rof}M_{ar}$						-4.174***
$ProfMax_{Bnk}$						(1.2133)
Drof Mar-		-5.8425*				
$ProfMax_{Inv}$		(2.3929)				
SolfInt				-3.0026*		
SelfInt				(1.4071)		
Bank	-10.19***	-5.4961*	-10.93***	-10.22***	-9.896***	-8.342***
$Bank_{Dir}$	(2.4858)	(2.6182)	(2.4277)	(2.3056)	(2.3795)	(2.3437)
Bank	-9.011***	-7.1671**	-10.09***	-12.31***	-6.0817*	-5.604*
$Bank_{Sav}$	(2.3308)	(2.5633)	(2.3539)	(2.2273)	(2.4464)	(2.2769)
Bank	5.5513^{*}		-5.5202*	-7.3759**		
$Bank_{Com}$	(2.3324)		(2.4173)	(2.4050)		
Rank -					-4.8690	
$Bank_{Coo}$					(2.6595)	
Prod-	4.9623					
$Prod_{Loa}$	(2.8479)					
Prod-	8.9820*		12.2422**	9.2055**	8.5847*	
$Prod_{Ins}$	(4.2894)		(4.4344)	(3.5300)	(3.7037)	
Drad	-5.2426*	-4.8831				
$Prod_{Sec}$	(2.6067)	(2.6740)				
Drad			-7.1982**	-5.1473*		
$Prod_{Bui}$			(2.2372)	(2.1902)		

Table 92Experiment H_{12} : Relative Investments Regressions

$Prod_{Sav}$					-4.5405 (2.3984)	_
F	8.89	7.74	10.38	9.10	14.13	14.05
Adj. \mathbb{R}^2	0.1396	0.0816	0.0868	0.1224	0.1556	0.1178

Source: Own representation.

Notes: N = 100 participants/400 observations by stakeholder. Values rounded where appropriate. Robust standard errors in parentheses. "Sha"/ "Cus"/"Emp"/"Eth"/"Soc"/"Env" denote banks which address the claims of shareholders/customers/employees/ethics/society/environment. */**/*** indicate significance at the 5%/1%/0.1% level.

Table 92 suggests that stakeholder salience strongly matters for investment decisions: In all six model specifications, the coefficient on *Relevance*, which captures the perceived importance of addressing the respective stakeholder's claims for a bank, is statistically significantly different from zero at confidence levels of 95% or higher. Its size implies that a positive one-category change in this variable, which is measured on a 5-point Likert scale from "very important" (coded as 5) to "very unimportant" (coded as 1), translates into an average increase in relative investments between 2.7 and 5.7 percentage points. This supports a weak version of hypothesis H_{12} , which describes a positive relationship between the salience of stakeholders and investments into banks which address their claims.

While all of them predict a major influence of stakeholder relevance, the best-fit model specifications vary considerably as to which control variables are included and have an influence on Rel_{Inv} . This limits the potential to draw robust inferences about the influence of these factors. Two exceptions are $Bank_{Dir}$ and $Bank_{Sav}$: In line with previous findings, the coefficients on these binary variables suggest that a relationship with either of these types of banks in real life translates into a more conservative investment behavior and lower allocations to socially responsible banks – by up to 12 percentage points for savings banks customers and investments into ethical and moral institutions – in the experiment.

The tests for hypothesis H_{12} paint a differentiated picture of how stakeholder salience may inform investments into certain socially responsible banks: On the one hand, the relative amounts invested into a bank which addresses a specific stakeholder's claims do not seem to depend on the salience of this stakeholder according to the CSR survey's results. On the other hand, there is greater – though still not perfect – consistency between investments into the different CSR banks and the revised stakeholder ranking of relation 4.17, which describes that the perceptions of stakeholder salience as more homogeneous. While the overall evaluation for the strong version of hypothesis H_{12} is therefore mixed, estimations on stakeholder level suggest that stakeholder salience is an important predictor of relative investments into socially responsible banks. This finding can be regarded as corroborating evidence for a weak version of hypothesis H_{12} . The results of all statistical tests for the three sets of hypotheses about investments into socially responsible banks are summarized in table 93. With respect to the first aspect – investor rationality – the evidence strongly suggests that more favorable risk/returns profiles trigger higher investments into the respective banks, as described by both hypotheses H_1 and H_3 . At the same time, the clear rebuttal of hypothesis H_2 at high significance levels is at odds with rational investment behavior according to equation 4.10; a finding which implies that the social performance of a bank need not necessarily impact its CFP to be considered by investors.

For the second set of hypotheses, which describe how three different phenomena of bounded rationality may influence investment decisions, the assessment is more differentiated: On the one hand, investors seem strongly affected by disposition effects according to hypothesis H_5 – which implies a particularly low willingness to sell the underperforming stocks of CSR banks – while a preference for socially responsible institutions over non-CSR banks with equal financial performance is in line with the predictions of the halo effects hypothesis H_8 . In addition, similar relative investments into different socially responsible banks corroborate the mental accounting hypotheses H_6 and, to a lesser extent, H_7 . On the other hand, there is only limited support both for returns targeting according to the first prospect theory hypothesis H_4 and the second CSR halo effects hypothesis H_9 , which claims that superior social performance may compensate an inferior risk/returns profile. All things considered, these findings suggest that CSR activities of banks may in fact trigger, reinforce, or mitigate certain biases and heuristics in investment decisions and, at the same time, carry the potential to establish a tense relationship with a bank's financial performance.

Third, in particular the mental accounting heuristics for CSR banks ex-ante limit the potential to yield strong results in line with hypotheses H_{10} to H_{12} , which are derived from the CSR survey's results. This is particularly evident for hypothesis H_{11} as its prediction of a positive relation between the cause/business fit of a stakeholder and investments into banks which address this stakeholder's claims finds little support in the data. Still, the experimental results qualitatively suggest that investors tend to allocate higher relative amounts to banks which target the claims of certain primary rather than secondary stakeholders, as predicted by H_{10} . In statistical terms, this evidence is stronger for individual primary and secondary stakeholders than for the comparisons between primary and secondary stakeholder salience and investments: First, perceptions of stakeholder salience depend to a significant extent on the specific setting and differ considerably between the salience inferred from the CSR survey – coded "inf. salience" in table 93 – and the experiment. Second, in the experiment, both investment patterns and revealed perceptions of stakeholder salience – coded "rev. salience" – are rather homogeneous; this is a possible explanation for the diversification heuristics identified by hypothesis H_6 . Third, the regression results show that stakeholder salience is an important predictor for investment decisions across different socially responsible banks. This suggests that, within the limited frame of possibilities scope, at least a weak version of H_{12} delivers valid predictions.

Table 93	Experiment:	Results of Hypothesis Tests	5

	Course contro d	A 1
Hypothesis and implication	Supported	Analysis
H_1 : Investors invest higher amounts into banks	Yes*	CT
with a more favorable risk/returns profile	Yes*	Reg
H ₂ : Investors invest the same amounts into so-		
cially responsible banks and non-socially respon-	No*	CT
sible banks with the same risk/returns profiles		
H_3 : Investors invest lower amounts into socially		
responsible banks with less favorable risk/returns	Yes^*	CT
profiles than non-socially responsible banks		
H ₄ : Investors invest higher amounts into so-	No*	СТ
cially responsible banks with an unfavorable	No	CT, corr.
risk/returns profile when non-socially responsible	No*	Reg
banks offer a more favorable risk/returns profile	No*	Reg, corr.
H ₅ : Identical deteriorations of previously iden-	Yes*	CT, % delta
tical risk/returns profiles trigger lower divest-	Yes*	CT, adj. % delta
ments for socially responsible banks than for non-	Yes*	CT, corr. % delta
socially responsible banks		
	(Mostly) yes	CT, avg.
H ₆ : Investors invest constant amounts into so-	(Mostly) yes [*]	CT, pairs
cially responsible banks	(Mostly) yes [*]	Reg
	Yes*	Reg, coefficients
H ₇ : Investors invest constant amounts into so-	Mixed	CT
cially responsible banks which pursue specific	(Mostly) yes [*]	Reg
CSR activities, irrespective of their risk/returns		
profiles		
H_8 : Investors invest higher amounts into socially	Yes*	Reg, restricted
responsible banks than into non-socially respon-	Yes*	Reg, extended
sible banks with identical risk/returns profiles		0,
H ₉ : Investors invest similar amounts into socially	No*	СТ
responsible banks and non-socially responsible	No*	Reg
banks with more favorable risk/returns profiles		-

H_{10} : Assuming identical risk/returns profiles, in-	Mixed	CT
vestors invest higher amounts into socially re-	Yes	Reg, avg. SH
sponsible banks which address the claims of pri-	(Mostly) yes [*]	Reg, ind. SH
mary rather than secondary stakeholders		
H_{11} : Assuming identical risk/returns profiles, in-		
vestors invest higher amounts into socially re-		
sponsible banks which address the claims of	No*	CT
stakeholders with a high rather than a low		
cause/business fit		
H_{12} : Assuming identical risk/returns profiles, in-	(Mostly) no	CT, inf. salience
vestors invest higher amounts into socially re-	(Mostly) yes	CT, rev. salience
sponsible banks which address the claims of more	Yes^*	Reg
rather than less salient stakeholders		

Source: Own representation.

Note: "CT" denotes analyses of central tendencies. "Reg" denotes regression models. "Corr." denotes correct investments as defined for the respective hypothesis test. "Delta" denotes changes in investments. "SH" denotes stakeholders. "Avg."/"Ind." denote averages of multiple stakeholders/individual stakeholders. "*" indicates statistical significance at standard significance levels ($\alpha \leq 5\%$).

4.3.5 Discussion

In the following section, these insights into bounded investor rationality and CSR in banking are discussed in terms of three dimensions: First, section 4.3.5.1 investigates the experiment's findings with respect to their internal as well as external validity and their contribution to the academic debate. Second, possible avenues for further research are introduced in section 4.3.5.2. Third, the implications of these findings, in particular for CSR and banking practitioners, are discussed in the section 4.3.5.3.

4.3.5.1 Validity

As described by Campbell (1957), an experiment is internally valid when its treatment yields significant responses in a dependent variable and these responses can be explained by systematic changes in the independent variables. On the contrary, Campbell and Stanley (1966) show that the internal validity of an experiment may be compromised by nine threats – experimenter bias, selection, regression towards the mean, history, instrumentation, maturation, mortality, interactions between selection and maturation effects, and repeated testing – the relevance of which for the present study is discussed below.

First, the experimenter bias describes the phenomenon that the outcomes of an experimental study are – accidentally or on purpose – influenced by the experimenter and their expectations. Supino (2012) describes that an experimenter may bias results by influencing the experiment's participants' decisions in terms of verbal and non-verbal cues or by handling treatment and control groups differently within the experiment or during the analysis process. To mitigate the impact of this bias in the present study, three steps were taken: First, the experiment followed a within-subjects design, which implies that its treatments are applied equally to all participants. By definition, this approach rules out that the treatment and control groups are treated differently by the experimenter. Second, as described in section 4.3.3, the experimental procedures followed five identical steps in all sessions and involved a minimum level of personal interactions between the experimenter and the participants. Where additional input was necessary – for instance, by providing instructions or answering questions – standardized wording was used. Similarly, the experiment's participants processed information and took decisions without the experimenter's interference. Third, the tests conducted in section 4.3.4 used a consistent set of data analyses for all hypotheses to counteract potential methodology-driven experimenter biases.

The second threat are selection biases: Shadish, Cook, and Campbell (2002) show that insufficiently randomized selection processes may result in systematic differences between treatment and control groups. As a consequence, the observed performance of the dependent variable may be driven by participant characteristics rather than variations in the independent variable. When defined in this narrow sense, a selection bias can be ruled out due to the within-subjects design of the experiment. In a wider sense, it is possible that certain characteristics of the experiment's participants are correlated with the independent variables and obscure their true relation with the dependent variable. To mitigate this issue, the experiment controlled for a range of attitudes and sociodemographic parameters, which are documented in section 4.3.2.2. As the hypothesis tests shows, including these parameters typically improves the fit of a model, but neither changes the direction of the results nor significantly affects the size of individual coefficients. In principle, the use of a self-selection approach to determine the participants for the experiment may in principle result in a selection bias; however, this is not the case for the present study as a selection into treatment and control groups was not possible by design. Self-selection should also reduce the probability that the participants' test scores – for instance, the relative amounts invested – subsequently regress to their means as participants were not chosen based on particularly high or low scores. The possibility to take these extreme decisions is additionally limited by the available budget in every scenario.

The latter finding points to the importance of dynamic effects, which constitute a third set of threats to internal validity. Their impact is mitigated by two factors in the experiment: First, the results of a cross-sectional experiment, which collects data at a single point in time, can by definition not be affected by subject maturation, biases due to repeated testing of individual participants, or mortality and attrition effects, which denote the systematic dropping out of participants with certain characteristics after enrollment. This conclusion also implies that interaction effects between selection and maturation can be ruled out. Second, the short overall data collection period of two weeks limits the impact potential for external events to cause the response behavior, which is referred to as history effects. The same is true for instrumentation effects, which denote biases due to changes in measurement approaches or experimental conditions between sessions.

From a more general perspective, repeated testing and maturation may result in learning and order effects (Supino, 2012; Hogarth and Einhorn, 1992) within individual sessions so that the investment decisions of a participant systematically depend on the scenario order. In principle, the experiment's focus on assessments and preferences – which should be more consistent than skills, which might be learned – suggests that its results should not be affected to a major extent by this bias. To proactively address potential learning and order effects, the position of the six socially responsible banks in the four scenario configurations was varied systematically as shown in figure 37. It demonstrates that each of the 24 socially responsible banks – defined by a combination of a stakeholder-focused CSR activity and a specific scenario configuration, which in turn translates into a certain risk/returns profile – is positioned in at least two different segments across the three versions of the experiment.⁵² Due to the requirement that scenarios A and B need to be shown prior to scenario D for every stakeholder, the sole exception is the employeefocused bank in configuration A, which is consistently positioned in the second segment in all three versions of the experiment.

Scenario	Stakeholder					
	Sha	Cus	Emp	Eth	Soc	Env
А	0.3013	0.9447	0.5897	0.0465	0.2511	0.3635
В	0.2616	0.3417	0.5123	0.0917	0.4247	0.5562
С	0.5886	0.9823	0.6486	0.5509	0.5911	0.3437
D	0.2346	0.2469	0.4783	0.5707	0.2434	0.6497

 Table 94
 Experiment: Relative Investments across Experiment Versions

Source: Own representation.

Notes: N = 100 participants, 37/34/29 observations by experiment version. "Sha"/"Cus"/"Emp"/ "Eth"/"Soc"/"Env" denote banks which address the claims of shareholders/customers/employees/ ethics/society/environment.

⁵²As illustrated by figure 37, the three segments are defined as positions 1-8 (first segment), positions 9-16 (second segment), and positions 17-24 (segment 3).

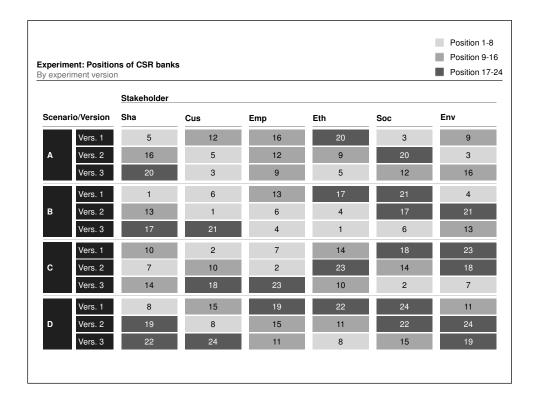


Figure 37 Experiment: Positions of CSR Banks

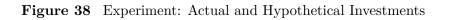
Source: Own representation.

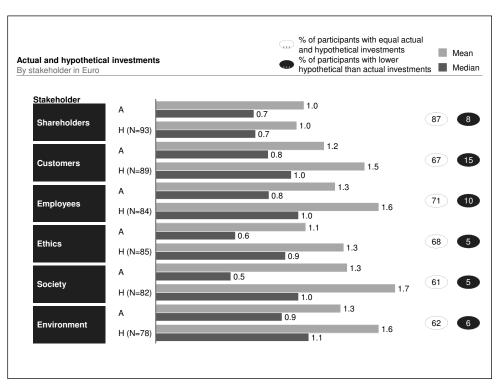
If this approach is effective in ensuring that investment decisions do not depend systematically on scenario order, the relative investments into each of the socially responsible banks should similar across the three versions of the experiment. To determine if this assumption is justified, table 94 summarizes the outcomes of multiple Kruskal Wallis tests whether the participants exhibit consistent preferences for the different socially responsible banks, irrespective of their positioning in the experiment. Based on the p-values, the null hypothesis of equal investments across the three experiment versions cannot be rejected for all 24 socially responsible banks except for ethical and moral institutions in scenario configuration A. Even without controlling for investor characteristics, this evidence strongly suggests that the relative investments into a certain socially responsible bank are not systematically influenced by the different versions of the experiment. Its results should therefore mostly be unaffected by the scenario order or learning effects.

As discussed in Supino (2012), an additional driver of internal validity is participant engagement, which is enhanced by two factors in the experiment: The first one are formal aspects such as the self-selection sign-up process and the experiment's short duration of clearly less than one hour. In combination, both should have helped to identify motivated participants and to maintain their engagement level throughout the sessions. Second, the experiment incentivized the financial and the social dimension of investment decisions as described in sections 4.3.2.3 and 4.3.3. The former component – financial incentives – is a distinguishing feature of economic experiments which seeks to encourage more accurate and considerate decision-making (Ariely and Norton, 2007; Camerer and Hogarth, 1999; Hertwig and Ortmann, 2001) and to increase the realism of an experimental setting (Binmore, 1999). Yet, the experiment's focus on assessments and preferences rather than achievements implies that no "right" and "wrong" answers or behaviors exist and can therefore not be incentivized in monetary terms. Therefore, the payment scheme combined a performance-based compensation – as an incentive to consider a bank's risk/returns profile in investment decisions – with two fixed payments for showing up and completing the final questionnaire, a typical element of psychological experiments (Dickson, 2011).

Strictly speaking, an economic experiment would require financial incentives for the social dimension, too. On the one hand, this is implicitly true as socially responsible banks are constantly characterized by non-superior certain risk/returns profiles. Participants who invest a positive amount into these institutions therefore cannot achieve the maximum possible payout. On the other hand, the banks and the activities they pursue to address certain stakeholder claims are fictitious. As a consequence, there is a monetary downside for individual participants when investing into CSR banks, but no tangible upside for the respective stakeholder. However, implementing effective financial incentives for the CSR dimension faces a set of challenges: While similar studies within the CRM literature donate a certain monetary amount to a charitable organization when a participant consumes a socially responsible product (Vanhamme et al., 2012; Pracejus and Olsen, 2004; Lichtenstein, Drumwright and Braig, 2004), this approach is not feasible for the experiment for three reasons: First, neither of the six CSR activities are donations since charitable giving is excluded by the operationalization of CSR in section 2.2 so that a mismatch would be created. Second, the stakeholder-based concept of CSR would require that six charitable organizations which each address the claims of one specific stakeholder exist and are all well-known by the general public: As the CRM literature shows, familiarity with the charitable organization is a key moderator for consumption decisions (Lafferty and Goldsmith, 2005; Lafferty and Edmondson, 2009). Discussions with both with industry experts and university students demonstrated that this criterion is particularly hardly to meet for the three primary stakeholders. Third, while the size of the donation has a strong impact on participants' decision, the literature and real-life examples suggest various different magnitudes (Müller, Fries and Gedenk, 2014). In combination, this evidence implies that the advantages of introducing donations to individual charities would have been more than offset by the disadvantages. This situation could not have been improved by channeling all donations to a single charitable organization: Under this approach, a participant's decision if and how much to invest into a certain socially responsible bank would have been a mixed result of their preference for the specific stakeholder in scope of this bank's CSR activity and for the overall donation cause. As a consequence, the validity of the analyses of investments into socially responsible banks in general and on the level of individual stakeholders in particular would have been severely compromised.

To size the importance of this aspect, the experiment explicitly investigated the question whether real donations to charities would have triggered different investment patterns: At the end of the experiment, all participants were shown their cumulative investments in real Euros – that is, divided by 1,000 – into each of the six socially responsible banks and were asked to indicate their how much they would have invested hypothetically into each of these banks if a certain proportion would be donated to an organization which promotes the interests of the respective stakeholder. In line with reviews of donation sizes in CRM (Müller, Fries and Gedenk, 2014; Hajjat, 2003), the donation size was calibrated at 10% of real cumulative investments. Figure 38 summarizes the outcomes for this question. The differences in sample sizes for actual and hypothetical investments results from adjusting for outliers: When the hypothetical investments for a certain CSR bank exceeded the total actual investments for all socially responsible banks combined, the hypothetical decision was considered an outlier. As only strictly unfeasible investment choices are eliminated, this represents a rather conservative approach.





Source: Own representation.

Notes: Values rounded. "A" ("H") denote actual (hypothetical) investments.

The evidence in figure 38 corroborates the hypothesis that the introduction of donations would not have triggered major shifts in investments: First, the size of the differences in average actual and hypothetical investments are minor with a maximum delta of EUR 0.5 for median investments into social banks. Second, between 60% and nearly 90% of the participants would have invested the same amounts in case of a 10% donation. 5% to 15% would even have decreased their investments. Taken together, both percentages imply that the number of participants who would have increased their investments in a donation scenario is very low such that a stakeholder-specific financial incentivization of CSR activities would not have altered the experimental findings substantially.

On the contrary, two arguments suggest that the experiment implemented the social dimension in a valid way: First, the literature provides indications that individuals may integrate CSR considerations into their economic decisions merely due to the utility they derive from doing good. This phenomenon is referred to as a "warm glow" (Andreoni, 1990, 464) and provides an explanation why, for instance, consumers accept price increases in connection with charitable donations (Müller, Fries and Gedenk, 2014). In a more general sense, the participants may have experienced a warm glow of moral satisfaction (Kahneman and Knetsch, 1992) by shifting their focus from a bank's financial to its social performance. Second, research into "nudging" and "libertarian paternalism" (Sunstein and Thaler, 2003; Thaler and Sunstein, 2008) suggests that feedback on previous decisions and transparency about their impact may be a powerful means to inform economic decisions. The experiment's dynamic stakeholder dashboard – which visualizes the extent to which a participant has considered the six stakeholders and their claims in investment decisions so far – is based on this rationale.

It still may be possible that the impact of CSR on investment decisions in the experiment is underestimated due to the absence of financial incentives to consider stakeholder claims. Yet, the statistical tests provide clear and statistically significant indications that social responsibility matters, as illustrated by, for instance, the results for hypothesis H_2 , H_5 , and H_8 . This suggests that the experiment's participants considered a bank's CSR activities in their investment decisions without the element of donations. While financial incentives might have encouraged even more or more significant results, their introduction would have created both theoretical inconsistencies and practical challenges.

The final component in a test of internal validity is statistical conclusion validity. This aspect, which focuses on whether the conclusions of a study are derived from valid data and appropriate analyses (Shadish, Cook and Campbell, 2002), is driven by three components: First, the participants of a study need to properly understand the basic principles and mechanisms to avoid excessive increases in variance, which reduces statistical conclusion validity. In the experiment, this aspect was addressed by requiring all partici-

pants to complete a short pre-test prior before the actual experiment to rule out random decision-making. Second, the requirements of the statistical tests need to be met. In the experiment, the decision to use a non-parametric methodology to determine whether, for instance, the investments into different kinds of banks are equal is based on the results of a statistical test for normality. Similarly, the regression models were used after a positive check of the three OLS assumptions (Wooldridge, 2015; Stock and Watson, 2014), which are shown in formulas 4.18 to 4.20.

$$E(u_i|X_i) = 0 \tag{4.18}$$

First, formula 4.18 describes that the error term u_i and the vector of independent variables X_i need to be uncorrelated. Three steps were taken to address a possible endogeneity of the independent variables in the experiment: First, the within-subjects design makes it impossible that a participant's unobservable characteristics – captured by the error term – and the treatment – described by the independent variable – are correlated as no treatment and control groups exist. Second, to determine whether a multivariate linear OLS best captures the true relation between dependent and independent variables, alternative regression models and specifications involving polynomial and interaction terms were estimated, which neither yielded different results nor achieved a better fit than the analyses reported in section 4.3.4. Third, to ensure that no important parameters were omitted, various potential control variables were derived from a literature review and the CSR survey results and included in a forward-stepwise approach if they exceeded a moderate significance level threshold. The exogeneity of the independent variables in the experiment should therefore be strong.

$$(X_i, Y_i), i = 1, \dots, n \text{ are } i.i.d.$$
 (4.19)

Second, the assumption shown by formula 4.19 that X_i and the dependent variable Y_i are independently and identically distributed typically holds when a random sample of participants is drawn from a large population. The sampling process of the experiment, allowed the participants to sign-up independently, which might in principle have created a non-random sample. However, the analyses controlled for various factors with possible relevance for the decisions of interest such as a participant's age, gender, and educational background. In addition, this self-selection did not affect the experiment's treatments, as discussed in the previous paragraph. Therefore, the second OLS assumption should hold.

$$0 < E(X_i^4) < \infty, \ 0 < E(u_i^4) < \infty \tag{4.20}$$

Third, formula 4.20 requires that large outliers are unlikely. In the experiment, the dependent variable – investments – is measured as a percentage of scenario income and therefore finite by definition. The same is true for the independent variables, which are

typically implemented as binary variables such as CSR, which describes whether or not a bank is socially responsible and can therefore only take values of 0 or 1. Similarly, table A.5 shows that the control variables are mostly either binary as well or categorical and therefore bounded by the endpoints of a Likert scale. The third OLS assumption should therefore be satisfied as well.

This discussion suggests that all three requirements for using multivariate linear OLS regressions should be met. In addition, the regression models used standard errors which are robust to heteroskedasticity (White, 1980). Therefore, the both the estimation results and the hypothesis tests should be unbiased.

