Corporate Governance and Corporate Social Responsibility Disclosure: Evidence from the US Banking Sector

ABSTRACT

There is a distinct lack of research into the relationship between corporate governance and corporate social responsibility (CSR) in the banking sector. This paper fills the gap in the literature by examining the impact of corporate governance, with particular reference to the role of board of directors, on the quality of CSR disclosure in US listed banks' annual reports after the US sub-prime mortgage crisis. Using a sample of large US commercial banks for the period 2009-2011 and controlling for audit committee characteristics, board meeting frequency, and banks' profitability, size and risk, we find evidence that board independence and board size, the two board characteristics usually associated with the protection of shareholder interests, are positively related to CSR disclosure. This indicates that, with regard to CSR disclosure, more independent boards of directors and larger boards are the internal corporate governance mechanisms which promote both shareholders' and other stakeholders' interests. Contrary to our expectations, CEO duality also impacts positively on CSR disclosure. From an agency-theoretical viewpoint, this suggests that powerful CEOs may promote transparency about banks' CSR activities for their private benefits. While this could indicate that powerful CEOs are under particular pressure to appease stakeholders' concerns that they might abuse their power by providing a high degree of CSR disclosure, it could also be a sign of managerial risk aversion or managers' private reputational concerns.

Keywords: Corporate governance. CSR disclosure. US Banks. Content analysis. Financial crisis.

1. Introduction

Financial institutions, in particular banks, have come under increasing pressure since the sub-prime mortgage crisis and the following credit crunch to take a more long-term view of their investors' business interests and to acknowledge and respond to their obligations to society (Matten, 2006; Money and Schepers, 2007; Gill, 2008; Grove, Patelli, Victoravich and Xu, 2011). Due to the extensive negative external effects poorly managed and controlled banks can impose on society, the perception of the firms' corporate social responsibility (CSR) activities is important not only for investors' and customers' risk assessment, but also for regulators' good-will and for the public's confidence in the financial system.

Extensive prior research suggests that CSR reporting can impact positively on stakeholders' perceptions of firm performance, firm value and firm risk, and thereby on firms' profitability, cost of capital and share price (Gray, Kouhy and Lavers, 1995b; Simpson and Kohers, 2002; Scholtens, 2008; Godfrey, Merrill and Hansen, 2009; Salama, Anderson and Toms, 2011; Ghoul, Guedhami, Kwok and Mishra, 2011; Cormier, Ledoux and Magnan, 2011; Lourenco, Branco, Curto and Eugenio, 2012). Moreover, as CSR reporting contributes to the reduction of information asymmetry between managers and investors as well as other stakeholders, comprehensive CSR reporting aids the supervision and control of managers. Effective boards of directors are therefore expected to promote CSR reporting (Jamali, Safieddine and Rabbath, 2008).

Given the potential impact of CSR reporting on firms' sustainability, there is a surprising dearth of research into the impact of corporate governance on CSR disclosure. Existing research mainly concentrates on the influence of CSR committees on CSR disclosure (Gill, 2008; Spitzeck, 2009; Li, Fetscherin, Alon, Lattemann and Yeh, 2010; Kolk and Pinkse, 2010), and largely neglects investigating whether key characteristics of the board of directors impact on the reporting of CSR-related issues. As the board of directors is responsible for the development of sustainable business strategies and the supervision of the responsible use of the firms' assets, it is the board, which takes the crucial decisions in relation to a firm's CSR policies. If firms engage in CSR activities and reporting not merely as a temporary fad or to appease managers' personal moral concerns (Porter and Kramer, 2006; Hennigfeld, Pohl and Tolhurst, 2006), but to acknowledge societal concerns and maintain positive relationships with key stakeholders in order to improve the sustainability of the business, one would expect that firms with more effective boards structures will be particularly diligent in providing information on CSR-related issues. Accordingly, and in light of increasing public, customer and investor pressures, corporate governance features, such as board characteristics, which were originally designed mainly to protect shareholder interests (Fama, 1980; Hermalin and Weisbach, 1998, 2003), might be effective in encouraging managerial stewardship for the benefit of a wide range of stakeholders.

Understanding the link between corporate governance, in particular board characteristics, and CSR reporting is important for banks, because of their potential significant negative external effects on society. Since the credit crunch of 2007-2008, stakeholders' perceptions of firms' risk and performance have become particularly important to banks' sustainability, since they rely on depositors and government agencies as key sources for funding and liquidity (Grove et al., 2011; Veronesi and Zingales, 2010), and as investors have become increasingly risk averse (Gemmill and Keswani, 2011). However, there is a distinct lack of empirical research into the relationship between corporate governance and CSR in the banking sector. This paper fills the gap in the literature by investigating whether corporate governance characteristics, in particular key features of the board of directors, impact on CSR disclosure in US commercial banks' annual reports, for the period after the credit crunch of 2007-2008. We use banks' annual reports, rather than CSR or corporate sustainability reports, because annual reports are the key documents scrutinised by a wide range of stakeholders (e.g. Toms, 2002; Campbell and Slack, 2008). Additionally disclosure of CSR-related information in annual reports allows boards to signal their balance between financial and social objectives (Gray, Kouhy and Lavers, 1995a). Unlike previous research into CSR disclosure, which relied on counting relevant words or sentences (e.g. Li, Pike and Haniffa, 2008; Kothari, Xu and Short, 2009; Haniffa and Cooke, 2005), we use content analysis to measure the comprehensiveness and quality of disclosed information in banks' annual reports. The rationale for this is that the quality of disclosure is more essential than the quantity (Hasseldine, Salama and Toms, 2005; Toms, 2002). In line with definitions, frameworks and methods employed in the mainstream CSR literature (Gray et al., 1995a, 1995b; Haniffa and Cooke, 2005; Branco and Rodrigues, 2006; Scholtens, 2008; Holder-Webb, Cohen, Nath and Wood, 2009), we develop a CSR disclosure measure based on the content of four CSR categories − community involvement, environment, employees, and product and customer service quality − and score the content of information in each of the categories based on the existence and comprehensiveness of information disclosed.

Our findings suggest that board independence and board size positively affect CSR disclosure by large US banks. This indicates that, possibly due to the increasing realisation of the long-term benefits of CSR, corporate governance mechanisms that were chiefly designed to protect minority shareholder interests might also encourage managerial stewardship for the benefit of all stakeholders. However, contrary to our expectations, Chief Executive Officer (CEO) duality, also, appears to be positively related to CSR disclosure. We are unable to identify whether stakeholders benefit from the ability of powerful CEOs to pursue private interests by engaging in CSR activities and CSR reporting, or whether the market pressures and public scrutiny force powerful CEOs to engage in CSR disclosure as a means of allaying fears that they might exploit their position.

The remainder of this paper proceeds as follows. The next section provides a discussion of the relationship between corporate governance and CSR disclosure. This is followed by the hypotheses development. Afterwards, we discuss our research design, in terms of sample data, measurement of variables and the model, before we present the results and their analysis. The conclusion is given in the final section.

2. Corporate Governance and CSR

According to the World Bank, "corporate social responsibility is the commitment of businesses to contribute to sustainable economic development by working with employees, their families, the local community and society at large to improve their lives in ways that are good for business and for development" (Starks 2009, p. 465).

CSR can have both financial and strategic advantages for firms. By engaging in social activities and reporting on CSR, firms develop the trust and goodwill of stakeholders, which can provide them with competitive advantages (Aguilera, Williams, Conley and Rupp, 2006; Money and Schepers, 2007; Gill, 2008; Kolk and Pinkse, 2010). Research suggests that CSR reporting promotes firms' image and enhances their reputation (Gray et al., 1995b; Li et al., 2010; Vanhamme, Lindgreen, Reast and van Popering, 2012) as relationships with stakeholders are based on a positive exchange of benefits (Bear, Rahman and Post, 2010). Socially responsible firms tend to experience greater brand loyalty (Mackenzie, 2007), customer satisfaction and employee commitment (Matten, 2006). CSR engagement also reduces the risk that firms' performance is negatively affected by labour disputes, product safety scandals and consumer fraud (Waddock and Graves, 1997). Accordingly, firms which are perceived to have high CSR standards are subject to lower firm specific risks due to lower cash flow variability (Salama et al., 2011).

