The Impact of Corporate Social Responsibility on Corporate Financial Performance in the Banking Industry

Master Thesis

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Abstract

The present research aims to investigate the direct impact of CSR, both overall and dimension wise, on banks’ financial performance. While KLD ratings were used to operationalize CSR through overall and dimensional variables (environment, community, human rights, employee relations, diversity, product and governance); ROA and Tobin’s Q ratio were selected to measure CFP. 

A sample of 96 U.S. banks was drawn and analysed through correlations and OLS regressions. Results support CSR as a multidimensional concept, showing that richer insights were generally collected when banks’ CSR performance was considered at a dimensional level. In particular, this study suggests that: (i) statistical significance is rarely obtained when banks’ overall CSR performance is considered; (ii) banks’ CSR dimensions have differently changed after the 2008 financial crisis; (iii) individual dimensions of banks’ CSR have distinct impacts on CFP; (iv) the direct impact of banks’ CSR performance on their CFP has remained unchanged after the 2008 financial crisis; and (v) banks’ size and their geographical scope of activity moderate the impact of specific CSR dimensions on CFP.

Keywords: Corporate Social Performance, Corporate Financial Performance, Banking, CSR Dimensions, 2008 Financial Crisis.
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List of Abbreviations

CFP – Corporate Financial Performance
CSR – Corporate Social Responsibility
CV – Control Variable
DV – Dependent Variable
EBF – European Banking Federation
ESG – Environmental, Social and Governance
IV – Independent Variable
KLD – Kinder, Lydenberg, Domini & Company
MV – Moderating Variable
OLS – Ordinary Least Squares
ROA – Return on Assets
VIF – Variance Inflation Factor
1 Introduction

The relationship between corporate social responsibility (CSR) and corporate financial performance (CFP) has become a growing topic in the scientific community for the past three decades (Carroll, 1999; Dobers, 2009; McGuire, Sundgren, & Schneeweis, 1988; Soana, 2011). Recent literature has highlighted the importance of embedding CSR principles in the business strategy of enterprises, recognizing the underlying importance of social performance as a vehicle to achieve competitive advantage, improve reputation, increase customer satisfaction and consequently influence firms’ performance (Carroll & Shabana, 2010; Orlitzky, Schmidt, & Rynes, 2003; Saeidi, Sofian, Saeidi, Saeidi, & Saeidi, 2015).

In the context of the 2008 financial crisis and the rising debate on business ethics, the study of CSR has gained renewed attention (Chih, Chih, & Chen, 2009; Souto, 2009), especially in sectors deeply affected by the past financial turmoil as it is the case of the banking industry (Gangi & Trotta, 2013). In fact, a broader and more active CSR commitment has been urged to banks as a means of restoring financial services’ reputation and trustworthiness, enhancing relations with different stakeholders and ultimately improving financial performance (Birindelli, Ferretti, Intonti, & Iannuzzi, 2015; Decker, 2004; EBF, 2013; Lentner, Szegedi, & Tatay, 2015; Soana, 2011). Notwithstanding, the question is whether a link between banks’ social responsibility and their financial performance may be truly established.

In spite of banking being a recent setting for CSR research (Carnevale, Mazzuca, & Venturini, 2012; Scholtens, 2009; Simpson & Kohers, 2002; Soana, 2011), there is already some evidence of the positive association between adopting CSR for strategic choices and financial performance in this industry (Wu & Shen, 2013). Nonetheless, existing literature is still scarce and insufficient (Wu & Shen, 2013), and it is yet unclear whether and what specific types of CSR (hereinafter referred to as CSR dimensions) may improve banks’ financial performance.

Understanding the nature and evolution of this relationship and especially how individual CSR dimensions may differently impact banks’ performance is fundamental for an effective response to the recent calls for a more socially responsible behaviour from this industry. Thus, the present study aims to answer the following research question:

**How does CSR, both overall and dimension wise, impact CFP in the banking industry?**

Four sub-questions guide this research, namely:

i. How have overall CSR and individual CSR dimensions evolved over time, especially in light of the 2008 financial crisis?
ii. To what extent do overall CSR and individual CSR dimensions impact banks’ financial performance, and how?
iii. How have these impacts changed in the context of the 2008 financial crisis?
iv. To what extent do banks’ size and their geographical scope of activity (international, national or local) moderate the impact of overall CSR and individual CSR dimensions on financial performance?

By answering the questions above, this study makes several contributions to both scientific and managerial communities. Firstly, it contributes to the existing literature on the relationship between CSR and CFP by exploring this link in the context of a specific industry – the banking industry. Second, it provides an important development to the recent study of social performance in this sector of activity, analysing the evolution of banks’ CSR, its impact on financial performance, the influence of the 2008 financial crisis over this relationship, and the potential moderation effect of banks’ size and their geographical scope of activity on the link between social and financial performance for the first time. Third, it regards CSR as a multidimensional concept, measuring it both overall and dimension wise, and further exploring the individual impacts of its dimensions on banks’ financial performance. As a result, this research provides the banking industry with insightful information to effectively respond to recent calls for a more socially responsible behaviour, maximizing value creation for their stakeholders and optimizing corporate financial performance.

The present paper is organized as follows: chapter 2 discusses the theoretical foundations of CSR, introduces this construct in the context of the banking industry and unveils the ongoing theoretical debate and empirical findings on the relationship between CSR and CFP, both in the general context and in the banking sector; drawing from this literature review, chapter 3 formulates the hypotheses to be tested in the present study; chapter 4 elaborates on the methodology adopted; chapter 5 shows the research findings per hypothesis; chapter 6 discusses the empirical results, in light of the previous literature review; finally, chapter 7 outlines the main conclusions, implications and limitations of this study, identifying recommendations for future research.

2 Literature Review
This chapter aims to present the theoretical foundations underpinning the present study. As a result, it: (i) introduces CSR, placing this concept in the context of the stakeholder theory and discussing its growing strategic importance; (ii) presents CSR in the context of the banking industry, contextualizing socially responsible banking, identifying its main motivations and providing an overview of CSR dimensions for this sector; and (iii) elaborates on the ongoing debate about the relationship between CSR and CFP, supporting it with findings from general empirical research as well as from studies applied to the banking industry.
2.1 Conceptualization of CSR

2.1.1 Definition of CSR

Over the past decades, corporate social responsibility (CSR) has raised growing attention from academics, practitioners, policymakers and society at large (Ducassy, 2013). Since its first appearance in the 1930s and diffusion in the 1960s and 70s (Carroll, 1979, 1999; Carroll & Shabana, 2010), CSR has gained increasing relevance as an idea, as a principle and more recently as a strategic issue (Carroll, 1999, 2008; Husted & Allen, 2007). It has evolved from a narrowly circumscribed idea to a complex construct, regarded as “central to much of today’s corporate decision making” (Cochran, 2007, p. 50). However, in spite of the several decades of theoretical and empirical research, no universal definition of CSR can be found in the literature (Dahlsrud, 2008; Abagail McWilliams, Siegel, & Wright, 2006). The proliferation of concepts, terms and theoretical perspectives over this construct (Carroll, 1979, 1991, 1999; Carroll & Shabana, 2010; Dahlsrud, 2008; Garriga & Melé, 2004) makes it hard to present a unique definition, though common ideas and principles might be found.

The basic idea behind CSR is that to succeed a business needs to go beyond pure profit-making for shareholders (Carroll & Shabana, 2010; Davis, 1960; Souto, 2009) and satisfy a broader range of internal and external stakeholders. Thus, contrary to Friedman (1970), for whom the main goal of a firm should be profit maximization, CSR acknowledges that a business is part of a wider and more complex economic, social and environmental system, therefore entailing an implied social contract with society (Carroll, 1999; Dahlsrud, 2008; Dobers, 2009). This pushes business to address “issues beyond the narrow economic, technical, and legal requirements of the firm” (Davis, 1973, p. 312). Building on this, Carroll defines CSR as “the economic, legal, ethical, and discretionary expectations that society has of organisations at a given point in time” (Carroll, 1979, p. 500). These discretionary responsibilities were later named as voluntary or philanthropic (Carroll, 1991, 1999). In this context, Wood (1991) contends that “the basic idea of corporate social responsibility is that business and society are interwoven rather than distinct entities; therefore, society has certain expectations for appropriate business behaviour and outcomes” (p. 695).

Although Carroll’s definition of CSR might be the most prominent in the academic literature (Carroll & Shabana, 2010; Dahlsrud, 2008), a recent study (Dahlsrud, 2008) concluded that the most cited one was in fact introduced by the European Commission (EC), conceiving it as “a concept whereby companies decide voluntarily to contribute to a better society and a cleaner environment” (EC, 2001, p. 4). More recently, the same institution has defined CSR as “the responsibility of enterprises for their impacts on society” (EC, 2011, p. 6). Remarkably, Decker (2004) goes further and states that “the focus now lies not just on the impact of businesses on society but on the responsiveness of business to societal and environmental concerns and the...
management of the impact on society in a socially responsible manner” (p. 714), illustrating how the business perception on CSR has evolved over time. As Porter & Kramer (2011) suggest, this entails a change of mind-set, in which business and society are not regarded as competing against each other anymore. Instead they should be brought together by companies, which need to take the lead in creating “shared value by reconceiving the intersection between society and corporate performance” (Porter & Kramer, 2011, p. 49).

Interestingly, what seems to be common to all these definitions of CSR is the multidimensional nature of the construct (Carroll, 1999; Dahlsrud, 2008; Decker, 2004), explaining why it varies “in the information they provide stakeholders, and hence, in their effect on firm performance” (Jayachandran, Kalaignanam, & Eilert, 2013, p. 1255).

### 2.1.2 CSR Dimensions

Although the multidimensional nature of CSR seems to be unanimous, what specific dimensions constitute this construct is not so clear, being potentially explained by the profusion of definitions that can be found in the literature. For instance, Carroll (1979, 1991, 1999) proposes four dimensions of corporate social responsibility in line with his own definition: economic, legal, ethical, and philanthropic, discretionary or voluntary. In turn, the EC (2001) makes a clear distinction between internal and external CSR dimensions. While the former entails activities involving human resources management, health and safety at work, adaptation to change, and management of environmental impacts and natural resources; the latter encompasses topics such as local communities, business partners, suppliers and consumers, human rights, and global environmental concerns (EC, 2001). Interestingly, Dahlsrud (2008) found the most referred dimensions across 37 CSR definitions to be as follows: stakeholder; social; economic; voluntariness (philanthropy); and environment.

For the purpose of the present research, this study considers the seven Kinder, Lydenberg, Domini & Company (KLD) rating domains as the operational measure of CSR dimensions: environment; community; human rights; employee relations; diversity; product; and corporate governance (MSCI, 2015) (Appendix 1). KLD ratings are often found in empirical research either as an aggregated (Callan & Thomas, 2009; Abagail McWilliams & Siegel, 2000) or disaggregated CSR measure (Callan & Thomas, 2009; Jayachandran et al., 2013; Michelon, Boesso, & Kumar, 2013; Wang & Berens, 2015). Further details on KLD and its use as a CSR measure may be found in chapter 4.

### 2.1.3 The Stakeholder Theory

A relevant aspect of CSR is the interaction of the company with its internal and external stakeholders, i.e. stockholders, management, employees, customers, suppliers, non-governmental organisations, public authorities and local community (Freeman, 2001; Wu &
Shen, 2013). For this reason, the stakeholder theoretical perspective is considered one of the underlying theories of CSR, becoming a key element when conceptualizing this construct. Although formally introduced in the 1980s (Freeman, 1984), the principles of the stakeholder theory could already be found in the earliest definitions of CSR (Carroll, 1999). Similar to this concept, the stakeholder theory is driven by the premise that business is inserted in a broad and complex system, where numerous stakeholders with different nature, roles, interests and types of relationship with the business coexist (Freeman, 2001). Therefore, contrary to the stockholder theory, this perspective contends that to thrive a firm needs to go beyond pure profit-making for shareholders and address the interests of the multiple stakeholders existing in the internal and external context of the firm (Hillman & Keim, 2001; Souto, 2009; Wang & Berens, 2015).

Remarkably, this focus on satisfying stakeholders rather than exclusively shareholders does not mean the firm neglects value creation for stockholders. According to Freeman (2001), there is no conflict between satisfying shareholders and pursuing other stakeholders’ interests. In fact, stakeholder management was found not only to be positively related to shareholders wealth, but also to improve it (Hillman & Keim, 2001). Therefore, by recognizing the influence of internal and external stakeholders on firm performance, the stakeholder theory places effective management of stakeholder relationships and interests as a key activity for the success of any business (EC, 2001; Jones, 1995).

In light of the above and given that relationships between the firm and its stakeholders may have distinct economic, social and/or environmental concerns (Dobers, 2009), the multidimensional nature of CSR may enable the company not only to fulfil its implicit contract with society, but above all to satisfy and conciliate different (and frequently competing) interests in the stakeholder network, leading to an improvement of the firm financial performance and consequently to profit maximization for shareholders (Hillman & Keim, 2001; Jayachandran et al., 2013; Wang & Berens, 2015). In other words, in light of the stakeholder theory, CSR contributes to corporate financial performance as, by incorporating socially responsible principles in their strategy, companies are able to improve work environment and relations with employees, enhance reputation in the market, increase customer satisfaction, create competitive advantage and develop better relations with the local community, maximizing value creation within the company (EC, 2011; Saeidi et al., 2015; Souto, 2009).