The third criterion of statistical conclusion validity concerns the significance levels of the analyses. For the statistical tests of the individual hypotheses, this aspect has already been discussed within section 4.3.4. To establish the overall significance of the regression models in terms of their fit, the effect size identified by a regression model according to its R^2 is classified into three categories as described by Cohen (1992). Table 95 reports the thresholds of R^2 for small, medium, and large effect sizes and how many percent of the experiment's regression models fall within each category. This analysis, which considers only the extended regression specifications and neglects the illustrative restricted models, suggests a differentiated conclusion: On the one hand, about 40% of the models identify a medium to large effect size with nearly 30% in the latter category. On the other hand, more than half of the models exhibit a rather small effect size. In this case, comparisons of regression coefficients across estimations rather than interpretations of their absolute magnitude are appropriate, which mirrors the approach of section 4.3.4.

Effect size	Minimum \mathbb{R}^2	Regressions with effect size
Small	0.0196	61%
Medium	0.1304	12%
Large	0.2592	27%

 Table 95
 Experiment: Fit of Regression Models

Source: Own representation based on Cohen (1992).

Note: N = 33 regression models, extended specifications.

As described in Campbell (1957), "the controls required for internal validity often tend to jeopardize representativeness" (Campbell, 1957, 297). Similarly, Schram (2005) characterizes the relationship between the internal and the external validity of economic experiments as tense. While this suggests that an experiment's methodology and an internally valid implementation may compromise its external validity, the findings of section 4.3.4 may still carry importance beyond the laboratory environment.

Following Bardsley (2010), there are two main challenges to the external validity of an economic experiment, the first being unrepresentative samples. For the present study, two main aspects should be discussed in this connection: First, the use of students, which has been criticized occasionally in the literature (Benz and Meier, 2008; Peterson, 2001; Sears, 1986). This position is up by Winer's (1999) question "since students are not "real" people, how can the lab results be generalized to the greater population?" (Winer, 1999, 352). Yet, as Lynch (1999) argues, experiments with student participants do not have an inherently smaller generalization potential than studies based on real-life environments and participants: In his view, the assumption that the findings of one study can be transferred to another setting is generally flawed and external validity does not require the realistic modeling of all – and potentially irrelevant – background factors. Instead, to reject a student sample as inappropriate, one needs to identify the specific dimension in which students differ from the population of interest and show that as well as how this difference matters (Lynch, 1999, 370). In line with this argumentation, Druckman and Kam (2011) set forth a number of arguments for choosing students as subjects. One of them is that "experimental realism" – situations which participants take seriously and which provide feedback between a participant's actions and their effects – rather than the "mundane realism" of the experiment's conditions is crucial for external validity. The experimental realism of laboratory studies which involve monetary incentives or complex decision problems should be higher when conducted with students, who are "relatively educated, in need of small amounts of money, and accustomed to following instructions" (Druckman and Kam, 2011, 86).

Second, the representativeness of a sample can be discussed in terms of its demographics. Two observations suggest that this aspect should not pose a major challenge for the present study: First, tables 62 and 63 illustrate that the experiment's participants are on average slightly older, more advanced in their studies, and more diverse in terms of academic disciplines than the CSR survey's students. This suggests a relatively broader overall participant scope. Second, the experiment's participants share some characteristics with the investors of SRI funds: Similar to socially responsible consumers, these financial market participants are typically younger (Berry and Yeung, 2013; Diamantopoulos et al., 2003), better educated (Cheah et al., 2011), but not necessarily wealthier (Nilsson, 2008) than investors of conventional funds. In spite of these common features, the participants of the experiment remain students, not expert investors. Yet, empirical findings suggest that students and financial sector professionals are characterized by lower differences in judgment and choice than often assumed (Hewitt, 2009; Arnold et al., 2009) and may be affected by similar constraints and biases (Torngren and Montgomery, 2004; Kahneman and Riepe, 1998). The student sample's demographics therefore do not render inferences about more general investment decision patterns per se invalid.

The second possible threat to an experiment's external validity is an unrepresentative decision problem (Bardsley, 2010). In three ways, the experiment documented in the present study provided a representative choice environment: First, in a fundamental sense, a decision problem faced by professional and non-professional investors alike – whether and how much to invest into different banks – is modeled. Second, the participants' investment decisions affected the variable component of their payouts based on the financial performance of the banks. Qualitatively, this approach reproduces the investment profit generation mechanism and is quantitatively based on real ROE data for German banks, as shown by figure 27. Third, the stakeholder management activities are derived from the CSR survey. As discussed in section 3.3.5.1, these activities are in turn based on analyses of CSR reports, previous research, and discussions with industry experts on banking, CSR, and SRI to ensure the representativeness of the banks' CSR activities.

Still, two challenges to the representativeness of the experiment's decision problem remain: First, as pointed out in the discussion of internal validity, the financial performance of a bank is linked to cash payouts while its social performance is fictitious. In terms of external validity, this suggests that only one component of a real investor's decision problem between individual financial benefits and social impact is modeled. Yet, to some extent, the experiment thereby reflects reality: Typically, there is no immediate impact for market participants who allocate their funds to a socially responsible bank; either because an investor is not affected by measures which address the claims of primary stakeholders other than themselves – for instance, of bank employees – or because investments do not directly improve the situation of intangible secondary stakeholders such as the environment or ethics and morale. Therefore, the experiment can be understood as a stylization of this disconnect between the interests of investors and the impact of their decisions on a bank's further stakeholders.

Second, the experiment's participants could divide their funds between one CSR bank and two non-CSR banks in every scenario. In reality, investor may choose from multiple socially responsible banks with portfolios of different CSR activities or institutions which favor one stakeholder at the expense of another. However, the combination of a scarcity of previous research and the limited time frame of an experiment created the need to focus on the fundamental aspects of the interaction between a bank's CSR activities, the decisions of its investors, and their bounded rationality.

This discussion suggests a threefold conclusion: First, there are no fundamental threats to the external validity of the experiment's findings such as an inherently unrepresentative participant sample or decision problem. Second, its findings may carry particular importance for the sub-sample of the relevant public – defined in section 3.3.5.1 – which shares a number of sociodemographic characteristics with socially responsible investors. Third, the experiment's findings should be interpreted as a set of possible outcomes and the assessment whether they may hold true in another setting should always take the characteristics of the specific population and decision problem into account. This echoes the position of Guala and Mittone (2005), who clarify that "many experiments are not aimed at a well-specified real-world target but rather contribute to (...) a body of experimental knowledge to be applied case by case" (Guala and Mittone, 2005, 495).

Ultimately, the relative importance of an experiment's internal and external validity depends on its purpose, for which Roth (1995) describes a threefold classification: First, "speaking to theorists" describes how experiments seek to test specific hypotheses which are derived from theoretical models. Therefore, a high internal validity is crucial. Second, experiments with the objective to generate new data or insights – typically motivated by a lack of established theory or models in a specific area of research – can be classified as 'searching for facts'. Third, to support policymaking by "whispering in the ears of princes", the experiment's findings need to be in particular externally valid (McDermott, 2011). The present study investigates the interactions between bounded investor rationality and the CSR activities of banks. As previous research on this topic is sparse, it primarily engages in "searching for facts". However, Roth's (1995) three purpose categories are not mutually exclusive; therefore, testing theoretical predictions such as behavioral phenomena and providing a fact base to support, for instance, the decisions of CSR practitioners in the financial industry represent its secondary objectives. While this combination requires both internal and external validity, the above discussion did not identify serious weaknesses in either of the two dimensions.

In a final step, the experiment's outcomes are compared against the findings of previous research. As this analysis is rendered difficult by a scarcity of studies with a similar overall focus, the following assessment is mostly based on individual investigations into investor rationality, bounded investor rationality, and the topics derived from the CSR survey's results. It yields the result that selected outcomes – for instance, the relevance of financial profits for investors or the impact of behavioral phenomena – are in line with or extend previous findings. In case of other, more controversial topics such as the question whether profit-neutral CSR activities matter for investment decisions, the experiment's findings clearly support one position in the academic debate.

Two aspects of investor rationality are analyzed in the experiment. The first one, the fundamental assumption that investors prefer assets with higher expected returns for a given level of risk, is strongly supported by the literature. For instance, Ederington and Golubeva (2010) show that investors of US mutual funds reallocate their portfolios in response to changes in parameters which affect an asset's future returns. Recent results are in line with this outcome (Greenwood and Shleifer, 2014; Chalmers, Kaul and Phillips, 2013; Hoffmann and Post, 2015). This mirrors the findings for hypothesis H_1 that the ex-

periment's participants – who are directly provided with expected returns and risk rather than variables which may impact these parameters – allocate higher relative amounts to financially superior banks.

The second aspect concerns how the interactions between a bank's corporate financial and social performance impact the decisions of rational investors. As the findings in line with the predictions of hypothesis H_3 suggest, investors shun CSR banks in case of an inferior financial performance. This echoes the outcomes of Nilsson's (2009) study that investors who are primarily concerned about the social performance of an investment constitute a minority even among dedicated socially responsible investors. Similarly, Mackenzie and Lewis (1999) find that ethical investors refrain from their socially responsible investment strategy in case of major underperformance. Finally, McLachlan and Gardner (2004) show that perceived relevance of financial returns is similar for Australian investors with and without a CSR focus in investments.

At the same time, the test results for H_2 imply that investors also consider a bank's CSR activities which do not affect financial performance. Prima facie, this finding is at odds with rational portfolio selection, which implies a "primary purpose (...) to receive finan*cial return*" (Nilsson, 2008, 311) so that CSR and non-CSR banks with equal risk/returns profiles should be equivalent for investors. In addition, it contradicts early empirical findings by Teoh and Shiu (1990) that CSR information does not affect investment decisions. A possible explanation is provided by Williams (2007), who identifies non-financial considerations as a key driver behind the growth of the SRI segment. As section 4.1.2 suggests that systematic differences in financial performance between SRI and conventional funds are unlikely to be the cause for this growth trend, Williams' argument appears both valid and helpful to understand investors' preferences for CSR banks over non-CSR institutions with the same risk/returns profiles. More generally, the behavior observed in the experiment is in line with findings by Lydenberg (2007) that social investors in the US or in Europe focus on both the socio-ecological aspects and the financial performance of their investments or by Nilsson (2009) that most SRI investors are driven by both social responsibility and profit motives. Therefore, the experiment's results are fundamentally corroborated by previous findings for the SRI industry, but suggest as a novel aspect that these investment patterns may hold true for a banking setting and for investors without an explicit CSR focus, too.

The experiment's results for bounded investor rationality corroborate in particular the disposition effect hypothesis H_5 , to some extent the mental accounting hypothesis H_6 , and the halo effects hypothesis H_8 . Where relevant previous research exists, it is mostly in line with these results: First, several studies find that SRI investors strongly commit to their investments (Webley, Lewis and Mackenzie, 2001) or divest from these assets

only hesitantly in case of their underperformance (Bollen, 2007; Benson and Humphrey, 2008; Lewis and Mackenzie, 2000) The analyses for H_5 suggest that this is true not only for the SRI segment, but also for investors of socially responsible banks, and introduce disposition effects as a possible explanation for these behaviors.

Second, the finding that investors tend to allocate similar amounts to different kinds of socially responsible banks, as stated by H₆, is in line with findings by Choi, Laibson, and Madrian (2009) or Benartzi and Thaler (2007; 2001) that diversification heuristics – the distribution of funds across different types of assets in relatively fixed proportions – inform portfolio choice. In addition, the test results for H₆ suggest that not only financial parameters such as asset classes and financial performance, but also social performance indicators are considered when establishing mental accounts. Yet, the limited previous evidence for this investment behavior in a CSR setting, which was discussed in section 4.2.2.2, suggests that further research is needed to establish the robustness of this result.

The importance of the third behavioral phenomenon - CSR halos - is highlighted by the test results for hypotheses H_8 . Against the background of previous research, this outcome has a dual implication: First, it is in line with studies which describe that CSR has a favorable impact on companies (Klein and Dawar, 2004; Smith, Read and López-Rodríguez, 2010; Hong and Liskovich, 2014) rather than trigger negative associations (Luchs et al., 2010; Chernev and Blair, 2015; Sen and Bhattacharya, 2001). Second, the experiment's results support the idea of Brown and Perry (1994) that CSR halos may affect perceptions of financial performance specifically for banks and their investors. While the explicit impact of CSR halos on investment decisions has not been investigated so far, the above literature review for H₂ implies that investors also consider a bank's CSR activities which are unrelated to financial performance, which can be interpreted as evidence in line with the results for H_8 . Similarly, Sörqvist et al. (2015) show that investors are willing to pay higher prices pay – or to forgo profits as in the experiment – for a socially responsible product. More specifically, Berry and Yeung (2013) find that, for a given level of financial performance, SRI investors allocate higher amounts to companies with a strong ethical performance. Finally, the findings for H_8 echo the result by Consolandi, Innocenti, and Vercelli (2009) that relative investments into certain stocks increase after their inclusion in an ethical index. The experiment's investors exhibit a similar behavior, which can be interpreted as a manifestation of CSR halos.

As a third topic, the experiment tests whether investment decisions are consistent with certain preferences identified in the CSR survey. The analyses suggest that this consistency is limited, but may primarily inform two aspects: First, the tendency to overweight banks which address the claims of primary rather than secondary stakeholders, as described by hypothesis H_{10} . Being in line with the CSR survey's results already implies

that this experimental finding is consistent with one closely related previous study. In addition, while the distinction between primary and secondary stakeholders is a novel aspect derived in section 3.2.1.2, this result is corroborated by selected previous findings: For instance, Cox, Brammer, and Millington's (2004) show that investors prefer stocks of companies which primarily address the claims of their employees. At the same time, the authors find that investor preferences for firms with a social or environmental CSR focus are weaker over the long term and may even turn negative for short-term investors. Similarly, Luo et al. (2014) identify an investor preference for firms which assign particularly high priority to addressing customer claims. In combination, this supports the experiment's finding that investors tend to favor banks which focus on addressing the claims of their primary stakeholders. At the same time, the relatively high investments into environmental banks in the experiment, which are at odds with hypothesis H_{10} , corroborate an observation by Renneboog, Ter Horst, and Zhang's (2008) that investors allocate their funds in particular to companies with a sound environmental performance.

The second CSR survey result – the relation between the relevance of certain stakeholders and the investments into banks which address their claims – can be investigated in the light of previous research from two perspectives. The first one is concerned with the perceived salience of the six bank stakeholders, which, as the hypothesis tests for H_{10} illustrates, is rather inadequately described by the stakeholder taxonomy. Still, the experiment's result is partly consistent with a number of scholarly studies: For instance, the relatively high relevance of addressing social claims is broadly in line with Fatma, Rahman, and Khan (2014). The authors also argue that CSR activities which address the claims of customers rather than shareholders should be more salient, which mirrors the experiment's salience ranking of equation 4.17. Further selected outcomes of the experiment such as the finding that addressing the claims of customers is regarded as more salient for a bank (Pérez and del Bosque, 2012) than implementing environmental or social measures (Pérez, Martínez and del Bosque, 2013) can also be corroborated by the literature.

From the second perspective, the perceived salience of stakeholders constitutes an important driver of investments into banks which address their claims. At the same time, the relation between stakeholder salience – which can be interpreted more generally as an investor's attitudes towards a stakeholder – and investment decisions is not perfect. This finding does not support the hypothesis of a comprehensive CSR attitude-behavior gap (Shaw, McMaster and Newholm, 2015; Berger and Corbin, 1992; Roberts, 1996*a*) which, for instance, Vyvyan, Ng, and Brimble (2007) also identify among SRI investors. Instead, it is in line with findings by Williams (2007) that stronger concerns about social issues as a consumer translate into higher investments into socially responsible funds. Similarly, it suggests that the Barreda-Tarrazona, Matallín-Sáez, and Balaguer-Franch's (2011) result that investors allocate more funds to SRI funds which address the topics they are personally concerned about matters for bank investors, too. The experiment results therefore support Nilsson's (2008) conclusion that investor attitudes are important, but not the only factor which drives socially responsible investment decisions.

Finally, the regression models identify a small set of control variables which is consistently related to investment decisions in the same qualitative direction. The first one is *Gender*, the coefficients on which imply that female participants tend to invest lower relative amounts than male ones. This finding is in line with the literature on genderrelated differences in investment patterns (Huang and Kisgen, 2013; Barber and Odean, 2001; Bajtelsmit and Bernasek, 1996). Second, as hypothesized in section 4.3.2.2, the estimations suggest that a more favorable attitude towards profit maximization on the part of investors $(Prof Max_{Inv})$ results in higher investments for the full sample of banks. In contrast, the coefficient on this variable turns negative when only socially responsible banks are in scope. This implies that participants who identify more strongly with Friedman's (1970) position towards the social responsibility of companies are more highspending in general, but allocate lower relative amounts to banks which emphasize social rather than financial performance. Third, the use of financial products which generate payouts in the more distant future – such as private insurance contracts $(Prod_{Ins})$ or building savings contracts $(Prod_{Bui})$ – is often positively related to relative investments into socially responsible banks in the experiment. This is in line with previous findings that socially responsible consumers (Gul, 2013) and investors (Cox, Brammer and Millington, 2004)typically take a long-term perspective. The influence of further control variables beyond this set – for instance, the different bank relationships of a participant $(Bank_{Type})$ or their study progress (Grad) – varies across the different estimations. In addition, there is no indication that a participant's attitude towards banks (captured by the variable BankAtt) or their course of studies (variable Bus) have a significant influence on investment decisions as neither of them exceeds the 10% significance threshold used in the forward-stepwise regressions.

4.3.5.2 Further Research

The present study introduces the first experiment study which investigates the impact of CSR activities in banking on the decisions of their investors which explicitly considers bounded rationality. Intuitively, this situation opens up several avenues for further research, which can be classified as further investigations within the current experimental setting, design modifications, and applications to different populations. All three combined may help to better understand the mechanics of a bank investor's CSR activity evaluations and to determine the robustness of the experimental findings. Multiple phenomena could be investigated without changing the experiment's overall decision problem. One starting point could be the extension of a bank's social performance: As previous research suggests, negative CSR – corporate actions and behaviors with unfavorable social implications (Mishra and Modi, 2013) – exerts a stronger influence on consumer decisions than positive information (Bhattacharya and Sen, 2004; Klein and Dawar, 2004; Sen and Bhattacharya, 2001). Introducing this distinction in the experiment might trigger asymmetric behaviors with wider gaps between investments into negative CSR banks and non-CSR banks than between positive CSR and non-CSR institutions. Both kinds of CSR activities could also be combined to establish activity portfolios or analyze the impact of CSR trade-offs – measures which favor one stakeholder at the expense of another – on investment decisions. Simultaneously, this approach would allow to integrate the finding of section 3.1 that banks often engage in multiple CSR activities at the same time while their resources are limited (Branco and Rodrigues, 2006).

In addition, further research should implement an alternative framing of CSR activities. Both the CSR survey and the experiment operationalized CSR in banking in line with section 2.2 instead of using connotative terms such as "CSR". Future research efforts might go the opposite way and investigate whether investors take systematically different decisions when a bank's stakeholder management measures are explicitly framed as CSR activities. The theoretical rationale is the general phenomenon of framing effects, which implies that "seemingly inconsequential changes in the formulations of choice problems cause(d) significant shifts of preference" (Tversky and Kahneman, 1985, 457). More specifically, Bénabou and Tirole (2010) show that CSR often denotes corporate concerns "about the environment, the welfare of people in poor countries, and other good causes" (Bénabou and Tirole, 2010, 21). An alternative framing might therefore trigger higher investments into banks which address the claims of secondary stakeholders. If this is true, one practical implication for banks might be to design and implement a holistic stakeholder management strategy, but label its components differently; for instance, by using "CSR" only activities to address social, ethical, or environmental claims.

A stronger focus on social, ethical, or environmental activities would simultaneously allow for an implementation of targeted donations; a third aspect for further research within the first topic. Section 4.3.5.1 argued that the familiarity with and the fit of a charitable organization are instrumental for donations to effectively incentivize socially responsible investor decisions and that this condition can be fulfilled more easily for activities which address the claims of secondary stakeholders. Thereby, the previous conclusion that financial incentives to consider CSR activities would not have had a substantial impact on the experiment's outcomes could be validated empirically. The financial performance of the banks in the experiment constitutes a second starting point. On the one hand, future investigations might introduce socially responsible banks with superior risk/returns profiles. The literature suggests that these "strategic choices" CSR activities (Wu and Shen, 2013, 3529) have a positive impact on the utility of a rational investor. Therefore, the hypothesis could be tested whether investors allocate higher relative amounts to socially responsible banks with a more favorable financial performance than other investment alternatives. On the other hand, the three risk/returns profiles could be varied quantitatively to determine whether the experimental results are robust to changes in the overall economic conditions. One reference point for this exercise could be the slightly higher benchmark yields of 6%, 11%, and 16%, which Glac (2009) reports in an experimental SRI study. Yet, rather than adopting these or similar values, future studies should derive risk and returns figures for a specific asset class, as shown in section 4.3.2.1, and in line with the current low interest rate environment (Ferrero, 2015).

Third, the social and the financial performance of a bank should be combined to test additional behavioral phenomena: On the one hand, the discussion in section 4.2 illustrated how prospect theory, mental accounting, and halo effects might be of importance for the decision problem of interest in theory. The empirical insights of section 4.3.4 corroborated the assumption that these three well-established phenomena play a role for the given context and thereby further vindicate their selection. Still, it is possible that additional biases or heuristics might interact with CSR activities in banking to systematically influence investment decisions. One straightforward analysis could therefore introduce more than one CSR bank per scenario to explore whether mental accounting results in constant relative investments into socially responsible and non-socially responsible banks, irrespective of the number of institutions. Due to the significant number of additional scenarios⁵³, this aspect would probably constitute a dedicated research effort. A second analysis could investigate the relevance of returns targeting in a high-yield environment: Meeting a constant target yield would then be possible even by diversifying across institutions so that investors might allocate more capital to financially inferior CSR banks when the financial attractiveness of the non-socially responsible investment alternative increases. Third, the combination of social responsibility and financial superiority would allow to investigate halo effects in greater detail: For instance, non-linear attribute evaluations (Einhorn and Gonedes, 1971) might result in even stronger halos for institutions with a strategic choices motive. Finally, a new phenomenon to be investigated is ambiguity. Ellsberg (1961) defines that ambiguity "exists when the decision-maker feels that there may be more than one reasonable distribution or set of probabilities over the future events relevant to the decision at hand" (Ellsberg, 1961, 657) and shows experimentally that individuals are

⁵³Implementing two different CSR banks as well as one non-CSR bank by scenario would require 15 additional scenarios for each of the four scenario configurations under the assumption of six CSR activities.

generally averse to ambiguous information. Other studies show that ambiguity triggers pessimism and individuals consistently expect ambiguous situations to unfold in an unfavorable manner (Einhorn and Hogarth, 1985; Frisch and Baron, 1988). When information on a bank's CSR activities in the experimental is ambiguous, pessimist investors might expect only a weak CSP and invest less into these institutions. This situation may be reinforced when the CFP of a bank is ambiguous, too (Dow and da Costa Werlang, 1992). Therefore, ambiguity aversion might also play a role for CSR in banking due to the opacity of the banking industry and the features of CSR as a concept with strong context dependence. Since decision-makers in real settings typically lack the "precise probabilities of potential outcomes" (Fox and Tversky, 1995, 586), the introduction of ambiguity might simultaneously increase the experiment's external validity.

A second topic are modifications to the experiment's design. One promising approach are dynamic settings which allow for interactions between participants: Similar to the suggestion by Tokumaru (2016), the participants of this experiment would randomly assume the roles of banks or investors. In a first period, the former would decide on the CSR activities they want to pursue and prioritize as well as the extent of social performance disclosures. In a second period, the investors would determine their investments into the different banks on the basis of their social and financial performance. By repeating both periods, investor responses to different bank activities and vice versa could be studied in a dynamic, endogenous environment. When CSR activities entail short-term costs, but partially hedge banks against stochastic shocks to their risk/returns profiles – for instance, via reputational crises – a non-deterministic link between CSP and CFP could be established. In addition, banks could be allowed to opt for either full transparency, non-disclosure, or ambiguity when reporting their CSP to test whether investor aversion to ambiguity discourages banks from using this format. Another aspect of interest could be how investors respond to those banks which choose not to disclose their CSR activities: Since highly socially responsible companies can be expected to disclose more information on their CSR activities (El Ghoul et al., 2011), investors may assume that the social performance of non-disclosing banks is poor. Ultimately, the existence of investor profiles with different preferences for financial and social performance (Derwall, Koedijk and Ter Horst, 2011; Nilsson, 2009) could create a situation in which both socially responsible and non-socially responsible banks with a pool of self-selected investors coexist. While it depends on the relation between CSP and CFP whether or not this state is an equilibrium, the preferences of investors in the experiment suggest that, as long as this relation is not unambiguously negative, socially responsible banks should prevail in the long run.

In a third step, further research might see an application of the experiment to other participant samples or geographies. Financial market professionals, socially responsible investors, or customers of ethical banks appear particularly well-suited to determine the robustness of the experimental results. Simultaneously, this approach would allow to determine the influence of ex-ante more favorable attitudes towards CSR or investor experience on investment decisions, for which previous findings are inconclusive (Holm and Rikhardsson, 2008; Nilsson, 2008). Likewise, the context dependence of CSR implies that an application in different countries may create additional insights: For instance, while the social component of CSR is traditionally strong in the USA, the German concept of "sustainability" points to a greater relevance of environmental aspects (Hahn and Scheermesser, 2006; Lindgreen, Swaen and Johnston, 2009). This may be one explanation for the high investments into CSR banks with an environmental focus in the experiment while North American participants might allocate higher amounts to social banks.

4.3.5.3 Implications

From a practical perspective, the experimental findings may help a bank's management achieve greater transparency on how investors evaluate CSR activities vis-à-vis financial performance as well as the potential drivers – such as rational choice, bounded investor rationality, or overarching patterns – of their investment decisions. Complementing the CSR survey's implications derived in section 3.3.5.3 from a financial perspective, this insight may inform the design and implementation of a bank's CSR strategy.

First, the investment patterns provide bank managers with an overall indication of the relative importance of financial and social performance. On the one hand, the experimental results suggest that bank investors expect a certain monetary yield on their investments. On the other hand, their investment decisions are influenced by CSR concerns, too. This combination implies that the predominant group among a bank's shareholders may be "complete investors", who value both financial and social returns (Lydenberg, 2007, 476). The experiment's results take this idea one step further and suggest a differentiated conclusion: CSR activities cannot compensate for an inferior risk/returns profile, as the analyses for hypotheses H_3 and H_9 demonstrate. However, investors also consider CSR activities which do not affect profits, as the findings for H_2 show. While the trade-off between CSP and CFP may ultimately depend on the relative size of both performance parameters, the specific CSR activities, and the overall industry context, this finding suggests that non-CSR banks should build and maintain their profitability while socially responsible institutions should refrain from altruistic CSR.