As CSR engagement and CSR reporting can impact on firms' risks and profitability, investors increasingly consider firms' social behaviour in their investment decisions (Simpson and Kohers, 2002; Aguilera et al., 2006; Matten, 2006). Research by Ghoul et al. (2011) on US firms indicates that investment in employee relations, environmental policies and CSR product strategies helps lower firms' costs of capital. Investors, therefore, increasingly require boards and managers to engage in CSR and report on this engagement (Scholtens, 2008; Kolk and Pinkse, 2010).

However, firms' engagement in CSR is not merely of interest to long-term profit maximising shareholders. Firms' dependence on other stakeholders and on the frameworks and resources provided by civil society means that there is a reciprocal expectation that firms "balance the multiplicity of stakeholder interests" and "are responsible to society as a whole" (van Marrewijk, 2003, pp. 96-97). Expectations about firms' social responsibilities are, therefore, affected by their potential impact on stakeholders and civic society. This is one of the reasons why industries, which can impose significant negative external effects on society, such as the financial service sector, tend to be comparatively tightly regulated and scrutinised. The huge negative external effects failing banks in the US and Europe recently imposed on society are the driving force behind attempts by national and international regulators to improve banking standards and explain why the CSR activities of banks have come under increased public scrutiny (Grove et al., 2011).

While governments have the responsibility to set regulatory frameworks for the operation of firms at national and international level, it is the board of directors, which is ultimately responsible for the development of sustainable business strategies and the oversight of managers' use of the firms' resources (OECD, 1999). Both at national and at firm-level, "good corporate governance" is expected "to ensure that corporations take into account the interests of a wide range of constituencies, as well as of the communities within which they operate, and that their boards are accountable to the company and the shareholders" (OECD, 1999, p. 5). However, with regard to firms' engagement in CSR, there is so far little research into whether "good" corporate governance at board level has any impact (e.g. Jo and Harjoto, 2011). This is of particular concern, given the potential conflicts of interest between shareholders, other stakeholders and the public at large. As most firm-level corporate governance mechanisms were originally developed to protect shareholder interests (Fama, 1980), it is by no means a foregone conclusion that "good" corporate governance is also beneficial to the interests of other stakeholders and civic society.

3. Hypotheses Development

In situations where goods, labour and capital markets are not perfectly competitive, agency theory suggests that managers might be able and willing to abuse their power to exploit the firms' shareholders as well as other stakeholders (Hermalin and Weisbach, 1998; Haniffa and Cooke, 2002). In such circumstances, when external corporate governance fails, internal corporate governance mechanisms, in particular boards of directors, are expected to play a key role in supervising managers and holding them to account (Fama, 1980; Hermalin and Weisbach, 2003; Li et al., 2008; Guest, 2009). While directors in non-financial companies are usually expected to oversee managers predominantly in the interest of shareholders, financial services regulation extends the fiduciary duties of directors of banks to depositors and regulators (Pathan and Skully, 2010), although the election of the directors remains the purview of shareholders.

The way that boards discharge their duty of supervision and control depends not only on their fiduciary duties but also on their membership and organisation. For example, Pathan's (2009) research on large US bank holding companies indicates that between 1997 and 2004 CEO power and board structure were related to banks' risk taking. The findings do not only show that board characteristics, such as board independence and CEO duality, can impact on firm behaviour; they also demonstrate the importance of differences in stakeholder interests. The pre-credit crunch study indicates that strong, independent boards of directors successfully put pressure on banks' management to increase risk taking for the short-term benefit of shareholders and the detriment of depositors, bondholders and risk-averse CEOs. By contrast, banks with strong CEOs tended to have a lower risk profile, as managers were able to accommodate their personal inclination for risk-aversion, which incidentally also benefitted other stakeholders such as depositors and bondholders.

In the context of CSR disclosure, differences in interests of managers, shareholders and other stakeholders are also likely to play a role in how corporate governance structures affect firm behaviour. However, in this case, as discussed earlier, it appears that shareholders' and other stakeholders' interests might be more closely aligned.

3.1 Board Independence

From an agency theoretical perspective, boards with a high proportion of independent directors are presumed to be more effective in monitoring and controlling management. They are, therefore, expected to be more successful in directing management towards long-term firm value enhancing activities and a high degree of transparency. Independent directors are supposed to be able to assess management performance more objectively than executive directors, as they are less closely involved in the development of firm strategies and business policies. In addition, independent directors are less dependent on the CEO's goodwill than executive directors and affiliated non-executive directors with business links to the firm. Therefore, a higher proportion of independent directors on the board is expected to lead to better monitoring and control of management (John and Senbet, 1998; Ahmed, Hossain and Adam, 2006; Cheng and Courtenay, 2006).

Moreover, independent non-executive directors' remuneration is not tied to the firm's financial performance and growth, unlike the remuneration of top executives and the business prospects of affiliated non-executive directors. Consequently, independent directors are expected to be less focussed on short-term financial performance targets and more interested in measures which enhance firms' long-term sustainability, such as engaging in and reporting on CSR (Ibrahim, Howard and Angelidis, 2003). Banks with independent boards are, therefore, expected to display a greater engagement in CSR and CSR reporting (Jamali et al., 2008; Arora and Dharwadkar, 2011).

Indeed, empirical research suggests that independent directors are more supportive of firms' investment in CSR activities (Johnson and Greening, 1999) and pay more attention to the perception of the firm's social impact than executive or affiliated non-executive directors. Moreover, prior studies indicate that boards of directors with a high proportion of independent directors tend to facilitate a comparatively high degree of transparency and voluntary disclosure (Cheng and Courtenay, 2006; Patelli and Prencipe, 2007; Donnelly and

Mulcahy, 2008; Li et al., 2008; Chau and Gray 2010). This suggests that independent directors are likely to support the disclosure of CSR activities to reduce information asymmetry between insiders and outsiders. This leads to our first hypothesis.

H1: A higher degree of board independence is positively related to CSR disclosure.

3.2 Board Size

Considering group dynamics, smaller boards are often expected to be more effective at monitoring and controlling management than larger boards. Due to their limited size, they are expected to benefit from more efficient communication and coordination as well as higher levels of commitment and accountability of individual board members (Ahmed et al., 2006; Dey, 2008).

However, the drawback of small boards is that the workload of individual members tends to be high, which might limit the monitoring ability of the board (John and Senbet, 1998). Moreover, smaller boards can draw on a less diversified range of expertise than larger boards, which can impact on the quality of the advice and monitoring offered (Guest, 2009).

Empirical research suggests that board size is determined by a variety of factors including industry, firm size and the complexity of the firm's business (Krishnan and Visvanathan, 2009; Pathan, 2009). As commercial banks are complex organisations that are subject to wide-ranging regulation (Grove et al., 2011), we expect that in this context workload considerations are of ultimate importance. Hence, we expect that larger boards will be better able to direct management to engage in CSR activities and to effectively communicate their social performance to the bank's stakeholders. This leads to our second hypothesis.

H2: Board size is positively related to CSR disclosure.

3.3 CEO Duality

Agency theory suggests that managers' private interests are likely to impact on the degree to which they engage in CSR activities and CSR disclosure. In this context, CEO duality can be seen both as a sign and an instrument of managerial power. CEOs are more likely to be appointed as chairs of the boards of directors if they have a successful track record or if they control a large proportion of the firm's shares (Hermalin and Weisbach, 1998). Moreover, as chairs of boards of directors have the ability to set the board's agenda and influence the information provided to the other board members, CEOs who also act as chairs can hide crucial information more easily from other, in particular non-executive, directors (Haniffa and Cooke, 2002; Li et al., 2008; Krishnan and Visvanathan, 2009). Being chair might also enable CEOs to influence board appointments in their favour (Haniffa and Cooke, 2002). Therefore, non-executive directors might be more likely to accept managerial decisions against their better judgement, because they try to avoid confrontations with powerful CEOs, for example to retain their places on the board (Dey, 2008). Empirical research suggests that boards of directors' attention to monitoring is negatively affected by CEO duality (Tuggle, Sirmon, Reutzel, and Bierman, 2010), as is the level of voluntary disclosure (Donnelly and Mulcahy, 2008; Chau and Gray, 2010).