Concluding, the stakeholder theory acknowledges that social relations are important for financial performance (Barnett & Salomon, 2006). Used as an instrument for effective stakeholder management, CSR can thereby create financial value for the firm, which explains its growing importance in the business sphere and in corporate strategy in particular.
2.1.4 CSR as a Strategic Issue

As CSR becomes more popular in the corporate world (Carroll, 1999, 2008), scientific research about its implications for business also increases. In this context, it is argued that, since corporate social performance requires and reinforces firms’ engagement with internal and external stakeholders (EC, 2011), it provides business with the following benefits: (i) cost and risk reduction (Jones, 1995); (ii) competitive advantage (Saeidi et al., 2015); (iii) legitimacy over its activities (Jayachandran et al., 2013; Wood, 1991) and reputation (Galbreath & Shum, 2012; Wang & Berens, 2015); and (iv) synergistic value creation (Carroll & Shabana, 2010).

Therefore, CSR is considered to enable long-term business success (Carroll & Shabana, 2010; Decker, 2004; Ducassy, 2013), privileging long-term profits maximization rather than short-term profitability (Decker, 2004).

More recently, research has focused on the effect of CSR during economic downturns (Ducassy, 2013; Souto, 2009), especially in light of the 2008 financial crisis, hypothesising whether social performance still contributes to business success in these contexts. It is demonstrated that CSR acts as an insurance-like protection, preserving value creation in the peak of the crisis (Ducassy, 2013) and in the face of other negative events (Godfrey, Merrill, & Hansen, 2009). Additionally, CSR activity is considered by investors as a predictor of the likely reactions of other firm’s stakeholders in the face of certain negative events, “temper[ing] potential sanctions” (Godfrey et al., 2009, p. 429). These findings reinforce the importance of firms having “a demonstrable CSR agenda” (Decker, 2004, p. 714).

Nonetheless, only when a strategic approach to social responsibility is taken and CSR is aligned with the economic goals of the company, will it contribute to the business competitiveness (EC, 2001). In this context, Porter and Kramer (2011) go further and state that companies will only achieve economic success by creating shared value, i.e. “creating economic value in a way that also creates value for society by addressing its needs and challenges” (p.49). Thus, it is paramount that companies move CSR to “a core business function, (…) central to the firm’s overall strategy” (Carroll, 1999; Carroll & Shabana, 2010, p. 93), engaging socially responsible initiatives with their economic objectives in a mutually reinforcing way (Porter & Kramer, 2006) and reconnecting “company success with social progress” (Porter & Kramer, 2011, p. 49).

In this context, Porter and Kramer (2006) draw attention to the importance of incorporating CSR “in the way most appropriate to each firm’s strategy” (p.78) and not in a generic manner. A successful CSR strategy – i.e. “what are the specific CSR issues to be addressed and how to engage with the stakeholders” (Dahlsrud, 2008, p. 6) – has to be consistent and aligned with the firm’s context (Griffin & Mahon, 1997), specific strategies and activities (Boesso, Favotto, & Michelon, 2015), and the nature and type of relationships with stakeholders (Boesso et al.,
which strongly vary across sectors and national cultures (EC, 2001; Miras-Rodriguez, Carrasco-Gallego, & Escobar-Pérez, 2015; van den Heuvel, Soeters, & Gossling, 2011). Indeed, industry is considered to play a role on how a company’s CSR may impact its financial performance (Michelon et al., 2013). Thereby, it can be argued that research on social responsibility should be conducted within a delimited industry or sector. The present study follows these calls, exclusively analysing CSR and its impacts on CFP in the context of the banking industry.

2.2 CSR in the Banking Industry

2.2.1 Socially Responsible Banking

Although socially responsible banking is a relatively recent topic, the link between CSR and banks goes back to the essence of the banking activity: to facilitate money transmission, payments, savings, lending and investments to both individuals and businesses (Decker, 2004). Given that these activities make use of public resources (Wu & Shen, 2013), involve a large number and variety of stakeholders (Lentner et al., 2015) and shape the economic and social environment in which they occur (Simpson & Kohers, 2002), finance in general and banks in particular are considered to play an important role in sustainable economic and social development (Decker, 2004; Scholtens, 2006; Wu & Shen, 2013). In other words, the development of society is highly supported on the products provided by the banking sector, explaining their strong connection. For this reason, CSR is considered to be inherent to banking and a structural element of this industry (Decker, 2004).

Nonetheless, only over the past few years has socially responsible banking drawn the interest of academics, practitioners and society at large, becoming a paradigmatic concept in this context (Scholtens, 2009). As banks’ socially responsible behaviour is getting under increasing public scrutiny, the discussion on how they engage with CSR has been intensified. Solely complying with existing regulation is perceived as insufficient (Decker, 2004) and a change in the paradigm of how banks approach CSR is urged. Recent calls stress the importance of banks to “develop strategies which would show that they take account of wider societal concerns which arise from their business activity” (Decker, 2004). This suggests a need for banks to move from being exclusively accountable for their direct impact to also consider their indirect impact on society (Relano, 2015), ideally anticipating and preventing negative effects (Paulet, Parnaudeau, & Relano, 2015). In line with this, banks need to go beyond the CSR logic and incorporate it in the their business model (Paulet et al., 2015), combining social with economic profitability (Barigozzi & Tedeschi, 2015). In this context, understanding which dimensions of CSR reinforce banks’ financial performance is paramount for the implementation of a successful and sustained CSR strategy in this industry.
2.2.2 Motives

In line with the previous sub-section, the motives leading banks to incorporate principles of social responsibility in their strategy might be segmented in three main categories: (i) general or transversal to all industries; (ii) specific from the banking sector; and (iii) resulting from an unfavourable financial context.

First of all, motives also shared by other firms in the market explain the increasing interest of banks in CSR. These are as follows: improving work environment; creating better relations with the local community; enhancing firm’s reputation in the market; creating competitive advantage; achieving differentiation; and increasing customer satisfaction (Saeidi et al., 2015; Souto, 2009). As outlined above, corporate social performance enables firms to maximize value creation for stakeholders and thereby for shareholders (Hillman & Keim, 2001). Then, similarly to other firms, when “a bank acts in a socially responsible way, it creates the basis to consolidate its own long-term presence on the market” (Birindelli et al., 2015, p. 305).

Second, the particular nature of banking further explains the growing adoption of CSR as a strategic issue. To begin with, social performance enables banks to fulfil its implicit social contract with society on basis of their strong connection with communities (Scholtens, 2009; Simpson & Kohers, 2002), as mentioned above. Additionally, CSR is perceived as a valuable instrument to legitimize the banking activity, which is under increasing public scrutiny (Wu & Shen, 2013), enabling banks to comply with existing regulation and guidelines on this matter (Lentner et al., 2015). Moreover, CSR assists banks to reduce information asymmetry among multiple stakeholders (owners, borrowers, depositors, managers, employees and regulators), which is especially relevant for this industry given the nature of its products (Lentner et al., 2015). Finally, it enables banks to answer to the growing demand for socially responsible financial products, as it is the case of investments (Birindelli et al., 2015; Decker, 2004).

At last, the 2008 financial crisis and consequent loss of people’s trust in financial services have motivated the growing importance of CSR in the context of the banking industry (EBF, 2013; Scholtens, 2009). Indeed, after the past financial downturn, superintendent institutions have stressed the need of banks to “consider the wider social and environmental impact of its business decisions and (...) aim to respond in a voluntary, balanced and responsible way to the interests of all of its stakeholders” (EBF, 2013). In this context, the implementation of CSR strategies, policies and initiatives is perceived as a way of banks to restore financial services’ reputation and confidence, improve relations with different stakeholders and ultimately increase their financial performance (Birindelli et al., 2015; Decker, 2004; EBF, 2013; Lentner et al., 2015).
2.2.3 CSR Dimensions in Banking

In spite of being a recent field of research, some authors (Birindelli et al., 2015; Scholtens, 2009) have attempted to identify the main CSR dimensions in the banking industry, in order to assess banks’ level of commitment towards social responsibility performance.

In this context, Scholtens (2009) has stressed the importance of CSR for banking by developing a framework to specifically assess international banks’ social responsibility, outlining the following dimensions: (i) codes of ethics, sustainability reporting, and environmental management systems; (ii) environmental management; (iii) responsible financial products; and (iv) social conduct. On the other hand, Birindelli et al. (2015) analysed the degree of ethical involvement of banks considering the following domains and aspects: (i) disclosure; (ii) organisation and management; (iii) offer of socially responsible instruments; and (iv) international agreements, certifications and indexes. Besides academic research, sectoral organisations also play an important role on releasing CSR best practices for banks. For instance, EBF (2013) suggests these companies to develop a socially responsible behaviour in the following dimensions: (i) community involvement; (ii) environmental impact; (iii) financial education; (iv) information disclosure; (v) socially responsible investments; and (vi) labour relations.

In spite of these contributions, there is no consensual framework on banks’ CSR dimensions. Therefore, given the wide spread of KLD within CSR empirical research across industries, the present study takes into consideration its seven dimensions.

2.3 The Relationship between CSR and CFP

2.3.1 The CSR and CFP Debate

Whether and how CSR actually impacts CFP is a fundamental question for business enterprises. Indeed, this relationship is one of the most widely debated topics, having been empirically tested for the past three decades (Aupperle, Carroll, & Hatfield, 1985; Callan & Thomas, 2009; Jayachandran et al., 2013; Michelon et al., 2013).

Several issues characterize the ongoing debate on the link between social and financial performance: first, the existence and nature of this potential relationship, already found to be positive, negative, non-linear or inexistent at all (Brammer & Millington, 2008; Soana, 2011); second, the short-term versus long-term relationship between these variables (Aupperle et al., 1985; Callan & Thomas, 2009); third, the direction of this link, i.e. whether it is CSR exerting influence over CFP or the opposite or even if it is a case of bidirectional causality (McGuire et al., 1988; Orlitzky et al., 2003; Waddock & Graves, 1997); finally, the extent to which a direct relationship between CSR and CFP can be established and whether an indirect link between these variables should be rather studied (Orlitzky et al., 2003; Wang & Berens, 2015).
For the purpose of the present research, only the first topic is theoretically discussed and empirically tested, as this study is motivated by the analysis of the direct impact of CSR on CFP in the banking industry. Given that banks' CSR is a recent and scarcely explored topic (Wu & Shen, 2013), a potential direct link between CSR and CFP should be firstly studied before more complex analyses are conducted.

### 2.3.2 Findings on the Relationship between CSR and CFP

Although the nature of the link between CSR and CFP is certainly one of the most tested relationships, research has revealed mixed or contradicting results (Barnett & Salomon, 2006; Griffin & Mahon, 1997; Souto, 2009), failing to shed light on the extent to which CSR actually pays off. In fact, several authors (Griffin & Mahon, 1997; Orlitzky et al., 2003; Simpson & Kohers, 2002; Soana, 2011) have compiled multiple results from research on this topic, concluding that the relationship between social and financial performance may be characterized either as positive, negative, non-linear – U or inverted U shape – or inexistent (no association). The main discussion point is whether “costs of social responsibility are offset or exceeded by financial returns” (Barnett & Salomon, 2006, p. 1102), and if so when.

To begin with, a positive relationship between CSR and CFP seems to proliferate in the existing empirical research (Callan & Thomas, 2009; Griffin & Mahon, 1997; Orlitzky et al., 2003). This is consistent with the stakeholder theory and the argument that value created by social performance exceeds the investment made and produces “financial benefits (…) that are not subject to diminishing returns” (Brammer & Millington, 2008, p. 1328). In line with this, Michelon et al. (2013) and Boesso et al. (2015) have found positive impact of CSR on financial performance to be likely observed when CSR initiatives are related to firm stakeholders’ preferences and when allocation of resources to this matter is aligned with corporate strategy. Because of this positive relationship between strategic CSR and CFP, such investments are considered to be strategic (Barnett & Salomon, 2006; Ducassy, 2013).

A less significant portion of empirical studies has found a negative relationship between CSR and CFP (Soana, 2011). These results are supported by the theoretical argument that CSR leads companies to incur in additional costs, superior to potential revenues, which prevent CSR from being paid off (Brammer & Millington, 2008), decreasing profits and shareholder wealth (Barnett & Salomon, 2006; Callan & Thomas, 2009; Simpson & Kohers, 2002). In this context, expenditures with CSR are purely perceived as costs (Aupperle et al., 1985).

In turn, a nonlinear relationship between CSR and CFP may be also found in the literature, suggesting that the previous points of view in fact complement each other (Barnett & Salomon, 2006) as the nature of this link might evolve over time, assuming either a U or inverted U shape. On one hand, costs with CSR may exceed potential benefits in the short-term, yet
paying off in the long-term; on the other hand, it is argued that CSR only delivers economic advantage up to a certain level (the optimal level), after which costs outweigh potential benefits (Soana, 2011).

Finally, no relationship between social and financial performance can be also found in empirical research, regardless of whether a short- or long-term analysis is taken (Aupperle et al., 1985). The relationship between CSR and CFP is said to be so complex that some authors state that a direct link cannot be established (Simpson & Kohers, 2002).

In light of the above, existing results are considered to be inconclusive. This might be explained by the high heterogeneity of research conducted in this field, which commonly adopts a cross-industry approach (Wu & Shen, 2013), hiding industry specifications and characteristics (Griffin & Mahon, 1997), and which largely varies in terms of time frame, sample size and operational CSR and CFP measures (Griffin & Mahon, 1997; Orlitzky et al., 2003). This leads to a loss of results’ comparability across studies and often limits the ability to generalize conclusions (Orlitzky et al., 2003; Soana, 2011). For this reason, a single-industry approach is recommended. The link between CSR and CFP should be analysed in the context of a specific industry, considering that a specific CSR or CFP measure may have different meanings for distinct industries (Griffin & Mahon, 1997).