Second, the experiment's results imply that banks should be aware of certain behavioral phenomena and their potential interactions with CSR activities in investment decisions. While the discussion in section 4.3.5.2 suggests that this list is unlikely to be exhaustive, banks might use disposition effects, halo effects, or – to some extent – mental accounting strategically for their own benefit: For instance, the analyses for hypothesis H_5

identify particularly strong disposition effects for socially responsible banks. Therefore, investments into CSR might be used to hedge against capital withdrawals in case of a deteriorating financial performance. Another phenomenon which can be leveraged are halo effects: The findings for H_8 show that CSR activities which do not adversely affect profits may trigger higher investments, provided that banks do not only greenwash their business (Wu and Shen, 2013), but implement actions without harming profits. As long as banks do not set an exclusive focus on addressing the claims of customers or ethics and morale, the results for mental accounting – the third behavioral phenomenon – suggest that investors evaluate different CSR activities in a similar way. Should, for instance, committed long-term CSR targets keep a bank from flexibly prioritizing one stakeholder, the institution can therefore still expect similar responses from its investors by addressing the claims of another party. In addition, banks may see higher investments by taking stakeholder management measures which activate the mental "customers" account may see higher investments. Yet, the limited statistical significance of the tests for H_6 imply that these banks should proceed with caution and determine first whether and to which extent mental accounting matters for their specific business environment.

A similar conclusion holds for the third aspect: Since CSR survey preferences and experimental investment decisions overlap only to a limited extent, banks need to engage in a close dialog with their investors to identify their priorities rather than extrapolate results of previous studies. This is illustrated, for instance, by the observation that a stakeholder's cause/business is an important factor within the survey, but assuming the same values for H_{11} helps little to explain investment patterns in the experiment. Still, the experiment's findings combined with the survey results carry three practical implications: First, both investigations illustrate a consistent preference for institutions which address customer claims. While this outcome may be inflated as all participants in both studies were de-facto bank customers (McDonald and Hung Lai, 2011; Pomering and Dolnicar, 2006a), banks might consider paying particular attention to the claims of this stakeholder group to appeal to both their investors and the broader public. Second, banks should identify those stakeholders which are perceived as salient for their business in general and by their investors for two main reasons. On the one hand, stakeholder salience may be related to certain behavioral phenomena such as mental accounting as the analyses of both stakeholder salience and the investments into banks which address their claims yield rather uniform results. On the other hand, the results for hypothesis H_{12} suggest that salience is an influential driver of capital allocation decisions. Banks which face constraints in translating this result into CSR activities may choose to increase the perceived relevance of stakeholders which are currently in scope for their investors – for instance, by launching targeted marketing campaigns – and thereby attract more capital. Third, banks wishing to embark on a strategy which prioritizes primary stakeholders and their claims should be aware of one caveat in addition to the limited statistical significance

of the results for hypothesis H_{10} : As shown by figure 23, the gaps between the expectations towards the CSR activities of banks and the perceptions of their perceived current activity level are much larger for secondary than for primary stakeholders. As investors might have similar views, banks should continuously monitor their actual CSR engagement levels against expectations to avoid both white spots and excessive coverage in their stakeholder management strategy.

The experiment therefore provides insights for practitioners in three ways: First, it complements the CSR survey's findings to create a comprehensive picture of CSR in banking and how it is evaluated by investors; a key stakeholder group for credit institutions in particular against the background of increasingly stringent capital-based regulations. Second, creates awareness that the effectiveness of a CSR strategy may be significantly affected by bounded rationality and demonstrates this for a set of specific behavioral phenomena in connection with financial performance. These findings are likely to be applicable to different investor groups as the control variables either have no major effect on the overall results or are excluded for statistical insignificance in the first place. At the same time, the results do not vary systematically across the different types of banks. This underlines the relevance of the third insight: The result that certain stakeholders and CSR activities matter for a bank in one setting does not imply that this is also true for another environment. Banks are therefore well-advised to conduct thorough analyses specifically for key stakeholder groups prior to setting-up a CSR strategy to determine the importance of the experiment's findings and its implications for their specific situation.

4.4 Conclusions

In this chapter, the analysis of CSR in banking is taken one step further by introducing the element of finance. The underlying motivation is to answer the second and the third research question: How do the CSR activities of banks affect the decisions of their investors? And what is the impact of bounded rationality on these investment decisions?

The related literature makes different predictions about these topics: Section 4.1 shows that, if investors are rational and maximize their expected utility, as described by portfolio selection theory, only CSR activities which are related to a bank's risk and returns profile should affect investment decisions. By definition, this approach rules out bounded investor rationality and implies that investors should only consider a bank's social performance if it is related to financial performance. As the empirical evidence for this relation is ambiguous, CSR cannot be taken as an unequivocal financial performance indicator.

Findings of behavioral economics and finance challenge this view: If investors exhibit bounded rationality, their decisions may incorporate other parameters than risk and returns alone. As a consequence, a relation between social and financial performance is not required for CSR to impact investment decisions. Section 4.2 discusses this possibility for three behavioral phenomena and finds that prospect theory, mental accounting, and halo effects for CSR may play an important role for CSR in banking. The potential importance of bounded rationality for investment decisions in the given setting contrasts with the limited amount of previous research in this area.

To determine the relative importance of both schools of thought for the investors of socially responsible banks, an experiment was conducted with 100 university students. In 24 scenarios, the participants could decide on investments into different types of banks which differed in terms of social and financial performance. Sections 4.3.1 to 4.3.4 document the design and the results of this exercise. The hypothesis allows for a differentiated assessment of the two opposing positions: On the one hand, financially attractive banks attract higher investments while investments are lower in case of an unfavorable risk/returns profile – irrespective of whether or not the institution is socially responsible. This behavior corroborates the assumption that investors are rational and focus exclusively on financial performance. On the other hand, investor decisions exhibit systematic patterns which can be explained as bounded rationality: The experiment's participants prefer the socially responsible option when deciding between two banks with equal financial performance, as implied by CSR halos. The observation that investors show a lower willingness to sell underperforming stocks of CSR banks suggests that CSR activities can reinforce disposition effects. Finally, the tendency to invest similar amounts across socially responsible institutions may result from a mental budgeting process which distinguishes between CSR and non-CSR banks first and then allocates funds within these limits.

These results provide differentiated answers to the second and the third research question: First, CSR activities are taken into account by investors. For this to happen, a connection between social and financial performance is not mandatory: As long as CSR activities do not result in inferior financial performance, investors exhibit a preference for socially responsible banks. Second, CSR carries the potential to trigger, reinforce, or mitigate certain systematic biases and heuristics in their investment decisions.

While the experiment focuses on a largely uncharted field of research, section 4.3.5 shows that selected outcomes – for instance, the relevance of financial profits for investors or the impact of behavioral phenomena – are in line with or extend previous findings. In case of other, more controversial topics such as the question whether profit-neutral CSR activities matter for investment decisions, the experiment's findings clearly support one position in the academic debate. Most important, the results generate a set of novel insights which

contribute to the sparse body of academic literature at the intersection of CSR, banking, and behavioral science. The primary goal of the experiment can therefore be classified as "searching for facts" (Roth, 1995), which requires an internally and externally valid approach. While the former criterion is mostly satisfied by the experimental methodology per se, the experiment's decision problem and participant sample should contribute to a high level of experimental realism. Still, decisions to generalize its findings should always take the characteristics of the specific population and decision problem into account.

One objective of future research may therefore be to investigate the robustness of the experiment's findings to changes in the overall setting by recruiting participants with different cultural backgrounds, social preferences, or expertise in financial matters. Systematic variations in financial performance, alternative framings of CSR activities, or ambiguous disclosure formats as well as different combinations of these aspects may generate further insights. Finally, an experiment in which the participants could assume the roles of investors and banks would allow to render decisions on stakeholder management activities dynamic and endogenous. At the same time, CSR in banking and bounded investor rationality could be studied over time to identify the impact of interactions between participants on market developments in the short and long term.

The decisions on the design of a CSR strategy in banking may be informed by these findings. At the same time, the comparison between the results of the CSR survey and of the experiment highlights the need for this planning approach to be both specific – for individual stakeholders and the decision problem of interest – and comprehensive. In particular when implementing or communicating their CSR activity portfolio, practitioners should be aware that the rationality of their stakeholders may be bounded in multiple, yet systematic, ways. Yet, the present study suggests that this may also create opportunities to leverage investor heuristics and biases for the benefit of the institution by using, for instance, disposition effects as a financial performance hedge or CSR halos to build a competitive advantage. CSR in banking therefore not only matters for investors, but also as an instrument of strategic bank management.

5 Summary and Outlook

Over the recent years, CSR in banking has turned into a topic of major interest for various parties: Society places greater emphasis on the responsible business practices of companies in general beyond legal compliance. Policymakers specifically require credit institutions to strengthen socially responsible behaviors in response to the 2007-08 Financial Crisis. Acting accordingly, banks have ratcheted up their CSR efforts across a wide range of topic areas by introducing new business objectives, launching action programs, or implementing alternative lending standards. At the same time, the empirical literature on this topic remains sparse, resulting in opacity on stakeholder relevance, CSR activity effectiveness, and the impact of factors such as reputation for socially responsible banks. Similarly, there is considerable uncertainty as to how bank investors value CSR activities, particularly against the background of bounded investor rationality and in connection with the financial performance of a bank. Banks seeking to design and implement effective CSR strategies to manage the claims of their stakeholders therefore face a challenging situation.

This combination of a clear need for action, few previous scholarly investigations, and limited transparency on practical issues has motivated the three research questions of the present study: First, what is the meaning of "CSR" in banking? Second, how do the CSR activities of banks affect the decisions of their investors? Third, what is the impact of bounded rationality on these investment decisions?

Theoretical discussions and a survey study provide answers to the first question. The former exercise suggests to operationalize – rather than define – the meaning of CSR in terms of three qualities: Voluntariness beyond legal obligations, integration of activities within a company's regular operations, and the management of stakeholder claims. This approach is in line with the main features of the European Commission's established definitions (European Commission, 2009, 2001; Dahlsrud, 2008). CSR is also found to be a meaningful concept in contemporary banking: First, banks' non-profit expenditures are significant as well as increasing and encompass a wide range of CSR activities with social, environmental, or educational objectives. Second, industry initiatives have increasingly institutionalized socially responsible practices and raised the profile of CSR in the financial sector. Third, both a lack of social responsibility and misguided good intentions have been identified as triggers or reinforcing factors in the 2007-08 Financial Crisis.

The industry-specific meaning of CSR in banking is explained along a framework in which banks can implement CSR activities via both bank-internal and bank-external – or lending - measures to address the claims of primary and secondary stakeholders and are impacted by different interaction factors such as reputation. Applying the stakeholder model by Mitchell, Agle, and Wood (1997) to the banking industry yields a stakeholder taxonomy which suggests that shareholders, customers, and employees are definitive bank stakeholders with immediate value chain relevance and highly salient claims. In addition, ethics and morale, society and social issues, and the environment constitute dependent stakeholders with less salient claims on a bank. The former are therefore defined as primary, the latter as intangible secondary stakeholders. To address the claims of both groups, banks can implement internal measures by making commitments or launching action programs or establish positive or negative screens in their external lending channel. At the same time, three interaction factors – the distinction between CSR commitments and actions, the reputation of a bank, and the fit between a bank's business and the stakeholder claims in scope of its CSR activities – may impact perceptions of both social performance and CSR activity effectiveness.

The second analysis – a comprehensive CSR survey, conducted among 479 university students – suggests that the meaning of CSR in banking is adequately captured by the CSR framework. Its findings imply that all stakeholders, CSR channels, and interaction factors shape the perceptions of banks as socially responsible companies. In addition, the survey provides differentiated empirical insights into the industry-specific features and mechanics of CSR: The claims of all six bank stakeholders are perceived as salient with their relative salience being in line with the predictions of the stakeholder taxonomy. CSR activities are perceived as particularly effective when implemented as bank-internal action programs which address the claims of primary bank stakeholders. Within the external channel, participants perceive positive lending standards as more powerful than exclusionary approaches. The interaction factors are capable of explaining additional phenomena such as stronger perceptions of CSR activity effectiveness when the fit between the banking business and the management of certain stakeholder claims is perceived as higher. At the same time, an existent though imperfect relation between perceived social responsibility and reputation suggests that, while an unfavorable reputation does not necessarily harm a bank's CSR profile, a strong social performance is not the sole driver of a favorable reputation. These findings provide a set of empirical insights into the banking-specific features of CSR, which answers the first research question.

To determine the relative importance of rational choice and bounded rationality for the investors of socially responsible banks, an experiment was conducted with 100 university students. In 24 scenarios, the participants could decide on investments into different types of banks which differed in terms of social and financial performance. The hypothesis tests

allow for a differentiated assessment of the two opposing positions concerning investor rationality: On the one hand, financially attractive banks attract higher investments while investments are lower in case of an unfavorable risk/returns profile – irrespective of whether or not the institution is socially responsible. This behavior corroborates the assumption that investors are rational and focus exclusively on financial performance. On the other hand, investor decisions exhibit systematic patterns which can be explained as bounded rationality: The experiment's investors prefer the socially responsible option when deciding between two banks with equal financial performance, as implied by CSR halos. The observation that investors show a lower willingness to sell underperforming stocks of CSR banks suggests that CSR activities can reinforce disposition effects. Finally, the tendency to invest similar amounts across socially responsible institutions may result from a mental budgeting process which distinguishes between CSR and non-CSR banks first and then allocates funds within limits that are specific for both types of banks.

These results provide novel answers to the second and the third research question: First, CSR activities are taken into account by investors. For this to happen, a connection between social and financial performance is not mandatory. As long as CSR activities do not result in inferior financial performance, investors exhibit a preference for socially responsible banks. Second, CSR carries the potential to trigger, reinforce, or mitigate certain systematic biases and heuristics in their investment decisions.

At the same time, these findings carry immediate relevance for CSR strategy discussions: To approach and structure the complex issue of CSR, the framework of CSR in banking or the stakeholder taxonomy provide banks with an actionable methodology to identify, classify, and prioritize the claims of key stakeholders as well as to evaluate their CSR activities. To ensure that these CSR actions neither exceed nor fall short of public expectations, continuous monitoring on stakeholder level during an activity's implementation is crucial. Ultimately, banks seeking to enhance their public image through CSR should consider that social performance is only one driver of reputation. This illustrates the importance of pursuing an integrated approach to CSR in which the voluntary management of stakeholder claims and the overall business activities of a bank are aligned and consistent. In addition, practitioners should be aware that the rationality of their stakeholders may be bounded in multiple, yet systematic, ways. The present study suggests that this may also create opportunities for the benefit of the institution by using, for instance, disposition effects as a financial performance hedge or CSR halos to build a competitive advantage. CSR in banking therefore not only matters for investors, but also as an instrument of strategic bank management.

This conception of CSR as a managerial tool implies that certain factors govern its successful implementation. The first one is systematic top-down planning: Banks should

align on a concept of CSR, identify key stakeholders as well as the salience of their claims, and derive a set of effective activities to address them, all based on a clear framework. Prior to launching these initiatives, a bank's management should also determine the most relevant interaction factors and decide if as well as how to shape them by taking supporting measures. This approach, which mirrors the components of the CSR framework established by the present study, provides a high degree of clarity on a bank's overall CSR strategy. Rigid performance management processes – which translate overall priorities into specific targets, assign clear accountabilities, and identify the financial impact of CSR activities – can effectively support the strategy's implementation (Rahbek Pedersen and Neergaard, 2008; Maon, Lindgreen and Swaen, 2009). The second success factor involves bottom-up processes and feedback loops: As discussed in the previous paragraph, the continuous monitoring of activities and expectations on stakeholder level is crucial. In addition, banks should be aware that perceptions of stakeholder salience and activity effectiveness may change over time due to the dynamic nature of CSR (Herzig and Moon, 2012; Matten and Moon, 2008). Banks need to adapt to these developments and proactively incorporate insights from diverse sources such as recent scientific findings, industry best-practices, and - most important - the knowledge of their staff into their CSR framework and strategy. This procedure is line with theories of integrated strategy (Mintzberg, Ahlstrand and Lampel, 2005), which emphasizes the relevance of evolving a strategic direction by pragmatic and context-specific learning.

Taking integrated strategy one step further implies that banks can benefit from employing a holistic perspective of CSR. In a straightforward way, this can be achieved, for instance, by pooling the results of different investigations – such as the CSR survey and the experiment – rather than considering their insights in isolation. A more comprehensive approach is detailed in a recent paper by management practitioners Browne and Nuttall (2013). The authors urge companies to think "beyond corporate social responsi*bility*" – which they understand as centralized initiatives that seek to mitigate corporate short-term risks and are separated from a company's regular operations – and to focus on "integrated external engagement" (IEE) instead. IEE is built around four corporate principles: Managers needs to define the company's contributions to society, know their stakeholders, apply a managerial toolkit when implementing measures, and take stakeholder engagement seriously. Some of these principles are already mirrored in the present study: The operationalization of CSR as stakeholder management within a bank's everyday business is consistent with the first principle. A second aspect concerns the systematic identification of relevant stakeholders and the prioritization of their claims according to the stakeholder model; this combines actions described by the second and fourth principle. The importance of adopting a managerial perspective, captured by the third principle, has been outlined in the previous paragraph. Anchoring these IEE principles in a bank's operations and strategy may require shifts in the way a bank is run – at the same time,

precisely these changes and a proactive management approach are required to build a competitive advantage around CSR (Derwall, Koedijk and Ter Horst, 2011; Porter and Kramer, 2006). Specifically for banks, the present study suggests a fifth principle: Selectively leverage bounded rationality. For instance, the findings imply that banks can implement CSR activities to exploit disposition effects among their investors and hedge against fire sales of their stocks in case of deteriorating risk/returns profiles. In terms of Browne and Nuttall's (2013) terminology, this focus on limiting downside risk still has a strong CSR flavor. Yet, the example of CSR halos illustrates that socially responsible banks may benefit from even higher upside potential when investors are affected by bounded rationality. Credit institutions which ensure that their financial performance remains competitive can therefore strategically use stakeholder management activities. This suggests that an integrated approach to CSR, complemented by insights from behavioral strategy (Powell, Lovallo and Fox, 2011), can create tangible value for banks.

Since the 2007-08 Financial Crisis, the efforts to institutionalize CSR have gained further momentum, in particular within the European Union: From April to August 2014, the European Commission solicited feedback on its "Renewed EU Strategy 2011-14 for Corporate Social Responsibility" (European Commission, 2011). At the "European Union Multi Stakeholder Forum on Corporate Social Responsibility" in February 2015, more than 450 participants discussed the outcomes of the consultation. The information obtained by these two events is meant to provide the basis for the European Commission's 2020 CSR strategy (European Commission, 2014, 5-6). Social responsibility will therefore remain relevant for companies across industries.

At the time of writing, this strategy development effort is not yet finished. However, the European Commission's related working documents contain a number of suggestions which are in line with the approach and the findings documented in the previous chapters: To appeal to investors, companies are urged to think about CSR in terms of corporate strategy rather than compliance (European Commission, 2015, 7). Assisting investors in integrating CSR information into their decisions is regarded as equally important and insufficiently implemented so far (European Commission, 2014, 21). Specifically for banks, the multi-stakeholder forum stresses the relevance of CSR within banking regulation to improve the industry's tarnished reputation and recommends to set-up "a financial industry working group on responsible banking with all relevant Commission services" (European Commission, 2015, 8). This illustrates that CSR in banking constitutes a topic of increasing importance. Going forward, the results of the present study may therefore inform a number of crucial debates.

References

- Acharya, Viral V., and Tanju Yorulmazer. 2003. "Information Contagion and Inter-Bank Correlation in a Theory of Systemic Risk." CEPR Discussion Paper 3743.
- Achua, Joseph K. 2008. "Corporate Social Responsibility in Nigerian Banking System." Society and Business Review, 3(1): 57–71.
- Agle, Bradley R., Thomas Donaldson, R. Edward Freeman, Michael C. Jensen, and Donna J. Wood. 2008. "Dialogue: Toward Superior Stakeholder Theory." Business Ethics Quarterly, 18(02): 153–190.
- Akerlof, George A. 1970. "The Market for "Lemons": Quality Uncertainty and the Market Mechanism." *Quarterly Journal of Economics*, 84(3): 488–500.
- Aldlaigan, Abdullah, and Francis Buttle. 2005. "Beyond Satisfaction: Customer Attachment to Retail Banks." International Journal of Bank Marketing, 23(4): 349– 359.
- Allen, Franklin, and Douglas Gale. 2000. "Financial Contagion." Journal of Political Economy, 108(1): 1–33.
- Altunbas, Yener, Lynne Evans, and Philip Molyneux. 2001. "Bank Ownership and Efficiency." Journal of Money, Credit and Banking, 33(4): 926–954.
- Andreoni, James. 1990. "Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving." *Economic Journal*, 100(401): 464–477.
- Argandoña, Antonio. 2009. "Can Corporate Social Responsibility Help Us Understand the Credit Crisis?" IESE Business School Working Paper 790.
- Ariely, Dan, and Michael I. Norton. 2007. "Psychology and Experimental Economics. A Gap in Abstraction." Current Directions in Psychological Science, 16(6): 336–339.
- Arlow, Peter. 1991. "Personal Characteristics in College Students' Evaluations of Business Ethics and Corporate Social Responsibility." *Journal of Business Ethics*, 10(1): 63–69.
- Arnold, Vicky, Jean C. Bedard, Jillian Phillips, and Steve G. Sutton. 2009. "Understanding Professional and Non-Professional Investors' Information

Requirements." http://www.finrafoundation.org/web/groups/foundation/@foundation/ documents/foundation/p118443.pdf, accessed: 11.12.2015.

- Arrow, Kenneth J. 1986. "Rationality of Self and Others in an Economic System." Journal of Business, 59(4): 385–399.
- Ater, Itai, and Vardit Landsman. 2013. "Do Customers Learn from Experience? Evidence from Retail Banking." *Management Science*, 59(9): 2019–2035.
- Atkinson, Tyler, David Luttrell, and Harvey Rosenblum. 2013. "How Bad Was It? The Costs and Consequences of the 2007–09 Financial Crisis." Federal Reserve Bank of Dallas Staff Paper 20.
- Aupperle, Kenneth E., Archie B. Carroll, and John D. Hatfield. 1985. "An Empirical Examination of the Relationship between Corporate Social Responsibility and Profitability." Academy of Management Journal, 28(2): 446–463.
- **Bajtelsmit, Vickie L., and Alexandra Bernasek.** 1996. "Why Do Women Invest Differently than Men?" *Financial Counseling and Planning*, 7: 1–10.
- Balmer, John M. T., and Edmund R. Gray. 1999. "Corporate Identity and Corporate Communications: Creating a Competitive Advantage." Corporate Communications: An International Journal, 4(4): 171–177.
- Balzer, William K., and Lorne M. Sulsky. 1992. "Halo and Performance Appraisal Research: A Critical Examination." *Journal of Applied Psychology*, 77(6): 975.
- Bank of England. 2015. "One Bank Research Agenda February 2015." http://www.bankofengland.co.uk/research/documents/onebank/discussion.pdf, accessed: 26.04.2016.
- Bank und Markt. 2010. "Daten und Fakten zur Hausbankbeziehung." http://www.investors-marketing.de/data/investors_marketing/media/doc/ 201009_bum.pdf, accessed: 26.04.2016.
- Barber, Brad M., and Terrance Odean. 2001. "Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment." *Quarterly Journal of Economics*, 116(1): 261– 292.
- **Barberis, Nicholas C.** 2013. "Thirty Years of Prospect Theory in Economics: A Review and Assessment." *Journal of Economic Perspectives*, 27(1): 173–96.
- Barberis, Nicholas C., and Ming Huang. 2001. "Mental Accounting, Loss Aversion, and Individual Stock Returns." *Journal of Finance*, 56(4): 1247–1292.

- **Barberis, Nicholas C., and Wei Xiong.** 2009. "What Drives the Disposition Effect? An Analysis of a Long-Standing Preference-Based Explanation." *Journal of Finance*, 64(2): 751–784.
- **Bardsley, Nick.** 2010. *Experimental Economics: Rethinking the Rules*. Princeton University Press.
- Barnett, Michael L. 2007. "Stakeholder Influence Capacity and the Variability of Financial Returns to Corporate Social Responsibility." Academy of Management Review, 32(3): 794–816.
- Barnett, Michael L., and Robert M. Salomon. 2012. "Does It Pay to Be Really Good? Addressing the Shape of the Relationship between Social and Financial Performance." Strategic Management Journal, 33(11): 1304–1320.
- Barreda-Tarrazona, Iván, Juan Matallín-Sáez, and Maria R. Balaguer-Franch. 2011. "Measuring Investors' Socially Responsible Preferences in Mutual Funds." *Journal* of Business Ethics, 103: 305–330.
- Basel Committee on Banking Supervision. 2006. "International Convergence of Capital Measurement and Capital Standards: A Revised Framework. Comprehensive Version." http://www.bis.org/publ/bcbs128.pdf, accessed: 29.04.2015.
- Basel Committee on Banking Supervision. 2010. "Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems." http://www.bis.org/publ/bcbs189.pdf, accessed: 29.04.2015.
- Basel Committee on Banking Supervision. 2015a. "Basel III Monitoring Report. March 2015." http://www.bis.org/bcbs/publ/d312.pdf, accessed: 29.04.2015.
- Basel Committee on Banking Supervision. 2015b. "Basel III Phase-In Arrangements." http://www.bis.org/bcbs/basel3/basel3-phase-in-arrangements.pdf, accessed: 30.04.2015.
- Basil, Debra Z., and Mary Runté. 2007. "How Individuals Mentally Account for Work-Time Volunteerism: Putting the Work into Volunteer Work." In European Advances in Consumer Research. Vol. 8, , ed. Stefania Borghini, Mary Ann McGrath and Cele Otnes, 314–315.
- Battilana, J., and S. Dorado. 2010. "Building Sustainable Hybrid Organizations: The Case of Commercial Microfinance Organizations." Academy of Management Journal, 53(6): 1419–1440.
- **BBC.** 2011. "Banking Industry Gives Up on PPI Mis-Selling Battle." http://www.bbc.com/news/business-13330858, accessed: 08.05.2015.