As previously discussed, while it is often assumed that bank CEOs are less risk happy than their diversified shareholders, changes in banks' executive remuneration might have changed this. Empirical studies suggest that executive remuneration in US holding banks has become increasingly risk sensitive, which has encouraged managers to take more risks in order to maximise their short-term pay. Research by Bai and Elyasiani (2013) shows that between 1992 and 2008 the risk sensitivity of CEO pay in US bank holding companies increased significantly and that this is related to an increase in bank risk. Similarly, research by Hagendorff and Vallascas (2011) find that between 1993 and 2007 CEOs of US banks increasingly engaged in risky business transactions, as the proportion of equity-based pay in their performance contracts rose. This suggests that managers' typical inclination to limit their risk exposure to protect their human capital has been eroded by the structure of their executive pay packages. As CSR engagement and disclosure tend to reduce firms' risk profiles (Simpson and Kohers, 2002; Scholtens, 2008; Salama et al., 2011; Ghoul et al., 2011), CEOs might view CSR reporting as detrimental to maximising their remuneration.

Moreover, if powerful CEOs are able to use CSR to further their own interests and moral convictions, rather than the interests of shareholders and other stakeholders, they are likely to be reluctant to provide comprehensive, high quality disclosure of CSR activities. Since the provision of information increases the effectiveness of external control not only by informed investors, financial analysts and the business press (Healy and Palepu, 2001; Li et al., 2008; Beyer, Cogen, Thomas and Walther 2010) but also by other key stakeholders and the public, powerful CEOs are expected to use their influence to curtail voluntary disclosure, including CSR disclosure.

Given the development of executive remuneration in banks during the last 15 years and the ability of CEOs, who also act as chairs of the boards of directors, to influence board behaviour, we expect that:

H3: CEO duality is negatively related to CSR disclosure.

4. Research Design

4.1 Sample

The paper seeks to investigate whether CSR reporting in annual reports of US listed national commercial banks is related to the firms' corporate governance in the wake of the financial crisis of 2007−2008. We therefore examine the CSR disclosures in US national commercial banks' annual reports from 2009−2011. In order to focus on financial institutions which provide similar services and are subject to the same regulations and disclosure requirements, we exclude credit unions, saving institutions and central reserve depositories from our considerations. This leaves us with a sample of 193 banks with total assets varying from $48 million to $2,223 billion. To ensure that banks have a similar level of regulatory scrutiny and public visibility, we further refine our sample by excluding all banks which recorded less than $1 billion in total assets in 2009. The initial sample selected according to the defined criteria consisted of 107 US listed national commercial banks per-year.

The CSR data was collected from banks' 2009, 2010 and 2011 annual reports. The data on board composition and activity was also collected from the banks' annual reports as well as related proxy statements. Financial data was collected from the *Thomson One Banker* database and, if necessary, from the banks' 10-K forms and websites. If one or more of the variables were not found in the mentioned data sources, the corresponding bank was omitted from the sample. This left us with 98 observations for 2009, 97 observations for 2010 and 96 observations for 2011.

4.2 Measuring CSR Disclosure

In line with previous research, this paper focuses on self-reported information on CSR provided by the firms in their annual reports (Gray et al., 1995b). The information contained in the annual report is under much more control of the CEO and the board of directors, than information by the press or interest groups, which many CSR ratings agencies rely on (Johnson and Greening 1999; Barnea and Rubin, 2010; Bear et al., 2010; Jo and Harjoto, 2011). This is important given our research questions. Moreover, compared with specialised CSR reports, annual reports tend to have a much wider readership among shareholders, stakeholders and information intermediaries, such as financial analysts and credit rating agencies. Finally, the majority of the content of annual reports tends to be audited, whereas auditing of CSR reports tends to be much more limited (Pflugrath, Roebuck and Simnett, 2011; Perego and Kolk, 2012). This suggests that the CSR information provided in annual reports has a greater reliability than that published in CSR reports.

Previous studies which aimed at evaluating CSR disclosure have tended to use two main approaches. The first is to use CSR ratings provided by CSR rating agencies (Johnson and Greening 1999; Barnea and Rubin, 2010; Bear et al., 2010). We reject this option as the underlying rationale for the ratings tends to remain obscure and the rating is not only affected by information disclosed by the firm. The second approach is to measure the disclosure content using word or page counts (Li et al., 2008; Kothari et al., 2009; Haniffa and Cooke, 2005). However, such quantity scores say little about the quality and comprehensiveness of the disclosure (Hasseldine et al., 2005). If, as previously discussed, CEOs might be incentivized to use CSR disclosure to maximize media coverage while at the same time trying to limit stakeholder scrutiny of their policies, measuring the quality and comprehensiveness rather than the quantity of CSR disclosure is particularly important.

Therefore, in line with the guidance provided by Gray et al. (1995a), we construct a CSR disclosure measure based on the definitions, frameworks and methods employed in the mainstream CSR literature. We examine the content of four CSR categories: community involvement, environment, employees, and product and customer service quality (Gray et al., 1995b; Haniffa and Cooke, 2005; Branco and Rodrigues, 2006; Scholtens, 2008; Holder-Webb et al., 2009).

The content of information on the four CSR categories is assessed using scores based on the existence and comprehensiveness of information disclosed in each category (see appendix). Each CSR category is rated from zero to three according to the richness of information disclosed. One additional point is given per category if quantitative figures are disclosed and another point if comparative figures are disclosed. Therefore, a maximum of five points can be assigned to each category and twenty points as a total score for CSR disclosure quality. The disclosure measure (CSRDS) is the ratio of points awarded over the maximum points a bank could achieve.

CSRDS = $\sum$ points of (community, environment, employees and product & customer services categories) / 20

The reliability and consistency of coding is crucial in the application of content analysis to ensure that the assigned scores are reproducible and reliable. Although reliability testing cannot provide full assurance of scoring objectivity (Linsley, Shrives and Crumpton, 2006), Kripendroff’s alpha is commonly used to assess the level of agreement between two or more coders (Newson and Deggan, 2002; Hasseldine et al., 2005; Holder-Webb et al., 2009). Previous studies tend to suggest that alpha values of 75% or above are considered generally acceptable (Hasseldine et al., 2005; Holder-Webb et al., 2009).

To ensure the reliability of the assigned CSR disclosure scores, a randomly selected sample of twenty annual reports was selected. The corresponding annual reports were provided to two independent coders. The coders were informed about the scoring procedure and were then required to assess the CSR content of the annual reports and allocate relevant scores. The scores provided by the two independent coders along with the score computed by one of the authors were used to test the scoring process reliability. The results of the test were satisfactory as the Krippendorff's alpha for inter-coding agreement showed a value of 80%.

4.3 Control Variables

To avoid model misspecification, we control for additional variables, which might also impact on CSR disclosure. As CSR reporting is largely voluntary disclosure, we expect that corporate governance structures, which impact on the provision and quality of voluntary disclosure, will also affect CSR disclosure. In this context, agency theory suggests that effective audit committees are likely to improve the reliability of corporate reporting and thereby to reduce information asymmetry between management and outside investors and other stakeholders (McMullen, 1996). The effectiveness of audit committees is likely to depend on their size and expertise. Due to the scope and complexity of the tasks of audit committees, larger audit committees are expected to be more effective and to put more pressure on managers to disclose information voluntarily to increase transparency (Li et al., 2008; Goh, 2009). This is especially relevant to banks, which conduct particularly complex and risky business operations (Laeven and Levine, 2009; Pathan, 2009). The literature on voluntary disclosure and disclosure quality also suggests that audit committee members with financial expertise tend to have a positive impact on the extent and reliability of corporate reporting (Bédard, Chtourou and Courteau, 2004; Karamanou and Vafeas, 2005; Hoitash and Hoitash, 2009). Although it appears unlikely that the understanding of audit committee members of CSR related information is linked to their financial expertise, we suggest that such members might have a more positive attitude to information disclosure in general.