Complementarily, Wang and Berens (2015) recently found that individual CSR dimensions hold distinct impacts on CFP. In line with this, Michelon et al. (2013) and Boesso et al. (2015) realized that disaggregated CSR measures have different effects on financial performance, stressing how social performance can differently impact firms’ stakeholders. Thus the remaining question is: what CSR dimensions mostly improve firms’ financial performance?

Few studies have focused on this topic so far. Among these, Jayachandran et al. (2013) found that product social performance has a greater positive impact on firm performance than the environmental dimension of CSR. On the other hand, Aupperle et al. (1985) realized that “firms with a corporate social responsibility committee on their boards did not differ in profitability from other firms” (p. 460). Given the lack of research in this field, further research on the relationship between CSR and CFP, both overall and dimension wise, is needed.

### 2.3.3 Evidences from the Banking Industry

Not surprisingly, only recently has research been addressing the relationship between CSR and CFP in the banking industry. Although still insufficient to draw universal conclusions, there are already some evidences that adopting CSR for strategic, altruistic and greenwashing motives has, respectively, a positive, non-negative and inexistent association with banks’ financial performance (Wu & Shen, 2013). Accordingly, Simpson and Kohers (2002) found evidences of a positive link between social and financial performance in this industry.
Furthermore, Scholtens (2009) draws attention for the evolution of banks’ social responsibility, which considerably improved between 2000 and 2005, showing evidences of the positive and significant relationship between banks’ CSR score and their financial size and quality.

On the other hand, while testing the global and individual ethical ratings of CSR for 21 European and 16 Italian banks, Soana (2011) has found a negative relationship between internal social policy (management of employees) and CFP. Although this study shows early evidences of the potential impact of different CSR dimensions on banks’ financial performance, its small sample size and cultural diversity of sample elements may explain the general lack of statistical significance among the remaining results. Furthermore, existing research in this field fails to shed light on the potential moderating effect of banks’ size and geographical scope of the activity.

Hence, given the recent study of CSR in the banking industry and the limitations discussed above, further research is needed in this field.

3 Hypotheses Development

Although socially responsible banking has become increasingly established in the financial sector (Scholtens, 2009), research on the relationship between banks’ social behaviour and their financial performance is still scarce and insufficient to infer sound conclusions (Wu & Shen, 2013). Therefore, drawing from general literature and considering the specificities of this sector, the present chapter introduces a set of hypotheses aiming to provide a deeper understanding about the impact of banks’ CSR on their CFP.

3.1 Evolution of CSR Performance in the Banking Industry

Evidence from the growing importance of CSR for firms is widespread in general literature (Carroll, 1999). In line with this, socially responsible banking has become a popular topic, especially in the aftermath of the 2008 financial crisis (EBF, 2013; Lentner et al., 2015; Paulet et al., 2015). Such relevance has been reflected in the growing engagement of banks with social responsibility reporting (Scholtens, 2009), the rising supply and demand for socially responsible products in this sector (Decker, 2004; Scholtens, 2009) and the emergence of ethical banking as a business model (Paulet et al., 2015). Consequently, and following on Scholtens (2009) findings of growing banks’ social performance between 2000 and 2005, it is proposed that:

**Hypothesis 1.a. Overall** CSR performance has increased in the banking industry after the 2008 financial crisis.

Over the past decades, CSR has evolved from a narrow definition to a more complex construct (Simpson & Kohers, 2002), as a wider set of activities and initiatives is recognised to
demonstrate the social responsibility commitment of a firm. Likewise, in the context of the banking industry, calls after the 2008 financial crisis have been urging banks to engage with CSR issues that go beyond those exclusively concerned with their direct impact in the economic, social and environmental context (EBF, 2013; Paulet et al., 2015; Relano, 2015), fully exploring the multidimensional nature of corporate social responsibility. Therefore, considering KLD’s CSR dimensions (environment, community, human rights, employee relations, diversity, product and governance), it is predicted that:

**Hypothesis 1.b.** Individual dimensions of CSR performance have increased in the banking industry after the 2008 financial crisis.

### 3.2 Nature of the Impact of CSR on CFP in the Banking Industry

A positive relationship between CSR and CFP proliferates in general literature (Orlitzky et al., 2003; Soana, 2011), supporting the stakeholder theory and the theoretical discussion on CSR as a strategic issue (Carroll & Shabana, 2010; Freeman, 2001). As these frameworks are also reflected in the banking industry, it is expected that:

**Hypothesis 2.a.** Overall CSR has a positive impact on CFP in the banking industry.

According to the stakeholder perspective, CSR facilitates the effective management of stakeholder relationships since its multidimensional nature enables a firm to satisfy and conciliate the interest of multiple agents (EC, 2001; Jones, 1995), thereby improving corporate financial performance (Hillman & Keim, 2001; Jayachandran et al., 2013; Wang & Berens, 2015). Therefore, in line with Soana’s (2011) findings on CSR in the banking industry, it is believed that:

**Hypothesis 2.b.** Individual CSR dimensions have a positive impact on CFP in the banking industry.

### 3.3 Evolution of the Impact of CSR on CFP in the Banking Industry

The expected increase of banks’ overall CSR performance after the 2008 financial crisis (H1.a) is predicted to intensify the potential positive impact of social responsibility on corporate financial performance (H2.a). Therefore, it is hypothesised that:

**Hypothesis 3.a.** The impact of overall CSR on CFP has increased in the banking industry after the 2008 financial crisis.

Since banks’ social performance is believed to have increased across different CSR dimensions after the 2008 financial crisis (H1.b) and their impact to hold a positive effect on financial performance (H2.b), it is proposed that:

**Hypothesis 3.b.** The impact of individual CSR dimensions on CFP has increased in the banking industry after the 2008 financial crisis.
3.4 Moderators of the Impact of CSR on CFP in the Banking Industry

Firm size is considered to influence banks' CSR (Birindelli et al., 2015) and thereby their overall relationship between CSR and CFP. On one hand, it may be argued that larger firms are more CSR-minded (Chih et al., 2009) because they are under greater pressure to demonstrate a socially responsible behaviour, have more resources to invest in such initiatives (Ducassy, 2013) or simply benefit of scale economies in terms of CSR provision (McWilliams & Siegel, 2001, p. 124). On the other hand, small firms hold the needed structural flexibility to better adjust their CSR strategy towards a more effective relationship between social and financial performance (Dixon-Fowler, Slater, Johnson, Ellstrand, & Romi, 2012; Michelon et al., 2013). Hence, there are two alternative hypotheses possible:

**Hypothesis 4.a.i.** Banks’ size moderates the impact of overall CSR on CFP, in the sense that larger banks have higher impacts.

**Hypothesis 4.a.ii.** Banks’ size moderates the impact of overall CSR on CFP, in the sense that smaller banks have higher impacts.

Likewise, it might be argued that capacity of investment in social responsibility and CSR priorities change according to banks’ size, being reflected in their social performance. Thus, the following alternative hypotheses are possible:

**Hypothesis 4.b.i.** Banks’ size moderates the impact of individual CSR dimensions on CFP, in the sense that larger banks have higher impacts.

**Hypothesis 4.b.ii.** Banks’ size moderates the impact of individual CSR dimensions on CFP, in the sense that smaller banks have higher impacts.

Degree of internationalization (domestic activity versus cross-border activity) is indicated as one of the factors influencing banks’ social responsibility (Birindelli et al., 2015). Given that multinational banks are under greater scrutiny (Wu & Shen, 2013), they might hold a more extensive record of social performance as well as stronger CSR strategies and agendas, which may improve banks’ CSR effect on financial performance. On the other hand, because of their wide scope of activity, multinational banks may lose the needed focus and accountability over its initiatives. In line with this, operations taken at a local level are argued to provide banks with improved knowledge about their stakeholders, enabling them to conduct more effective CSR actions and to better involve the community on their social initiatives (Paulet et al., 2015). Therefore, there are two alternative hypotheses possible:

**Hypothesis 5.a.i.** Banks’ geographical scope of activity moderates the impact of overall CSR on CFP, in the sense that multinational banks have higher impacts.
Hypothesis 5.a.ii. Banks' geographical scope of activity moderates the impact of overall CSR on CFP, in the sense that local banks have higher impacts.

Moreover, it might be hypothesised that certain individual CSR dimensions have greater importance for multinational banks than for local banks or vice-versa, thus moderating the impact of certain CSR dimensions on banks' CFP. Hence, two alternative hypotheses are possible:

Hypothesis 5.b.i. Banks’ geographical scope of activity moderates the impact of individual CSR dimensions on CFP, in the sense that multinational banks have higher impacts.

Hypothesis 5.b.ii. Banks’ geographical scope of activity moderates the impact of individual CSR dimensions on CFP, in the sense that local banks have higher impacts.

4 Methodology

This chapter aims to describe the methodology used to test the hypotheses previously formulated. Therefore, it introduces: (i) the research design adopted and the underlying conceptual model; (ii) the measures used to operationalize CSR, CFP, banks’ size and banks’ geographical scope of activity; (iii) the process of data collection and the sample drawn for this study; and (iv) the data analytical strategy followed.

4.1 Research Design

As previously mentioned, the present research aims to answer the following research question:

*How does CSR, both overall and dimension wise, impact CFP in the banking industry?*

For this purpose, four main aspects are investigated, corresponding to the sub-questions of the present study: (i) how overall CSR and individual dimensions of CSR performance have changed in the banking industry, in light of the 2008 financial crisis (H1.a and H1.b); (ii) to what extent CSR actually impacts banks’ financial performance, and how (H2.a and H2.b); (iii) how these potential impacts have evolved in the context of the 2008 financial crisis (H3.a and H3.b); and (iv) to what extent these relationships are moderated by banks’ size and their geographical scope of activity (H4.a, H4.b, H5.a and H5.b). As a result, this research is underpinned on the following conceptual model:

![Figure 1 – Research Conceptual Model](image-url)
A panel data study was conducted, aiming to explore the evolution of CSR performance in the banking industry and to establish a causal relationship between banks’ social and financial performance. This study relies on primary and secondary data, collected for the period 2004-2014, and on quantitative methods, used to perform univariate, bivariate (correlations) and multivariate (Ordinary Least Squares regressions) analyses. Secondary data availability constrained the application of the present research to the banking industry in the USA.

4.2 Measures
Following the conceptual model outlined above, four major constructs integrate the present study: corporate social responsibility (CSR), corporate financial performance (CFP), size and geographical scope of activity. The measures selected to operationalize each construct are discussed as follows.

4.2.1 CSR
Different CSR measures resulting from multiple sources can be found in the literature. Soana (2011) identified the following sources of CSR data: (i) reports published by companies themselves; (ii) questionnaire surveys to company managers; (iii) reputational measures released by researchers or journals, such as the annual Corporate Reputational Index published by Fortune; (iv) one-dimensional indicators, reflecting a specific CSR issue; and (v) ethical rating, i.e. multi-dimensional indices released by specialized agencies, such as KLD, which can be used either as an aggregated or disaggregated CSR measure (standing for overall CSR performance or individual dimensions of CSR performance, respectively). Since the present study considers CSR performance both overall and dimension wise, ethical rating is preferred to other sources of CSR data. This type of rating has already been successfully applied to the banking industry (Soana, 2011). For this empirical research in particular, KLD is selected to operationalize CSR since: (i) it is described as “the oldest and most influential and, by far, the most widely analysed [rating] by academics” (Chatterji, Levine, & Toffel, 2009, p. 127); (ii) it comprises data for several CSR variables (indicators and dimensions), thereby being used by the most recent research on the relationship between different dimensions of social responsibility and financial performance (Jayachandran et al., 2013; Wang & Berens, 2015); and (iii) its significant universe coverage and timeframe allow to draw a reasonable sample size for the present study.

Being one of the most common CSR measures, KLD provides information about the environmental, social and governance (ESG) performance of publicly traded companies (Appendix 2), according to 76 positive or negative performance indicators, grouped into seven dimensions: environment, community, human rights, employee relations, diversity, product and governance (MSCI, 2015). These indicators are designated either as strengths (e.g. innovative giving) or concerns (e.g. investment controversies) depending on whether they
stand for positive or negative aspects of ESG performance, respectively (Appendix 1). All the indicators assume the form of binary variables: 1 is given when the company meets the assessment criteria established for the respective indicator; 0 when it does not. When data is not available for a specific company and indicator, a NR or R is assigned, being equivalent to 0 for counting purposes. After assessing each company in every indicator, the firm’s number of strengths and number of concerns per dimension are separately summed up.

Similarly to previous studies (Callan & Thomas, 2009; Wang & Berens, 2015), this research only takes into consideration the number of strengths per dimension, therefore assuming seven dimensional CSR variables (Figure 2). Likewise, overall CSR is measured through the total number of strengths hold by a company, which results from the sum of all its strengths per dimensions (Figure 2).

**4.2.2 CFP**

Corporate financial performance can be measured through both accounting- and market-based measures, focusing on different aspects of this construct (Boesso et al., 2015; McGuire et al., 1988; Michelon et al., 2013; Orlitzky et al., 2003; Soana, 2011). While accounting-based measures reflect the historical performance of the firm; market-based measures “represent investors’ evaluations of a firm’s ability to generate future economic earnings rather than past performance” (McGuire et al., 1988). As the choice of a certain type of measure can affect research findings (McGuire et al., 1988; Orlitzky et al., 2003), this study makes use of both accounting- and market-based variables.