- Bebchuk, Lucian A., Alma Cohen, and Holger Spamann. 2010. "The Wages of Failure: Executive Compensation at Bear Stearns and Lehman 2000-2008." Yale Journal on Regulation, 27: 257.
- Becker-Olsen, Karen L., Andrew B. Cudmore, and Ronald Paul Hill. 2006. "The Impact of Perceived Corporate Social Responsibility on Consumer Behavior." *Journal* of Business Research, 59(1): 46–53.
- Beerli, Asunción, Josefa D. Martin, and Agustín Quintana. 2004. "A Model of Customer Loyalty in the Retail Banking Market." European Journal of Marketing, 38(1/2): 253–275.
- Bénabou, Roland, and Jean Tirole. 2010. "Individual and Corporate Social Responsibility." *Economica*, 77(305): 1–19.
- Benartzi, Shlomo, and Richard H. Thaler. 1995. "Myopic Loss Aversion and the Equity Premium Puzzle." *Quarterly Journal of Economics*, 110(1): 73–92.
- Benartzi, Shlomo, and Richard H. Thaler. 1999. "Risk Aversion or Myopia? Choices in Repeated Gambles and Retirement Investments." *Management Science*, 45(3): 364– 381.
- Benartzi, Shlomo, and Richard H. Thaler. 2001. "Naive Diversification Strategies in Defined Contribution Saving Plans." *American Economic Review*, 79–98.
- Benartzi, Shlomo, and Richard H. Thaler. 2007. "Heuristics and Biases in Retirement Savings Behavior." *Journal of Economic Perspectives*, 21(3): 81–104.
- Ben-David, Itzhak, and David Hirshleifer. 2012. "Beyond the Disposition Effect: Do Investors Really Like Realizing Gains More Than Losses." *Review of Financial Studies*, 25(8): 2485–2532.
- **Benedikter, Roland.** 2011. "European Answers to the Financial Crisis: Social Banking and Social Finance." SPICE Digest Spring Issue.
- Benson, Karen L., and Jacquelyn E. Humphrey. 2008. "Socially Responsible Investment Funds: Investor Reaction to Current and Past Returns." Journal of Banking & Finance, 32(9): 1850–1859.
- **Benz, Matthias, and Stephan Meier.** 2008. "Do People Behave in Experiments as in the Field? Evidence from Donations." *Experimental Economics*, 11(3): 268–281.
- Berger, Ida E., and Ruth M. Corbin. 1992. "Perceived Consumer Effectiveness and Faith in Others as Moderators of Environmentally Responsible Behaviors." Journal of Public Policy & Marketing, 79–89.

- Berg, Nathan, and Gerd Gigerenzer. 2010. "As-If Behavioral Economics: Neoclassical Economics in Disguise?" *History of Economic Ideas*, 18(1): 133–165.
- Bernanke, Ben S. 2005. "The Global Saving Glut and the U.S. Current Account Deficit." http://www.federalreserve.gov/boarddocs/speeches/2005/200503102/, Accessed: 08.04.2015.
- Berry, Robert H., and Fannie Yeung. 2013. "Are Investors Willing to Sacrifice Cash for Morality?" *Journal of Business Ethics*, 117(3): 477–492.
- **BFO.** 2015. "The Banking and Finance Oath. Background." *http://www.thebfo.org/About-us/Background*, accessed: 12.05.2015.
- Bhattacharya, Chitra B., and Sankar Sen. 2004. "Doing Better at Doing Good: When, Why, and How Consumers Respond to Corporate Social Initiatives." *California Management Review*, 47(1): 9–24.
- **Binmore, Ken.** 1999. "Why Experiment in Economics?" *Economic Journal*, 109(453): 16–24.
- **Bischoff, Ulrike.** 2014. "Financial Centre Focus: Banking Sector Employment in Frankfurt – Consolidation Remains Limited." Helaba Research 10 December 2014.
- Blanchflower, David G., and Andrew J. Oswald. 2004. "Well-being over Time in Britain and the USA." *Journal of Public Economics*, 88(7): 1359–1386.
- Bloomberg View. 2015. "Q&A: Richard Thaler." https://www.bloomberg.com/view/articles/2015-06-01/richard-thaler-still-believeseconomists-are-useful, accessed: 19.08.2016.
- **BMF.** 2015. "Finanzmarkt. Die Entstehung der Finanzkrise." http://www.bundesfinanzministerium.de/Content/DE/Bilderstrecken/Mediathek/ Infografiken/infografik-finanzmarkt.html, accessed: 07.04.2015.
- BMUB. 2012. "Gesetz zur Förderung der Kreislaufwirtschaft und Sicherung der umweltverträglichen Bewirtschaftung von Abfällen (Kreislaufwirtschaftsgesetz -KrWG)." http://www.gesetze-im-internet.de/bundesrecht/krwg/gesamt.pdf, accessed: 08.05.2015.
- BMUB. 2014. "Gesetz für den Ausbau erneuerbarer Energien (Erneuerbare-Energien-Gesetz - EEG 2014)." http://www.gesetze-iminternet.de/bundesrecht/eeg_2014/gesamt.pdf, accessed: 11.05.2015.
- Bollen, Nicholas P. B. 2007. "Mutual Fund Attributes and Investor Behavior." *Journal* of Financial and Quantitative Analysis, 42(3): 683–708.

- Bolton, Brian J. 2013. "Corporate Social Responsibility and Bank Performance." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2277912, accessed: 23.08.2016.
- Bouma, Jan Jaap, Marcel Jeucken, and Leon Klinkers. 2001. Sustainable Banking: The Greening of Finance. Greenleaf.
- **Bowen, Howard R.** 1953. *Social Responsibilities of the Businessman*. University of Iowa Press.
- Boz, Emine, and Enrique G. Mendoza. 2010. "Financial Innovation, the Discovery of Risk, and the US Credit Crisis." NBER Working Paper 16020.
- Brammer, Stephen, and Andrew Millington. 2008. "Does It Pay to Be Different? An Analysis of the Relationship between Corporate Social and Financial Performance." *Strategic Management Journal*, 29(12): 1325–1343.
- Branco, Manuel Castelo, and Lúcia Lima Rodrigues. 2006. "Corporate Social Responsibility and Resource-Based Perspectives." *Journal of Business Ethics*, 69(2): 111– 132.
- British Bankers Association. 2014. "A Bankers' Oath: Part of the Answer?" https://www.bba.org.uk/news/bba-voice/a-bankers-oath-part-of-the-answer/, accessed: 12.05.2015.
- Brown, Brad, and Susan Perry. 1994. "Removing the Financial Performance Halo from Fortune's "Most Admired" Companies." Academy of Management Journal, 37(5): 1347–1359.
- Browne, John, and Robin Nuttall. 2013. "Beyond Corporate Social Responsibility: Integrated External Engagement." http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/beyond-corporate-social-responsibility-integrated-external-engagement, accessed: 21.04.2016.
- Brown, Michael, and Paul Whysall. 2010. "Performance, Reputation, and Social Responsibility in the UK's Financial Services: A Post-'Credit Crunch' Interpretation." *Service Industries Journal*, 30(12): 1991–2006.
- Brown, Tom J., and Peter A. Dacin. 1997. "The Company and the Product: Corporate Associations and Consumer Product Responses." *Journal of Marketing*, 68–84.
- Brummer, James J. 1991. Corporate Responsibility and Legitimacy: An Interdisciplinary Analysis. Greenwood.
- Brunnermeier, Markus K. 2008. "Deciphering the Liquidity and Credit Crunch 2007-08." Journal of Economic Perspectives, 23(1): 77–100.

- **Bryant, John.** 1980. "A Model of Reserves, Bank Runs, and Deposit Insurance." *Journal* of Banking & Finance, 4(4): 335–344.
- Bryson, John M. 2004. "What to Do When Stakeholders Matter: A Guide to Stakeholder Identification and Analysis Techniques." *Public Management Review*, 6: 21–53.
- Bülbül, Dilek, Reinhard H. Schmidt, and Ulrich Schüwer. 2013. "Savings Banks and Cooperative Banks in Europe." SAFE Sustainable Architecture for Finance in Europe White Paper Series 5.
- Burke, Lee, and Jeanne M. Logsdon. 1996. "How Corporate Social Responsibility Pays Off." Long Range Planning, 29(4): 495–502.
- **Business Backs** Education. 2015."Business Backs Education. Creating CSR Spend Global Education a Baseline for Corporate on Initiatives." http://www.unesco.org/education/BBE-EPG-Report2015.pdf, accessed: 23.06.2016.
- Callado-Muñoz, Francisco J., and Natalia Utrero-González. 2011. "Does It Pay to Be Socially Responsible? Evidence from Spain's Retail Banking Sector." *European Financial Management*, 17(4): 755–787.
- Camerer, Colin F. 2004. "Prospect Theory in the Wild: Evidence from the Field." Advances in Behavioral Economics, , ed. Colin F. Camerer, George Loewenstein and Matthew Rabin, Chapter 5, 148–161. Princeton University Press.
- Camerer, Colin F., and George Loewenstein. 2004. "Behavioral Economics: Past, Present, Future." Advances in Behavioral Economics, , ed. Colin F. Camerer, George Loewenstein and Matthew Rabin, Chapter 1, 3–52. Princeton University Press.
- Camerer, Colin F., and Robin M. Hogarth. 1999. "The Effects of Financial Incentives in Experiments: A Review and Capital-Labor-Production Framework." *Journal* of Risk and Uncertainty, 19(1-3): 7–42.
- Camerer, Colin F., George Loewenstein, and Matthew Rabin. 2004. Advances in Behavioral Economics. Princeton University Press.
- Camerer, Colin F., Linda Babcock, George Loewenstein, and Richard H. Thaler. 1997. "Labor Supply of New York City Cabdrivers: One Day at a Time." *Quarterly Journal of Economics*, 407–441.
- **Campbell, Donald T.** 1957. "Factors Relevant to the Validity of Experiments in Social Settings." *Psychological Bulletin*, 54(4): 297.
- Campbell, Donald T., and Julian C. Stanley. 1966. Experimental and Quasi-Experimental Designs for Research. Houghton Mifflin.

- Caniëls, Marjolein C. J., Matthias H. Gehrsitz, and Janjaap Semeijn. 2013. "Participation of Suppliers in Greening Supply Chains: An Empirical Analysis of German Automotive Suppliers." Journal of Purchasing and Supply Management, 19(3): 134–143.
- Capelle-Blancard, Gunther, and Stéphanie Monjon. 2014. "The Performance of Socially Responsible Funds: Does the Screening Process Matter?" *European Financial Management*, 20(3): 494–520.
- Carrigan, Marylyn, and Ahmad Attalla. 2001. "The Myth of the Ethical Consumer Do Ethics Matter in Purchase Behaviour?" Journal of Consumer Marketing, 18(7): 560– 578.
- **Carroll, Archie B.** 1979. "A Three-Dimensional Conceptual Model of Corporate Performance." *Academy of Management Review*, 4(4): 497–505.
- **Carroll, Archie B.** 1991. "The Pyramid of Corporate Social Responsibility: Toward the Moral Management of Organizational Stakeholders." *Business Horizons*, 34(4): 39–48.
- Carroll, Archie B. 1998. "The Four Faces of Corporate Citizenship." Business and Society Review, 100–101(1): 1–7.
- CECP. 2006. "Giving in Numbers: 2006 Edition." http://cecp.co/pdfs/giving_in_numbers/GivinginNumbers2006.pdf, accessed: 23.06.2016.
- CECP. 2007. "Giving in Numbers: 2007 Edition." http://cecp.co/pdfs/giving_in_numbers/GivinginNumbers2007.pdf. accessed: 23.06.2016.
- CECP. 2008. "Giving in Numbers: 2008 Edition." http://cecp.co/pdfs/giving_in_numbers/GivinginNumbers2008.pdf. accessed: 23.06.2016.
- CECP. 2009. "Giving in Numbers: 2009 Edition." http://cecp.co/pdfs/giving_in_numbers/GivinginNumbers2009.pdf. accessed: 23.06.2016.
- CECP. 2010. "Giving in Numbers: 2010 Edition." http://cecp.co/pdfs/giving_in_numbers/GivinginNumbers2006.pdf. accessed: 23.06.2016.
- CECP. 2011. "Giving in Numbers: 2011 Edition." http://cecp.co/pdfs/giving_in_numbers/GivinginNumbers2011.pdf. accessed: 23.06.2016.

CECP. 2012. "Giving in Numbers: 2012 Edition." http://cecp.co/pdfs/giving_in_numbers/GivinginNumbers2006.pdf. accessed: 23.06.2016.

- CECP. 2013. "Giving in Numbers: 2013 Edition." http://cecp.co/pdfs/giving_in_numbers/GivinginNumbers2013.pdf. accessed: 23.06.2016.
- CECP. 2014. "Giving in Numbers: 2014 Edition." http://cecp.co/pdfs/giving_in_numbers/GivinginNumbers2006.pdf. accessed: 23.06.2016.
- CECP. 2015a. "About CECP." http://cecp.co/about-cecp.html, accessed: 25.03.2015.
- **CECP.** 2015b. "Giving in Numbers. 10th Anniversary 2015 Edition." http://cecp.co/pdfs/giving_in_numbers/GIN2015_FINAL_web.pdf, accessed: 17.08.2016.
- Cetorelli, Nicola, and Philip E. Strahan. 2006. "Finance as a Barrier to Entry: Bank Competition and Industry Structure in Local US Markets." *Journal of Finance*, 61(1): 437–461.
- Chalmers, John, Aditya Kaul, and Blake Phillips. 2013. "The Wisdom of Crowds: Mutual Fund Investors' Aggregate Asset Allocation Decisions." Journal of Banking & Finance, 37(9): 3318–3333.
- Cheah, Eng-Tuck, Dima Jamali, Johnnie E. V. Johnson, and Ming-Chien Sung. 2011. "Drivers of Corporate Social Responsibility Attitudes: The Demography of Socially Responsible Investors." *British Journal of Management*, 22(2): 305–323.
- Chernev, Alexander, and Sean Blair. 2015. "Doing Well by Doing Good: The Benevolent Halo of Corporate Social Responsibility." *Journal of Consumer Research*, 41: 1412– 1425.
- Choi, Bernard C. K., and Anita W. P. Pak. 2005. "A Catalog of Biases in Questionnaires." *Preventing Chronic Disease*, 2(1): 1–13.
- Choi, James J., David Laibson, and Brigitte C. Madrian. 2009. "Mental Accounting in Portfolio Choice: Evidence from a Flypaper Effect." *American Economic Review*, 99(5): 2085–2095.
- CISL and UNEPFI. 2014. "Stability and Sustainability in Bank-III?" ing Reform. Are Environmental Risks Missing Basel in http://www.unepfi.org/fileadmin/documents/StabilitySustainability.pdf, accessed: 08.05.2015.

- Claessens, Stijn, and Luc Laeven. 2004. "What Drives Bank Competition? Some International Evidence." Journal of Money, Credit and Banking, 36(3): 563–583.
- Clarkson, Max E. 1995. "A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance." Academy of Management Review, 20(1): 92–117.
- Climent, Francisco, and Pilar Soriano. 2011. "Green and Good? The Investment Performance of US Environmental Mutual Funds." *Journal of Business Ethics*, 103(2): 275– 287.
- Clinch, Matt. 2013. "More Cuts to Take UK Financial Job Losses to 132,000." http://www.cnbc.com/id/100394685, accessed: 28.04.2015.
- Cohen, Jacob. 1992. "A Power Primer." Psychological Bulletin, 112(1): 155–159.
- Consolandi, Costanza, Alessandro Innocenti, and Alessandro Vercelli. 2009. "CSR, Rationality and the Ethical Preferences of Investors in a Laboratory Experiment." *Research in Economics*, 63(4): 242–252.
- **Cooper, William H.** 1981. "Conceptual Similarity as a Source of Illusory Halo in Job Performance Ratings." *Journal of Applied Psychology*, 66(3): 302–307.
- Cox, Paul, Stephen Brammer, and Andrew Millington. 2004. "An Empirical Examination of Institutional Investor Preferences for Corporate Social Performance." *Journal of Business Ethics*, 52(1): 27–43.
- Creyer, Elizabeth H. 1997. "The Influence of Firm Behavior on Purchase Intention: Do Consumers Really Care about Business Ethics?" Journal of Consumer Marketing, 14(6): 421–432.
- Crockett, Andrew. 2002. "Market Discipline and Financial Stability." Journal of Banking & Finance, 26(5): 977–987.
- Cronbach, Lee J. 1951. "Coefficient Alpha and the Internal Structure of Tests." *Psychometrika*, 16(3): 297–334.
- Da Costa, Newton, Marco Goulart, Cesar Cupertino, Jurandir Macedo, and Sergio Da Silva. 2013. "The Disposition Effect and Investor Experience." Journal of Banking & Finance, 37(5): 1669–1675.
- **Dahlsrud, Alexander.** 2008. "How Corporate Social Responsibility is Defined: An Analysis of 37 Definitions." *Corporate Social Responsibility and Environmental Management*, 15(1): 1–13.
- Dam, Lammertjan, Michael Koetter, and Bert Scholtens. 2009. "Why Do Firms Do Good? Evidence from Managerial Efficiency." CORE Working Paper Series.

- Daniel, Kent, David Hirshleifer, and Avanidhar Subrahmanyam. 1998. "Investor Psychology and Security Market Under-and Overreactions." Journal of Finance, 53(6): 1839–1885.
- **Darby, Michael R., and Edi Karni.** 1973. "Free Competition and the Optimal Amount of Fraud." *Journal of Law and Economics*, 16(1): 67–88.
- **Davis, James H., F. David Schoorman, and Lex Donaldson.** 1997. "Toward a Stewardship Theory of Management." *Academy of Management Review*, 22(1): 20–47.
- **Davis, John B.** 2006. "The Turn in Economics: Neoclassical Dominance to Mainstream Pluralism?" *Journal of Institutional Economics*, 2(1): 1–21.
- **Davis, Keith.** 1968. "Understanding the Social Responsibility Puzzle." *Business Hori*zons, 10(4): 45–50.
- **Davis, Keith.** 1973. "The Case for and against Business Assumption of Social Responsibilities." *Academy of Management Journal*, 16(2): 312–322.
- **De Bondt, Werner F. M., and Richard H. Thaler.** 1985. "Does the Stock Market Overreact?" *Journal of Finance*, 40(3): 793–805.
- **Decker, O. Sallyanne.** 2004. "Corporate Social Responsibility and Structural Change in Financial Services." *Managerial Auditing Journal*, 19(6): 712–728.
- Decker, O. Sallyanne, and Christopher Sale. 2010. "An Analysis of Corporate Social Responsibility, Trust and Reputation in the Banking Profession." *Professionals' Perspectives of Corporate Social Responsibility*, , ed. Samuel O. Idowu and Walter Leal Filho, Chapter 7, 135–156. Springer.
- **De Clerck, Frans.** 2009. "Ethical Banking." *Ethical Prospects. Economy, Society, and Environment*, , ed. Laszlo Zsolnai, Zsolt Boda and Laszlo Fekete, Chapter 3, 209–227. Springer.
- Deephouse, David L. 2000. "Media Reputation as a Strategic Resource: An Integration of Mass Communication and Resource-Based Theories." Journal of Management, 26(6): 1091–1112.
- **DellaVigna, Stefano.** 2009. "Psychology and Economics: Evidence from the Field." Journal of Economic Literature, 47: 315–372.
- Derwall, Jeroen, Kees Koedijk, and Jenke Ter Horst. 2011. "A Tale of Values-Driven and Profit-Seeking Social Investors." Journal of Banking & Finance, 35(8): 2137– 2147.

- **Deutsche Bank.** 2015a. "Cluster Munitions." https://www.db.com/cr/en/positions/clustermunitions.htm, accessed: 20.05.2015.
- **Deutsche Bank.** 2015b. "Management of Reputational Risks: Strengthening Trust in the Bank." *https://www.db.com/cr/en/concrete-management-of-reputational-risks.htm*, accessed: 28.05.2015.
- Deutsche Bundesbank. 2015. "Die Ertragslage der deutschen Kreditinstitute." https://www.bundesbank.de/Redaktion/DE/Downloads/Statistiken/ Banken_Und_Andere_Finanzielle_Institute/ Banken/GuV_Statistik/ guv_tab6.pdf?_blob=publicationFile, accessed: 09.01.2016.
- Deutsche Bundesbank. 2016. "Monatsbericht August 2016." https://www.bundesbank.de/Redaktion/DE/Downloads/Veroeffentlichungen/ Monatsberichte/2016/2016_08_monatsbericht.pdf, accessed: 17.08.2016.
- DeYoung, Robert, Emma Y. Peng, and Meng Yan. 2013. "Executive Compensation and Business Policy Choices at US Commercial Banks." *Journal of Financial and Quantitative Analysis*, 48(01): 165–196.
- Diamantopoulos, Adamantios, Bodo B. Schlegelmilch, Rudolf R. Sinkovics, and Greg M. Bohlen. 2003. "Can Socio-Demographics Still Play a Role in Profiling Green Consumers? A Review of the Evidence and an Empirical Investigation." *Journal* of Business Research, 56(6): 465–480.
- Diamond, Douglas W., and Philip H. Dybvig. 1983. "Bank Runs, Deposit Insurance, and Liquidity." *Journal of Political Economy*, 401–419.
- Dickson, Eric S. 2011. "Economics vs. Psychology Experiments: Stylization, Incentives, and Deception." *Cambridge Handbook of Experimental Political Science*, ed. James N. Druckman, Donald P. Green, James H. Kuklinski and Arthur Lupia, Chapter 5, 102– 124. Cambridge University Press.
- Dillard, Jesse, Madeleine E. Pullman, Erica Mina Okada, and Eric L. Mais. 2010. "Framing the "Green" Alternative for Environmentally Conscious Consumers." Sustainability Accounting, Management and Policy Journal, 1(2): 222–234.
- **Dion, Karen, Ellen Berscheid, and Elaine Walster.** 1972. "What Is Beautiful Is Good." *Journal of Personality and Social Psychology*, 24(3): 285.
- Do, Hung, Carol A. Tilt, and Matthew V. Tilling. 2007. "Corporate Social Disclosure by Westpac Banking Corporation: A Study of Social Impact Reports (2002-2004)."
 In 5th Asia Pacific Interdisciplinary Research in Accounting (APIRA) Conference.

- Donaldson, Lex, and James H. Davis. 1991. "Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns." Australian Journal of Management, 16(1): 49–64.
- Donaldson, Thomas. 1982. Corporations and Morality. Cambridge University Press.
- **Donaldson, Thomas, and Lee E. Preston.** 1995. "The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications." *Academy of Management Review*, 20(1): 65–91.
- **Donaldson, Thomas, and Thomas W. Dunfee.** 1994. "Toward a Unified Conception of Business Ethics: Integrative Social Contracts Theory." *Academy of Management Review*, 19(2): 252–284.
- Dow, James, and Sergio Ribeiro da Costa Werlang. 1992. "Uncertainty Aversion, Risk Aversion, and the Optimal Choice of Portfolio." *Econometrica: Journal of the Econometric Society*, 197–204.
- **Drost, Ellen A.** 2011. "Validity and Reliability in Social Science Research." *Education Research and Perspectives*, 38(1): 105–123.
- Druckman, James N., and Cindy D. Kam. 2011. "Students as Experimental Participants: A Defense of the 'Narrow Data Base'." *Cambridge Handbook of Experimental Political Science*, ed. James N. Druckman, Donald P. Green, James H. Kuklinski and Arthur Lupia, Chapter 4, 41–57. Cambridge University Press.
- Du, Shuili, Chitra B. Bhattacharya, and Sankar Sen. 2010. "Maximizing Business Returns to Corporate Social Responsibility (CSR): The Role of CSR Communication." International Journal of Management Reviews, 12(1): 8–19.
- Eberl, Markus, and Manfred Schwaiger. 2005. "Corporate Reputation: Disentangling the Effects on Financial Performance." *European Journal of Marketing*, 39(7/8): 838–854.
- Edelman. 2015. "2015 Edelman Trust Barometer Global Results." http://www.edelman.com/insights/intellectual-property/2015-edelman-trustbarometer/trust-and-innovation-edelman-trust-barometer/global-results/, accessed: 09.04.2015.
- Ederington, Louis H., and Evgenia V. Golubeva. 2010. "The Impact of Risk and Return Perceptions on the Portfolio Reallocation Decisions of Mutual Fund Investors." University of Oklahoma Working Paper.
- Einhorn, Hillel J., and Nicholas J. Gonedes. 1971. "An Exponential Discrepancy Model for Attitude Evaluation." *Behavioral Science*, 16(2): 152–157.

- Einhorn, Hillel J., and Robin M. Hogarth. 1985. "Ambiguity and Uncertainty in Probabilistic Inference." *Psychological Review*, 92(4): 433–461.
- El Ghoul, Sadok, Omrane Guedhami, Chuck C. Y. Kwok, and Dev R. Mishra. 2011. "Does Corporate Social Responsibility Affect the Cost of Capital?" *Journal of Banking & Finance*, 35(9): 2388–2406.
- Ellen, Pam Scholder, Deborah J. Webb, and Lois A. Mohr. 2006. "Building Corporate Associations: Consumer Attributions for Corporate Socially Responsible Programs." *Journal of the Academy of Marketing Science*, 34(2): 147–157.
- Ellen, Pam Scholder, Joshua Lyle Wiener, and Cathy Cobb-Walgren. 1991.
 "The Role of Perceived Consumer Effectiveness in Motivating Environmentally Conscious Behaviors." Journal of Public Policy & Marketing, 102–117.
- Elliott, W. Brooke, Frank D. Hodge, Jane Jollineau Kennedy, and Maarten Pronk. 2007. "Are MBA Students a Good Proxy for Nonprofessional Investors?" Accounting Review, 82(1): 139–168.
- Elliott, W. Brooke, Frank D. Hodge, Maarten Pronk, and Jane Jollineau Kennedy. 2004. "When Are Graduate Business Students a Reasonable Proxy for Non-professional Investors?" *http://papers.ssrn.com/sol3/papers.cfm?abstract_id=556980*, accessed: 23.06.2016.
- Ellsberg, Daniel. 1961. "Risk, Ambiguity, and the Savage Axioms." *Quarterly Journal* of *Economics*, 75(4): 643–669.
- El Mosaid, Fadma, and Rachid Boutti. 2012. "Relationship between Corporate Social Responsibility and Financial Performance in Islamic Banking." *Research Journal* of Finance and Accounting, 3(10): 93–103.
- Elsas, Ralf, Andreas Hackethal, and Markus Holzhäuser. 2010. "The Anatomy of Bank Diversification." Journal of Banking & Finance, 34(6): 1274–1287.
- **Equator Principles.** 2013. "The Equator Principles. A Financial Industry Benchmark for Determining, Assessing and Managing Environmental and Social Risk in Projects." Equator Principles Version June 213.
- Equator Principles. 2016a. "About the Equator Principles." http://www.equatorprinciples.com/index.php/about-ep, accessed: 25.03.2016.
- Equator Principles. 2016b. "Equator Principles: Members and Reporting." http://www.equator-principles.com/index.php/members-reporting, accessed: 25.03.2016.