According to Lee, Mande and Ortman (2004), the number of audit committee and board meetings might be a measure of diligence and, therefore, board and audit committee effectiveness. With regard to corporate reporting, Kent and Stewart's (2008) research indicates that the frequency of board and audit committee meetings is positively related to voluntary disclosure. Thus we control for board and audit committee meeting frequency.

Managers of firms which perform well financially might have spare resources under their control, which can be used to engage more actively in CSR and CSR reporting to placate stakeholders or pursue managerial interests. It is therefore essential to control for firms' financial performance (Haniffa and Cooke, 2002, 2005; Lim, Matolcsy and Chow, 2007; Arora and Dharwadkar, 2011).

The need of managers of highly leveraged firms to generate and retain cash to service the debt might reduce their ability to fund CSR and CSR reporting (Reverte, 2009; Barnea and Rubin, 2010). We therefore control for firm leverage. While empirical research by Haniffa and Cooke (2002, 2005) and Reverte (2009) has found no indication of a relationship between leverage and CSR disclosure, Barnea and Rubin's (2010) research suggests a negative relationship between leverage and CSR disclosure.

As managers might use CSR disclosure to impact on stakeholders' perceptions of firm risk, we control for banks' systematic risks. Prior empirical research indicates that firm risk tends to be positively related to CSR disclosure (Deegan and Gordon, 1996; Jo and Harjoto, 2011).

Large firms have greater impact on communities than smaller firms. (Barnea and Rubin, 2010). Consequently, large firms tend to be more exposed to the influence of powerful stakeholder groups representing employees, customers, investors, public authorities, etc., are likely to face tighter regulatory requirements, and tend to be subject to greater public scrutiny (Reverte, 2009; Barnea and Rubin, 2010)). Therefore, firm size is likely to influence the amount of CSR disclosure needed to address the concerns of various stakeholder groups (Branco and Rodrigues, 2006). As our sample consists of large US national commercial banks, the study uses a relative rather than absolute measure to control for bank size (De Haan and Poghosyan, 2012; Holder-Webb et al., 2009).

4.4 The Model

To test the hypotheses, the Model (1.2) is set out below.

$$CSRDS_t = \alpha + \beta_1 BS_t + \beta_2 BI_t + \beta_3 DUAL_t + \beta_4 ACS_t + \beta_5 ACFE_t + \beta_6 BM_t + \beta_7 ACM_t + \beta_8 ROA_t + \beta_9 Lev_t + \beta_{10} SIZE_t + \beta_{11} BETA_t + \acute{\varepsilon}$$

Where:

CSRDS	corporate social responsibility disclosure score measured as the ratio of disclosure content points over the maximum score a bank can achieve.
BS	board size as measured by the number of board members.
BI	board independence, measured by the number of independent directors over the total number of board members.
DUAL	chair/CEO duality: 0 if the CEO is not acting as the chair of the board of directors; 1, otherwise.
ACS	audit committee size, measured by the number of members on the audit committee.
ACFE	audit committee financial expertise, measured by the number of financial experts on the audit committee.
BM	board meetings, measured by the number of board meetings per year.

ACM	audit committee meetings, measured by the number of audit committee meetings per year.
ROA	profitability, measured by net income over total assets.
LEV	leverage, measured by total debt over assets.
SIZE	Bank's size, measured by calculating the distance of each bank's log total assets from the sample mean, scaled by the log total assets' standard deviation.
BETA	Bank's risk, measured by systematic risk.
α	the intercept.
$\beta_1 \ldots. \beta n$	the regression coefficients.
t	period indicator.
έ	the error term.

5. Results and Discussion

5.1 Descriptive Statistics

5.1.1 Corporate Social Responsibility Disclosures

Banks disclose CSR with different intensity and vary in their focus between the four identified CSR categories. The percentage of banks that disclose CSR in their annual reports increases from 93% in 2009 to 97% in 2010 and 2011. The mean of the aggregate disclosure score is 4.47 points (i.e. a ratio measure of 0.22) and the standard deviation is 3.35. The highest CSR disclosure score is 16 points out of 20 (i.e. 0.8) across the four CSR categories.

The majority of the examined banks' annual reports (87%) disclosed information related to their staff. This is in line with Branco and Rodrigues' (2006) contention that banks are particularly motivated to disclose CSR information in relation to employees, since they are essential assets for banks and impact on investors' assessment of the firms.

Forty-seven percent (47%) of the examined annual reports disclosed information related to community involvement. A similar proportion of annual reports (44%) disclosed information on social products, service quality and customer satisfaction. Only twelve percent (12%) of the annual reports examined disclosed information related to environmental projects and initiatives. Table 1 summarises the descriptive statistics for the CSR disclosures.

[Table 1 about here]

Between 2009 and 2010, we found a slight increase in the disclosure of CSR relevant content in the annual reports, as well as a rise in the number of banks that disclosed CSR related information in their annual reports. However, both disclosure levels and the number of banks disclosing CSR related information remained largely the same between 2010 and 2011.

5.1.2 Corporate Governance Variables

The proportion of independent directors on the boards of the banks in our sample varies between 50% and 94% with a mean of 81%. This finding is comparable to that by Pathan and Skully (2010), which suggests that between 1997 and 2004 the proportion of independent directors on the boards of US bank holding companies ranged from 10% to 96.55%, with a mean of 64.55%. The main reason for these differences is probably the increased regulatory pressure on listed companies to improve board independence. For example, from 2004 onwards, changes to Section 303A of the NYSE's Listed Company Manual, meant that most listed companies were required to have a majority of independent directors on their boards.[i] In 32% of our observations there is only one executive director on the board.

The boards of national US banks, which are regulated and supervised by the Office of the Comptroller of the Currency (OCC), have to consist of between five and twenty-five directors. Our sample suggests that the board size actually varies between five and twenty-one members. With 12.5 the mean of the board size in 2009 is similar that in 2010 (12.29) and 2011 (12). This is in line with research by Pathan and Skully (2010) who find that between 1997 to 2004 boards of US bank holding companies had 5 to 31 directors with a mean of 12.92. The lower maximum number of directors on bank boards compared to Pathan and Skully (2010) might partially be explained by differences between the samples, as bank holding companies are not subject to OCC regulations, and might also confirm their observation that the board size of medium and large banks is declining over time (Linck, Netter and Yang, 2008; Pathan and Skully, 2010).

The third board characteristic examined is CEO duality. In 43% of the examined banks the CEO also holds the position of the chairman of the board. This compares to 58% in Pathan and Skully's (2010) sample. As boards tend to be put under pressure by shareholders to abandon CEO duality if firm performance is poor (Hermalin and Weisbach, 1998; Linck et al., 2008), the fall in CEO duality might be related to the poor bank performance during and after the US sub-prime mortgage crisis. Table 2 summarises the descriptive statistics of the control variables.

[Table 2 about here]

5.2 Data Analysis

The descriptive statistics show that CSR disclosure scores range from zero to 0.8, with a mean of 0.22. Five percent of observations did not disclose CSR related information and therefore score zero. As our dependent variable is censored, we apply TOBIT regression models in the first instance [ii]. The TOBIT regression model (Tobin, 1958) is commonly used in studying cases of censored data. If the values of the dependent variable in some of the observations are grouped at a limiting amount, which is commonly zero, TOBIT regressions becomes more powerful than other regressions since they make use of all observations regardless of whether they are at the limit or above. This distinguishes the TOBIT regression from other regressions that estimate the best fit only based on values which lie above the limit (McDonald and Moffitt, 1980).

The TOBIT model equation is formed as follows:

$$
\begin{aligned}
yt &= X_t\beta + u_t && \text{if } X_t\beta + u_t > 0 \\
&= 0 && \text{if } X_t\beta + u_t \leq 0 \\
& && t = 1, 2, \ldots, N
\end{aligned}
$$

Where N denotes the number of observations, y_t denotes the dependent variable at time t, X_t denotes the independent variables at time t, β are the coefficients and u_t represents the error term (McDonald and Moffitt, 1980).

We use a Spearman correlations matrix and VIF-tests to test for the existence of multi-collinearity between the examined independent variables. Table 3 shows the correlations between the independent variables. The results do not indicate any serious collinearity in the examined models. We test for heteroscedasticity using White's test. The results do not suggest a threat of heteroscedasticity.