In terms of accounting-based measures, return on assets (ROA) and return on equity (ROE) are the most used variables in empirical research (Orlitzky et al., 2003). Since ROA and ROE are highly correlated in the banking industry (Simpson & Kohers, 2002), this study makes use
of the former. On the other hand, as Tobin’s Q (Callan & Thomas, 2009; Jayachandran et al., 2013; Wang & Berens, 2015) seems to be the most common market-based measure in CSR literature, it is preferred to others such as market value.

\[
\text{ROA}_t = \frac{\text{Net Income}_t}{\text{Total Assets}_t}
\]

\[
\text{Tobin's Q}_t = \frac{\text{Total Market Value}_t}{\text{Total Assets}_t}
\]

Figure 3 – CFP Measures

4.2.3 Size

Firm size is measured in the literature through different variables: total assets (Callan & Thomas, 2009), net sales (Callan & Thomas, 2009; Hillman & Keim, 2001), net income (Hillman & Keim, 2001), and the number of employees, either as an absolute value (Callan & Thomas, 2009), as a logarithm function (Jayachandran et al., 2013) or as a natural logarithm function (Boesso et al., 2015; Michelon et al., 2013). In the banking literature, total balance sheet (Scholtens, 2009), the natural logarithm of total assets (Simpson & Kohers, 2002) and the number of employees (Scholtens, 2009) are the most used variables to assess banks’ size. Therefore, this study makes use of the natural logarithm of total assets and the natural logarithm of the number of employees to measure this construct.

4.2.4 Geographical Scope of Activity

Banks’ geographical scope of activity is measured by the existence versus inexistence of branches at the local, national and international levels. Hence, local scope of activity is assigned when a certain bank has branches located in one state only, or in two or more contiguous states situated in a specific region of the country. National scope of activity is attributed when a certain bank has branches located across the country, covering several regions. At last, international scope of activity is endorsed when a specific bank has branches located outside of the country’s borders.

4.3 Data Collection and Sample

For the purpose of this research, both secondary (CSR, CFP and banks’ size) and primary data (banks’ geographical scope of activity) were collected (Appendix 3). Overall and dimensional CSR were drawn from MSCI ESG KLD STATS. Information regarding total assets, net income (loss), market value and employees was retrieved from Compustat in order to compute CFP (ROA and Tobin’s Q ratios) and size variables [ln(Assets) and ln(Employees)]. Banks’ branch locations were collected on the respective official website and used to determine their geographical scope of activity. Figure 4 outlines the timeframe of each variable integrated in the conceptual model:
In light of the above, this study departs from a universe of U.S. publicly traded companies whose SIC code derives from 60. Depositary Institutions (Appendix 4) and whose data is available on both MSCI ESG KLD STATS and Compustat. Companies presenting missing values for any of the variables or years in Figure 4 were excluded. In the end, a sample of 96 elements was drawn, complying with the following criteria:

- Firms with SIC code within 60. Depositary Institutions;
- Firms whose data is simultaneously available on MSCI ESG KLD STATS and Compustat (230 elements);
- Firms whose data regarding CSR$_{t-1}$, CFP$_t$, CFP$_{t-1}$ and Size$_t$ is available for the period between 2004 and 2014 on a yearly basis (96 elements).

A total number of 1056 observations was retrieved.

4.4 Analytical Strategy

Univariate, bivariate and multivariate analyses were conducted in the context of the present research. First, descriptive statistics illustrate how each variable has evolved during the respective period of analysis. Secondly, correlation and multiple linear regression analyses, using the Ordinary Least Squares (OLS) method, are used to test the hypothesized relationship between banks’ CSR and CFP, and the potential moderation effect of size and geographical scope of activity. Regression models used to test each hypothesis are elaborated as follows.

4.4.1 Evolution of CSR Performance in the Banking Industry

The following regression equation was used to test whether the relevance of CSR performance has increased after the 2008 financial crisis (H1.a and H1.b):

$$\text{Equation 1: } \text{CSR}_{i,t} - \text{CSR}_{i,2003} = \alpha + \beta_1 \times D_{\text{AfterCrisis}} + \epsilon_{i,t},$$

where $\text{CSR}_{i,t}$ stands for the CSR performance measure, either overall (H1.a) or dimension wise (H1.b), of a certain company at a given year; $\text{CSR}_{i,2003}$ regards to the respective CSR performance variable in 2003; $D_{\text{AfterCrisis}}$ is the dummy variable signalizing the period between 2008 and 2013; and $\epsilon_{i,t}$ the error term associated to this regression model. As a result, the
The Impact of CSR on CFP in the Banking Industry

4.4.2 Nature of the Impact of CSR on CFP in the Banking Industry
To test the link between CSR and CFP (H2.a and H2.b), a third regression equation was tested.

**Equation 2:** \( CF_{i,t} = \alpha + \beta_1 \times CSR_{i,t-1} + \beta_2 \times CFP_{i,t-1} + \epsilon_{i,t} \),

where \( CF_{i,t} \) represents the corporate financial performance measure, either ROA or Tobin’s Q ratio, for a certain company at a given year; \( CSR_{i,t-1} \) stands for the one-year lagged variable measuring overall CSR performance (H2.a) or individual CSR dimensions (H2.b); \( CFP_{i,t-1} \) is the one-year lagged variable for the respective corporate financial performance measure; and \( \epsilon_{i,t} \) the error term. By incorporating the CSR one-year lagged variable, this model assumes there is a time lag between CSR and its impact on CFP. On the other hand, the introduction of the respective CFP lagged variable by one period is explained by the fact that historical CFP influences current performance.

4.4.3 Evolution of the Impact of CSR on CFP in the Banking Industry
Hypotheses 3.a and 3.b were tested by the following regression equation:

**Equation 3:** \( CF_{i,t} = \alpha + \beta_1 \times CSR_{i,t-1} + \beta_2 \times D_{AfterCrisis} + \beta_3 \times CSR_{i,t-1} \times D_{AfterCrisis} + \beta_4 \times CFP_{i,t-1} + \epsilon_{i,t} \),

Where \( CF_{i,t} \) represents the financial performance measure, either ROA or Tobin’s Q ratio, for a certain company at a given year; \( CSR_{i,t-1} \) stands for the CSR variable lagged by one period, either overall CSR performance (H3.a) or individual CSR dimensions (H3.b); \( D_{AfterCrisis} \) is the dummy variable signalizing the period after the 2008 financial crisis; \( CSR_{i,t-1} \times D_{AfterCrisis} \) the interaction term between the CSR lagged variable, either overall (H3.a) or dimension wise (H3.b), and the dummy for the period after the financial crisis; \( CFP_{i,t-1} \) is the one-year lagged variable for the respective financial performance measure; and \( \epsilon_{i,t} \) the error term. Thus, Equation 3 builds on Equation 2, enabling to test whether the impact of CSR on CFP has changed after the crisis, and if so in what direction it has evolved.

4.4.4 Moderators of the Impact of CSR on CFP in the Banking Industry
At last, the moderation effect of banks’ size (H4.a.i, H4.a.ii, H4.b.i and H4.b.ii) and their geographical scope of activity (H5.a.i, H5.a.ii, H5.b.i and H5.b.ii) are tested by two different regression equations as follows:

**Equation 4:** \( CF_{i,t} = \alpha + \beta_1 \times CSR_{i,t-1} + \beta_2 \times Size_{i,t} + \beta_3 \times CSR_{i,t-1} \times Size_{i,t} + \beta_4 \times CFP_{i,t-1} + \epsilon_{i,t} \),

**Equation 5:** \( CF_{i,t} = \alpha + \beta_1 \times CSR_{i,t-1} + \beta_2 \times GeoScope_{i,t} + \beta_3 \times CSR_{i,t-1} \times GeoScope_{i,t} + \beta_4 \times CFP_{i,t-1} + \epsilon_{i,t} \),
where $CFP_{i,t}$ stands for the financial performance measure, either ROA or Tobin’s Q ratio, for a certain company at a given year; $CSR_{i,t-1}$ represents the CSR variable lagged by one period, either overall CSR (H4.a and H5.a) or CSR dimensions (H4.b and H5.b); $Size_{i,t}$ stands for the size measure, either $ln(Assets)$ or $ln(Employees)$ (H4.a and H4.b); $CSR_{i,t-1} \times Size_{i,t}$ is the interaction term between the respective CSR performance measure and banks’ size (H4.a and H4.b); $GeoScope_{i,t}$ represents the geographical scope of activity to be tested (international, national or local) (H5.a and H5.b); and $CSR_{i,t-1} \times GeoScope_{i,t}$ the interaction term between CSR performance and the geographical scope of activity (H5.a and H5.b); $CFP_{i,t-1}$ is the one-year lagged variable for the respective financial performance measure; and $\epsilon_{i,t}$ the error term. These models enable to determine whether and how banks’ size and their geographical scope of activity may influence the impact of CSR performance on CFP.

5 Results

This chapter explores the empirical results obtained from univariate, bivariate and multivariate analyses. Thus, it presents: (i) descriptive statistics of banks’ CSR, CFP, size and geographical scope of activity; and (ii) correlations and regression results from the equations outlined above.

An important remark should be done with regard to the regression analysis. Multicollinearity issues were dismissed when the VIF of independent and control variables integrated in the models were below the conventionally accepted limit of 10.0 (Burns & Burns, 2008). Centered variables ($x_{centered} = x_i - \bar{x}$) were used when this requirement was not met, which mainly occurred when moderation effects were studied. In fact, variable centering is often used in multiple regression to improve interpretability of coefficients, being regarded “as a potential solution to reduce numerical instability associated with multicollinearity” (Afshartous & Preston, 2011, p. 4). In this study, the use of such variables is signalized in the respective table of regression results.

5.1 Descriptive Statistics

The sample of this research is composed by 96 U.S. companies classified with a SIC code within 60. Depositary Institutions (83 elements as 6020. Commercial Banks; 12 as 6035. Saving Institutions, Federally Chartered; and 1 as 6036. Saving Institutions, Not Federally Chartered). A univariate analysis of their CSR, CFP, size and geographical scope was performed in order to characterize these variables during the period of analysis (Appendices 5, 6, 7 and 8).

Figure 5 and Figure 6 illustrate the evolution of overall and dimensional CSR performance in the banking industry between 2003 and 2013, respectively. Appendix 5 provides extra information on the respective mean values and standard deviations.
To begin with, descriptive statistics reveal that banks’ mean of overall CSR performance is low, varying from 1.29 and 2.15 strengths during the period of analysis (Appendix 5). In Figure 5, a gradual growth of banks’ overall CSR performance can be observed from 2005 to 2009 (+20.1%), which was suddenly interrupted in 2010 (-25.1% comparing to 2009). Only in 2012 was the banking industry able to recover from this fall, however revealing a clear incapacity of maintaining this record in the following year.

Figure 6 breaks down banks’ overall CSR performance into the seven dimensions composing this construct. The following conclusions can be derived from the analysis of the figure above and Appendix 5: (i) all CSR dimensions show a unique pattern; (ii) CSR Human Rights reveals the poorest performance during the whole period of analysis; (iii) CSR Diversity, Governance and Community are the ones in which banks perform the best, especially until 2009; (iv) a clear change in the behaviour of all CSR dimensions (with the exception of CSR Human Rights) can be identified from 2009 onwards in different directions (increase versus decrease); and (v) the behaviour of CSR Product and Governance between 2011 and 2013 highly explains the rise and fall of overall CSR performance during the same period.

In light of the above, this univariate analysis depicts a clear change of banks’ socially responsible behaviour in 2009, potentially explained by the 2008 financial crisis, and a high social performance instability in the following years. The characterization of these patterns considerably depend on the CSR dimension to be analysed.

In terms of CFP performance, low ROA and Tobin’s Q ratios seem to characterize this sample (Figure 7, Figure 8 and Appendix 6). The peak of both measures in this industry occurs in 2006, being followed by a declining period that culminates in 2008. There is a stable and continuous recovery for ROA until 2013 and a gradual growth for Tobin’s Q until 2014, only interrupted in 2011.
Regarding size variables, Figure 9 and Figure 10 illustrate the size of the banking industry, in terms of total assets and number of employees, between 2004 and 2014. While total assets reveal a continuous growth across the whole period; the number of employees has stagnated from 2008 onwards, showing a slight decline beginning in 2012. Additional information on sample’s mean values and standard deviations may be found in Appendix 7.

Finally, Figure 11 and Appendix 8 indicate that most banks develop their activity at a local level, i.e. in one specific state, or in two or more contiguous states located in a delimited region of the country (between 65.6% to 66.7% of the sample elements, depending on the year of analysis). A smaller proportion of banks operates at a national scale (between 24.0% to 25.0%). Only a residual percentage of these elements holds any branches abroad (9.4%). Not significant changes on banks’ branch locations occur throughout the period of analysis.
5.2 Results from Hypothesis 1.a

*H1.a. Overall CSR performance has increased in the banking industry after the 2008 financial crisis.*

In order to assess whether the 2008 financial crisis has impacted on banks’ overall socially responsible behaviour, a correlation analysis and an OLS regression were performed. Table 1 and Table 2 report the main results from these analyses.