- Erickson, Gary M., and Johny K. Johansson. 1985. "The Role of Price in Multi-Attribute Product Evaluations." *Journal of Consumer Research*, 12: 195–199.
- Erickson, Gary M., Johny K. Johansson, and Paul Chao. 1984. "Image Variables in Multi-Attribute Product Evaluations: Country-of-Origin Effects." *Journal of Consumer Research*, 11: 694–99.
- Estrada, Javier. 2006. "Downside Risk in Practice." Journal of Applied Corporate Finance, 18: 117–125.
- Estrada, Javier. 2008. "Mean-Semivariance Optimization: A Heuristic Approach." Journal of Applied Finance, 18(1): 47–72.
- European Commission. 2001. "Promoting a European Framework for Corporate Social Responsibility. European Commission Green Paper." *europa.eu/rapid/press-release_DOC-01-9_en.pdf*.
- European Commission. 2009. "Corporate Social Responsibility (CSR). Memo 09/109." http://europa.eu/rapid/press-release_MEMO-09-109_en.htm, accessed: 07.09.2016.
- European Commission. 2011. "A Renewed EU Strategy 2011-14 for Corporate Social Responsibility." http://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:52011DC0681&qid=1473251808216&from=EN, accessed: 07.09.2016.
- **European Commission.** 2013. "How Companies Influence our Society: Citizens' View. Eurobarometer 363." *http://ec.europa.eu/public_opinion/flash/fl_363_en.pdf*, accessed: 08.07.2015.
- 2014."The European Commission. Corporate Social Responsibility Strategy of the European Commission: Results of the Pub-2014." lic Consultation Carried out between 30April and 15August http://ec.europa.eu/docsroom/documents/8021/attachments/1/translations/ en/renditions/pdf, accessed; 25.04.2016.
- European Commission. 2015. "Executive Summary. EU Multi Stakeholder Forum on Corporate Social Responsibility. 3-4 February, 2015 Brussels, Belgium." http://ec.europa.eu/DocsRoom/documents/8774/attachments/1/translations/en/ renditions/native, accessed: 25.04.2016.
- European Union. 2004. "Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on Environmental Liability With Regard to the Prevention of Remedying of Environmental Damage." http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32004L0035&from=EN, accessed: 08.05.2015.

- European Union. 2013. "Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on Access to the Activity of Credit Institutions and the Prudential Supervision of Credit Institutions." http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:176:0338:0436:EN:PDF, accessed: 29.04.2015.
- Falck, Oliver, and Stephan Heblich. 2007. "Corporate Social Responsibility: Doing Well by Doing Good." *Business Horizons*, 50(3): 247–254.
- Fama, Eugene F. 1965. "The Behavior of Stock-Market Prices." Journal of Business, 38(1): 34–105.
- Fama, Eugene F. 1970. "Efficient Capital Markets: A Review of Theory and Empirical Work." Journal of Finance, 25(2): 383–417.
- Fama, Eugene F. 1991. "Efficient Capital Markets: II." Journal of Finance, 46(5): 1575– 1617.
- Fatma, Mobin, Zillur Rahman, and Imran Khan. 2014. "Multi-Item Stakeholder Based Scale to Measure CSR in the Banking Industry." *International Strategic Man*agement Review, 2(1): 9–20.
- Fauver, Larry, and Michael E. Fuerst. 2006. "Does Good Corporate Governance Include Employee Representation? Evidence from German Corporate Boards." *Journal* of Financial Economics, 82(3): 673–710.
- FAZ. 2009. ""Green Towers" im Herzen Frankfurts." http://www.faz.net/aktuell/rheinmain/frankfurt/deutsche-bank-green-towers-im-herzen-frankfurts-1594882.html, accessed: 18.05.2015.
- FAZ. 2012. "Das Buzzword Nachhaltigkeit." http://www.faz.net/aktuell/feuilleton/debatten/ eine-antwort-auf-sebastian-nerz-das-buzzword-nachhaltigkeit-11694846.html, accessed: 06.07.2015.
- FAZ. 2013a. "Ackermanns gefährliche 25 Prozent." http://www.faz.net/aktuell/finanzen/was-treiben-die-banken/was-treiben-die-banken-8ackermanns-gefaehrliche-25-prozent-12240743.html, accessed: 19.05.2015.
- FAZ. 2013b. "Deutsche Bank. Der Wandel kommt nicht über Nacht." http://www.faz.net/aktuell/wirtschaft/unternehmen/deutsche-bank-der-wandelkommt-nicht-ueber-nacht-12045935.html, accessed: 12.05.2015.
- FCIC. 2011. "The Financial Crisis Inquiry Report: Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States." http://www.gpo.gov/fdsys/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf, accessed: 10.04.2015.

- FDIC. 2015. "ComE-IN Background Definitions. Subprime Definition (Based on Borrower Characteristics)." https://www.fdic.gov/about/comein/background.html, accessed: 09.04.2015.
- Federal Reserve System. 2011. "Incentive Compensation Practices: A Report on the Horizontal Review of Practices at Large Banking Organizations." http://www.federalreserve.gov/publications/other-reports/files/incentive-compensation-practices-report-201110.pdf, accessed: 08.092016.
- Fehr, Ernst, and Klaus M. Schmidt. 1999. "A Theory of Fairness, Competition, and Cooperation." *Quarterly Journal of Economics*, 114(3): 817–868.
- Feingold, Alan. 1992. "Good-Looking People Are Not What We Think." *Psychological Bulletin*, 111(2): 304–341.
- Fennema, Hein, and Peter Wakker. 1997. "Original and Cumulative Prospect Theory: A Discussion of Empirical Differences." *Journal of Behavioral Decision Making*, 10: 53–64.
- Ferran, Eilis. 2012. "Regulatory Lessons from the Payment Protection Insurance Misselling Scandal in the UK." European Business Organization Law Review, 13(02): 247– 270.
- Ferrero, Andrea. 2015. "House Price Booms, Current Account Deficits, and Low Interest Rates." Journal of Money, Credit and Banking, 47(S1): 261–293.
- Financial Times. 2012. "US Banks Can't Ignore Shareholder Activism." http://www.ft.com/intl/cms/s/0/7ac01f22-21d8-11e2-9cb4-00144feabdc0.html?siteedition=uk, accessed: 30.04.2015.
- **Financial Times.** 2014. "Behavioural Economics and Public Policy." *https://www.ft.com/content/9d7d31a4-aea8-11e3-aaa6-00144feab7de*, accessed: 07.09.2016.
- **Financial Times.** 2015. "Banks Lagging in Europe's Bull Market." http://video.ft.com/4088721539001/Banks-lagging-in-Europes-bull-market/markets, accessed: 07.09.2016.
- Financial Times. 2016a. "Banks: Too Dull to Fail?" https://www.ft.com/content/63fdcdcc-6f84-11e6-9ac1-1055824ca907, accessed: 07.09.2016.
- **Financial Times.** 2016b. "Companies Criticised over Failure to Disclose Ethics." https://next.ft.com/content/32ee2dce-e6b5-11e5-a09b-1f8b0d268c39, accessed: 12.04.2016.

- Financial Times. 2016c. "VW Production Threatened by Escalating Dispute with Suppliers." https://www.ft.com/content/7c5f61d4-679e-11e6-a0b1-d87a9fea034f, accessed: 29.08.2016.
- Fiordelisi, Franco, and Davide Salvatore Mare. 2014. "Competition and Financial Stability in European Cooperative Banks." Journal of International Money and Finance, 45: 1–16.
- Fischbacher, Urs. 2007. "z-Tree: Zurich Toolbox for Ready-Made Economic Experiments." *Experimental Economics*, 10(2): 171–178.
- Flannery, Mark J. 1986. "Asymmetric Information and Risky Debt Maturity Choice." Journal of Finance, 41(1): 19–37.
- Flannery, Mark J. 1998. "Using Market Information in Prudential Bank Supervision: A Review of the US Empirical Evidence." Journal of Money, Credit and Banking, 273–305.
- Flannery, Mark J. 2001. "The Faces of "Market Discipline"." Journal of Financial Services Research, 20(2-3): 107–119.
- Flannery, Mark J., Simon H. Kwan, and Mahendrarajah Nimalendran. 2004. "Market Evidence on the Opaqueness of Banking Firms' Assets." *Journal of Financial Economics*, 71(3): 419–460.
- Flannery, Mark J., Simon H. Kwan, and Mahendrarajah Nimalendran. 2013. "The 2007–2009 Financial Crisis and Bank Opaqueness." *Journal of Financial Intermediation*, 22(1): 55–84.
- FNMA. 2015. "Fannie Mae. Company Overview." http://www.fanniemae.com/portal/about-us/company-overview/about-fm.html, accessed: 08.04.2015.
- Folajin, Oyetayo O., Oluwaseun T. Ibitoye, and Abimbola T. Dunsin. 2014. "Corporate Social Responsibility and Organizational Profitability: An Empirical Investigation of United Bank for Africa (UBA) Plc." International Journal of Academic Research in Business and Social Sciences, 4(8): 205–214.
- Fombrun, Charles, and Mark Shanley. 1990. "What's in a Name? Reputation Building and Corporate Strategy." Academy of Management Journal, 33(2): 233–258.
- Forbes. 2014. "Last Time I Looked J.P. Morgan Chase Was Not a Regulated Public Utility." http://www.forbes.com/sites/robertlenzner/2014/08/22/its-rubbish-to-say-thebanks-are-public-utilities-today/, accessed: 12.05.2015.
- Fowler, Stephen J., and Chris Hope. 2007. "A Critical Review of Sustainable Business Indices and Their Impact." *Journal of Business Ethics*, 76(3): 243–252.

- Fox, Craig R., and Amos Tversky. 1995. "Ambiguity Aversion and Comparative Ignorance." *Quarterly Journal of Economics*, 110(3): 585–603.
- **Freeman, R. Edward.** 1984. Strategic Management: A Stakeholder Approach. Pitman Publishing.
- Freeman, R. Edward, and John McVea. 2001. "A Stakeholder Approach to Strategic Management." Darden Graduate School of Business Administration University of Virginia Working Paper 01-02.
- Freeman, R. Edward, Jeffrey S. Harrison, Andrew C. Wicks, Bidhan. L Parmar, and Simone De Colle. 2010. Stakeholder Theory: The State of the Art. Cambridge University Press.
- Freixas, Xavier, and Jean-Charles Rochet. 2008. Microeconomics of Banking. Second Edition. MIT Press.
- Frey, Rüdiger, and Juraj Hledik. 2014. "Correlation and Contagion as Sources of Systemic Risk." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2541733, accessed: 20.08.2016.
- Friedman, Andrew L., and Samantha Miles. 2006. Stakeholders: Theory and Practice. Oxford University Press.
- Friedman, Milton. 1953. Essays in Positive Economics. University of Chicago Press.
- Friedman, Milton. 1962. Capitalism and Freedom. University of Chicago Press.
- **Friedman, Milton.** 1970. "The Social Responsibility of Business Is to Increase Its Profits." *The New York Times Magazine*, 30–35.
- Frisch, Deborah, and Jonathan Baron. 1988. "Ambiguity and Rationality." Journal of Behavioral Decision Making, 1(3): 149–157.
- Froot, Kenneth A., and Emil M. Dabora. 1999. "How Are Stock Prices Affected by the Location of Trade?" *Journal of Financial Economics*, 53(2): 189–216.
- Fulton, L. 2013. "Worker Representation in Europe. Board-Level Representation." http://www.worker-participation.eu/National-Industrial-Relations/Across-Europe/Board-level-Representation2, accessed: 28.04.2015.
- Furrer, Bettina, Hoffmann Volker, and Marion Swoboda. 2009."Banking & Climate Change: **Opportunities** Risks. An Analand ysis Climate Strategies More Than 100Banks Worldwide." of in http://www.igcc.org.au/resources/Documents/sam_study_banking_e.pdf, accessed: 19.05.2015.

- **G20.** 2009. "London Summit Leaders' Statement." https://www.imf.org/external/np/sec/pr/2009/pdf/g20-040209.pdf, accessed 13.04.2015.
- Galema, Rients, Auke Plantinga, and Bert Scholtens. 2008. "The Stocks at Stake: Return and Risk in Socially Responsible Investment." Journal of Banking & Finance, 32(12): 2646–2654.
- Garriga, Elisabet, and Domènec Melé. 2004. "Corporate Social Responsibility Theories: Mapping the Territory." *Journal of Business Ethics*, 53(1): 51–71.
- Gaski, John F. 1985. "Dangerous Territory: The Societal Marketing Concept Revisited." Business Horizons, 28(4): 42–47.
- Geffen, Charlette A., and Sandra Rothenberg. 2000. "Suppliers and Environmental Innovation: The Automotive Paint Process." International Journal of Operations & Production Management, 20(2): 166–186.
- George, Darren, and Paul Mallery. 2003. SPSS for Windows Step by Step: A Simple Study Guide and Reference. Pearson.
- Gerakos, Joseph J., and Chad Syverson. 2013. "Competition in the Audit Market: Policy Implications." *Journal of Accounting*, 53(4): 725–775.
- German Federal Statistical Office. 2014. "Bevölkerung auf Grundlage des Zensus 2011." https://www.destatis.de/DE/ZahlenFakten/GesellschaftStaat/Bevoelkerung/ Bevoelkerungsstand/Tabellen/Zensus_Geschlecht_Staatsangehoerigkeit.html, accessed: 31.07.2015.
- **Ghysels, Eric, Alberto Plazzi, and Rossen Valkanov.** 2013. "The Risk-Return Relationship and Financial Crises." University of North Carolina, University of Lugano and University of California San Diego Discussion Paper.
- Ghysels, Eric, Pierre Guérin, and Massimiliano Marcellino. 2014. "Regime Switches in the Risk-Return Trade-Off." *Journal of Empirical Finance*, 28: 118–138.
- Gibbons, Damon. 2011. "Held to Account: A Review of Corporate Social Responsibility in Retail Banking from the Consumer Perspective." www.responsiblecredit.org.uk/uimages/File/Held%20to%20Account%20final%20February, accessed: 23.06.2016.
- Gielissen, Robert B. 2011. "Why Do Consumers Buy Socially Responsible Products." International Journal of Business and Social Science, 2(3): 21–35.

- **Girard, Carine, and André Sobczak.** 2012. "Towards a Model of Corporate and Social Stakeholder Engagement: Analyzing the Relations between a French Mutual Bank and iIs Members." *Journal of Business Ethics*, 107(2): 215–225.
- **Glac, Katherina.** 2009. "Understanding Socially Responsible Investing: The Effect of Decision Frames and Trade-Off Options." *Journal of Business Ethics*, 87(1): 41–55.
- **Global Reporting Initiative.** 2013. "Financial Services." Global Reporting Initiative G4 Sector Disclosures.
- **Global Reporting Initiative.** 2015. "What Is GRI?" https://www.globalreporting.org/information/about-gri/what-is-GRI, accessed: 26.03.2015.
- Global Reporting Initiative. 2016. "G4 Sector Disclosures." https://www.globalreporting.org/standards/sectorguidance/sectorguidanceG4/Pages/default.aspx, accessed: 26.08.2016.
- Global Sustainable Investment Alliance. 2015. "Global Sustainable Investment Review 2014." http://www.ussif.org/Files/Publications/GSIA_Review.pdf, accessed: 20.05.2015.
- Goetzmann, William N., and Alok Kumar. 2008. "Equity Portfolio Diversification." *Review of Finance*, 12: 433–463.
- Goodhart, Charles A. E. 2011. "If Banks Should Act as Utilities, Why Not Treat Them as Such?" http://www.voxeu.org/article/if-banks-should-act-utilities-why-not-treat-them-such, accessed: 12.05.2015.
- **Gooding, Arthur E.** 1975. "Quantification of Investors' Perceptions of Common Stocks: Risk and Return Dimensions." *Journal of Finance*, 30(5): 1301–1316.
- Greenwood, Robin, and Andrei Shleifer. 2014. "Expectations of Returns and Expected Returns." *Review of Financial Studies*, 27(3): 714–746.
- Griffin, Jennifer J., and John F. Mahon. 1997. "The Corporate Social Performance and Corporate Financial Performance Debate: Twenty-Five Years of Incomparable Research." Business & Society, 36(1): 5–31.
- Grinblatt, Mark, and Bing Han. 2005. "Prospect Theory, Mental Accounting, and Momentum." Journal of Financial Economics, 78(2): 311–339.
- Grootveld, Henk, and Winfried Hallerbach. 1999. "Variance vs Downside Risk: Is There Really That Much Difference?" European Journal of Operational Research, 114(2): 304–319.

- **Grubbs, Frank E.** 1969. "Procedures for Detecting Outlying Observations in Samples." *Technometrics*, 11(1): 1–21.
- Guala, Francesco, and Luigi Mittone. 2005. "Experiments in Economics: External Validity and the Robustness of Phenomena." Journal of Economic Methodology, 12(4): 495–515.
- Gul, Misra C. 2013. "Long-term Orientation, Perceived Consumer Effectiveness, and Environmentally Conscious Consumer Behavior: The Case of Turkey." International Journal of Marketing Studies, 5(5): 23–31.
- Hackethal, Andreas, Michael Haliassos, and Tullio Jappelli. 2012. "Financial Advisors: A Case of Babysitters?" Journal of Banking & Finance, 36(2): 509–524.
- Hahn, Tobias, and Mandy Scheermesser. 2006. "Approaches to Corporate Sustainability among German Companies." Corporate Social Responsibility and Environmental Management, 13(3): 150–165.
- Haigh, Michael S., and John A. List. 2005. "Do Professional Traders Exhibit Myopic Loss Aversion? An Experimental Analysis." *Journal of Finance*, 60(1): 523–534.
- Hajjat, Mahmood M. 2003. "Effect of Cause-Related Marketing on Attitudes and Purchase Intentions: The Moderating Role of Cause Involvement and Donation Size." *Journal of Nonprofit & Public Sector Marketing*, 11(1): 93–109.
- Hartmann, Monika. 2011. "Corporate Social Responsibility in the Food Sector." European Review of Agricultural Economics, 38(3): 297–324.
- Hartmann, Philipp, Stefan Straetmans, and Casper G. De Vries. 2005. "Banking System Stability: A Cross-Atlantic Perspective." The Risks of Financial Institutions, , ed. Philipp Hartmann and Rene M. Stutz, Chapter 4, 133–192.
- Hendry, John. 2001. "Missing the Target: Normative Stakeholder Theory and the Corporate Governance Debate." *Business Ethics Quarterly*, 11(1): 159–176.
- Hens, Thorsten, and Martin Vlcek. 2011. "Does Prospect Theory Explain the Disposition Effect?" Journal of Behavioral Finance, 12(3): 141–157.
- Hertwig, Ralph, and Andreas Ortmann. 2001. "Experimental Practices in Economics: A Methodological Challenge for Psychologists?" *Behavioral and Brain Sciences*, 24(03): 383–403.
- Herzig, Christian, and Jeremy Moon. 2012. "Corporate Social Responsibility, the Financial Sector and Economic Recession." *Journal of Business Research (forthcoming)*.

- Hewitt, Max. 2009. "Improving Investors' Forecast Accuracy When Operating Cash Flows and Accruals Are Differentially Persistent." *Accounting Review*, 84(6): 1913–1931.
- Hill, Charles W. L., and Thomas M. Jones. 1992. "Stakeholder-Agency Theory." Journal of Management Studies, 29(2): 131–154.
- Hillman, Amy J., and Gerald D. Keim. 2001. "Shareholder Value, Stakeholder Management, and Social Issues: What's the Bottom Line?" Strategic Management Journal, 22(2): 125–139.
- Hoepner, Andreas G. F., and John O. S. Wilson. 2010. "Social, Environmental, Ethical and Trust (SEET) Issues in Banking: An Overview." *Research Handbook* on International Banking and Governance, , ed. James R. Barth, Chen Lin and Clas Wihlborg, Chapter 24, 427–457. Edward Elgar.
- Hoffmann, Arvid O. I., and Thomas Post. 2015. "How Return and Risk Experiences Shape Investor Beliefs and Preferences." *Accounting & Finance*.
- Hogarth, Robin M., and Hillel J. Einhorn. 1992. "Order Effects in Belief Updating: The Belief-Adjustment Model." *Cognitive Psychology*, 24(1): 1–55.
- Holm, Claus, and Pall Rikhardsson. 2008. "Experienced and Novice Investors: Does Environmental Information Influence Investment Allocation Decisions?" European Accounting Review, 17(3): 537–557.
- Homer, Pamela M. 1995. "Ad Size as an Indicator of Perceived Advertising Costs and Effort: The Effects on Memory and Perceptions." *Journal of Advertising*, 24(4): 1–12.
- Hong, Harrison G., and Inessa Liskovich. 2014. "Crime, Punishment and the Halo Effect of Corporate Social Responsibility." NBER Working Paper 21215.
- Hoyler, Michael, Tim Freytag, and Christoph Mager. 2008. "Connecting Rhine-Main: The Production of Multi-Scalar Polycentricities through Knowledge-Intensive Business Services." *Regional Studies*, 42(8): 1095–1111.
- **HSBC.** 2015. "Our Values." *https://www.hsbc.com/citizenship/our-values*, accessed: 07.09.2016.
- Huang, Jiekun, and Darren J. Kisgen. 2013. "Gender and Corporate Finance: Are Male Executives Overconfident Relative to Female Executives?" Journal of Financial Economics, 108(3): 822–839.
- Huang, Wei, Qianqiu Liu, S. Ghon Rhee, and Feng Wu. 2012. "Extreme Downside Risk and Expected Stock Returns." *Journal of Banking & Finance*, 36: 1492–1502.

- Hull, Clyde Eiríkur, and Sandra Rothenberg. 2008. "Firm Performance: The Interactions of Corporate Social Performance with Innovation and Industry Differentiation." *Strategic Management Journal*, 29(7): 781–789.
- Idowu, Samuel O., and Walter Leal Filho. 2009. "Preface." Professionals' Perspectives of Corporate Social Responsibility, , ed. Samuel O. Idowu and Walter Leal Filho, Chapter 0, ix–x. Springer.
- **Illeditsch, Philipp Karl.** 2011. "Ambiguous Information, Portfolio Inertia, and Excess Volatility." *Journal of Finance*, 66(6): 2213–2247.
- **IMF.** 2009. "Navigating the Financial Challenges Ahead." International Monetary Fund Global Financial Stability Report.
- **IMF.** 2014. "Risk Taking, Liquidity, and Shadow Banking. Curbing Excess While Promoting Growth." International Monetary Fund Global Financial Stability Report.
- **IPCC.** 2014. "Climate Change 2014: Impacts, Adaptation, and Vulnerability." Fifth Assessment Report of the Intergovernmental Panel on Climate Change.
- Jawahar, I. M., and Gary L. McLaughlin. 2001. "Toward a Descriptive Stakeholder Theory: An Organizational Life Cycle Approach." Academy of Management Review, 26(3): 397–414.
- **Jensen, Michael C.** 2001. "Value Maximization, Stakeholder Theory, and the Corporate Objective Function." *Journal of Applied Corporate Finance*, 14(3): 8–21.
- Jeucken, Marcel. 2004. Sustainability in Finance: Banking on the Planet. Eburon.
- Jondeau, Eric, and Michael Rockinger. 2003. "Testing for Differences in the Tails of Stock-Market Returns." *Journal of Empirical Finance*, 10: 559–581.
- Kahneman, Daniel. 2003a. "Maps of Bounded Rationality: Psychology for Behavioral Economics." *American Economic Review*, 93(5): 1449–1475.
- Kahneman, Daniel. 2003b. "A Perspective on Judgment and Choice: Mapping Bounded Rationality." *American Psychologist*, 58(9): 697.
- Kahneman, Daniel, and Alan B. Krueger. 2006. "Developments in the Measurement of Subjective Well-Being." *Journal of Economic Perspectives*, 20(1): 3–24.
- Kahneman, Daniel, and Amos Tversky. 1979. "Prospect Theory: An Analysis of Decision under Risk." *Econometrica: Journal of the Econometric Society*, 47(2): 263– 291.