[Table 3 about here]

The analysis of the impact of corporate governance on banks' CSR disclosure for the three-year period is conducted using two models, in order to isolate any potential effects of audit committee characteristics on voluntary disclosure. The results of the regressions are interpreted and reconciled below. Table 4 below shows estimates for two TOBIT models (1.1. and 1.2).

[Table 4 about here]

All of the key corporate governance variables, board independence, board size and CEO duality, are statistically significant in each of the regressions. While the explanatory power of the model increases when audit committee characteristics are added to the model, the results for the board characteristics remain consistent.

Our results, therefore, support hypothesis 1, which expected board independence to be positively related to CSR disclosure. This is in line with previous research into independent directors' attitude towards CSR activities (Johnson and Greening 1999; Ibrahim et al., 2003) and independent directors' influence on transparency and voluntary disclosure (Cheng and Courtenay, 2006; Patelli and Prencipe, 2007; Donnelly and Mulcahy, 2008; Li et al., 2008; Chau and Gray, 2010). These findings indicate that independent directors promote both shareholders' and other stakeholders' interests with regard to CSR disclosure.

Hypothesis 2, which predicted that firms with larger boards are likely to disclose more CSR related information, is also supported. Our findings are in line with previous research into the relationship between board size and voluntary disclosure (e.g. Lim et al., 2007; Donnelly and Mulcahy, 2008). The results indicate that, possibly because banks are complex organisations, having a larger number of directors share the work has a positive impact on the firm's attitude towards its stakeholders.

Hypothesis 3, which expected CEO duality to be negatively related to CSR disclosure, is not supported. To the contrary, in line with findings by Bear et al. (2010), our results consistently suggest a statistically significant positive relationship between CEO duality and CSR disclosure. One possible explanation might be that more powerful CEOs promote CSR and CSR disclosure in order to become more successful and to increase their pay or tenure prospects, to appease personal moral concerns, or to reduce the supervision and control exerted by financial or goods markets, the board of directors or regulators (Barnea and Rubin 2010). For example, Jiraporn and Chintrakarn (2013) suggest that CEOs view CSR opportunistically to gain media coverage and enhance their own reputation. Using CEO pay as a measure for CEO power, their research suggests that, unless CEOs are already firmly entrenched, more powerful CEOs are likely to engage more actively in CSR. Moreover, as previously discussed, particularly in the context of banks, powerful CEOs might have an incentive to limit their firm's risk exposure against the interests of short-term oriented shareholders (Laeven and Levine, 2009; Barry, Lepetit and Tarazi, 2011) in order to improve their job security and to protect their human capital (Fama and Jensen, 1983; Pathan, 2009). As banks' risk exposure can not only be reduced via finance and investment strategies (Pathan, 2009), but also via CSR activities aimed at engaging key stakeholders (Gill, 2008; Scholtens, 2008; Kolk and Pinkse, 2010; Ghoul et al., 2011; Salama et al., 2011), powerful CEOs might have an interest to increase the bank's CSR activities and reporting.

Another explanation why powerful CEOs might pursue a high degree of engagement with and disclosure of CSR might be related to the increased scrutiny they are exposed to. If goods, labour and capital markets are competitive, agency theory suggests that firms' corporate governance mechanisms might be endogenously determined (Fama, 1980; Hermalin and Weisbach, 2003). This implies that, if investors and other stakeholders are aware of a CEO's powerful position, they may demand additional safeguards to reduce the risk that managers abuse their power. In this context firms with CEO duality might use CSR disclosure to improve the effectiveness of outside control by informed investors, financial analysts, the business press etc. (Healy and Palepu, 2001; Li et al., 2008; Beyer et al., 2010), or to signal high ethical standards and good faith to their stakeholders (Gray et al., 1995b; Meek, Roberts and Gray, 1995; Aguilera et al., 2006; Money and Schepers, 2007; Kolk and Pinkse, 2010).

While one might argue that in either case, stakeholders stand to benefit from CEO duality with regards to CSR disclosure, as the rationale for the disclosure is fundamentally different, it would be important to know whether the influence of powerful CEOs on CSR disclosure is driven by personal interests, by risk management considerations, or by competitive and public pressure. As we measure not simply the quantity of CSR disclosure but its quality and comprehensiveness, and as our models control for firm risk, our findings most plausibly point towards the latter option. This could be related to the increasing pressure on banks since the sub-prime mortgage crisis by investors, regulators and the public to pay more attention to the long-term sustainability of the business and to respond to their obligations to society (Matten, 2006; Money and Schepers, 2007; Gill, 2008; Grove, et al., 2011). However, as our data does not allow us to develop a definitive answer to the question, it would be worthwhile in the future to explore this issue explicitly.

With regard to the other control variables, we found that board meeting frequency and audit committee meeting frequency are statistically significantly related to CSR disclosure. This is in line with findings by Kent and Stewart (2008) which suggest a positive relationship between the number of board meetings and the level of disclosed information. The number of board and audit committee meetings appears to be a good proxy for the diligence and effort of the relevant board members (Lee et al., 2004), which has a positive impact on firms' CSR reporting.

Our research also indicates that ROA is statistically significantly related to CSR disclosure. This is in line with findings by Johnson and Greening (1999), Simpson and Kohers (2002), Haniffa and Cooke (2005), Scholtens (2008), as well as Li et al. (2010), which suggest that firms with a better financial performance are more capable to invest in social activities than firms suffering from poor returns. In line with the expectation that managers of comparatively risky businesses might use CSR disclosure to mitigate stakeholders' risk perceptions (Deegan and Gordon, 1996; Jo and Harjoto, 2011), we find beta to be positively statistically significantly related to CSR disclosure. Leverage does not appear to be significantly related to CSR disclosure. This is in line with similar findings by Haniffa and Cooke (2005) and Reverte (2009).

5.3 Sensitivity Testing

To check the robustness of the estimated relationships between corporate governance and CSR disclosure, another set of regressions is conducted using the fixed effect panel linear regression with robust standard errors (see Table 4, models 2.1. and 2.2.). In line with our earlier results, board independence, board size, CEO duality, audit committee financial expertise, board and audit committee meeting frequency and ROA are all statistically significantly and positively related to CSR disclosure. Firm risk, however, is only statistically significantly related to CSR disclosure in the full model, which takes account of board and audit committee characteristics.

As reverse causality might be a challenge to our analysis, we run a chi-square test to establish whether the CSR disclosure score and ROA are interdependent. The chi-square test reports a significance of 0.969, indicating that reverse causality between ROA and CSR is unlikely. Nevertheless, we re-ran the TOBIT regression, replacing ROA by one-year lagged ROA. The results were consistent with the original regression.

6. Conclusion

Prior research into the relationship between corporate governance and CSR is limited almost exclusively to the investigation of the impact on CSR committees on CSR activities and CSR disclosure (Li et al., 2010; Kolk and Pinkse, 2010; Spitzeck, 2009; Gill, 2008). The lack of research into the impact of firms' other corporate governance structures on CSR reporting is an indication of a mental disconnect between what is considered to be "good corporate governance" and how to ensure that firms transparently fulfil their social obligations to society.

Even if CSR reporting would be considered merely as a means to develop better long-term, mutually beneficial relationships with key stakeholders (Gray et al., 1995b; Meek et al., 1995; Aguilera et al., 2006; Money and Schepers, 2007; Kolk and Pinkse, 2010), the economic value of the related benefits suggests that firms' corporate governance structures should have a bearing on it. Moreover, given the potential impact of firms on a wide range of direct and indirect stakeholders, it is of interest to investigate whether board features which were designed to facilitate corporate governance in the interest of equity investors can also be effective in promoting firms' engagement with their wider social responsibilities. This appears to be particularly relevant in the context of large banks, due to their ability to impose significant negative external effects on society.

Examining the CSR disclosure in annual reports of a sample of large national US commercial banks using content analysis, our findings suggest that key characteristics of the board of directors are significantly associated with CSR disclosure. In particular, our research indicates that board independence and board size are positively and significantly related to CSR disclosure by US banks. These findings highlight that effectively designed boards (Gray et al., 1995b; Ibrahim et al., 2003; Lee et al., 2004; Guest, 2009) can contribute to safeguarding the interests of all stakeholders, and not merely the shareholders who appoint them. This highlights the need for stakeholders and their representatives to take a much closer interest in corporate governance mechanisms which are likely to affect the effectiveness of the board of directors and not to limit their concerns to directly CSR related corporate governance features, such as CSR committees.