Table 1 – Equation 1: Pearson Correlations between Overall CSR and \( D_{\text{AfterCrisis}} \)

<table>
<thead>
<tr>
<th>( \Delta \text{CSR Overall}_{t, 2003} )</th>
<th>( D_{\text{AfterCrisis}} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR Overall</td>
<td>1.000</td>
</tr>
<tr>
<td>( D_{\text{AfterCrisis}} )</td>
<td>-0.028</td>
</tr>
</tbody>
</table>

* Significant at 0.10 level. ** Significant at 0.05 level.

Table 1 indicates that there is no correlation between overall CSR performance and the period after the 2008 financial crisis at any significance levels (\( p \leq 0.05 \) or \( p \leq 0.1 \)). Table 2 also unveils that the model tested has no explanatory power, since adjusted \( R^2 = 0.000 \). Hence, the 2008 financial crisis does not explain any change in banks’ overall CSR performance. Therefore, hypothesis 1.a is not supported.

5.3 Results from Hypothesis 1.b

*H1.b Individual dimensions of CSR performance have increased in the banking industry after the 2008 financial crisis.*

Overall CSR performance was broken down into seven dimensions in order further explore the potential impact of the 2008 financial crisis on banks' socially responsible behaviour. Similarly to H1.a, Equation 1 enables to test this hypothesis. Table 3 and Table 4 summarize the main results of the correlation and regression analyses, respectively.

First, Table 3 presents the correlations between the change in each CSR dimension performance and the dummy variable for the period after the financial crisis. In general, there
is a weak but statistically significant correlation between these variables (at \( p \)-values \( < 0.05 \)), except for CSR Human Rights. Nonetheless, it is clear that different types of relationships in terms of nature exist across the several dimensions. Whereas there is a positive association between the change in banks’ CSR Environment, Employee Relations and Product, and the period after the 2008 financial crisis; there is a negative relationship between the change in banks’ CSR Community, Diversity and Governance, and the same dummy variable.

Following on this, Table 4 explores the potential causal relationship between the variables above. The adjusted \( R^2 \) indicates that 0.2% to 3.3% of the variance of each dimension of CSR performance is explained by the model. Moreover, the regression coefficients and the respective \( p \)-values suggest that the 2008 financial crisis has explanatory power over the change in banks’ CSR Environment, Community, Employee Relations, Product and Governance at a significance level of 0.05; and in CSR Diversity at a significance level of 0.10. This change is translated in an improvement of CSR performance in terms of environment (0.115), employees relations (0.091) and product (0.196) after 2008; and in a decrease of CSR performance related to community (-0.209), diversity (-0.101) and governance (-0.136) during the same period. There is no relationship between the change in banks’ CSR Human Rights and the 2008 financial crisis.

Table 3 – Equation 1: Pearson Correlations between CSR Dimensions and \( D_{AfterCrisis} \)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR Env.</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR Com.</td>
<td></td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR Hum.</td>
<td></td>
<td></td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR Emp.</td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR Div.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR Pro.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>CSR Gov.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
</tr>
<tr>
<td>( D_{AfterCrisis} )</td>
<td>0.134**</td>
<td>-0.182**</td>
<td>-0.022</td>
<td>0.070**</td>
<td>-0.059**</td>
<td>0.186**</td>
<td>-0.111**</td>
</tr>
</tbody>
</table>

* Significant at 0.10 level. ** Significant at 0.05 level.

Therefore, H1.b is partially supported.
5.4 Results from Hypothesis 2.a

H2.a. Overall CSR has a positive impact on CFP in the banking industry.

The impact of CSR on CFP is tested through Equation 2. Table 5 presents the correlation coefficients between banks’ overall CSR performance and both their measures of CFP – ROA and Tobin’s Q ratio, respectively.

Table 5 – Equation 2: Pearson Correlations between CFP and Overall CSR

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>Tobin’s Qt</th>
<th>CSR Overallt-1</th>
<th>ROA1</th>
<th>Tobin’s Qt-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROAt</td>
<td>1.000</td>
<td>0.010</td>
<td>0.010</td>
<td>0.489**</td>
<td>0.361***</td>
</tr>
<tr>
<td>Tobin’s Qt</td>
<td>0.523**</td>
<td>1.000</td>
<td>−0.074**</td>
<td>0.422**</td>
<td>0.800**</td>
</tr>
<tr>
<td>CSR Overallt-1</td>
<td>0.010</td>
<td>0.010</td>
<td>1.000</td>
<td>0.018</td>
<td>1.000</td>
</tr>
<tr>
<td>ROA1</td>
<td>0.489**</td>
<td>0.422**</td>
<td>0.018</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Tobin’s Qt-1</td>
<td>0.361***</td>
<td>0.800**</td>
<td>−0.070**</td>
<td>0.529**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

* Significant at 0.10 level. ** Significant at 0.05 level.

Different types of relationship can be observed. Table 5 indicates there is no significant correlation between overall CSR and ROA. On the other hand, it shows that overall CSR is negatively and weakly correlated to Tobin’s Q at a significance level of 0.05, meaning that the higher the bank’s CSR performance, the lower its Tobin’s Q ratio.

In addition, Table 6 provides a deeper insight into the potential causality underlying this relationship. Several conclusions are drawn from these results. Firstly, the adjusted coefficient of multiple determination, adjusted $R^2$, is higher for the Tobin’s Q regression model (0.640) than for ROA’s (0.238). This means that while 64.0% of the variance of banks’ Tobin’s Q ratio is explained by the model outlined in Equation 2, only 23.8% of the variance of ROA is accounted by the same model. As the coefficients suggest, this finding is mainly attributed to the explanatory power of the respective lagged CFP variable. This is related to the second finding: CFP lagged variables have statistical significance in the respective regression model at a confidence interval of 95%, though the contribution of Tobin’s $Q_{t-1}$ to predict CFP is higher than ROA$_{t-1}$’s. Finally, the results reveal that overall CSR performance is not significant to predict neither of the CFP measures analysed. Therefore, H2.a is not supported.

5.5 Results from Hypothesis 2.b

H2.b. Individual CSR dimensions have a positive impact on CFP in the banking industry.

Hypothesis 2.b provides extra evidence on the link between CSR and CFP in the banking industry by going beyond the overall performance and exploring the potential impact of each individual CSR dimension and both financial measures.
Table 7 – Equation 2: Pearson Correlations between CFP and CSR Dimensions

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>Tobin’s Q</th>
<th>CSR Env$_{t-1}$</th>
<th>CSR Com$_{t-1}$</th>
<th>CSR Hum$_{t-1}$</th>
<th>CSR Emp$_{t-1}$</th>
<th>CSR Div$_{t-1}$</th>
<th>CSR Pro$_{t-1}$</th>
<th>CSR Gov$_{t-1}$</th>
<th>ROA$_{t-1}$</th>
<th>Tobin’s Q$_{t-1}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td>0.523**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR Env$_{t-1}$</td>
<td>0.004**</td>
<td>-0.112**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR Com$_{t-1}$</td>
<td>-0.075**</td>
<td>-0.115**</td>
<td>0.210**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR Hum$_{t-1}$</td>
<td>0.032</td>
<td>0.003</td>
<td>0.139**</td>
<td>0.344**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR Emp$_{t-1}$</td>
<td>-0.012</td>
<td>-0.040*</td>
<td>0.184**</td>
<td>0.312**</td>
<td>0.116**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR Div$_{t-1}$</td>
<td>0.006</td>
<td>-0.085**</td>
<td>0.431**</td>
<td>0.548**</td>
<td>0.385**</td>
<td>0.355**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR Pro$_{t-1}$</td>
<td>0.051**</td>
<td>0.009</td>
<td>0.311**</td>
<td>-0.051**</td>
<td>0.027</td>
<td>0.603**</td>
<td>0.062**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR Gov$_{t-1}$</td>
<td>0.099**</td>
<td>0.138**</td>
<td>0.018</td>
<td>0.111**</td>
<td>0.038</td>
<td>-0.045*</td>
<td>-0.033</td>
<td>-0.031</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA$_{t-1}$</td>
<td>0.489**</td>
<td>0.422**</td>
<td>-0.024</td>
<td>-0.049*</td>
<td>0.036</td>
<td>0.020</td>
<td>0.007</td>
<td>0.024</td>
<td>0.094**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Tobin’s Q$_{t-1}$</td>
<td>0.361**</td>
<td>0.800**</td>
<td>-0.107**</td>
<td>-0.070**</td>
<td>0.019</td>
<td>-0.044**</td>
<td>-0.058**</td>
<td>-0.122**</td>
<td>0.128**</td>
<td>0.529**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

* Significant at 0.10 level. ** Significant at 0.05 level.

Table 8 – Equation 2: Regression Results for CFP with CSR Dimensions

|                  | ROA Model 0 | ROA Model 1 | ROA Model 2 | ROA Model 3 | ROA Model 4 | ROA Model 5 | ROA Model 6 | ROA Model 7 | Tobin’s Q Model 0 | Tobin’s Q Model 1 | Tobin’s Q Model 2 | Tobin’s Q Model 3 | Tobin’s Q Model 4 | Tobin’s Q Model 5 | Tobin’s Q Model 6 | Tobin’s Q Model 7 |
|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Constant         | 0.004**     | 0.004**     | 0.004**     | 0.004**     | 0.004**     | 0.003**     | 0.030**     | 0.034**     | 0.036**           | 0.033**            | 0.035**            | 0.028**            | 0.032**            |                    |
| CSR Env$_{t-1}$  | 0.000       | 0.000       | -0.011**    | -0.005      | -0.001**    | -0.001      | -0.007**    | -0.008**    | -0.009**         | -0.007**           | -0.006**           | -0.005**           | -0.004**           |                    |
| CSR Com$_{t-1}$  | 0.003       | 0.000       | 0.002       | -0.001      | 0.000       | -0.001      | 0.002       | -0.001      | 0.000             | -0.003**           | -0.003**           | -0.003**           | -0.003**           |                    |
| CSR Hum$_{t-1}$  | 0.000       | 0.000       | 2.364E-5    | -0.000      | -0.000      | -0.000      | -0.000      | -0.000      | -0.000            | 0.007              | 0.007              | 0.007              | 0.007              |                    |
| CSR Emp$_{t-1}$  | 0.001       | 0.001       | 0.028**     | 0.025**     | 0.001       | 0.001       | 0.001       | 0.001       | 0.001             | 0.001              | 0.001              | 0.001              | 0.001              |                    |
| CSR Div$_{t-1}$  | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | 0.000             | 0.000              | 0.000              | 0.000              | 0.000              |                    |
| CSR Pro$_{t-1}$  | 0.001**     | 0.001**     | 0.028**     | 0.025**     | 0.001**     | 0.001**     | 0.001**     | 0.001**     | 0.001             | 0.001              | 0.001              | 0.001              | 0.001              |                    |
| ROA$_{t-1}$      | 0.485**     | 0.485**     | 0.495**     | 0.497**     | 0.498**     | 0.497**     | 0.496**     | 0.492**     | 0.486**           | 0.496**            | 0.496**            | 0.496**            | 0.496**            | 0.496**            |
| Tobin’s Q$_{t-1}$| 0.758**     | 0.755**     | 0.754**     | 0.758**     | 0.758**     | 0.758**     | 0.756**     | 0.771**     | 0.754**           | 0.754**            | 0.754**            | 0.754**            | 0.754**            | 0.754**            |
| $R^2$            | 0.249       | 0.240       | 0.242       | 0.240       | 0.240       | 0.241       | 0.242       | 0.242       | 0.240             | 0.244              | 0.244              | 0.244              | 0.244              | 0.244              |
| Adjusted $R^2$   | 0.243       | 0.238       | 0.241       | 0.238       | 0.239       | 0.240       | 0.241       | 0.241       | 0.240             | 0.244              | 0.244              | 0.244              | 0.244              | 0.244              |

* Significant at 0.10 level. ** Significant at 0.05 level.
Correlations presented in Table 7 demonstrate that there are different relationships between each dimension of CSR performance and each CFP measure – ROA and Tobin’s Q ratio. While CSR Product and CSR Governance are positively correlated to ROA (0.051 and 0.099, respectively) at a significance level of 0.05; CSR Community is negatively associated to the same CFP measure (-0.075). Complementarily, there is evidence of a positive relationship between CSR Governance and Tobin’s Q (0.138); though CSR Environment, Community and Diversity are negatively related to this CFP variable (-0.112, -0.115 and -0.085, respectively) at a confidence interval of 95%. At a lower confidence interval (90%), CSR Employee Relations is negatively correlated to Tobin’s Q (-0.040). Interestingly, there is a positive association between CSR Governance and CFP, and a negative link between CSR Community and CFP, regardless the chosen financial measure. Plus, all the significant correlations are considered to be weak, however they tend to be slightly stronger towards to Tobin’s Q than in relation to ROA.

Table 8 illustrates the regression results from Equation 2, enabling to test a causal relationship between each CSR dimension and the CFP variables. CSR dimension lagged variables were included in the model, firstly altogether (Model 0 in the table) and then separately (from Model 1 to Model 7), in order to dismiss any potential multicollinearity issues among independent variables.

Table 8 reveals that both regression models, ROA and Tobin’s Q, have explanatory power, though presenting distinct adjusted coefficients of multiple regression. While 65.7% of the variance of banks’ Tobin’s Q is explained by the respective regression model (Model 0), only 24.3% of the variance of ROA is accounted by the equivalent model. In both cases, the high contribution of the CFP lagged variable to predict the dependent variable is clear. Additionally, the regression coefficients of Model 0 indicate that while CSR Governance has a positive impact on ROA (0.001), CSR Community produces a negative effect (-0.001) on the same variable at a significance level of 0.05. On the other hand, the regression model for Tobin’s Q indicates that CSR Product and CSR Governance are positive and statistically significant (0.028 and 0.007, respectively), whereas CSR Environment and CSR Community produce a negative impact on banks’ Tobin’s Q (-0.011 and -0.007, respectively) at the same confidence interval. Finally, it is worth meaning that, when isolated in a regression model (Model 5), CSR Diversity has a negative impact on Tobin’s Q (-0.003).