- Kahneman, Daniel, and Jack L. Knetsch. 1992. "Valuing Public Goods: The Purchase of Moral Satisfaction." Journal of Environmental Economics and Management, 22(1): 57–70.
- Kahneman, Daniel, and Mark W. Riepe. 1998. "Aspects of Investor Psychology." Journal of Portfolio Management, 24(4): 52–65.
- Kalmi, Panu. 2014. "Ethics, Banking and Ownership." Safe Bank, 55(2): 27–37.
- Kane, Edward J. 2009. "Ethical Failures in Regulating and Supervising the Pursuit of Safety-Net Subsidies." European Business Organization Law Review, 10(02): 185–211.
- Karlan, Dean, and Jonathan Zinman. 2011. "Microcredit in Theory and Practice: Using Randomized Credit Scoring for Impact Evaluation." *Science*, 332(6035): 1278– 1284.
- Karl, Marlene. 2015. "Are Ethical and Social Banks Less Risky? Evidence from a New Dataset." DIW Berlin Discussion Paper 1484.
- **Karoglou, Michail.** 2010. "Breaking Down the Non-Normality of Stock Returns." *European Journal of Finance*, 16(1): 79–95.
- Kasman, Saadet, Gülin Vardar, and Gökçe Tunç. 2011. "The Impact of Interest Rate and Exchange Rate Volatility on Banks' Stock Returns and Volatility: Evidence from Turkey." *Economic Modelling*, 28(3): 1328–1334.
- Keaveney, Susan M. 1995. "Customer Switching Behavior in Service Industries: An Exploratory Study." Journal of Marketing, 59: 71–82.
- Kempf, Alexander, and Peer Osthoff. 2007. "The Effect of Socially Responsible Investing on Portfolio Performance." *European Financial Management*, 13(5): 908–922.
- Keynes, John Maynard. 1936. General Theory of Employment, Interest and Money. Macmillan.
- Keys, Benjamin J., Tanmoy Mukherjee, Amit Seru, and Vikrant Vig. 2010. "Did Securitization Lead to Lax Screening? Evidence from Subprime Loans." *Quarterly Journal of Economics*, 125(1): 307–362.
- Klayman, Joshua, Jack B. Soll, Claudia Gonzalez-Vallejo, and Sema Barlas. 1999. "Overconfidence: It Depends on How, What, and Whom You Ask." Organizational Behavior and Human Decision Processes, 79(3): 216–247.
- Klein, Jill, and Niraj Dawar. 2004. "Corporate Social Responsibility and Consumers' Attributions and Brand Evaluations in a Product-Harm Crisis." International Journal of Research in Marketing, 21(3): 203–217.

- **KPMG.** 2015. "Industries." *http://www.kpmg.com/us/en/industry/*, accessed: 05.05.2015.
- Kvålseth, Tarald O. 1985. "Cautionary Note about R2." American Statistician, 39(4): 279–285.
- Lafferty, Barbara A., and Diane R. Edmondson. 2009. "Portraying the Cause Instead of the Brand in Cause-Related Marketing Ads: Does it Really Matter?" *Journal* of Marketing Theory and Practice, 17(2): 129–144.
- Lafferty, Barbara A., and Ronald E. Goldsmith. 2005. "Cause-Brand Alliances: Does the Cause Help the Brand or Does the Brand Help the Cause?" Journal of Business Research, 58: 423–429.
- Landier, Augustin, and Vinay B. Nair. 2009. Investing for Change: Profit from Responsible Investment. Oxford University Press.
- Lane, Philip R. 2012. "The European Sovereign Debt Crisis." Journal of Economic Perspectives, 26(3): 49–67.
- Lankoski, Leena, N. Craig Smith, and Luk Van Wassenhove. 2011. "Judgments of Stakeholder Value: Advancing Stakeholder Theory through Prospect Theory." INSEAD Working Paper.
- Laplume, André O., Karan Sonpar, and Reginald A. Litz. 2008. "Stakeholder Theory: Reviewing a Theory That Moves Us." *Journal of Management*, 34(6): 1152– 1189.
- Lenssen, Gilbert, André Sobczak, Gervaise Debucquet, and Christelle Havard. 2006. "The Impact of Higher Education on Students' and Young Managers' Perception of Companies and CSR: An Exploratory Analysis." Corporate Governance: The International Journal of Business in Society, 6(4): 463–474.
- Levitt, Theodore. 1958. "The Dangers of Social-Responsibility." *Harvard Business Review*, 36(5): 41–50.
- Lewis, Alan, and Craig Mackenzie. 2000. "Morals, Money, Ethical Investing and Economic Psychology." *Human Relations*, 53(2): 179–191.
- Lewis, Phillip V. 1985. "Defining 'Business Ethics': Like Nailing Jello to a Wall." Journal of Business Ethics, 4(5): 377–383.
- Lichtenstein, Donald R., Minette E. Drumwright, and Bridgette M. Braig. 2004. "The Effect of Corporate Social Responsibility on Customer Donations to Corporate-Supported Nonprofits." *Journal of Marketing*, 68(4): 16–32.

- Liikanen, Erkki. 2012."High-Level Expert Reforming Group on the Structure of the EU Banking Sector. Final Report, Brussels, 2012." 2October http://ec.europa.eu/internal market/bank/docs/high*level_expert_group/report_en.pdf*, accessed: 08.05.2016.
- Lim, Sonya Seongyeon. 2006. "Do Investors Integrate Losses and Segregate Gains? Mental Accounting and Investor Trading Decisions." Journal of Business, 79(5): 2539– 2573.
- Lindgreen, Adam, Valérie Swaen, and Wesley J. Johnston. 2009. "Corporate Social Responsibility: An Empirical Investigation of US Organizations." *Journal of Business Ethics*, 85(2): 303–323.
- List, John A. 2004. "Neoclassical Theory versus Prospect Theory: Evidence from the Marketplace." *Econometrica: Journal of the Econometric Society*, 72(2): 615–625.
- Litwin, Mark S. 1995. *How to Measure Survey Reliability and Validity*. Sage Publications.
- Li, Yan, and Liyan Yang. 2013. "Prospect Theory, the Disposition Effect, and Asset Prices." *Journal of Financial Economics*, 107(3): 715–739.
- Locke, Peter R., and Steven C. Mann. 2009. "Daily Income Target Effects: Evidence from a Large Sample of Professional Commodities Traders." *Journal of Financial Markets*, 12(4): 814–831.
- Logsdon, Jeanne M., and Donna J. Wood. 2002. "Business Citizenship." Business Ethics Quarterly, 12(2): 155–187.
- Longin, François M. 1996. "The Asymptotic Distribution of Extreme Stock Market Returns." *Journal of Business*, 69(3): 383–408.
- Lougee, Barbara, and James Wallace. 2008. "The Corporate Social Responsibility (CSR) Trend." Journal of Applied Corporate Finance, 20(1): 96–108.
- Lubin, David A., and Daniel C. Esty. 2010. "The Sustainability Imperative." *Harvard Business Review*, 88(5): 42–50.
- Luchs, Michael G., Rebecca Walker Naylor, Julie R. Irwin, and Rajagopal Raghunathan. 2010. "The Sustainability Liability: Potential Negative Effects of Ethicality on Product Preference." *Journal of Marketing*, 74(5): 18–31.
- Luo, Xueming, and Chitra B. Bhattacharya. 2006. "Corporate Social Responsibility, Customer Satisfaction, and Market Value." *Journal of Marketing*, 70(4): 1–18.

- Luo, Xueming, Ran Zhang, Weining Zhang, and Jaakko Aspara. 2014. "Do Institutional Investors Pay Attention to Customer Satisfaction and Why?" Journal of the Academy of Marketing Science, 42(2): 119–136.
- Lydenberg, Steven. 2007. "Universal Investors and Socially Responsible Investors: A Tale of Emerging Affinities." *Corporate Governance: An International Review*, 15(3): 467–477.
- Lynch, John G. 1999. "Theory and External Validity." Journal of the Academy of Marketing Science, 27(3): 367–376.
- MacGuigan, James R., Frederick H. deB. Harris, and R. Charles Moyer. 2010. Managerial Economics: Applications, Strategy, and Tactics. Thomson South-Western.
- Mackenzie, Craig, and Alan Lewis. 1999. "Morals and Markets: The Case of Ethical Investing." *Business Ethics Quarterly*, 9(3): 439–452.
- Maon, François, Adam Lindgreen, and Valérie Swaen. 2009. "Designing and Implementing Corporate Social Responsibility: An Integrative Framework Grounded in Theory and Practice." *Journal of Business Ethics*, 87(1): 71–89.
- Marcoux, Alexei M. 2003. "A Fiduciary Argument against Stakeholder Theory." Business Ethics Quarterly, 13(1): 1–24.
- Margolis, Joshua D., and James P. Walsh. 2003. "Misery Loves Companies: Rethinking Social Initiatives by Business." *Administrative Science Quarterly*, 48(2): 268– 305.
- Marin, Longinos, and Salvador Ruiz. 2007. ""I Need You Too!" Corporate Identity Attractiveness for Consumers and the Role of Social Responsibility." *Journal of Business Ethics*, 71(3): 245–260.
- Markowitz, Harry M. 1952. "Portfolio Selection." Journal of Finance, 7(1): 77–91.
- Markowitz, Harry M. 1959. Portfolio Selection: Efficient Diversification of Investments. John Wiley & Sons.
- Markowitz, Harry M., Peter Todd, Ganlin Xu, and Yuji Yamane. 1993. "Computation of Mean-Semivariance Efficient Sets by the Critical Line Algorithm." Annals of Operations Research, 45(1): 307–317.
- Marom, Isaiah Yeshayahu. 2006. "Toward a Unified Theory of the CSP–CFP Link." Journal of Business Ethics, 67(2): 191–200.
- Matten, D., and J. Moon. 2008. ""Implicit" and "Explicit" CSR: A Conceptual Framework for a Comparative Understanding of Corporate Social Responsibility." *Academy* of Management Review, 33(2): 404–424.

- McDermott, Rose. 2011. "Internal and External Validity." Cambridge Handbook of Experimental Political Science, , ed. James N. Druckman, Donald P. Green, James H. Kuklinski and Arthur Lupia, Chapter 3, 27–40. Cambridge University Press.
- McDonald, Lynette M., and Chia Hung Lai. 2011. "Impact of Corporate Social Responsibility Initiatives on Taiwanese Banking Customers." *International Journal of Bank Marketing*, 29(1): 50–63.
- McDonald, Lynette M., and Sharyn Rundle-Thiele. 2008. "Corporate Social Responsibility and Bank Customer Satisfaction: A Research Agenda." *International Journal of Bank Marketing*, 26(3): 170–182.
- McGee, John. 1998. "Commentary on 'Corporate Strategies and Environmental Regulations: An Organizing Framework' by A. M. Rugman and A. Verbeke." *Strategic Management Journal*, 19(4): 377–387.
- McGuire, Jean B., Alison Sundgren, and Thomas Schneeweis. 1988. "Corporate Social Responsibility and Firm Financial Performance." *Academy of Management Journal*, 31(4): 854–872.
- McKinsey & Company. 2012. "Global Corporate and Investment Banking: An Agenda for Change." McKinsey & Company Global Corporate & Investment Banking Practice Report.
- McKinsey & Company. 2015. "Client Service: Industry Practices." http://www.mckinsey.com/client-service, accessed: 05.05.2015.
- McKinsey & Company. 2016. "The Road Ahead. Perspectives on German Banking." German Banking Practice Report.
- McKinsey Global Institute. 2015. "Debt and (Not Much) Deleveraging." McKinsey Global Institute Report.
- McLachlan, Jonathan, and John Gardner. 2004. "A Comparison of Socially Responsible and Conventional Investors." *Journal of Business Ethics*, 52(1): 11–25.
- McWilliams, Abagail, and Donald Siegel. 2001. "Corporate Social Responsibility: A Theory of the Firm Perspective." Academy of Management Review, 26(1): 117–127.
- Micco, Alejandro, Ugo Panizza, and Monica Yanez. 2007. "Bank Ownership and Performance. Does Politics Matter?" Journal of Banking & Finance, 31: 219–241.
- Michelson, Grant, Nick Wailes, Sandra Van Der Laan, and Geoff Frost. 2004. "Ethical Investment Processes and Outcomes." *Journal of Business Ethics*, 52(1): 1–10.

- Mintzberg, Henry, Bruce Ahlstrand, and Joseph Lampel. 2005. Strategy Safari: A Guided Tour through the Wilds of Strategic Management. Simon and Schuster.
- Mishina, Yuri, Bernadine J Dykes, Emily S. Block, and Timothy G. Pollock. 2010. "Why "Good" Firms Do Bad Things: The Effects of High Aspirations, High Expectations, and Prominence on the Incidence of Corporate Illegality." Academy of Management Journal, 53(4): 701–722.
- Mishra, Saurabh, and Sachin B. Modi. 2013. "Positive and Negative Corporate Social Responsibility, Financial Leverage, and Idiosyncratic Risk." *Journal of Business Ethics*, 117(2): 431–448.
- Mitchell, Ronald K., Bradley R. Agle, and Donna J. Wood. 1997. "Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts." *Academy of Management Review*, 22(4): 853–886.
- Moch, Nils. 2013. "Competition in Fragmented Markets: New Evidence from the German Banking Industry in the Light of the Subprime Crisis." Journal of Banking & Finance, 37(8): 2908–2919.
- Mohsin Butt, Muhammad, and Muhammad Aftab. 2013. "Incorporating Attitude towards Halal Banking in an Integrated Service Quality, Satisfaction, Trust and Loyalty Model in Online Islamic Banking Context." *International Journal of Bank Marketing*, 31(1): 6–23.
- Moon, Jeremy, Andrew Crane, and Dirk Matten. 2005. "Can Corporations be Citizens? Corporate Citizenship as a Metaphor for Business Participation in Society." *Business Ethics Quarterly*, 429–453.
- Moore, Don A., and Paul J. Healy. 2008. "The Trouble with Overconfidence." *Psychological Review*, 115(2): 502–517.
- Morgan, Donald P. 2002. "Rating Banks: Risk and Uncertainty in an Opaque Industry." American Economic Review, 92(4): 874–888.
- Mörtenböck, Peter, and Helge Mooshammer. 2014. Occupy: Räume des Protests. Transcript Verlag.
- Müller, Sarah S., Anne J. Fries, and Karen Gedenk. 2014. "How Much to Give? The Effect of Donation Size on Tactical and Strategic Success in Cause-Related Marketing." *International Journal of Research in Marketing*, 31(2): 178–191.
- Mullineux, Andy. 2009. "The Regulation of British Retail Banking Utilities." Journal of Financial Regulation and Compliance, 17(4): 453–466.

- Mullineux, Andy. 2014. "Banking for the Public Good." International Review of Financial Analysis, 36: 87–94.
- Nakkeeran, N. Senthilkumar, Anthonisamy Ananth, and Anthony Arulraj. 2011. "Impact of Corporate Social Responsibility on Customer Satisfaction in Banking Service." African Journal of Business Management, 5(7): 3028–3039.
- Nawrocki, David N. 1999. "A Brief History of Downside Risk Measures." Journal of Investing, 8(3): 9–25.
- Nenova, Tatiana. 2003. "The Value of Corporate Voting Rights and Control: A Cross-Country Analysis." *Journal of Financial Economics*, 68(3): 325–351.
- Nilsson, Jonas. 2008. "Investment with a Conscience: Examining the Impact of Pro-Social Attitudes and Perceived Financial Performance on Socially Responsible Investment Behavior." Journal of Business Ethics, 83(2): 307–325.
- Nilsson, Jonas. 2009. "Segmenting Socially Responsible Mutual Fund Investors: The Influence of Financial Return and Social Responsibility." *International Journal of Bank Marketing*, 27(1): 5–31.
- Nisbett, Richard E., and Timothy D. Wilson. 1977. "The Halo Effect: Evidence for Unconscious Alteration of Judgments." *Journal of Personality and Social Psychology*, 35(4): 250.
- Nutt, Paul C., and Robert W. Backoff. 1992. Strategic Management of Public and Third Sector Organizations: A Handbook for Leaders. Jossey-Bass.
- **Obstfeld, Maurice, and Kenneth S. Rogoff.** 2009. "Global Imbalances and the Financial Crisis: Products of Common Causes." CEPR Discussion Paper 7606.
- **Occupy.** 2015. "About Occupy.com." *http://www.occupy.com/about*, Accessed: 11.05.2015.
- Odean, Terrance. 1998. "Are Investors Reluctant to Realize Their Losses?" Journal of Finance, 53(5): 1775–1798.
- **OECD.** 2009. "Overview of Selected Initiatives and Instruments Relevant to Corporate Social Responsibility." Annual Report on the OECD Guidelines for Multinational Enterprises, Chapter 6, 235–260.
- Orlitzky, Marc, Frank L. Schmidt, and Sara L. Rynes. 2003. "Corporate Social and Financial Performance: A Meta-Analysis." *Organization Studies*, 24(3): 403–441.
- O'Sullivan, Niamh, and Brendan O'Dwyer. 2009. "Stakeholder Perspectives on a Financial Sector Legitimation Process: The Case of NGOs and the Equator Principles." Accounting, Auditing & Accountability Journal, 22(4): 553–587.

- Özkan, Yasemin. 2009. "The Effect of Some Demographic Characteristics of Turkish Consumers on their Socially Responsible Consumption Behaviours." World Applied Sciences Journal, 6(7): 946–960.
- Papaoikonomou, Eleni, Gerard Ryan, and Matias Ginieis. 2011. "Towards a Holistic Approach of the Attitude Behaviour Gap in Ethical Consumer Behaviours: Empirical Evidence from Spain." International Advances in Economic Research, 17(1): 77–88.
- Park, Jin Yong, Kyungdo Park, and Alan J. Dubinsky. 2011.. "Impact of Retailer Image on Private Brand Attitude: Halo Effect and Summary Construct." Australian Journal of Psychology, 63(3): 173–183.
- Park, Patricia. 2009. "Perspectives of Lawyers in Practice on CSR." Professionals' Perspectives of Corporate Social Responsibility, , ed. Samuel O. Idowu and Walter Leal Filho, Chapter 2, 33–48. Springer.
- **Peeters, Herwig.** 2003. "Sustainable Development and the Role of the Financial World." *Environment, Development and Sustainability*, 5(1-2): 197–230.
- Pérez, Andrea, and Ignacio Rodríguez del Bosque. 2012. "The Role of CSR in the Corporate Identity of Banking Service Providers." *Journal of Business Ethics*, 108(2): 145–166.
- Pérez, Andrea, and Ignacio Rodríguez del Bosque. 2013. "Measuring CSR Image: Three Studies to Develop and to Validate a Reliable Measurement Tool." Journal of Business Ethics, 118: 265–286.
- Pérez, Andrea, Patricia Martínez, and Ignacio Rodríguez del Bosque. 2013. "The Development of a Stakeholder-Based Scale for Measuring Corporate Social Responsibility in the Banking Industry." Service Business, 7(3): 459–481.
- Perrini, Francesco, and Antonio Tencati. 2006. "Sustainability and Stakeholder Management: The Need for New Corporate Performance Evaluation and Reporting Systems." Business Strategy and the Environment, 15(5): 296–308.
- Peterson, Robert A. 2001. "On the Use of College Students in Social Science Research: Insights from a Second-Order Meta-Analysis." *Journal of Consumer Research*, 28(3): 450–461.
- Pew Research Center. 2015. "Questionnaire Design." http://www.pewresearch.org/methodology/u-s-survey-research/questionnaire-design/, accessed: 04.09.2015.
- Phillips, Robert, R. Edward Freeman, and Andrew C. Wicks. 2003. "What Stakeholder Theory Is Not." *Business Ethics Quarterly*, 13(4): 479–502.

- Pinkston, Tammie S., and Archie B. Carroll. 1996. "A Retrospective Examination of CSR Orientations: Have They Changed?" Journal of Business Ethics, 15(2): 199– 206.
- **Pomering, Alan, and Sara Dolnicar.** 2006*a.* "Customers' Sensitivity to Different Measures of Corporate Social Responsibility in the Australian Banking Sector." University of Wollongong Faculty of Commerce Papers.
- **Pomering, Alan, and Sara Dolnicar.** 2006b. "The Limitations of Consumer Response to CSR: An Empirical Test of Smith's Proposed Antecedents." University of Wollongong Faculty of Commerce Papers.
- Poolthong, Yaowalak, and Rujirutana Mandhachitara. 2009. "Customer Expectations of CSR, Perceived Service Quality and Brand Effect in Thai Retail Banking." *International Journal of Bank Marketing*, 27(6): 408–427.
- **Porter, Michael E.** 1979. "How Competitive Forces Shape Strategy." *Harvard Business Review*, 2(57): 137–145.
- **Porter, Michael E.** 2008. "The Five Competitive Forces That Shape Strategy." *Harvard Business Review*, 86(1): 25–40.
- Porter, Michael E., and Mark R. Kramer. 2006. "The Link between Competitive Advantage and Corporate Social Responsibility." *Harvard Business Review*, 84(12): 78–92.
- **Powell, Thomas C., Dan Lovallo, and Craig R. Fox.** 2011. "Behavioral Strategy." Strategic Management Journal, 32(13): 1369–1386.
- Pracejus, John W., and G. Douglas Olsen. 2004. "The Role of Brand/Cause Fit in the Effectiveness of Cause-Related Marketing Campaigns." *Journal of Business Research*, 57(6): 635–640.
- PricewaterhouseCoopers.2015."IndustrySectors."http://www.pwc.com/gx/en/industry-sectors, accessed:05.05.2015.5.05.2015.
- Prior, Francesc, and Antonio Argandoña. 2009. "Best Practices in Credit Accessibility and Corporate Social Responsibility in Financial Institutions." *Journal of Business Ethics*, 87(1): 251–265.
- Quazi, Ali M. 1997. "Corporate Social Responsibility in Diverse Environments: A Comparative Study of Managerial Attitudes in Australia and Bangladesh." Business and Professional Ethics Journal, 16(4): 67–84.

- Rahbek Pedersen, Ebsen, and Peter Neergaard. 2008. "From Periphery to Center: How CSR Is Integrated in Mainstream Performance Management Frameworks." *Measuring Business Excellence*, 12(1): 4–12.
- Ramasamy, Bala, and Mathew Yeung. 2009. "Chinese Consumers' Perception of Corporate Social Responsibility (CSR)." Journal of Business Ethics, 88: 119–132.
- Ranyard, Rob, Lisa Hinkley, Janis Williamson, and Sandie McHugh. 2006. "The Role of Mental Accounting in Consumer Credit Decision Processes." Journal of Economic Psychology, 27(4): 571–588.
- **Reicherter, Matthias.** 2000. Fusionsentscheidung und Wert der Kreditgenossenschaft. Springer.
- Reinhart, Carmen M., and Kenneth S. Rogoff. 2011. "From Financial Crash to Debt Crisis." *American Economic Review*, 101: 1676–1706.
- Relano, Francesc, and Elisabeth Paulet. 2014. "Differentiating between Sincere and Insincere Corporate Social Responsibility (CSR): Evidence from the German Banking Industry." Safe Bank, 55(2): 65–84.
- Renneboog, Luc, Jenke Ter Horst, and Chendi Zhang. 2008. "Socially Responsible Investments: Institutional Aspects, Performance, and Investor Behavior." Journal of Banking & Finance, 32: 1723–1742.
- Reuters. 2015. "HSBC Chief Says Bank Sometimes Fell Short of Standards." http://www.reuters.com/article/2015/02/13/us-hsbc-leak-ceoidUSKBN0LH1UO20150213, accessed: 08.05.2015.
- **Riekeberg, Marcus.** 2013. *Migrationsbedingte Kundenabwanderung bei Sparkassen.* Springer.
- **Roberts, James A.** 1996*a*. "Green Consumers in the 1990s: Profile and Implications for Advertising." *Journal of Business Research*, 36: 217–231.
- **Roberts, James A.** 1996b. "Will the Real Socially Responsible Consumer Please Step Forward?" *Business Horizons*, 39(1): 79–83.
- Roberts, Peter W., and Grahame R. Dowling. 2002. "Corporate Reputation and Sustained Superior Financial Performance." Strategic Management Journal, 23(12): 1077–1093.
- Rom, Brian M., and Kathleen W. Ferguson. 1994. "Post-Modern Portfolio Theory Comes of Age." *Journal of Investing*, 3(3): 11–17.

- Rosenthal, Leonard, and Colin Young. 1990. "The Seemingly Anomalous Price Behavior of Royal Dutch/Shell and Unilever NV/PLC." Journal of Financial Economics, 26(1): 123–141.
- Roth, Alvin E. 1995. "Bargaining Experiments." *Handbook of Experimental Economics*, ed. John H. Kagel and Alvin E. Roth, Chapter 4, 253–342. Princeton University Press.
- Rubin, Allen, and Earl Babbie. 2015. Essential Research Methods for Social Work. Cengage Learning.
- Rubinstein, Ariel. 2006. "Discussion of "Behavioral Economics"." Advances in Economics and Econometrics: Volume 2: Theory and Applications, ed. Richard Blundell, Whitney K. Newey and Torsten Persson, Chapter 9, 246–255. Cambridge University Press.
- Salvador, Enrique, Christos Floros, and Vicent Arago. 2014. "Re-Examining the Risk-Return Relationship in Europe: Linear or Non-Linear Trade-Off?" Journal of Empirical Finance, 28: 60–77.
- San-Jose, Leire, Jose Luis Retolaza, and Jorge Gutierrez-Goiria. 2011. "Are Ethical Banks Different? A Comparative Analysis Using the Radical Affinity Index." *Journal of Business Ethics*, 100(1): 151–173.
- Santos, Joao A. C. 2001. "Bank Capital Regulation in Contemporary Banking Theory: A Review of the Literature." *Financial Markets, Institutions & Instruments*, 10(2): 41– 84.
- Schaeck, Klaus, Consuelo Silva Buston, and Wolf Wagner. 2013. "The Two Faces of Interbank Correlation." Tilburg University Center for Economic Research Discussion Paper 2013-077.
- Schildbach, Jan, Claudius Wenzel, Bernhard Speyer, and Ralf Hoffmann. 2013. "Bank Performance in the US and Europe. An Ocean Apart." Deutsche Bank Research September 26, 2013.
- Scholtens, Bert. 2009. "Corporate Social Responsibility in the International Banking Industry." *Journal of Business Ethics*, 86(2): 159–175.
- Scholtens, Bert, and Lammertjan Dam. 2007. "Banking on the Equator. Are Banks that Adopted the Equator Principles Different from Non-Adopters?" World Development, 35(8): 1307–1328.
- Schram, Arthur. 2005. "Artificiality: The Tension between Internal and External Validity in Economic Experiments." *Journal of Economic Methodology*, 12(2): 225–237.