Our findings also suggest that CEO duality is positively and significantly related to CSR disclosure by US banks. However, we are unable to establish the reasons for this positive relationship. It would be helpful if future research would explore whether this positive relationship is determined by the competitiveness of relevant goods, labour and capital markets (Fama, 1980; Hermalin and Weisbach, 2003) in the banking sector, and therefore an indication of the effectiveness of a self-regulating system of corporate governance, or whether it is a sign of managerial risk aversion (Fama and Jensen, 1983; Laeven and Levine, 2009; Pathan, 2009; Barnea and Rubin, 2010; Barry et al., 2011).

In order to gain a better understanding of the circumstances in which corporate governance mechanisms designed to protect shareholders can be helpful or harmful to the protection of the interests of other stakeholders, it would be beneficial to explore the relationship between corporate governance and CSR disclosure in a much wider range of industries and countries, with different levels of public scrutiny, regulation and competitive pressures.

While our research does not provide any evidence for a significant change in CSR disclosure by US commercial banks between 2009 and 2011, it might further be of interest to explore in future, how CSR disclosure and corporate governance of US commercial banks has developed over a longer time horizon, possibly including the period before the sub-prime mortgage crisis.

Appendix

CSR Categories and Sub-categories

	CSR category	CSR sub-category
1	Community involvement	• Contributions and donations to charities, NGOs and community activities • Provision if support to students to continue their education and sponsoring sport activities • Sponsoring health programmes • Sponsoring arts and culture • Supporting sports and/or recreational projects • Participation in social government campaigns
2	Environment	• Bank's environmental policies and concerns • Implemented systems for environmental management • Environmental projects such as recycling and protection of natural resources • Energy saving in performing business operations
3	Employees	• Number of employees; health and safety policies and measures. • Equal opportunities in employment (e.g. minorities, women) • Training and education provided to employees (training policies and nature of training) • Employee assistance/benefits • Employee compensation • Employee expertise and backgrounds • Employee share purchase schemes • The confidence and self-esteem of employees • Employees' appreciation • Issues related to the recruitment process • Photos to document employee welfare (e.g. at social activities, award ceremonies) • Discussion of employees' welfare • Policies adopted regarding staff profit sharing

	CSR category	CSR sub-category
4	Social products and services quality	• Diversity of social products (e.g. climate products, educational loans etc.) • Discussion of the types of social products • Geographical distribution and marketing network of the offered social products • Discussions in relation to customers feedback • Provision for disabled, frail and difficult-to-reach customers • Investments in social responsibility activities • Strategies and plans for future expansion in social products and services • Loyalty programmes and gifts to customers

Source: Based on categories identified by Gray et al., 1995b; Haniffa and Cooke, 2005; Branco and Rodrigues, 2006; Scholtens, 2008; Holder-Webb et al., 2009.

Notes

[i] See: Securities Exchange Act Release No. 48745 (November 4, 2003); 68 FR 64154 (November 12, 2003) (SR-NYSE-2002-33).

[ii] We also employ OLS regressions with robust standard errors to test the sensitivity of the estimated regression results.

References

Aguilera, R.V., Williams, C.A., Conley, J.M., and Rupp, D.E. (2006). Corporate Governance and Social Responsibility: A Comparative Analysis of the UK and the US. *Corporate Governance: An International Review,* 14(3), 147-158.

Ahmed, K., Hossain, M. and Adams, M. (2006). The Effect of Board Composition and Board Size on the Informativeness of Annual Accounting Earning. *Corporate Governance: An International Review*, 14(5), 418-431.

Arora, P. and Dharwadkar, R. (2011). Corporate Governance and Corporate Social Responsibility (CSR): The Moderating Roles of Attainment Discrepancy and Organization Slack. *Corporate Governance: An International Review*, 19(2), 136-152.

Bai, G. and Elyasiani, E. (2013). Bank Stability and Managerial Compensation. *Journal of Banking and Finance*, 37(3), 799-813.

Barnea, A. and Rubin, A. (2010). Corporate Social Responsibility as a Conflict Between Shareholders. *Journal of Business Ethics,* 97(1),71-86.

Barry, T.A., Lepetit, L. and Tarazi, A. (2011). Ownership Structure and Risk in Publicly Held and Privately Owned Banks, *Journal of Banking and Finance*, 35(5), 1327-1340.

Bear, S., Rahman, N. and Post, C. (2010). The Impact of Board Diversity and Gender Composition on Corporate Social Responsibility and Firm Reputation. *Journal of Business Ethics,* 97(2), 207-221.

Bédard, J., Chtourou, S.M. and Courteau, L. (2004). The Effect of Audit Committee Expertise, Independence and Activity on Aggressive Earnings Management. *Auditing: A Journal of Practice and Theory*, 23(2), 15-37.

Beyer, A, Cogen, D.A., Thomas, Z.L. and Walther, B.R. (2010). The Financial Reporting Environment: Review of the Recent Literature. *Journal of Accounting and Economics*, 50(2-3), 296-343.

Branco, M.C. and Rodrigues, L.L. (2006). Communication of Corporate Social Responsibility by Portuguese Banks. *Corporate Communication: An International Journal*, 11(3), 232-248.

Campbell, D., and Slack, R. (2008). Narrative Reporting: Analysts' Perceptions of its Value and Relevance. *Association of Chartered Certified Accountants Research Report 104*.

Chau, G. and Gray, S.J. (2010). Family Ownership, Board Independence and Voluntary Disclosure: Evidence from Hong Kong. *Journal of International Accounting, Auditing and Taxation*, 19(2), 93-109.

Cheng, E.C.M. and Courtenay, S.M. (2006). Board Composition, Regulatory Regime and Voluntary Disclosure. *The International Journal of Accounting*, 41(3), 262-289.

Cormier, D., Ledoux, M. and Magnan, M. (2011). The Informational Contribution of Social and Environmental Disclosures for Investors. *Management Decision*, 49(8), 1276-1304.

Deegan, C. and Gordon, B. (1996). A Study of the Environmental Disclosure Practices of Australian Corporations. *Accounting and Business Research*, 26(3), 187-199.

De Haan, J. and Poghosyan, T. (2012). Bank Size, Market Concentration, and Bank Earnings Volatility in the US. *Journal of International Financial Markets, Institutions & Money*, 22(1), 35-54.

Dey, A. (2008). Corporate Governance and Agency Conflicts. *Journal of Accounting Research*, 46(5), 1143-1181.

Donnelly, R. and Mulcahy, M. (2008). Board Structure, Ownership, and Voluntary Disclosure in Ireland. *Corporate Governance: An International Review,* 16(5), 416-429.

Fama, E.F. (1980). Agency Problems and the Theory of the Firm. *Journal of Political Economy*, 88(2), 288-307.

Fama, E.F. and Jensen, M.C. (1983). Corporations and Private Property. *Journal of Law and Economics*, 26(2) 301-325.

Gemmill, G. and Keswani, A. (2011). Downside Risks and the Size of Credit Spreads. *Journal of Banking and Finance,* 35(8), 2021-2036.

Ghoul, S.E., Guedhami, O., Kwok, C.C.Y. and Mishra, D.R. (2011). Does Corporate Social Responsibility Affect the Cost of Capital? *Journal of Banking and Finance*, 35(9), 2388-2406.

Gill, A. (2008). Corporate Governance as Social Responsibility: A Research Agenda. *Berkeley Journal of International Law,* 26(2), 452-478.

Godfrey, P.C., Merrill, C.B. and Hansen, J.M. (2009). The Relationship Between Corporate Social Responsibility and Shareholder Value: An Empirical Test of the Risk Management Hypothesis. *Strategic Management Journal,* 30(4), 425-445.

Goh, B.W. (2009). Audit Committees, Boards of Directors, and Remediation of Material Weaknesses in Internal Control. *Contemporary Accounting Research*, 26(2), 549-579.