All in all, it is observed that individual dimensions of CSR can differently impact accounting- and market-based measures. However, it should be regarded that CSR Governance and CSR Community have, respectively, a positive and a negative impact on any measure of financial performance. These effects are stronger for Tobin’s Q than for ROA.
In light of the above, and since positive effects in CFP measures were found among some individual CSR dimensions, H2.b is partially supported.

5.6 Results from Hypothesis 3.a

_H3.a_ The impact of overall CSR on CFP has increased in the banking industry after the financial crisis.

Since the impact of overall CSR on CFP has already been studied, hypothesis 3.a focuses on how this impact has changed after the 2008 financial crisis.

In this context, Table 9 reveals the regression results of Equation 3 for ROA and Tobin’s Q ratio. Again, a higher adjusted $R^2$ is identified in the Tobin’s Q model. Nonetheless, the regression coefficients suggest that overall CSR after the 2008 financial crisis has no statistical significance in neither of the models. In other words, the impact of overall CSR on CFP has not changed after the 2008 financial crisis.

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>Tobin's Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.006**</td>
<td>0.034**</td>
</tr>
<tr>
<td>CSR Overall$_{t-1}$</td>
<td>3.322E-5</td>
<td>0.000</td>
</tr>
<tr>
<td>D$_{AfterCrisis}$</td>
<td>-0.003**</td>
<td>0.001</td>
</tr>
<tr>
<td>CSR Overall$<em>{t-1}$ x D$</em>{AfterCrisis}$</td>
<td>-2.641E-5</td>
<td>-0.001</td>
</tr>
<tr>
<td>ROA$_{t-1}$</td>
<td>0.458**</td>
<td></td>
</tr>
<tr>
<td>Tobin's Q$_{t-1}$</td>
<td></td>
<td>0.755**</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.256</td>
<td>0.641</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.253</td>
<td>0.640</td>
</tr>
</tbody>
</table>

* Significant at 0.10 level. ** Significant at 0.05 level.

Therefore, H3.a is not supported.

5.7 Results from Hypothesis 3.b

_H3.b_ The impact of individual CSR dimensions on CFP has increased in the banking industry after the 2008 financial crisis.

The regression results shown in Table 10 enable to the test hypothesis 3.b for ROA and Tobin’s Q. Multicollinearity issues were identified in _CSR Environment$_{t-1}$ and _CSR Environment$_{t-1}$ x _D$_{AfterCrisis}$, as their VIF exceeded the conventionally established limit of 10.0 (Burns & Burns, 2008). Centered measures were used to overcome this problem. Although they did not succeed, in the sense that multicollinearity was still observed after their integration in the model, these variables were maintained as their VIF assume more moderated values than initially. However, results should be regarded with caution.
Table 10 – Equation 3: Regression Results for CFP with CSR Dimensions and $D_{AfterCrisis}$

<table>
<thead>
<tr>
<th></th>
<th>ROA$_t$ Model 0</th>
<th>ROA$_t$ Model 1</th>
<th>ROA$_t$ Model 2</th>
<th>ROA$_t$ Model 3</th>
<th>ROA$_t$ Model 4</th>
<th>ROA$_t$ Model 5</th>
<th>ROA$_t$ Model 6</th>
<th>Tobin’s Q$_t$ Model 0</th>
<th>Tobin’s Q$_t$ Model 1</th>
<th>Tobin’s Q$_t$ Model 2</th>
<th>Tobin’s Q$_t$ Model 3</th>
<th>Tobin’s Q$_t$ Model 4</th>
<th>Tobin’s Q$_t$ Model 5</th>
<th>Tobin’s Q$_t$ Model 6</th>
<th>Tobin’s Q$_t$ Model 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.006**</td>
<td>0.005**</td>
<td>0.006**</td>
<td>0.006**</td>
<td>0.006**</td>
<td>0.006**</td>
<td>0.006**</td>
<td>0.029**</td>
<td>0.030**</td>
<td>0.038**</td>
<td>0.034**</td>
<td>0.033**</td>
<td>0.035**</td>
<td>0.031**</td>
<td>0.030**</td>
</tr>
</tbody>
</table>
| CSR Env$_{t-1}$ (Cent.) | -0.011 | - 0.011 | - 0.055 | - 0.055 | * Significant at 0.10 level. ** Significant at 0.05 level.  
| CSR Com$_{t-1}$ | - 0.001 | 0.000 | - 0.009** | - 0.007** |  
| CSR Hum$_{t-1}$ | 0.003 | 0.003 | 0.013 | 0.004 |  
| CSR Emp$_{t-1}$ | 0.001 | 0.001 | 0.005 | 0.002 |  
| CSR Div$_{t-1}$ | 0.000 | 0.000 | 0.002 | 0.000 |  
| CSR Prod$_{t-1}$ | 0.001 | 0.001 | 0.031** | 0.033** |  
| CSR Gov$_{t-1}$ | - 1.760E-5 | 0.000 | 0.008* | 0.008* |  
| $D_{AfterCrisis}$ | - 0.003** | - 0.002** | - 0.003** | - 0.003** | - 0.003** | - 0.003** | - 0.003** | - 0.003** | - 0.003** | - 0.003** | - 0.003** | - 0.003** | - 0.003** | - 0.003** | - 0.003** |  
| CSR Env$_{t-1}$ $\times$ $D_{AfterCrisis}$ (Cent.) | 0.012 | 0.011 | 0.047 | 0.050 |  
| CSR Com$_{t-1}$ $\times$ $D_{AfterCrisis}$ | - 0.002 | - 0.001 | 0.003 | - 0.002 |  
| CSR Hum$_{t-1}$ $\times$ $D_{AfterCrisis}$ | 4.584E-5 | - 0.002 | - 0.017 | - 0.026 |  
| CSR Emp$_{t-1}$ $\times$ $D_{AfterCrisis}$ | 0.001 | - 0.001 | - 0.004 | - 0.004 |  
| CSR Div$_{t-1}$ $\times$ $D_{AfterCrisis}$ | 0.000 | 0.000 | - 0.004 | - 0.004 |  
| CSR Prod$_{t-1}$ $\times$ $D_{AfterCrisis}$ | 0.001 | 0.002 | - 0.004 | - 0.009 |  
| CSR Gov$_{t-1}$ $\times$ $D_{AfterCrisis}$ | 0.002 | 0.002 | - 0.001 | - 0.004 |  
| ROA$_t$          | 0.434**         | 0.498**         | 0.452**         | 0.458**         | 0.458**         | 0.452**         | 0.454**         |  
| Tobin’s Q$_t$    | 0.745**         | 0.755**         | 0.749**         | 0.757**         | 0.756**         | 0.752**         | 0.761**         | 0.755** |  
| R$^2$            | 0.274           | 0.258           | 0.261           | 0.256           | 0.257           | 0.256           | 0.261           | 0.258 | 0.255 | 0.256 | 0.262 | 0.264 | 0.264 | 0.263 | 0.265 | 0.264 |  
| Adjusted R$^2$   | 0.263           | 0.255           | 0.258           | 0.253           | 0.254           | 0.253           | 0.258           | 0.255 | 0.255 | 0.256 | 0.266 | 0.264 | 0.264 | 0.260 | 0.265 | 0.264 |  

* Multicollinearity issues found, but not possible to solve through centered variables.
Model 0 accounts for 26.3% of the variance of ROA and 65.6% of the variance of Tobin’s Q. Nonetheless, none of the interaction terms included in this model reveals statistical significance. The remaining models (Models 1 to 7) corroborate this finding. Therefore, the impact of individual CSR dimensions either on ROA or on Tobin’s Q has not changed after the 2008 financial crisis.

In light of the above, H3.b is not supported.

5.8 Results from Hypotheses 4.a

**H4.a.i.** Banks’ size moderates the impact of overall CSR on CFP, in the sense that larger banks have higher impacts.

**H4.a.ii** Banks’ size moderates the impact of overall CSR on CFP, in the sense that smaller banks have higher impacts.

Hypotheses 4.a test the moderation effect of banks’ size, both in terms of total assets and number of employees, on the relationship between overall CSR and CFP. Table 11 shows the regression results. Centered variables were used when multicollinearity issues arouse.

In the table below, it can be observed that neither of banks’ size measures moderates the impact of overall CSR performance on CFP. The regression coefficients of the interaction terms, i.e. $CSR_{Overall,t-1} \times \ln(\text{Assets})_t$ and $CSR_{Overall,t-1} \times \ln(\text{Employees})_t$, have no statistical significance at 0.05 in any regression model. Therefore, H4.a.i and H4.a.ii are not supported.

<table>
<thead>
<tr>
<th>Equation 4: Regression Results for CFP with Overall CSR and Size</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Constant</strong></td>
</tr>
<tr>
<td><strong>Model 1</strong></td>
</tr>
<tr>
<td>CSR Overall$_{t-1}$ (Centered)</td>
</tr>
<tr>
<td>ln(Assets)$_{t}$ (Centered)</td>
</tr>
<tr>
<td>ln(Emp)$_{t}$ (Centered)</td>
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<tr>
<td>CSR Overall$_{t-1} \times \ln(\text{Assets})_t$ (Centered)</td>
</tr>
<tr>
<td>CSR Overall$_{t-1}$</td>
</tr>
<tr>
<td>ln(Emp)$_{t}$</td>
</tr>
<tr>
<td>CSR Overall$_{t-1} \times \ln(\text{Employees})_t$</td>
</tr>
<tr>
<td>ROA$_{t-1}$</td>
</tr>
<tr>
<td>Tobin’s Q$_{t-1}$</td>
</tr>
<tr>
<td>$R^2$</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
</tr>
</tbody>
</table>

* Significant at 0.10 level. ** Significant at 0.05 level.

5.9 Results from Hypotheses 4.b

**H4.b.i.** Banks’ size moderates the impact of individual CSR dimensions on CFP, in the sense that larger banks have higher impacts.

**H4.b.ii.** Banks’ size moderates the impact of individual CSR dimensions on CFP, in the sense that smaller banks have higher impacts.
<table>
<thead>
<tr>
<th></th>
<th>ROA\textsubscript{Model 1}</th>
<th>ROA\textsubscript{Model 2}</th>
<th>ROA\textsubscript{Model 3}</th>
<th>ROA\textsubscript{Model 4}</th>
<th>ROA\textsubscript{Model 5}</th>
<th>ROA\textsubscript{Model 6}</th>
<th>ROA\textsubscript{Model 7}</th>
<th>Tobin’s Q\textsubscript{Model 1}</th>
<th>Tobin’s Q\textsubscript{Model 2}</th>
<th>Tobin’s Q\textsubscript{Model 3}</th>
<th>Tobin’s Q\textsubscript{Model 4}</th>
<th>Tobin’s Q\textsubscript{Model 5}</th>
<th>Tobin’s Q\textsubscript{Model 6}</th>
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<td>0.004**</td>
<td>0.004**</td>
<td>0.004**</td>
<td>0.004**</td>
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<td>0.034**</td>
<td>0.034**</td>
<td>0.034**</td>
</tr>
<tr>
<td>CSR Env\textsubscript{t-1} (Cent.)</td>
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<td>~ 0.001</td>
<td>~ 0.009**</td>
<td>101</td>
<td>0.008</td>
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<td>0.000</td>
</tr>
<tr>
<td>CSR Com\textsubscript{t-1} (Cent.)</td>
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<td>0.009**</td>
<td>0.008</td>
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<td>0.000</td>
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<tr>
<td>CSR Hum\textsubscript{t-1} (Cent.)</td>
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<tr>
<td>CSR Emp\textsubscript{t-1} (Cent.)</td>
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<tr>
<td>CSR Div\textsubscript{t-1} (Cent.)</td>
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<tr>
<td>CSR Pro\textsubscript{t-1} (Cent.)</td>
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<td>0.000</td>
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<td>CSR Env\textsubscript{t-1} x ln(Assets)\textsubscript{t} (Cent.)</td>
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</tr>
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<td>CSR Pro\textsubscript{t-1} x ln(Assets)\textsubscript{t} (Cent.)</td>
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<tr>
<td>CSR Gov\textsubscript{t-1} x ln(Assets)\textsubscript{t} (Cent.)</td>
<td>0.000</td>
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<td>0.241</td>
<td>0.243</td>
<td>0.242</td>
<td>0.243</td>
<td>0.244</td>
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<td>0.645</td>
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<td>0.645</td>
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<tr>
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<td>0.239</td>
<td>0.239</td>
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<td>0.240</td>
<td>0.241</td>
<td>0.241</td>
<td>0.643</td>
<td>0.647</td>
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<td>0.644</td>
<td>0.643</td>
<td>0.659</td>
</tr>
<tr>
<td>Adjusted R\textsuperscript{2}</td>
<td>0.239</td>
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<td>0.239</td>
<td>0.240</td>
<td>0.240</td>
<td>0.241</td>
<td>0.241</td>
<td>0.643</td>
<td>0.647</td>
<td>0.642</td>
<td>0.644</td>
<td>0.644</td>
<td>0.643</td>
<td>0.659</td>
</tr>
</tbody>
</table>

* Significant at 0.10 level. ** Significant at 0.05 level.