- Schröder, Michael. 2007. "Is There a Difference? The Performance Characteristics of SRI Equity Indices." Journal of Business Finance & Accounting, 34(1-2): 331–348.
- Schuldt, Jonathon P., Dominique Muller, and Norbert Schwarz. 2012. "The "Fair Trade" Effect: Health Halos from Social Ethics Claims." Social Psychological and Personality Science, 3(5): 581–589.
- Sears, David O. 1986. "College Sophomores in the Laboratory: Influences of a Narrow Data Base on Social Psychology's View of Human Nature." *Journal of Personality and Social Psychology*, 51(3): 515.
- Sela, Aner, Itamar Simonson, and Ran Kivetz. 2013. "Beating the Market: The Allure of Unintended Value." *Journal of Marketing Research*, 50(6): 691–705.
- Sen, Amartya K. 1977. "Rational Fools: A Critique of the Behavioral Foundations of Economic Theory." *Philosophy & Public Affairs*, 6(4): 317–344.
- Sen, Sankar, and Chitra B. Bhattacharya. 2001. "Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility." *Journal of Marketing Research*, 38(2): 225–243.
- Shadish, William R.., Thomas D. Cook, and Donald T. Campbell. 2002. Experimental and Quasi-Experimental Designs for Generalized Causal Inference. Houghton Mifflin.
- Shapiro, Carl, and Hal R. Varian. 2013. Information Rules: A Strategic Guide to the Network Economy. Harvard Business Press.
- Shaw, Deirdre, Robert McMaster, and Terry Newholm. 2015. "Care and Commitment in Ethical Consumption: An Exploration of the 'Attitude–Behaviour Gap'." *Journal of Business Ethics*, 136(2): 1–15.
- **Shefrin, Hersh, and Meir Statman.** 1985. "The Disposition to Sell Winners Too Early and Ride Losers Too Long: Theory and Evidence." *Journal of Finance*, 40(3): 777–790.
- Shen, Chung-Hua, and Yuan Chang. 2010. "Corporate Social Responsibility, Financial Performance and Selection Bias-Evidence from TWSE-listing Banks of Taiwan." *Research Handbook on International Banking and Governance*, ed. James R. Barth, Chen Lin and Clas Wihlborg, Chapter 25, 458–486. Edward Elgar.
- Sheth, Jagdish N., Nirmal K. Sethia, and Shanthi Srinivas. 2011. "Mindful Consumption: A Customer-Centric Approach to Sustainability." Journal of the Academy of Marketing Science, 39(1): 21–39.
- Shiller, Robert J. 1981. "Do Stock Prices Move Too Much to Be Justified by Subsequent Changes in Dividends?" *American Economic Review*, 71(3): 421–436.

- Shiller, Robert J. 2003. "From Efficient Markets Theory to Behavioral Finance." Journal of Economic Perspectives, 17(1): 83–104.
- Shleifer, Andrei. 2000. Inefficient Markets: An Introduction to Behavioral Finance. Oxford University Press.
- Siems, Mathias, and David Cabrelli. 2013. Comparative Company Law: A Case-Based Approach. Bloomsbury.
- Simmons, Carolyn J., and Karen L. Becker-Olsen. 2006. "Achieving Marketing Objectives through Social Sponsorships." *Journal of Marketing*, 70(4): 154–169.
- Simon, Herbert A. 1959. "Theories of Decision-Making in Economics and Behavioral Science." American Economic Review, 49(3): 253–283.
- Simon, Herbert A. 1972. "Theories of Bounded Rationality." Decision and Organization, 1(1): 161–176.
- Simpson, W. Gary, and Theodor Kohers. 2002. "The Link between Corporate Social and Financial Performance: Evidence from the Banking Industry." *Journal of Business Ethics*, 35(2): 97–109.
- Sirri, Erik R., and Peter Tufano. 1998. "Costly Search and Mutual Fund Flows." Journal of Finance, 1589–1622.
- Slovic, Paul. 1972. "Psychological Study of Human Judgment: Implications for Investment Decision Making." Journal of Finance, 27(4): 779–799.
- Slovic, Paul. 2001. "Psychological Study of Human Judgment: Implications for Investment Decision Making." Journal of Psychology and Financial Markets, 2(3): 160–172.
- Slovin, Myron B., Marie E. Sushka, and John A. Polonchek. 1993. "The Value of Bank Durability: Borrowers as Bank Stakeholders." *Journal of Finance*, 48(1): 247–266.
- Smith, Adam. 1799. An Inquiry into the Nature and Causes of the Wealth of Nations. Printed for A. Strahan, and T. Cadell Jun. and W. Davies in the Strand.
- Smith, N. Craig, Daniel Read, and Sofia López-Rodríguez. 2010. "Consumer Perceptions of Corporate Social Responsibility: The CSR Halo Effect."
- Smyth, Jolene D., Don A. Dillman, Leah Melani Christian, and Michael J. Stern. 2006. "Comparing Check-All and Forced-Choice Question Formats in Web Surveys." Public Opinion Quarterly, 70(1): 66–77.
- Soana, Maria-Gaia. 2011. "The Relationship between Corporate Social Performance and Corporate Financial Performance in the Banking Sector." *Journal of Business Ethics*, 104(1): 133–148.

- Soll, Jack B., and Joshua Klayman. 2004. "Overconfidence in Interval Estimates." Journal of Experimental Psychology: Learning, Memory, and Cognition, 30(2): 299.
- Sonnenberg, Nadine C., Alet C. Erasmus, and Adré Schreuder. 2014. "Consumers' Preferences for Eco-Friendly Appliances in an Emerging Market Context." International Journal of Consumer Studies, 38(5): 559–569.
- Sörqvist, Patrik, Andreas Haga, Linda Langeborg, Mattias Holmgren, Maria Wallinder, Anatole Nöstl, Paul B. Seager, and John E. Marsh. 2015. "The Green Halo: Mechanisms and Limits of the Eco-Label Effect." Food Quality and Preference, 43: 1–9.
- Sortino, Frank A., and Robert Van Der Meer. 1991. "Downside Risk." Journal of Portfolio Management, 17(4): 27–31.
- Speirs-Bridge, Andrew, Fiona Fidler, Marissa McBride, Louisa Flander, Geoff Cumming, and Mark Burgman. 2010. "Reducing Overconfidence in the Interval Judgments of Experts." *Risk Analysis*, 30(3): 512–23.
- Starik, Mark. 1994. "Essay by Mark Starik." Business and Society, 33(1): 89–95.
- Statman, Meir. 1987. "How Many Stocks Make a Diversified Portfolio?" Journal of Financial and Quantitative Analysis, 22(03): 353–363.
- Stegmann, Tim, and Stefan Gärtner. 2015. "Beschäftigungsentwicklung im Finanzsektor: Ein internationaler Vergleich." Forschung Aktuell, Institut für Arbeit und Technik (IAT), Gelsenkirchen 04/15.
- Stieb, James A. 2009. "Assessing Freeman's Stakeholder Theory." Journal of Business Ethics, 87(3): 401–414.
- Stock, James H., and Mark W. Watson. 2014. Introduction to Econometrics. Pearson.
- Storbacka, Kaj, Tore Strandvik, and Christian Grönroos. 1994. "Managing Customer Relationships for Profit: The Dynamics of Relationship Quality." International Journal of Service Industry Management, 5(5): 21–38.
- Strandberg, Coro. 2005. "Best Practices in Sustainable Finance." http://corostrandberg.com/publication/best-practices-in-sustainable-finance/, accessed: 16.12.2015.
- Strand, Robert. 2006. "The Stakeholder Dashboard." Greener Management International, 2006(54): 23–36.

- Sudman, Seymour, and Norman M. Bradburn. 1982. Asking Questions: A Practical Guide to Questionnaire Design. Jossey-Bass.
- Sunstein, Cass R., and Richard H. Thaler. 2003. "Libertarian Paternalism Is Not an Oxymoron." University of Chicago Law Review, 1159–1202.
- Supino, Phyllis G. 2012. "Fundamental Issues in Evaluating the Impact of Interventions." Principles of Research Methodology: A Guide for Clinical Investigators, , ed. Phyllis G. Supino and Jeffrey S. Borer, Chapter 5, 79–110. Springer.
- Sweeney, Lorraine, and Joseph Coughlan. 2008. "Do Different Industries Report Corporate Social Responsibility Differently? An Investigation through the Lens of Stakeholder Theory." Journal of Marketing Communications, 14(2): 113–124.
- Taleb, Nassim Nicholas. 2007. "Black Swans and the Domains of Statistics." *American Statistician*, 61(3): 198–200.
- Tang, Zhi, Clyde Eiríkur Hull, and Sandra Rothenberg. 2012. "How Corporate Social Responsibility Engagement Strategy Moderates the CSR–Financial Performance Relationship." Journal of Management Studies, 49(7): 1274–1303.
- Taylor, John B. 2009. "The Financial Crisis and the Policy Responses: An Empirical Analysis of What Went Wrong." National Bureau of Economic Research Working Paper 4631.
- Teoh, Hai Yap, and Godwin Y. Shiu. 1990. "Attitudes towards Corporate Social Responsibility and Perceived Importance of Social Responsibility Information Characteristics in a Decision Context." Journal of Business Ethics, 9(1): 71–77.
- Thaler, Richard H. 1985. "Mental Accounting and Consumer Choice." *Marketing Science*, 4(3): 199–214.
- **Thaler, Richard H.** 1992. The Winner's Curse: Paradoxes and Anomalies of Economic Life. Princeton University Press.
- Thaler, Richard H. 1999. "Mental Accounting Matters." Journal of Behavioral Decision Making, 12(3): 183–206.
- **Thaler, Richard H.** 2000. "From Homo Economicus to Homo Sapiens." Journal of Economic Perspectives, 14(1): 133–141.
- Thaler, Richard H., and Cass R. Sunstein. 2008. Nudge: Improving Decisions About Health, Wealth, and Happiness. Yale University Press.
- **The Boston Consulting Group.** 2015. "Industries." http://www.bcg.com/expertiseimpact/industries, accessed: 05.05.2015.

- The Economist. 2011. "European Banks: Chest Pains." http://www.economist.com/node/21526926, accessed: 30.04.2015.
- The Economist. 2012. "Shareholder Activism and the Banks. A New Kind of Outrage." http://www.economist.com/node/21554196, accessed: 30.04.2015.
- TheEconomist.2013a."DissectingtheMiracle."http://www.economist.com/news/special-report/21579145-ingredients-german-
economic-success-are-more-complex-they-seem-dissecting, accessed:26.08.2016.
- The Economist. 2013b. "Financial Fragmentation. Too Much of a Good Thing." http://www.economist.com/news/special-report/21587378-2008-global-financialintegration-has-gone-reverse-too-much-good-thing, accessed: 06.05.2015.
- The Guardian. 2012. "UK Banks and Insurers Blacklist Cluster Bomb Manufacturers." http://www.theguardian.com/business/2012/apr/09/uk-banks-blacklist-clusterbomb-manufacturers, accessed: 20.05.2015.
- The New York Times. 1999. "Fannie Mae Eases Credit to Aid Mortgage Lending." http://www.nytimes.com/1999/09/30/business/fannie-mae-eases-credit-to-aid-mortgage-lending.html, accessed: 07.09.2016.
- The New York Times. 2007. "Fed Shrugged as Subprime Crisis Spread." http://www.nytimes.com/2007/12/18/business/18subprime.html, accessed: 21.05.2015.
- The New York Times. 2008. "Greenspan Concedes Error on Regulation." http://www.nytimes.com/2008/10/24/business/economy/24panel.html, accessed: 21.05.2015.
- The New York Times. 2014. "With 'So Help Me God' Ethics Oath, Dutch Banks Seek Redemption." http://dealbook.nytimes.com/2014/12/12/netherlands-asksbankers-to-swear-to-god, accessed: 12.05.2015.
- The Wall Street Journal. 2011. "The Rising Fear in Bank Stock Prices." http://www.wsj.com/articles/SB10001424052970204531404577052493270860130, accessed: 11.05.2015.
- **Thorndike, Edward L.** 1920. "A Constant Error in Psychological Ratings." *Journal of Applied Psychology*, 4(1): 25–29.
- **Tirole, Jean.** 2001. "Corporate Governance." *Econometrica: Journal of the Econometric Society*, 69(1): 1–35.
- **Tobin, James.** 1964. "Commercial Banks as Creators of "Money"." Cowles Foundation for Research in Economics at Yale University Discussion Paper 159.

- **Tokumaru, Natsuka.** 2016. Social Preference, Institution, and Distribution. An Experimental and Philosphical Approach. Springer.
- Torngren, Gustaf, and Henry Montgomery. 2004. "Worse than Chance? Performance and Confidence among Professionals and Laypeople in the Stock Market." *Journal of Behavioral Finance*, 5(3): 148–153.
- Torres, Anna, Tammo H. A. Bijmolt, Josep A. Tribó, and Peter Verhoef. 2012. "Generating Global Brand Equity through Corporate Social Responsibility to Key Stakeholders." International Journal of Research in Marketing, 29(1): 13–24.
- **Treviño, Linda K., and Katherine A. Nelson.** 2010. Managing Business Ethics. Straight Talk about How to Do It Right. John Wiley & Sons.
- Truscott, Rachel A., Jennifer L. Bartlett, and Stephane A. Tywoniak. 2009. "The Reputation of the Corporate Social Responsibility Industry in Australia." Australiasian Marketing Journal (AMJ), 17(2): 84–91.
- **Tsatsaronis, Kostas, and Jing Yang.** 2012. "Bank Stock Returns, Leverage and the Business Cycle." BIS Quarterly Review, March.
- Tukey, John W. 1977. Exploratory Data Analysis. Addison-Wesley.
- **Turker, Duygu.** 2009. "Measuring Corporate Social Responsibility: A Scale Development Study." *Journal of Business Ethics*, 85(4): 411–427.
- Tversky, Amos, and Daniel Kahneman. 1985. "The Framing of Decisions and the Psychology of Choice." *Science*, 211(4481): 453–458.
- Tversky, Amos, and Daniel Kahneman. 1991. "Loss Aversion in Riskless Choice: A Reference-Dependent Model." *Quarterly Journal of Economics*, 106(4): 1039–1061.
- Ullmann, Arieh A. 1985. "Data in Search of a Theory: A Critical Examination of the Relationships among Social Performance, Social Disclosure, and Economic Performance of U. S. Firms." Academy of Management Review, 10(3): 540–557.
- **UNEP FI.** 2016*a*. "About the UNEP FI." *http://www.unepfi.org/about/*, accessed: 24.03.2016.
- **UNEP FI.** 2016b. "UNEP FI Background." *http://www.unepfi.org/about/background/*, accessed: 24.03.2016.
- **UNEP FI.** 2016*c*. "UNEP FI Signatories." *http://www.unepfi.org/signatories/*, accessed: 24.03.2016.
- **United Nations Global Compact.** 2015. "Overview of the UN Global Compact." *https://www.unglobalcompact.org/AboutTheGC/index.html*, accessed: 25.03.2015.

- **US SIF.** 2015. "Global Sustainable Investment." *http://www.ussif.org/globalsri*, accessed: 08.09.2016.
- Vakil, Anna C. 1997. "Confronting the Classification Problem: Toward a Taxonomy of NGOs." World Development, 25(12): 2057–2070.
- Valentine, Sean, and Gary Fleischman. 2008. "Ethics Programs, Perceived Corporate Social Responsibility and Job Satisfaction." *Journal of Business Ethics*, 77(2): 159–172.
- Van Der Laan, Gerwin, Hans Van Ees, and Arjen Van Witteloostuijn. 2008. "Corporate Social and Financial Performance: An Extended Stakeholder Theory, and Empirical Test with Accounting Measures." Journal of Business Ethics, 79(3): 299–310.
- Van De Ven, Bert. 2008. "An Ethical Framework for the Marketing of Corporate Social Responsibility." *Journal of Business Ethics*, 82(2): 339–352.
- Vanhamme, Joëlle, Adam Lindgreen, Jon Reast, and Nathalie Popering. 2012. "To Do Well by Doing Good: Improving Corporate Image through Cause-Related Marketing." Journal of Business Ethics, 109: 259–274.
- Van Marrewijk, Marcel. 2003. "Concepts and Definitions of CSR and Corporate Sustainability: Between Agency and Communion." *Journal of Business Ethics*, 44(2-3): 95– 105.
- **Vessey, Iris.** 1991. "Cognitive Fit: A Theory-Based Analysis of the Graphs versus Tables Literature." *Decision Sciences*, 22(2): 219–240.
- Viganò, Federica, and Daniele Nicolai. 2009. "CSR in the European Banking Sector: Evidence from a Survey." Rhetoric and Realities: Analysing Corporate Social Responsibility in Europe. Research Project within the EU's Sixth Framework Programme.
- Visser, Wayne. 2008. "CSR and the Financial Crisis: Taking Stock." http://www.waynevisser.com/blog/csr-and-the-financial-crisis, accessed: 18.11.2015.
- Vlaev, Ivo, Nick Chater, and Neil Stewart. 2009. "Dimensionality of Risk Perception: Factors Affecting Consumer Understanding and Evaluation of Financial Risk." *Journal of Behavioral Finance*, 10(3): 158–181.
- **Vogel, David.** 2005. The Market for Virtue: The Potential and Limits of Corporate Social Responsibility. Brookings Institution Press.
- Vyvyan, Victoria, Chew Ng, and Mark Brimble. 2007. "Socially Responsible Investing: The Green Attitudes and Grey Choices of Australian Investors." Corporate Governance: An International Review, 15(2): 370–381.

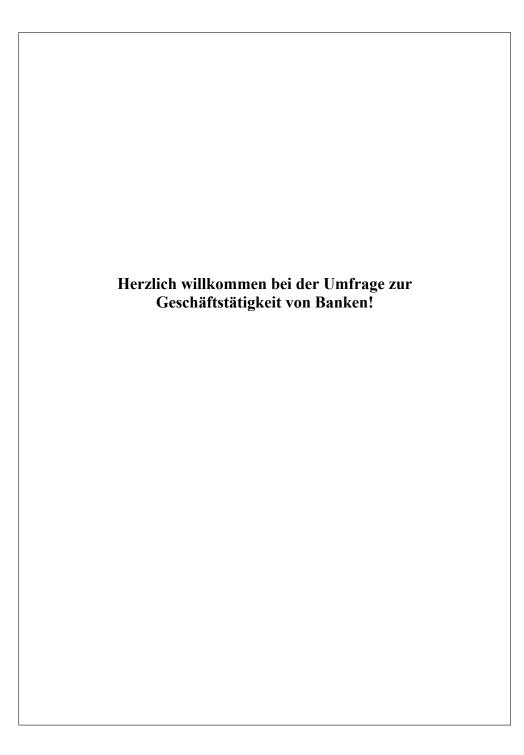
- Wallace, James E. 1995. "Financing Affordable Housing in the United States." *Housing Policy Debate*, 6(4): 785–814.
- Walsh, Gianfranco, Vincent-Wayne Mitchell, Paul R. Jackson, and Sharon E. Beatty. 2009. "Examining the Antecedents and Consequences of Corporate Reputation: A Customer Perspective." British Journal of Management, 20(2): 187–203.
- Washington, Marvin, and Edward J. Zajac. 2005. "Status Evolution and Competition: Theory and Evidence." Academy of Management Journal, 48(2): 282–296.
- Weber, Elke U., Niklas Siebenmorgen, and Martin Weber. 2005. "Communicating Asset Risk: How Name Recognition and the Format of Historic Volatility Information Affect Risk Perception and Investment Decisions." *Risk Analysis*, 25(3): 597–609.
- Weber, Martin, and Colin F. Camerer. 1998. "The Disposition Effect in Securities Trading: An Experimental Analysis." Journal of Economic Behavior & Organization, 33: 167–184.
- Weber, Olaf, and Sven Remer. 2011. Social Banks and the Future of Sustainable Finance. Routledge.
- Webley, Paul, Alan Lewis, and Craig Mackenzie. 2001. "Commitment among Ethical Investors: An Experimental Approach." Journal of Economic Psychology, 22(1): 27– 42.
- Webster Jr, Frederick E. 1975. "Determining the Characteristics of the Socially Conscious Consumer." Journal of Consumer Research, 2(3): 188–196.
- Weigelt, Keith, and Colin F. Camerer. 1988. "Reputation and Corporate Strategy: A Review of Recent Theory and Applications." *Strategic Management Journal*, 9(5): 443– 454.
- Wetzel, Christopher G., Timothy D. Wilson, and James Kort. 1981. "The Halo Effect Revisited: Forewarned Is Not Forearmed." *Journal of Experimental Social Psychology*, 17(4): 427–439.
- White, Halbert. 1980. "A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity." *Econometrica: Journal of the Econometric Society*, 48(4): 817–838.
- Whitehouse, Lisa. 2006. "Corporate Social Responsibility: Views from the Frontline." *Journal of Business Ethics*, 63(3): 279–296.
- Wicke, Jan Martin. 2013. Individuelle Vermögensverwaltung für Privatkunden. Springer.

- Wiedmann, Klaus-Peter, Nadine Hennigs, Stefan Henrik Behrens, and Christiane Klarmann. 2014. "Tasting Green: An Experimental Design for Investigating Consumer Perception of Organic Wine." *British Food Journal*, 116(2): 197–211.
- Williams, Geoffrey. 2007. "Some Determinants of the Socially Responsible Investment Decision: A Cross-Country Study." *Journal of Behavioral Finance*, 8(1): 43–57.
- Winer, Russell S. 1999. "Experimentation in the 21st Century: The Importance of External Validity." Journal of the Academy of Marketing Science, 27(3): 349–358.
- Wirtz, Jochen. 2003. "Halo in Customer Satisfaction Measures: The Role of Purpose of Rating, Number of Attributes and Customer Involvement." International Journal of Service Industry Management, 14(1): 96–119.
- Wisniewski, Tomasz Piotr, and Brendan Lambe. 2013. "The Role of Media in the Credit Crunch: The Case of the Banking Sector." Journal of Economic Behavior & Organization, 85: 163–175.
- Wood, Donna J. 2010. "Measuring Corporate Social Performance: A Review." International Journal of Management Reviews, 12(1): 50–84.
- Wooldridge, Jeffrey. 2015. Introductory Econometrics: A Modern Approach. Nelson.
- World Bank. 2015a. "Domestic Credit Provided by Financial Sector." http://data.worldbank.org/indicator/FS.AST.DOMS.GD.ZS/countries, accessed: 19.05.2015.
- World Bank. 2015b. "Financial Inclusion Data." http://datatopics.worldbank.org/ financialinclusion, accessed: 23.03.2015.
- World Bank. 2016."Inflation, Consumer Prices (An-(FP.CPI.TOTL.ZG). 2005-2013." %) United nual States. http://databank.worldbank.org/data/reports.aspx?source=2&country=USA &series = & period = #advancedDownloadOptions, accessed: 02.05.2016.
- World Economic Forum. 2013. "Sustainable Consumption: Stakeholder Perspectives." http://www3.weforum.org/docs/WEF_ENV_SustainableConsumption_Book_2013.pdf, accessed: 12.04.2016.
- Wu, Meng-Wen, and Chung-Hua Shen. 2013. "Corporate Social Responsibility in the Banking Industry: Motives and Financial Performance." *Journal of Banking & Finance*, 37(9): 3529–3547.
- Yigitbasioglu, Ogan M., and Oana Velcu. 2012. "A Review of Dashboards in Performance Management: Implications for Design and Research." *International Journal* of Accounting Information Systems, 13(1): 41–59.

- Yoon, Yeosun, Zeynep Gürhan-Canli, and Norbert Schwarz. 2006. "The Effect of Corporate Social Responsibility (CSR) Activities on Companies with Bad Reputations." *Journal of Consumer Psychology*, 16(4): 377–390.
- Young, William, Kumju Hwang, Seonaidh McDonald, and Caroline J. Oates. 2010. "Sustainable Consumption: Green Consumer Behaviour when Purchasing Products." *Sustainable Development*, 18(1): 20–31.

6 Appendix

A.1 CSR Survey



HEINRICH HEINE UNWERSTAT KÖSSELDON		Umfrage z	rur Geschäftstätigke	it von Banken		600
Worauf sollten Si	e achten?					
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Wen können Sie :	ansprechen?					
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Email:	Fenorth 1: 0175-318-7564 julian.tenorth@htu.t hl für Betriebswirtsc		anzdienstleistungen			
1.1 Wie be	urteilen Sie es, wenn	sich Banken bei ihre	er Geschäftstätigkei	t grundsätzlich an f	olgenden Interessen	igruppen orientier
Interessen- gruppe	Ist meiner Meinung nach Pflicht für eine Bank (z.B. gesetzlich vor- geschrieben)		-	t grundsätzlich an f ht für eine Bank un Weder wichtig noch unwichtig	-	igruppen orientier Sehr unwichtig
Interessen-	Ist meiner Meinung nach Pflicht für eine Bank (z.B. gesetzlich vor-	Ist meiner Meinur	ng nach keine Pflic	ht für eine Bank un Weder wichtig	d ist für mich	
Interessen- gruppe Bank- aktionäre Bankkunden	Ist meiner Meinung nach Pflicht für eine Bank (z.B. gesetzlich vor- geschrieben)	Ist meiner Meinur Sehr wichtig	ng nach keine Pflic Eher wichtig	ht für eine Bank un Weder wichtig noch unwichtig	d ist für mich Eher unwichtig	Schr unwichtig
Interessen- gruppe Bank- aktionäre Bankkunden Bankmitarbeiter	Ist meiner Meinung nach Pflicht für eine Bank (z.B. gesetzlich vor- geschrieben)	Ist meiner Meinur Sehr wichtig	ng nach keine Pflic Eher wichtig	ht für eine Bank un Weder wichtig noch unwichtig	d ist für mich Eher unwichtig	Sehr unwichtig
Interessen- gruppe Bank- aktionäre Bankkunden Bankmitarbeiter	Ist meiner Meinung nach Pflicht für eine Bank (z.B. gesetzlich vor- geschrieben)	Ist meiner Meinur Sehr wichtig	er Geschäftstätigkei	ht für eine Bank un Weder wichtig noch unwichtig	d ist für mich Eher unwichtig	Sehr unwichtig
Interessen- gruppe Bank- aktionäre Bankkunden Bankmitarbeiter 1.2 Wie be	Ist meiner Meinung nach Pflicht für eine Bank (z.B. gesetzlich vor- geschrieben)	Ist meiner Meinur Sehr wichtig	er Geschäftstätigkei	ht für eine Bank un Weder wichtig noch unwichtig	d ist für mich Eher unwichtig	Sehr unwichtig
Interessen- gruppe Bank- aktionäre Bankkunden Bankmitarbeiter 1.2 Wie be orientie Gesell- schaftliches	Ist meiner Meinung nach Pflicht für eine Bank (z.B. gesetzlich vor- geschrieben)	Ist meiner Meinur	ng nach keine Pflic Eher wichtig	ht für eine Bank un Weder wichtig	d ist für mich Eher unwichtig	Sehr unwichtig
Interessen- gruppe Bank- aktionäre Bankkunden Bankmitarbeiter 1.2 Wie be orientie Gesell- schaftliches Thema Ethik und	Ist meiner Meinung nach Pflicht für eine Bank (z.B. gesetzlich vor- geschrieben)	Ist meiner Meinur Sehr wichtig	er Geschäftstätigkei	ht für eine Bank un Weder wichtig noch unwichtig 	d ist für mich Eher unwichtig	Sehr unwichtig

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Umfrage zur Geschäftstätigkeit von Banken

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Banken können sich **unternehmensintern** (also bei ihren internen Abläufen, den Verhaltensrichtlinien für Bankmitarbeiter und ihrem Unternehmensleitbild) an bestimmten Interessengruppen und Themen orientieren.