Gray, R.H., Kouhy, R. and Lavers, S. (1995a). Constructing a Research Database of Social and Environmental Reporting by UK Companies: A Methodological Note. *Accounting, Auditing and Accountability Journal,* 8(2), 78-101.

Gray, R.H., Kouhy, R. and Lavers, S. (1995b). Corporate Social and Environmental Reporting: A Review of the Literature and a Longitudinal Study of UK Disclosure. *Accounting, Auditing and Accountability Journal*, 8(2), 47-77.

Grove, H., Patelli, L., Victoravich, L.M. and Xu, P. (2011). Corporate Governance and Performance in the Wake of the Financial Crisis: Evidence from US Commercial Banks. *Corporate Governance: An International Review*, 19(5), 418-436.

Guest, P.M. (2009). The Impact of Board Size on Firm Performance: Evidence from the UK. *European Journal of Finance,* 15(4), 385-404.

Hagendorff, J. and Vallascas, F. (2011). CEO Pay Incentives and Risk-Taking: Evidence from Bank Acquisitions. *Journal of Corporate Finance*, 17(4), 1078-1095.

Haniffa, R.M. and Cooke, T.E. (2002) Culture, Corporate Governance and Disclosure in Malaysian Corporations. *Abacus*, 38(3), 317-349.

Haniffa, R.M. and Cooke, T.E. (2005). The Impact of Culture and Governance on Corporate Social Reporting. *Journal of Accounting and Public Policy*, 24(5), 391-430.

Hasseldine, J., Salama, A. I. and Toms, J.S. (2005). Quantity Versus Quality: The Impact of Environmental Disclosures on the Reputations of UK Plcs. *The British Accounting Review,* 37(2), 231-248.

Healy, P.M. and Palepu, K.G. (2001). Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature. *Journal of Accounting and Economics*, 31(1-3), 405-440.

Hennigfeld, J., Pohl, M. and Tolhurst, N. (2006) Foreword. *The ICCA Handbook on Corporate Social Responsibility*. John Wiley and Sons, Ltd.: West Sussex, England.

Hermalin, B.E. and Weisbach, M.S. (1998). Endogenously Chosen Boards of Directors and Their Monitoring of the CEO. *American Economic Review*, 88(1), 96-118.

Hermalin, B.E. and Weisbach, M.S. (2003) Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature. *Economic Policy Review*, 9(1), 7-26.

Hoitash, R. and Hoitash, U (2009). The Role of Audit Committees in Managing Relationships with External Auditors after SOX: Evidence from the USA. *Managerial Auditing Journal*, 24(4), 368-397.

Holder-Webb, L., Cohen, J., Nath, L. and Wood, D. (2009). The Supply of Corporate Social Responsibility Disclosures Among U.S. Firms. *Journal of Business Ethics,* 84(4), 497-527.

Ibrahim, N. A., Howard, D. P. and Angelidis (2003). Board Members in the Service Industry: An Empirical Examination of the Relationship Between Corporate Social Responsibility Orientation and Directorial Type. *Journal of Business Ethics,* 47(4), 393-401.

Jamali, D., Safieddine, A.M. and Rabbath, M. (2008). Corporate Governance and Corporate Social Responsibility Synergies and Interrelationships. *Corporate Governance: An International Review,* 16(5), 443-459.

Jiraporn, P. and Chintrakarn, P. (2013). How Do Powerful CEOs View Corporate Social Responsibility (CSR)? *Economics Letters*, 119(3), 344-347.

Jo, H. and Harjoto, M. (2011). Corporate Governance and Firm Value: The Impact of Corporate Social Responsibility. *Journal of Business Ethics*, 103(3), 351-383.

John, K. and Senbet, L.W. (1998). Corporate Governance and Board Effectiveness. *Journal of Banking & Finance*, 22(4), 371-403.

Johnson, R.A. and Greening, D.W. (1999). The Effects of Corporate Governance and Institutional Ownership Types on Corporate Social Performance. *The Academy of Management Journal*, 42(5), 564-576.

Karamanou, I. and Vafeas, N. (2005). The Association Between Corporate Boards, Audit Committees, and Management Earnings Forecasts: An Empirical Analysis. *Journal of Accounting Research*, 43(3), 453-486.

Kent, P. and Stewart, J. (2008). Corporate Governance and Disclosures on the Transition to International Financial Reporting Standards. *Accounting and Finance,* 48(4), 649-671.

Kolk, A. and Pinkse, J. (2010). The Integration of Corporate Governance in Corporate Social Responsibility Disclosures. *Corporate Social Responsibility and Environmental Management*, 17(1), 150-26.

Kothari, S. P., Xu, L. and Short, J. (2009). The Effect of Disclosures by Management, Analysts, and Business Press on Cost of Capital, Return Volatility, and Analyst Forecasts: A Study Using Content Analysis. *Accounting Review*, 84(5), 1639-1670.

Krishnan, G. and Visvanathan, G. (2009). Do Auditors Price Audit Committee's Expertise? The Case of Accounting versus Non-accounting Financial Experts. *Journal of Accounting, Auditing and Finance*, 24(1), 115-144.

Laeven, L. and Levine, R. (2009). Bank Governance, Regulation and Risk Taking. *Journal of Financial Economics*, 93(2), 259-75.

Lee, H.Y., Mande, V. and Ortman, R. (2004). The Effect of Audit Committee and Board of Director Independence on Auditor Resignation. *Auditing: A Journal of Practice and Theory*, 23(2), 131-146.

Li, J., Pike, R. and Haniffa, R. (2008). Intellectual Capital Disclosure and Corporate Governance Structure in UK Firms. *Accounting and Business Research,* 38(2), 137-159.

Li, S., Fetscherin, M., Alon, I., Lattemann, C. and Yeh, K. (2010). Corporate Social Responsibility in Emerging Markets. *Management International Review,* 50(5), 635-654.

Lim, S., Matolcsy, Z. and Chow, D. (2007). The Association Between Board Composition and Different Types of Voluntary Disclosure. *European Accounting Review*, 16(3), 555-583.

Linck, J.S., Netter J.M. and Yang, T. (2008) The Determinants of Board Structure. *Journal of Finance and Economics*, 87(2), 308-328.

Linsley, P.M., Shrives, P.J. and Crumpton, M. (2006). Risk Disclosure: An Exploratory Study of UK and Canadian Banks. *Journal of Banking Regulation*, 7(3/4), 268-282.

Lourenco, I.C., Branco, M.C, Curto, J.D. and Eugenio, T. (2012). How Does the Market Value Corporate Sustainability Performance? *Journal of Business Ethics*, 108(4), 417-428.

Mackenzie, C. (2007). Boards, Incentives and Corporate Social Responsibility: The Case for a Change of Emphasis. *Corporate Governance: An International Review*, 15(5), 935-943.

Matten, D. (2006). Why Do Companies Engage in Corporate Social Responsibility? Background, Reasons and Basic Concepts. *The ICCA Handbook on Corporate Social Responsibility.* John Wiley and Sons, Ltd.: West Sussex, England.

McDonald, J.F. and Moffitt, R.A. (1980). The Uses of Tobit Analysis. *The Review of Economics and Statistics*, 62(2),318-321.

McMullen, D.A. (1996). Audit Committee Performance: An Investigation of the Consequences Associated with Audit Committees. *Auditing: A Journal of Practice and Theory*, 15(1), 87-103.

Meek, G.K., Roberts, C.B. and Gray, S.J (1995). Factors Influencing Voluntary Annual Report Disclosures By U.S., U.K. and Continental European Multinational Corporations. *Journal of International Business Studies,* 26(3), 555-572.

Money, K. and Schepers, H. (2007). Are CSR and Corporate Governance Converging? A View from Boardroom Directors and Company Secretaries in FTSE100 Companies in the UK. *Journal of General Management*, 33(2), 1-11.

Newson, M. and Deegan, A. (2002). Global Expectations and their Association with Corporate Social Disclosure Practices in Australia, Singapore, and South Korea. *The International Journal of Accounting,* 37(2), 183–213.

OECD (1999), *OECD Principles of Corporate Governance*. OECD Publications Service, Paris.