$^1$ Multicollinearity issues found, but not possible to solve through centered variables.
Table 13 – Equation 4: Regression Results for CFP with CSR Dimensions and Size (Employees)

|                  | ROA Model 8 | ROA Model 9 | ROA Model 10 | ROA Model 11 | ROA Model 12 | ROA Model 13 | ROA Model 14 | Tobin’s Q Model 8 | Tobin’s Q Model 9 | Tobin’s Q Model 10 | Tobin’s Q Model 11 | Tobin’s Q Model 12 | Tobin’s Q Model 13 | Tobin’s Q Model 14 |
|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Constant         | 0.004**     | 0.004**     | 0.004**     | 0.004**     | 0.004**     | 0.035**     | 0.038**     | 0.033**        | 0.035**       | 0.036**       | 0.030**       | 0.033**       | 0.033**       | 0.033**       |
| CSR Env         | 0.001       |             |             |             |             |             |             | −0.010         |                 |                 |                 |                 |                 |                 |
| CSR Com         |              | −0.002**    |             | −0.012**    |             |             |             |                 |                 |                 |                 |                 |                 |                 |
| CSR Hum (Cent.)  | 0.003       |             |             |             |             |             | −0.041      |                 |                 |                 |                 |                 |                 |                 |
| CSR Emp         |              |             |             |             |             |             |             | −0.003         |                 |                 |                 |                 |                 |                 |
| CSR Div         |              |             |             |             |             |             |             |                 |                 |                 | −0.003         |                 |                 |                 |
| CSR Prod        |              |             |             |             |             |             |             |                 |                 |                 |                 |                 |                 |                 |
| CSR Gov         |              |             |             |             |             |             |             |                 |                 |                 |                 |                 |                 | 0.007**       |
| ln(Emp.)        | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | −0.002      | −0.002         | −0.003**       | −0.002         | −0.003**       | −0.002         | −0.001         | −0.001         |
| CSR Env x ln(Emp.) | 0.000      |             |             |             |             |             |             |                 |                 |                 |                 |                 |                 |                 |
| CSR Com x ln(Emp.) | 0.000*    |             |             |             |             |             |             |                 |                 |                 |                 |                 |                 | 0.033**       |
| CSR Hum x ln(Emp.) (Cent.) | 0.000      |             |             |             |             |             |             | −8.424E-5      |                 |                 |                 |                 |                 |                 |
| CSR Emp x ln(Emp.) | 0.000*    |             |             |             |             |             |             |                 |                 |                 |                 |                 |                 | 0.022         |
| CSR Div x ln(Emp.) | 8.109E-5   |             |             |             |             |             |             |                 |                 |                 |                 |                 |                 | 0.001         |
| CSR Prod x ln(Emp.) | 0.000      |             |             |             |             |             |             |                 |                 |                 |                 |                 |                 | −0.009**      |
| CSR Gov x ln(Emp.) | 0.000      |             |             |             |             |             |             |                 |                 |                 |                 |                 |                 | −0.002        |
| ROA_t           | 0.498**     | 0.492**     | 0.497**     | 0.497**     | 0.496**     | 0.493**     |             |                 | 0.754**        | 0.752**        | 0.755**        | 0.756**        | 0.755**        | 0.765**        |
| Tobin’s Q_t     | 0.240       | 0.245       | 0.240       | 0.240       | 0.242       | 0.243       | 0.642       | 0.646          | 0.643          | 0.643          | 0.643          | 0.643          | 0.658          | 0.643          |
| R²              | 0.237       | 0.242       | 0.237       | 0.240       | 0.237       | 0.240       | 0.641       | 0.645          | 0.641          | 0.641          | 0.641          | 0.641          | 0.657          | 0.642          |
| Adjusted R²     |             |             |             |             |             |             |             |                 |                 |                 |                 |                 |                 |                 |                 |

* Significant at 0.10 level. ** Significant at 0.05 level.

¹ Multicollinearity issues found, but not possible to solve through centered variables.
Following H4.a, H4.b tests the moderation effect of banks’ size on the impact of individual dimensions of CSR performance on CFP (Table 12 and Table 13). Centered measures were used when multicollinearity issues were detected. Nonetheless, they did not solve multicollinearity found in $CSR_{Human\;Rights,1} \times \ln(Assets)_t$, $CSR_{Human\;Rights,1} \times \ln(Employees)_t$, and $CSR_{Human\;Rights,1} \times \ln(Employees)_t$. In these cases, centered variables were maintained to be consistent with the remaining variables in the model. Results should be taken into consideration with caution.

Table 12 and 13 indicate that size does not moderate the impact of different CSR dimensions on CFP when ROA is used as a proxy variable. On the other hand, $CSR_{Community,1} \times \ln(Assets)_t$, $CSR_{Product,1} \times \ln(Assets)_t$, $CSR_{Community,1} \times \ln(Employees)_t$, and $CSR_{Product,1} \times \ln(Employees)_t$ show statistical significance on Tobin’s Q models (0.03, -0.09, 0.03 and -0.09, respectively) at a confidence interval of 95%. This means that size moderates the impact of banks’ CSR Community and Product on Tobin’s Q, in the sense that the impact of CSR Community on Tobin’s Q is more favourable for larger banks, whereas the impact of CSR Product on the same financial variable is more beneficial for smaller banks. As a result, the negative impact of CSR Community on Tobin’s Q is softened for larger banks, while size actually reduces the positive impact of CSR Product on this CFP variable.

Therefore, H4.b.i and H4.b.ii are partially supported.

5.10 Results from Hypotheses 5.a

H5.a.i. Banks’ geographical scope of activity moderates the impact of overall CSR on CFP, in the sense that multinational banks have higher impacts.

H5.a.ii. Bank’s geographical scope of activity moderates the impact of overall CSR on CFP, in the sense that local banks have higher impacts.

Table 14 shows the regression results for the moderation effect of banks’ geographical scope of activity over the impact of overall CSR performance on CFP – ROA and Tobin’s Q ratio.

Results indicate that only $CSR_{Overall,1} \times International\;Scope_t$ in the Tobin’s Q regression model has statistical significance (-0.004) at a confidence interval of 95%. This means that the impact of overall CSR performance on their Tobin’s Q ratio is less favourable for multinational banks.

Therefore, 5.a.i and 5.a.ii are not supported.
Table 14 - Equation 5: Regression Results for CFP with Overall CSR and Geographical Scope of Activity

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<tr>
<th></th>
<th>ROA&lt;sub&gt;t-1&lt;/sub&gt;</th>
<th>ROA&lt;sub&gt;t-1&lt;/sub&gt;</th>
<th>ROA&lt;sub&gt;t-1&lt;/sub&gt;</th>
<th>Tobin’s Q&lt;sub&gt;t-1&lt;/sub&gt;</th>
<th>Tobin’s Q&lt;sub&gt;t-1&lt;/sub&gt;</th>
<th>Tobin’s Q&lt;sub&gt;t-1&lt;/sub&gt;</th>
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<tr>
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<td>0.004**</td>
<td>0.004**</td>
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<td></td>
</tr>
<tr>
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<td>-0.004**</td>
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<tr>
<td>CSR Overall&lt;sub&gt;t-1&lt;/sub&gt; x NationalScope&lt;sub&gt;t&lt;/sub&gt;</td>
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<td>0.000</td>
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<td>CSR Overall&lt;sub&gt;t-1&lt;/sub&gt; x LocalScope&lt;sub&gt;t&lt;/sub&gt;</td>
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<tr>
<td>R²</td>
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<td>0.240</td>
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<td>Adjusted R²</td>
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* Significant at 0.10 level. ** Significant at 0.05 level.

5.11 Results from Hypotheses 5.b

H5.b.i. Banks’ geographical scope of activity moderates the impact of individual CSR dimensions on CFP, in the sense that multinational banks have higher impacts.

H5.b.ii. Bank’s geographical scope of activity moderates the impact of individual CSR dimensions on CFP, in the sense that local banks have higher impacts.

Building on H5.a, hypotheses 5.b explore the moderation effect of the relationship between individual dimensions of CSR performance and CFP.

Table 15 demonstrates that CSR Governance<sub>t-1</sub> x InternationalScope<sub>t</sub> has statistical significance (-0.030) at a confidence interval of 95%. Thereby, the impact of the CSR Governance on Tobin’s Q turns out to be negative for multinational banks.

Complementarily, Table 16 suggests that in the context of the impact of individual CSR dimensions on ROA, there is statistical significance for CSR Employee Relations<sub>t-1</sub> x LocalScope<sub>t</sub> (-0.002) at a confidence interval of 90%. In other words, CSR Employee Relations has a less favourable impact on ROA for local banks, changing from a positive to negative effect.

Interestingly, Table 17 indicates that CSR Product as a higher impact on ROA (0.001 at p-values≤0.05) and CSR Governance on Tobin’s Q (0.013 at p-values≤0.1) for national banks, suggesting that an intermediate scope of activity (neither local nor international) is the most favourable to boost the effect of these CSR dimensions on CFP.

In light of the above, H5.b.i and H5.b.ii are not supported.
### Table 15 – Equation 5: Regression Results for CFP with CSR Dimensions and International Scope of Activity

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* Significant at 0.10 level. ** Significant at 0.05 level.
Table 16 – Equation 5: Regression Results for CFP with CSR Dimensions and Local Scope of Activity

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* Significant at 0.10 level. ** Significant at 0.05 level.
Table 17 – Equation 5: Regression Results for CFP with CSR Dimensions and National Scope of Activity

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* Significant at 0.10 level. ** Significant at 0.05 level.
6 Discussion

This chapter aims to further explore the empirical results outlined in the previous section, linking them to the literature review. The main goal is to provide an answer to the research question:

_How does CSR, both overall and dimension wise, impact CFP in the banking industry?_

The following sub-sections explore the results obtained in the context of each sub-question and hypothesis (Appendix 9).

6.1 Evolution of CSR Performance in the Banking Industry

Literature suggests that banks’ social responsibility has grown for the past years (EBF, 2013; Scholtens, 2009), in the context of the increasing public scrutiny, need of accounting for direct and indirect implications in the society (Decker, 2004; Relano, 2015) and calls of higher institutions to engage in CSR as a way to ease the negative consequences of the 2008 financial crisis (EBF, 2013).

Regarding this, empirical results indicate that this potential improvement of banks’ socially responsible behaviour is not so straightforward. In fact, findings reveal that, when taken at an aggregated level, banks’ overall CSR performance has not changed after the financial crisis. Nonetheless, when disaggregated and taken at a dimensional level, it is possible to verify that CSR has changed in specific dimensions after 2008, though not all in the same direction. While banks’ CSR has increased in terms of environment, employee relations and product; it has decreased in terms of community, diversity and governance. CSR performance towards human rights did not change significantly after 2008.

These results bring new insights into the literature. Firstly, they indicate that banks perceive CSR as a multidimensional concept, regarding each dimension separately and acting on it in an independent and individual way. Secondly, it is clear that banks have focused their social performance after the 2008 financial crisis in specific dimensions, attaching to them different degrees of importance and priority.

In this context, results show that the banking industry regards environment, employee relations and product quality as crucial, having improved its performance in these dimensions after the financial crisis. These preferences might be explained by the fact that: environment has become a rising concern across all industries, and banking seems to be no exception; employees are increasingly valued in today’s organisations; and product quality is paramount in this industry as demand for socially responsible products in this sector is growing (Decker, 2004; Scholtens, 2009).
On the other hand, banks have decreased their social responsibility in terms of community, diversity and governance, suggesting that they perceive these dimensions as being secondary. It seems that banks see no clear direct return from investing in CSR towards these issues, potentially because: investment in the community requires a large amount of money and effort to be indeed impactful (Brammer & Millington, 2008); and diversity and governance are seen as internal dimensions, concerning sensitive issues, often kept to shareholders and the management team, with low exposure to the public eye.

All in all, results demonstrate that banks have made strategic choices in terms of CSR, revealing resource constraints issues and/or a strong belief that investing on fewer and specific dimensions can be more beneficial after the past financial downturn. CSR in terms of environment, employee relations and product are seen as worthy and preferable investments at the expense of other dimensions as community, diversity and governance. This is partially aligned with calls from EBF (2013), urging banks to develop a socially responsible behaviour in terms of (i) community involvement; (ii) environmental impact; (iii) financial education; (iv) information disclosure; (v) socially responsible investments; and (vi) labour relations.

6.2 Nature of the Impact of CSR on CFP in the Banking Industry

Although a positive relationship between CSR and CFP proliferated in the literature (Orlitzky et al., 2003; Soana, 2011), the existence of contradicting results suggests that this might not always be the case and that individual CSR dimensions can impact CFP differently (Jayachandran et al., 2013). The present empirical research makes evidence of this.

When taken aggregately, banks’ CSR performance does not show a direct relationship with any of the financial variables studied – neither accounting- nor market-based measures. This finding supports some authors (Orlitzky et al., 2003; Wang & Berens, 2015) to a certain extent, demonstrating that it is not always possible to establish a direct link between CSR and CFP, though not excluding a potential indirect relationship between both constructs. In fact, it simply reveals that the potential mechanisms that can relate CSR to CFP are too complex to be captured in a direct and linear relationship, in line with Simpson and Kohers (2002).

Notwithstanding, a subsequent analysis of CSR at a disaggregated level brings new insights into this general finding. While banks’ CSR Governance is found to have a positive impact on ROA, CSR Community has a negative effect on the same variable. On the other hand, CSR oriented to product and governance improve banks’ Tobin’s Q, whereas CSR towards environment, community and diversity may actually have a negative impact on this ratio. There is no relationship between the remaining CSR dimensions and CFP measures.