2.1 Wie beurteilen Sie es, wenn sich Banken **unternehmensintern** an folgenden Interessengruppen und gesellschaftlichen Themen orientieren?

	1					
Gesell- schaftliches Thema	Ist meiner Meinung nach Pflicht für eine Bank (z.B. gesetzlich vor- geschrieben)	Sehr wichtig	Eher wichtig	ht für eine Bank un Weder wichtig noch unwichtig	Eher unwichtig	Sehr unwichtig
Bank- aktionäre						
Bankkunden						
Bankmitarbeiter						
Ethik und Moral						
Soziales						
Umwelt und Natur						

2.2 Ihrer Meinung nach: Wie stark orientieren sich momentan Banken unternehmensintern an folgenden Interessengruppen und gesellschaftlichen Themen?

Interessengruppe/ Gesellschaftliches Thema	Sehr stark	Eher stark	Weder stark noch schwach	Eher schwach	Sehr schwach
Bankaktionäre					
Bankkunden					
Bankmitarbeiter					
Ethik und Moral					
Soziales					
Umwelt und Natur					

2.3 **Ihrer Meinung nach:** Wie schädlich wäre es für die öffentliche Reputation von Banken, wenn sie sich nicht unternehmensintern an folgenden Interessengruppen und gesellschaftlichen Themen orientieren würden?

Interessengruppe/ Gesellschaftliches Thema	Sehr schädlich	Eher schädlich	Weder schädlich noch unschädlich	Eher unschädlich	Sehr unschädlich
Bankaktionäre					
Bankkunden					
Bankmitarbeiter					
Ethik und Moral					
Soziales					
Umwelt und Natur					

2.4 **Ihrer Meinung nach:** Wie gut **passt es** zur regulären Geschäftstätigkeit von Banken, sich **unternehmensintern** an folgenden Interessengruppen und gesellschaftlichen Themen zu orientieren?

Interessengruppe/ Gesellschaftliches Thema	Sehr gut	Eher gut	Weder gut noch schlecht	Eher schlecht	Sehr schlecht
Bankaktionäre					
Bankkunden					
Bankmitarbeiter					
Ethik und Moral					
Soziales					
Umwelt und Natur					

HEINRICH HEINE

Umfrage zur Geschäftstätigkeit von Banken

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2.5 Nachfolgend sehen Sie einige Beispiele, wie Banken interne Abläufe, Verhaltensrichtlinien für Bankmitarbeiter und Unternehmensleitbilder gestalten können. Wie effektiv sind diese Aktivitäten Ihrer Meinung nach, um sich an der jeweiligen Interessengruppe oder dem jeweiligen gesellschaftlichen Thema zu orientieren?

Interessen- gruppe/ Gesell- schaftliches Thema	Aktivität	Sehr effektiv	Eher effektiv	Weder effektiv noch ineffektiv	Eher ineffektiv	Sehr ineffekti
	Die Bank startet ein Programm, das sich an den Interessen von Bankaktionären orientiert (z.B. zur Senkung der internen Kosten)					
Bank- aktionäre	Die Bank betont die Interessen von Bankaktionären in ihrem Unternehmensleitbild					
	(Wenn Sie möchten: Ihr Vorschlag für eine Aktivität und Ihre Meinung, wie gut diese geeignet ist):					
	Die Bank startet ein Programm, das sich an den Interessen der Bankkunden orientiert (z.B. für verbesserte Sicherheit von Bankkundendaten)					
Bankkunden	Die Bank betont die Interessen von Bankkunden in ihrem Unternehmensleitbild					
	(Wenn Sie möchten: Ihr Vorschlag für eine Aktivität und Ihre Meinung, wie gut diese geeignet ist):					
	Die Bank startet ein Programm, das sich an den Interessen der Bankmitarbeiter orientiert (z.B. für bessere Vereinbarkeit von Familie und Beruf)					
Bankmitarbeiter	Die Bank betont die Interessen von Bankmitarbeitern in ihrem Unternehmensleitbild					
	(Wenn Sie möchten: Ihr Vorschlag für eine Aktivität und Ihre Meinung, wie gut diese geeignet ist):					
	Die Bank startet ein Programm, das sich an ethischen und moralischen Themen orientiert (z.B. für die Beurteilung und Bezahlung des Managements auf Grundlage ethischer Kriterien)					
Ethik und Moral	Die Bank betont ethische und moralische Themen in ihrem Unternehmensleitbild					
	(Wenn Sie möchten: Ihr Vorschlag für eine Aktivität und Ihre Meinung, wie gut diese geeignet ist):					
	Die Bank startet ein Programm, das sich an sozialen Themen orientiert (z.B. für Engagement der Bankmitarbeiter in Kursen zur finanziellen Bildung der Bevölkerung)					
Soziales	Die Bank betont soziale Themen in ihrem Unternehmensleitbild					
	(Wenn Sie möchten: Ihr Vorschlag für eine Aktivität und Ihre Meinung, wie gut diese geeignet ist):					
	Die Bank startet ein Programm, das sich an Umweltthemen orientiert (z.B. für flächendeckendes Recycling und gesteigerte Energieeffizienz in allen Gebäuden)					
Umwelt und Natur	Die Bank betont Umweltthemen in ihrem Unternehmensleitbild					
	(Wenn Sie möchten: Ihr Vorschlag für eine Aktivität und Ihre Meinung, wie gut diese geeignet ist):	 П			Π	

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HEINRICH HEINE UNIVERSITÄT DÜSSELDORF		Umfrage zi	ur Geschäftstätigkeit	von Banken		
Banken können sicl	h außerdem bei der	Kreditvergabe an b	estimmten Interessen	gruppen und gesellse	chaftlichen Themen	orientieren.
3.1 Wie beu orientier	ren?		Kreditvergabe an fo			haftlichen Theme
Interessen- gruppe/ Gesell- schaftliches Thema	Ist meiner Meinung nach Pflicht für eine Bank (z.B. gesetzlich vor- geschrieben)	Ist meiner Meinun Sehr wichtig	g nach keine Pflicht Eher wichtig	t für eine Bank und Weder wichtig noch unwichtig	ist für mich Eher unwichtig	Sehr unwichtig
Bank- aktionäre						
Bankkunden						
Ethik und Moral						
Soziales						
Umwelt und Natur						
Ethik und Moral						
Soziales Umwelt und Natur						
Umwelt und Natur 3.3 Ihrer M		schädlich wäre es für n Interessengruppen		utation von Banken,	wenn sie sich nicht n würden?	: bei der
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Umwelt und Natur 3.3 Ihrer M Kreditv Interessengruppe/ Gesellschaftliches	ergabe an folgende	schädlich wäre es für n Interessengruppen Sehr schädlich	c die öffentliche Repund gesellschaftliche Eher schädlich	utation von Banken, n Themen orientierer schädlich noch unschädlich	uwenn sie sich nicht n würden? Eher unschädlich	bei der Sehr unschädlich
Umwelt und Natur 3.3 Ihrer M Kreditv Interessengruppe/ Gesellschaftliches Bankaktionäre	ergabe an folgende	schädlich wäre es fün n Interessengruppen Sehr schädlich	c die öffentliche Repund gesellschaftliche Eher schädlich	utation von Banken, n Themen orientierer Weder schädlich noch unschädlich	United and the second s	bei der Sehr unschädlich
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Umwelt und Natur 3.3 Ihrer M Kreditv Interessengruppe/ Gesellschaftliches Bankaktionäre Bankkunden Ethik und Moral Soziales Umwelt und Natur 3.4 Ihrer M	rergabe an folgende	schädlich wäre es für n Interessengruppen Sehr schädlich	c die öffentliche Rep und gesellschaftliche Eher schädlich	utation von Banken, n Themen orientierer schädlich noch unschädlich	wenn sie sich nicht a würden? Eher unschädlich	bei der Schr unschädlich C C C C C C C C C C C C C C C C C C
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Umwelt und Natur 3.3 Ihrer M Kreditv Interessengruppe/ Gesellschaftliches Bankaktionäre Bankkunden Ethik und Moral Soziales Umwelt und Natur 3.4 Ihrer M Interesse Interessengruppe/ Gesellschaftliches	rergabe an folgende	schädlich wäre es für n Interessengruppen Sehr schädlich	t die öffentliche Repund gesellschaftliche Eher schädlich Eher schädlich	utation von Banken, n Themen orientierer schädlich noch unschädlich	wenn sie sich nicht wirden? Eher unschädlich Creditvergabe an for Eher schlecht	bei der bei d

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Soziales Umwelt und Natur Heinrich Heine

Umfrage zur Geschäftstätigkeit von Banken

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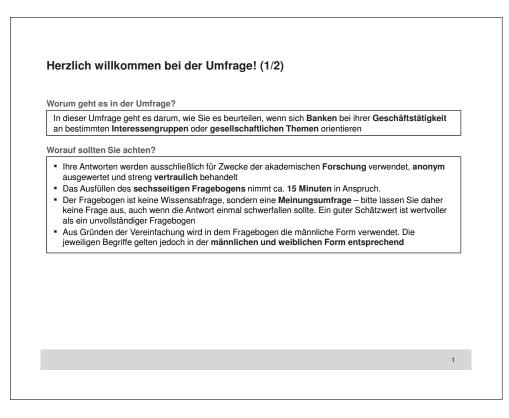
3.5	Nachfolgend sehen Sie einige Beispiele, wie Banken ihre Kreditvergabe gestalten können. Wie effektiv sind diese Aktivitäten Ihrer Meinung nach, um sich an der jeweiligen Interessengruppe oder dem jeweiligen
	gesellschaftlichen Thema zu orientieren?

Interessen- gruppe/ Gesell- schaftliches Thema	Aktivität	Sehr effektiv	Eher effektiv	Weder effektiv noch ineffektiv	Eher ineffektiv	Sehr ineffektiv
	Die Bank vergibt Kredite bevorzugt an Unternehmen und Personen, die für das jeweilige Risiko möglichst hohe Kreditzinsen zahlen					
Bank- aktionäre	Die Bank vergibt keine Kredite an Unternehmen und Personen, die einen bestimmten Mindestzins für das jeweilige Risiko nicht zahlen					
	(Wenn Sie möchten: Ihr Vorschlag für eine Aktivität und Ihre Meinung, wie gut diese geeignet ist):					
	Die Bank vergibt Kredite zu möglichst niedrigen Kreditzinsen für das jeweilige Risiko an Unternehmen und Personen					
Bank- kunden	Die Bank vergibt keine Kredite oberhalb eines bestimmten Höchstzinses für das jeweilige Risiko an Unternehmen und Personen					
	(Wenn Sie möchten: Ihr Vorschlag für eine Aktivität und Ihre Meinung, wie gut diese geeignet ist):					
	Die Bank vergibt Kredite bevorzugt an Unternehmen mit möglichst hohen ethischen und moralischen Standards und überprüft deren Einhaltung.					
Ethik und Moral	Die Bank definiert harte Mindeststandards für Ethik und Moral und vergibt keine Kredite an Unternehmen, die diese nicht erfüllen.					
	(Wenn Sie möchten: Ihr Vorschlag für eine Aktivität und Ihre Meinung, wie gut diese geeignet ist): 					
	Die Bank vergibt Kredite bevorzugt an Unternehmen mit möglichst hohen Sozialstandards und überprüft deren Einhaltung					
Soziales	Die Bank definiert harte Mindestsozialstandards und vergibt keine Kredite an Unternehmen, die diese nicht erfüllen					
	(Wenn Sie möchten: Ihr Vorschlag für eine Aktivität und Ihre Meinung, wie gut diese geeignet ist):					
	Die Bank vergibt Kredite bevorzugt an Unternehmen mit möglichst hohen Umweltstandards und überprüft deren Einhaltung					
Umwelt und Natur	Die Bank definiert harte Mindestumweltstandards und vergibt keine Kredite an Unternehmen, die diese nicht erfüllen					
	(Wenn Sie möchten: Ihr Vorschlag für eine Aktivität und Ihre Meinung, wie gut diese geeignet ist):					

Abschließend bitten wir Sie um	einige Angaben zu Ihrer	Person und um I	hre Beurteilung v	on einigen Aus	sagen.	
Ihr Geschlecht	□ Männlich	□ Weiblich				
Ihr Alter	Jahre					
Ihr Fortschritt im Studium						
Bachelor	C	BWL	\Box V	WL	□ Wirtschaftsch	emie
Master	[BWL	\Box V	WL	□ Wirtschaftsch	emie
Anderes Studium (bitte Fach und angestrebten Al	schluss angeben)					
Bereits abgeschlossenes Studiu (bitte Fach und Abschlussart an						
Bei welchen Banken besitzen	Sie ein Konto? (Mehrfach	nennungen mögl	ich)			
Direktbank (z.B. DKB, Ing-Dif		, 0				
Genossenschaftsbank (z.B. Vol	ks- und Raiffeisenbank)					
Private Geschäftsbank (z.B. De	utsche Bank, Commerzban	k)				
Sparkasse						
Sonstige (bitte angeben)						
Welche Finanzprodukte nutze	en Sie? (Mehrfachnennun	gen möglich)				
Girokonto						
Tagesgeldkonto/Sparkonto						
Bankdarlehen (z.B. Studienkred	lit)					
Private Lebensversicherung/Re	ntenversicherung					
Bausparvertrag						
Aktien, Anleihen oder Fonds						
Sonstige (bitte angeben)						
Sonstige (bitte angeben) Wie beurteilen Sie die folgend	en Aussagen?					
	en Aussagen?	Stimme völlig zu	Stimme eher zu	Stimme weder zu noch lehne ab	Lehne eher ab	Lehn völlig ab
Wie beurteilen Sie die folgend				weder zu		völlig

A.2 CSR Survey: Instructions

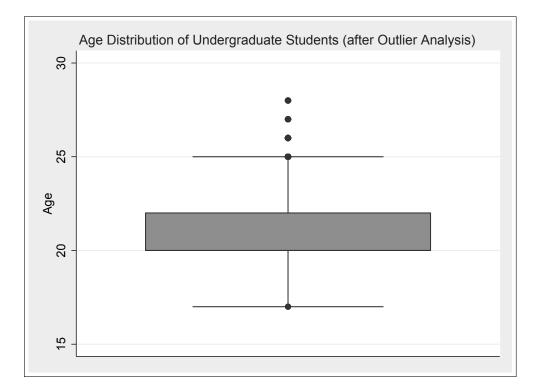


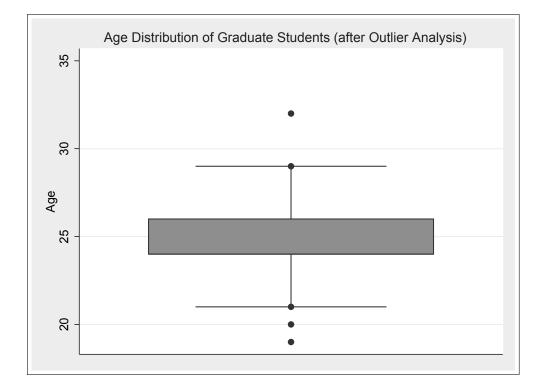


tte gehen Si	e für diese Umfrage	von folgenden Begriffsdefinitionen aus
	Begriff	Definition
Banken	Geschäftstätigkeit von Banken	Hereinnahme von Einlagen auf Giro- und Sparkonten und Vergabe von Krediten an Personen und Unternehmen unter Berücksichtigung bestimmter Abläufe, Verhaltensrichtlinien für Mitarbeiter und des Unternehmensleitbilds der Bank
	Bankaktionäre	Personen oder Unternehmen, die Aktien einer Bank besitzen
Interessen- gruppen	Bankkunden	Personen oder Unternehmen, die ein Giro- oder Sparkonto bei einer Bank besitzen oder einen Kredit aufgenommen haben
	Bankmitarbeiter	Personen, die bei einer Bank angestellt sind
	Ethik und Moral	Wertvorstellungen und Normen über "gutes" menschliches Handeln
Gesell- schaftliche Themen	Soziales	Bedürfnisse der Allgemeinheit, insbesondere der wirtschaftlich Schwächeren
	Umwelt und Natur	Schutz von Klima, Tieren und Pflanzen

Wen können Sie ansprechen?	
Bitte zögern Sie nicht, mich bei Fragen, Kommentaren oder Anregungen zu kontaktieren Julian Tenorth	
Telefon: Email: julian.tenorth@hhu.de Lehrstuhl für Betriebswirtschaftslehre, insb. Finanzdienstleistungen	
Herzlichen Dank für Ihre Teilnahme an der Umfrage!	
	3

A.3 CSR Survey: Outlier Analysis





A.4 Experiment: Instructions

Herzlich willkommen zum Experiment!

1. Worum geht es?

- In diesem Experiment nehmen Sie die Rolle eines **Privatinvestors** ein, der einen bestimmten Teil seines persönlichen Portfolios in **Aktien von Banken** investieren möchte.
- Ihnen werden im Anschluss 24 Szenarien gezeigt, in denen Sie jeweils Entscheidungen treffen, ob und wie viel Sie in Aktien bestimmter, fiktiver Banken investieren möchten.

2. Ablauf des Experiments

Alle Szenarien laufen identisch in 2 Schritten ab: Sie erhalten zunächst Informationen über Banken und treffen anschließend eine Investitionsentscheidung.

Schritt 1: Sie erhalten für drei fiktive Banken Informationen über:

- Das **Risiko-/Renditeprofil** jeder Bank. Dieses besteht aus:
 - Der erwarteten Maximalrendite. Wenn Sie f
 ür eine Bank eine Maximalrendite von z.B. 9% erwarten und 1.000 € investieren, k
 önnen Sie bis zu 90 € Gewinn erzielen.
 - Dem Risiko. Ein Risiko von z.B. 0-5 Prozentpunkten bedeutet, dass Ihre Investition zwischen 0 und 5 Prozentpunkte weniger als die erwartete Maximalrendite erzielen kann. Alle Werte zwischen 0 und 5 sind gleich wahrscheinlich. Im oben genannten Beispiel erzielen Sie also im schlechtesten Fall nur 4% Rendite und 40 € Gewinn.

Im Experiment hat jede Bank genau eines von drei möglichen Risiko-/Renditeprofilen:

Risiko-/Renditeprofil	Erwartete Maximalrendite	Risiko
Basis	6%	0-5 Prozentpunkte
Mittel	9%	0-5 Prozentpunkte
Hoch	12%	0-5 Prozentpunkte

■ Die weiteren Aktivitäten jeder Bank. Dies sind zusätzliche Informationen darüber, ob und wie sich eine Bank an bestimmten Akteuren oder gesellschaftlichen Themen orientiert. Wenn keine Informationen angegeben sind, verfolgt eine Bank keine weiteren Aktivitäten.

Im Experiment gibt **es sechs mögliche Aktivitäten**, mit denen sich eine Bank an jeweils **genau einem Akteur oder gesellschaftlichen Thema** orientiert:

Akteur/ges. Thema	Aktivität
Aktionäre	Die Bank senkt ihre internen Kosten
Kunden	Die Bank verbessert die Sicherheit der Bankkundendaten
Mitarbeiter	Die Bank verbessert die Vereinbarkeit von Familie und Beruf ihrer Mitarbeiter
Ethik und Moral	Die Bank bezahlt und beurteilt ihre Manager nach ethischen Kriterien
Soziales	Die Bank bietet Fortbildungen für bessere finanzielle Bildung der Bevölkerung an
Umwelt	Die Bank recycelt umfassend und steigert die Energieeffizienz ihrer Gebäude

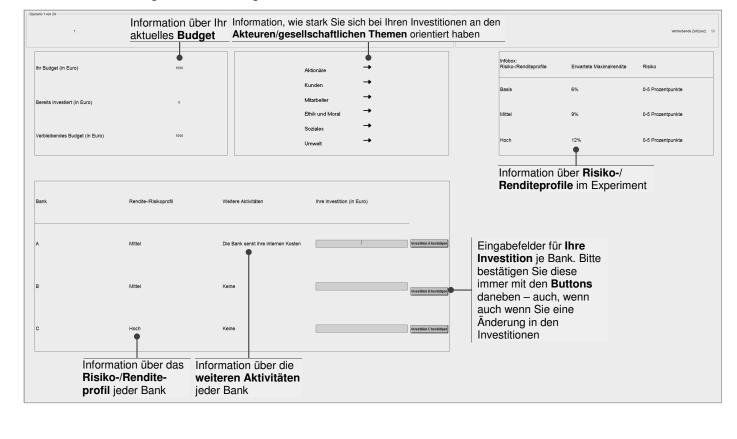
Schritt 2: Sie treffen eine Investitionsentscheidung

- Zu Beginn des Experiments erhalten Sie ein fiktives Budget von 1.000 €. Anschließend hängt Ihr Budget zu Beginn jedes Szenarios von Ihren letzten Investitionsentscheidungen und der tatsächlichen Performance der Banken ab.
- Zusätzlich zu Budgetinformationen sehen Sie in jedem Szenario, wie stark Sie sich bislang bei Ihren Investitionen an den unterschiedlichen Akteuren/gesellschaftlichen Themen orientiert haben. Diese Information wird dargestellt durch Pfeile, die Ihre Richtung dynamisch ändern.
- Sie können maximal Ihr gesamtes Budget je Szenario in eine, zwei oder alle drei Banken investieren. Geben Sie dazu einen Betrag (in ganzen €) in das Feld "Ihre Investition" je Bank ein, bestätigen Sie die Investitionen mit den Buttons daneben und klicken Sie zuletzt auf "Bestätigen und weiter", um zum nächsten Szenario zu gelangen. Sie können frühestens 30 Sekunden nach Beginn eines Szenarios zum nächsten Szenario weiterklicken.

3. Wichtige Hinweise

- Gehen Sie davon aus, dass es keine Diversifikationseffekte gibt: Das bedeutet, das Gesamtrisiko Ihres Portfolios ist immer gleich groß, ob Sie in eine, zwei oder drei Banken investieren.
- Wenn nicht anders angegeben, sind die Szenarien voneinander unabhängig. Betrachten Sie daher die Banken und Ihre Investitionsentscheidungen je Szenario als eigenständig, d.h. losgelöst von Ihren vorherigen Entscheidungen.
- Ausnahme: Sechsmal sehen Sie ein fr
 üheres Szenario und Ihre Investitionen je Bank in diesem Szenario, erhalten aber neue Informationen. Anschließend k
 önnen Sie eine neue Investitionsentscheidung je Bank treffen.
- 4. Budget und Auszahlungen
- Im Anschluss an das Experiment erhalten Sie für Ihre **Teilnahme** in jedem Fall eine **fixe** Auszahlung von 5 €.
- Zusätzlich erhalten sie
 - 2,50 € bei vollständiger Bearbeitung des Experiments.
 - Ihr fiktives Budget nach dem letzten Szenario, geteilt durch 1.000.

Bitte nehmen Sie sich für die Szenarien und Ihre Investitionsentscheidungen Zeit und entscheiden Sie stets so, als wären Sie ein realer Privatinvestor in einer realen Situation.



Alle Szenarien werden folgendermaßen dargestellt:

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CHAPTER 6. APPENDIX

A.5 Experiment: Control Variables

Experiment: Control Variables

Name	Description	Type
Age	Age of participant in years	Continuous
Gender	1 if participant is female and 0 otherwise	Binary
Grad	1 if participant pursues studies at graduate level (e.g., Master's degre) and 0 otherwise	Binary
Bus	1 if participant studies business, economics, or business chemistry and 0 otherwise	Binary
$\operatorname{Bank}_{type}$	1 if participant entertains a relationship with a cer- tain type of bank and 0 otherwise. Bank types encom- pass direct banks (Bank _{Dir}), savings banks (Bank _{Sav}), cooperative banks (Bank _{Coo}), and commercial banks (Bank _{Com})	Binary
$\operatorname{Prod}_{type}$	1 if participant holds a certain type of financial product and 0 otherwise. Financial products encompass current accounts ($\operatorname{Prod}_{Cur}$), savings accounts ($\operatorname{Prod}_{Sav}$), loans ($\operatorname{Prod}_{Loa}$), private insurance contracts ($\operatorname{Prod}_{Ins}$), build- ing savings contracts ($\operatorname{Prod}_{Bui}$), and securities, bonds, and mutual funds ($\operatorname{Prod}_{Sec}$)	Binary
$\operatorname{RRP}_{type}$	1 if bank in the experiment has a certain risk/returns profile and 0 otherwise. Risk/returns profiles encom- pass basic (RRP _{Bas}), medium (RRP _{Med}), and high (RRP _{Hig}) configurations	Binary
$\operatorname{Prof}\operatorname{Max}_{Bnk}$	Value on scale "Bank Profit Maximization"	Categorical
Prof Max_{Inv}	Value on scale "'Investor Profit Maximization"	Categorical
Relevance	Value on scale "Socially Responsible Behavior", by stakeholder	Categorical
PCE	Value on scale "Perceived Consumer Effectiveness"	Categorical
Self Int	Value on scale "Self-Interest Motivation"	Categorical
Bank Att	Value on scale "Attitude Towards Banks"	Categorical

Declaration of Authorship

Eidesstattliche Versicherung

Ich, Julian J. Tenorth, versichere an Eides statt, dass die vorliegende Dissertation von mir selbstständig und ohne unzulässige fremde Hilfe unter Beachtung der "Grundsätze zur Sicherung guter wissenschaftlicher Praxis an der Heinrich-Heine-Universität" erstellt worden ist.

Köln, den 20. September 2016