Patelli, L. and Prencipe, A. (2007). The Relationship Between Voluntary Disclosure and Independent Directors in the Presence of a Dominant Shareholder. *European Accounting Review*, 16(1), 5-33.

Pathan, S. (2009). Strong Boards, CEO Power and Bank Risk-taking. *Journal of Banking and Finance*, 33(7), 1340-1350.

Pathan, S. and Skully, M. (2010). Endogenously Structured Boards of Directors in Banks. *Journal of Banking and Finance*, 34(7), 1590-16060.

Perego, P. and Kolk, A. (2012). Multinationals' Accountability on Sustainability: The Evolution of Third-Party Assurance of Sustainability Reports, *Journal of Business Ethics*, 110(2), 173-190.

Pflugrath, G., Roebuck, P. and Simnett, R. (2011) Impact of Assurance and Assurer's Professional Affiliation on Financial Analysts' Assessment of Credibility of Corporate Social Responsibility Information, *Auditing: A Journal of Practice and Theory*, 30(3), 239-254.

Porter, M. and Kramer, M.R. (2006). Strategy and Society: The Link Between Competitive Advantage and Corporate Social Responsibility. *Harvard Business Review*, 84(12), 78-92.

Reverte, C. (2009). Determinants of Corporate Social Responsibility Disclosure Ratings by Spanish Listed Firms. *Journal of Business Ethics*, 88(2), 351-366.

Salama, A., Anderson, K. and Toms, J.S. (2011). Does Community and Environmental Responsibility Affect Firm Risk? Evidence from UK Panel Data 1994-2006. *Business Ethics: A European Review*, 20(2), 192-204.

Scholtens, B. (2008). Corporate Social Responsibility in the International Banking Industry. *Journal of Business Ethics*, 86(2), 159-175.

Simpson, W.G. and Kohers, T. (2002). The Link Between Corporate Social and Financial Performance: Evidence from the Banking Industry. *Journal of Business Ethics*, 35(2), 97-109.

Spitzeck, H. (2009). The Development of Governance Structures for Corporate Responsibility. *Corporate Governance*, 9(4), 495-505.

Starks, L.T. (2009). EFA Keynote Speech: Corporate Governance and Corporate Social Responsibility: What Do Investors Care about? What Should Investors Care about? *The Financial Review*, 44(4), 461-468.

Tobin, J. (1958). Estimation of Relationships for Limited Dependent Variables. *Econometrica*, 26(1), 24-36.

Toms, J.S. (2002). Firm Resources, Quality Signals and the Determinants of Corporate Environmental Reputation: Some UK Evidence. *The British Accounting Review*, 34(3), 257-282.

Tuggle, C., Sirmon, D., Reutzel, C. and Bierman, L. (2010). Commanding Board of Director Attention: Investigating how Organizational Performance and CEO Duality Affect Board Members' Attention to Monitoring. *Strategic Management Journal,* 31(9), 946-968.

Van Marrewijk, M. (2003). Concepts and Definitions of CSR and Corporate Sustainability: Between Agency and Communion. *Journal of Business Ethics*, 44(2-3), 95-105.

Vanhamme, J., Lindgreen, A., Reast, J. and van Popering, N. (2012). To Do Well by Doing Good: Improving Corporate Image through Cause-Related Marketing. *Journal of Business Ethics*, 109(3), 259–274.

Veronesi, P. and Zingales, L. (2010). Pauson’s Gift. *Journal of Financial Economics*, 97(3), 339-368.

Waddock, S.A. and Graves, S.B. (1997). The Corporate Social Performance - Financial Performance Link. *Strategic Management Journal*, 18(4), 303-319.

TABLE 1

Summary CSR Descriptive Statistics

Description	**Total CSR Disclosure**	**Community Involvement**	**Environment**	**Employees**	**Product & Customer Services**
Percent of total sample (295)	95%	47%	12%	87%	44%
Maximum disclosure score*	16 *(0.8)*	5	5	5	5
Minimum disclosure score*	0 *(0.0)*	0	0	0	0
Mode*	2 *(0.10)*	0	0	0	2
Mean*	4.47 *(0.22)*	1.30	0.80	0.28	2.08
SD*	3.35 *(0.17)*	1.64	1.13	0.88	1.14

***** data of the disclosure ratio in brackets

TABLE 2

Summary Descriptive Statistics for Control Variables

	BS	BI	DUAL	BM	ACS	ACFE	ACM	ROA	LEV	SIZE	BETA
Mean	12.4	0.81	0.43	10.96	4.49	1.78	8.44	-0.11	0.90	0.86	-0.30
Median	12	0.82	0	11	4	1	8	0.52	0.90	0.79	-0.015
SD	3.1	0.10	0.50	4.96	1.17	1.26	3.53	1.74	0.06	0.54	3.92
Skewness	0.29	-0.83	0.28	1.57	1.03	1.42	0.57	-2.14	-10.27	2.20	-0.06
Kurtosis	2.97	2.99	1.08	7.43	4.12	5.25	2.56	8.06	151.49	9.69	8.61
Minimum	5	0.50	0	4	3	0	3	-9.53	0.8	0	-15.61
Maximum	21	0.94	1	34	9	7	21	3.69	1.05	3.47	19.79

TABLE 3

Spearman Correlations Matrix

Variables	VIF	BS	BI	DUAL	BM	ACS	ACM	ACFE	ROA	LEV	SIZE	BETA
BS	1.27	1.00										
BI	1.13	-0.00	1.00									
DUAL	1.10	0.10	-0.00	1.00								
BM	1.28	-0.16	0.01	-0.23	1.00							
ACS	1.29	0.39	0.32	0.11	-0.07	1.00						
ACM	1.08	0.15	0.07	0.01	0.18	0.10	1.00					
ACFE	1.13	0.16	-0.01	0.10	0.10	0.05	0.19	1.00				
ROA	1.18	0.03	0.13	0.010	-0.24	0.07	-0.05	-0.04	1.00			
LEV	1.08	-0.14	-0.26	-0.04	0.012	-0.14	-0.21	-0.01	-0.23	1.00		
SIZE	1.44	-0.19	0.04	-0.09	0.03	-0.06	-0.10	-0.10	0.16	0.04	1.00	
BETA	1.21	-0.07	0.04	0.04	0.15	-0.11	0.03	-0.04	-0.22	0.30	-0.38	1.00

TABLE 4

The Relationship between Governance Structure and CSR Disclosure

	Model (1.1) *TOBIT Regression Board structure*	**Model (1.2)** *TOBIT Regression Full model*	**Model (2.1) Linear Panel regression** *Board structure*	**Model (2.2) Linear Panel regression** *Full model*
Independent variables	**Coeff.** ***p*-value**	**Coeff.** ***p*-value**	**Coeff.** ***p*-value**	**Coeff.** ***p*-value**
Constant	-0.30 (0.116)	-0.32* (0.088)	-0.34* (0.055)	-0.34** (0.046)
BS	0.013*** (0.000)	0.012*** (0.001)	0.011* (0.067)	0.01* (0.072)
BI	0.26*** (0.010)	0.27*** (0.009)	0.23** (0.022)	0.25** (0.035)
DUAL	0.06*** (0.004)	0.05*** (0.006)	0.06* (0.058)	0.056** (0.045)
BM	0.01*** (0.000)	0.006** (0.006)	0.01** (0.017)	0.006*** (0.024)
ACS		-0.012 (0.197)		-0.01 (0.189)
ACFE		0.02** (0.026)		0.017** (0.002)
ACM		0.01*** (0.004)		0.01* (0.087)
ROA	0.023*** (0.000)	0.022*** (0.000)	0.022** (0.032)	0.02** (0.033)
LEV	0.012 (0.945)	0.02 (0.915)	0.08 (0.486)	0.075 (0.418)
SIZE	0.040** (0.036)	0.035* (0.060)	0.055 (0.516)	0.048 (0.479)
BETA	0.006* (0.039)	0.006** (0.022)	0.004 (0.120)	0.005** (0.048)
Chi2	0.000	0.000	0.000	0.000
Wald Chi2 / R^2	56.45	76.33	0.17	0.22

*P < 0.1, **P < 0.05, ***P < 0.01; *p*-values in brackets.