From these findings, several conclusions may be drawn. Firstly, in line with some studies (Jayachandran et al., 2013; Wang & Berens, 2015), it seems that individual dimensions of CSR
can differently impact CFP, indicating that arguments standing for a positive, negative or even non-existing relationship between CSR and CFP have some ground of truth depending on the social responsibility dimension considered.

Secondly, it seems that the choice of certain CFP measures can in fact influence the research findings (McGuire et al., 1988; Orlitzky et al., 2003). In this case, results from Tobin’s Q regression models have shown more explanatory power than ROA’s models.

Thirdly, CSR concerning product and governance has shown a positive impact on banks’ CFP. It is reasonable to consider that social performance in these fields increases banks’ CFP, since improving the quality of the product and enhancing the principles through which the company is managed increments banks’ short-term profitability and provides favourable signals to the market on the company’s future performance.

Fourthly, external dimensions of CSR (namely, environment and community) have a negative impact on CFP. This might be explained by the fact that investments on such dimensions of CSR are generally high and imply a significant investment (Brammer & Millington, 2008), damaging short-term profitability (in the case of CSR community) and the market perception on it (in the case of both dimensions). They are seen as investments that lead banks to incur costs superior to potential revenues, at least in the short-term, corroborating some authors’ findings (Barnett & Salomon, 2006; Callan & Thomas, 2009; Simpson & Kohers, 2002).

Finally, it is worth mentioning that, although banks signalize a preference to improve CSR performance in terms of environment, employee relations and product quality, and to decrease efforts in terms of community, diversity and governance; they are just partially right. Results from H2.b indicate that increasing CSR performance in terms of environment and decreasing it in terms of governance may, in fact, jeopardize banks. They should rather focus on improving CSR Governance next to CSR Product, and decrease CSR Environment alongside CSR Community and Diversity to increase the company’s benefits from the impact of social performance on CFP.

6.3 Evolution of the Impact of CSR on CFP in the Banking Industry

Based on the literature, it was expected the impact of CSR on CFP to increase after the 2008 financial crisis, since social responsibility has been advocated as a way of banks to restore financial services’ reputation and confidence, improve relations with different stakeholders and finally enhance their financial performance (Birindelli et al., 2015; Decker, 2004; EBF, 2013; Lentner et al., 2015). Interestingly, empirical results suggest that the effect of CSR on CFP has not changed after the 2008 financial crisis, neither in terms of overall CSR, dimensional CSR, ROA nor Tobin’s Q. Therefore, although there were significant changes in banks’ social
performance after the financial crisis (H1.a and H1b), these have not been reflected on the
direct relationship between CSR and CFP.

Several reasons might shed light on these results. First, it might be the case that the changes
in banks’ CSR performance after the 2008 financial crisis were not substantial enough to
impact their CFP. In fact, Godfrey et al. (2009) suggests that a substantial investment on CSR
activity is needed to be noticed and credible, so that it is appreciated by stakeholders and
impacts firm financial performance.

Second, these changes might not be visible in the short-term. In fact, some authors suggest
that it takes time to perceive the impact of social responsibility on financial performance
(Brammer & Milington, 2008). Likewise, potential changes in the effect of CSR on CFP due to
an event like the 2008 financial crisis might be only possible to observe in the long-term.

Finally, results only take into consideration the direct impact of CSR on CFP, thus not
accounting for a potential indirect link between these variables. In fact, in line with several
authors (Orlitzky et al., 2003; Saeidi et al., 2015), it might be the case that the financial crisis
has only changed the impact of CSR on CFP via banks’ reputation, competitive advantage or
customer satisfaction. In other words, a change in the relationship between social and financial
performance after 2008 might only exist in the sense that it is mediated by banks’ reputation,
competitive advantage or customer satisfaction (potential mediators).

Therefore calls from superintendent institutions highlighting the potential benefits of engaging
with CSR may still be reasonable. However, further research is needed to assess the impact
of CSR on CFP after the 2008 financial crisis.

6.4 Moderators of the Impact of CSR on CFP in the Banking Industry

Finally, two main variables were suggested to moderate this impact: banks’ size and their
geographical scope of activity.

The present empirical research indicates that size moderates the direct relationship between
CSR and Tobin’s Q only at a dimensional level and specifically in terms of community and
product. Firstly, results suggest that for larger banks, either in terms of total assets or number
of employees, the negative impact of CSR Community on Tobin’s Q is softened, though still
remaining negative. This sobering effect may be explained by the fact that larger firms have
the needed resources and structures to make these investments more efficient and impactful
in the community (Dixon-Fowler et al., 2012; Michelon et al., 2013). Furthermore, given that
larger banks have greater implications in the society than smaller banks, it is expected that the
market perceives expenditures in this dimension as part of their implicit social contract,
assessing it from other perspectives than purely economic, i.e. regarding it as more than an
investment to generate superior revenues.
Secondly, findings reveal that the positive effect of CSR Product on Tobin’s Q is decreased for larger banks, suggesting that the market somehow sanctions such investments made by large firms, potentially because product quality is already taken as granted in these cases. In turn, the market highly recognizes small banks’ investment on CSR product, possibly because, given the importance of these costs on the financial structure of such banks, it is a signal of their high commitment towards the future.

Regarding the geographical scope of activity, this variable is found to moderate the relationship between CSR performance and Tobin’s Q, in the sense that the impacts of overall CSR and CSR Governance on Tobin’s Q are less favourable for multinational banks, shifting from being positive to becoming negative. This is consistent with the belief that banks tend to lose the needed focus and accountability to make such investment more efficient with an international scope of activity.

Furthermore, the impact of CSR Employees Relations on ROA is statistically significant for local banks, implying that for them such investments actually have a negative effect on short-term profitability, though at a lower confidence interval than other results (90%).

Finally, it was found that the impact of CSR Product and CSR Governance on ROA and Tobin’s Q, respectively, is positive and stronger for national banks, suggesting that an intermediate scope of activity (neither international nor local) might in fact be the most beneficial.

7 Conclusion

The present chapter outlines the main conclusions of this study, its theoretical and managerial implications, and limitations and suggestions future research.

7.1 Conclusions

Motivated by recent calls for a more socially responsible behaviour from the banking industry in the context of the 2008 financial crisis (EBF, 2013; Lentner et al., 2015; Paulet et al., 2015), this study investigates the direct impact of CSR, both overall and dimension wise, on banks’ financial performance. More specifically, it sheds light on: (i) the evolution of CSR in the banking industry; (ii) the impact of CSR on banks’ short-term profitability and on market perception of future profitability; (iii) how these impacts have changed in the context of the financial crisis; and (iv) the potential moderation effect of size and geographical scope of activity in the relationship between CSR and CFP.

In general, this research suggests that CSR should be regarded as a multidimensional concept and thereby its different dimensions should be considered and assessed individually. In fact, rarely did tests regarding overall CSR performance hypotheses show any statistical significance (H1.a, H2.a, H3.a and H4.a). Richer insights were usually collected when banks’
CSR performance was considered at a disaggregated level, enabling a deeper understanding of the evolution of each dimension and respective relationships with CFP, mainly in the context of the 2008 financial crisis. This is consistent with the fact that, because CSR is a multidimensional construct, it cannot be captured by an isolated aggregated variable. It seems there is a loss of information when the overall CSR measure is considered instead of the dimensional one.

In terms of the evolution of CSR in the banking industry, this study concludes that distinct CSR dimensions have changed differently over time (H1.b). Whereas the relevance of CSR in terms of environment, employee relations and product has increased in the banking industry since the 2008 financial crisis; social performance in terms of community, diversity and governance has decreased during the same period. Therefore, these results bring new insights into the literature, supporting that banks’ CSR performance has in fact grown (Scholtens, 2009) but only regarding specific dimensions.

Furthermore, the present study corroborates general literature (Wang & Berens, 2015) finding that individual dimensions of banks’ CSR have distinct impacts on CFP, in terms of nature and strength (H2.b). Moreover, it is shown that these impacts are also dependent on the exact CFP measure considered (ROA or Tobin’s Q ratio), in line with existing research (McGuire et al., 1988; Orlitzky et al., 2003). This suggests that banks’ investment on social performance should take into consideration the expected CFP outcome. Nonetheless, it is worth mentioning that increasing CSR Governance and decreasing CSR Community seem to be safe bets to boost any of the studied financial measures (H2b). Thus, when comparing the results above, it is interesting to note the existence of discrepancies between what banks are doing and considering to potentiate their financial performance the best (H1.b) and what actually does (H2.b).

In addition, this investigation indicates that the direct impact of banks’ CSR performance on CFP has remained unchanged after the 2008 financial crisis (H3.a and H3.b), challenging existing research and current institutional calls for an increase of banking engagement with CSR as a way to overcome the negative consequences of the past financial downturn (Birindelli et al., 2015; Decker, 2004; EBF, 2013; Lentner et al., 2015).

Finally, important moderation effects over this relationship were found in the present research. First, size exerts a sobering effect, limited to two CSR dimensions only (H4.b). While the negative impact of CSR Community on Tobin’s Q is weakened for larger banks, the impact of CSR Product is more favourable for smaller banks. Second, an international scope of activity was found to jeopardize the impact of banks’ overall CSR performance and CSR Governance on Tobin’s Q ratio; whereas local banks showed signs of a less beneficial impact of CSR.
Employee Relations on ROA (H5.b). National banks revealed to be those able to boost the impact of CSR Product and CSR Governance on ROA and Tobin’s Q, respectively, the most.

7.2 Theoretical and Managerial Implications

The present research is aimed to find how banks’ CSR performance, both overall and dimension wise, impact their financial performance. Being a fairly unexplored topic in the context of the banking industry, this study provides valuable theoretical and managerial implications.

As mentioned previously, although literature on CSR and its link to CFP has been substantially increasing for the last decades (Carroll, 1999, p. 1102; Dobers, 2009; McGuire et al., 1988; Soana, 2011) and banks’ CSR has become a growing topic (Birindelli et al., 2015; Chih et al., 2009; Decker, 2004), few authors have attempted to empirically study this relationship in the banking industry (Carnevale et al., 2012; Scholtens, 2009; Simpson & Kohers, 2002; Soana, 2011). Therefore, the present research provides an important contribution to academia by exploring this link in the context of a specific industry. Moreover, this study regards CSR as a multidimensional concept, accounting for both overall and dimensional CSR performance, and measuring CFP through accounting- and market-based measures (ROA and Tobin’s Q, respectively). By doing so, this study is able to show evidence that the relationship between CSR and CFP highly depends on the measures considered and that individual dimensions of banks’ CSR have different impacts on CFP – a recent field of research in general literature (Boesso et al., 2015; Michelon et al., 2013; Wang & Berens, 2015). Finally, the present study considers for the first time banks’ size and their geographical scope of activity as potential moderators of the relationship between CSR and CFP.

Likewise, important managerial implications arise from this study. In light of the recent institutional calls urging banks to further engage with CSR in the context the 2008 financial crisis, this investigation reveals which CSR dimensions in specific boost banks’ financial performance (ROA and Tobin’s Q) and which have a neutral or even undesirable outcome. It further allows banks to understand the effect on their size and geographical scope of activity on this impact. Moreover, by comparing the current banks’ CSR performance against these results, the present study enables these companies to adjust their CSR performance and align it with the expected outcomes. Finally, it provides banking superintendent institutions with insightful information to update their calls and create the necessary conditions to better support banks to effectively adjust their CSR conduct.

7.3 Limitations and Future Research

The present research presents some limitations that should be taken into consideration. Firstly, this study only focuses on the direct impact of CSR on CFP. Several authors have suggested
the existence of an indirect link between these variables (Orlitzky et al., 2003; Saeidi et al., 2015; Wang & Berens, 2015). Future research should test this relationship in the context of the banking industry, exploring the potential mediation effect of variables, such as reputation, competitive advantage or customer satisfaction (Orlitzky et al., 2003; Saeidi et al., 2015).

Secondly, this study exclusively considers the potential impact of CSR on CFP within one year, thus only conclusions regarding short-term impacts can be drawn. As there is some debate on the short-term versus long-term relationship between these variables (Aupperle et al., 1985; Callan & Thomas, 2009; Decker, 2004), further research on the long-term impact of CSR on CFP in the banking industry should be conducted.

Thirdly, it may be argued that the use of KLD ratings in the context of a specific industry is not the most appropriate measure, since it is applied to companies across different industries, neither accounting for the particularities of banking nor the characteristics of CSR in this sector.

Fourthly, the results of the present research do not take into consideration the rise of impact investment, an emerging asset class, increasingly integrated on banks’ core activities, which is hardly captured by generic CSR ratings. Hence, future research is suggested to explore the particular evolution of impact investing, especially after the 2008 financial crisis.

Furthermore, the research sample is confined to U.S. banks, thereby it may not be generalized to other national contexts. Existing literature has suggested national culture to play a role in the relationship between CSR and firm performance relationship (Michelon et al., 2013; Miras-Rodríguez et al., 2015; van den Heuvel et al., 2011). Therefore, it is recommended that future research analyses a broader sample of banks regarding their geographical origin, studying the potential moderation effect of national culture.

Finally, not all the multicollinearity issues were possible to solve using centered variables. As a consequence, results concerning these variables should be regarded with caution.
References


The Impact of CSR on CFP in the Banking Industry


