Board diversity and sustainability performance

A. Oosthuizen & S. Lahner

ABSTRACT

The purpose to this study was to describe and explore the difference in the board composition and characteristics of sustainability performing companies compared with other companies in terms of gender, ethnicity, affiliation and, uniquely, the inclusion of directors from a non-business background.

This exploratory study used a cross-sectional design in the form of a quantitative comparative analysis, and a longitudinal design in the form of a trend analysis to compare the differences in board composition between a sample of sustainability performing companies and a sample of other companies listed on the FTSE/JSE All Share Index between 2004 and 2010. Inclusion on the Social Responsibility Investment (SRI) Index was used as a proxy for sustainability performance.

The study provided support that director background as a board attribute may be linked to overall sustainability performance. It further provided insight into who board members should be, namely non-executive directors with non-business backgrounds.

The findings of this study suggest that the nomination committees of companies wanting to improve sustainability performance should consider the recruitment and appointment of non-executive directors from non-business backgrounds on to their boards. The study provides grounds for further empirical studies on the causal relationship between board compositions and sustainability performance.

Key words: sustainability, sustainability performance, boards of directors, board diversity, corporate governance, SRI index, director background, King Report, integrative model of board performance, corporate social responsibility

Ms A. Oosthuizen is a senior lecturer in the Department of Finance and Investment Management, University of Johannesburg. Ms S. Lahner is Senior Specialist Technical Accounting at Kumba Iron Ore Limited. E-mail: aoosthuizen@uj.ac.za

"Our planet is getting smaller and older as the population increases and certain resources required to sustain life are depleted" (Naude 2009).

This awareness that the Earth cannot support life indefinitely has resulted in society placing increasing pressure on business to rethink their strategies and business models to alleviate harm to the environment and society without threatening their profitability (IoD 2009). Sustainability should therefore be on the corporate agenda and is the responsibility of the board (Elkington 2006; Jamali, Safieddine & Rabbath 2008; Jo & Harjoto 2012; IoD 2009). However, the integration of sustainability into governance structures has implications for board composition (Kruse & Lundbergh 2010), requiring the right mix of competencies, skills and expertise to effect this. A homogeneous board has been related to directors' inability to consider diverse perspectives and their tendency to abide by social norms (Adams, De Haan, Terjesen & Van Ees 2015; Zhu, Shen & Hillman 2014). Van der Walt, Ingley, Shergill and Townsend (2006) contend that boards comprising directors with the same level of education and the same socio-economic background are no longer appropriate. Directors with new types of knowledge, skills and experience are required to drive the move towards creating sustainable organisations (Kruse & Lundbergh 2010).

To understand how boards are influencing sustainability performance, there is a need to describe the current status and progress that has been made in terms of board diversity and its relationship with sustainability. The impact of non-executive directors, females and ethnic minority groups on corporate behaviour has been widely covered (Adams et al. 2015; Carter, D'Souza, Simkins & Simpson 2010; Finegold, Benson & Hecht 2007; O'Neill, Saunders & McCarthy 1989; Van der Walt & Ingley 2003; Van der Walt et al. 2006). Recent literature, however, has placed more emphasis on the backgrounds of individual directors as an emerging theme (Anderson, Reeb, Upadhyay & Zhao 2011; Ben-Amar, Francoeur, Hafsi & Labelle 2013; Nguyen, Hagendorff & Eshraghi 2015; Ryan, Buchholtz & Kolb 2010), and the possibility of a special role played by those from non-business or managerial backgrounds (Peterson & Philpot 2009). These diverse backgrounds, which may lie within government, the arts, politics, academia, science, law or NGOs (Ayuso & Argandona 2007), and specifically in the relationship with sustainability performance, have to date received limited coverage in the literature.

The study aimed to contribute to an understanding of how boards in South Africa organise themselves in practice to effectively perform their role in creating sustainable organisations. To achieve this objective, the study set out to describe and explore the differences in the board composition and characteristics of sustainability performing companies compared with other companies listed on the FTSE/JSE All Share Index in terms of gender, ethnicity, affiliation and, uniquely, the inclusion of directors from

a non-business background. The study accepted that gender, ethnicity and affiliation affect company sustainability performance, but it also recognised that these factors do not capture the full value that directors bring to the board (Hillman & Dalziel 2003; Nguyen et al. 2015). It is therefore important to also incorporate background when examining attributes and their relationship with sustainability performance (Ryan et al. 2010). As the study is exploratory in nature, no conclusions are made regarding the causal relationship between board composition and sustainability performance, and the findings merely present a description of the difference in board composition between companies included on the SRI Index and other companies.

Taking note of director background and board diversity could assist the nomination committees of companies to construct boards capable of considering diverse perspectives and able to challenge social norms when executing their fiduciary duties, and so influence performance in sustainability. The study also provides the foundation for further empirical research to investigate the causal relationships between board characteristics and composition sustainability performance.

Literature review

The literature was analysed and contextualised firstly, to support the working definitions used in the study; secondly, to explain the relationship between sustainability performance and corporate governance; thirdly, to provide a justification for the theoretical frameworks and models used in the study; and finally to clarify the role of diversity in the context of sustainability performance.

Definitions in this study were aligned to reflect the principles of the South African King III Report on Corporate Governance (IoD 2009), which are globally recognised as a benchmark of corporate governance (Andreasson 2011; Ntim, Opong & Danbolt 2012; West 2009). Sustainability for the purposes of this study is used collectively and refers to economic, social and environmental aspects (Elkington 2006; IoD 2009; Kocmanová, Hřebíček & Dočekalová 2011). Sustainability performance refers to a company's ability, in addition to managing financial performance, to enhance and invest in the wellbeing of the overall economy, society and the environment (IoD 2009; Kocmanová et al. 2011).

Sustainability performance and corporate governance

Early research on the topics of sustainability and corporate governance treated these two issues separately; however, recent literature has drawn links between the two concepts (Aras & Crowther 2008; Jo & Harjoto 2012; Rodriguez, Ricart & Sanchez 2002), highlighting that sustainability is a matter of corporate governance

(Kocmanová & Šimberová 2014; Ntim & Soobaroyen 2013), and that the two cannot be separated.

Companies' commitment to sustainability can be explained through stakeholder theory (Jo & Harioto 2012; Tounes, Gribaa & Chakroun 2011). Stakeholder theorists propose that corporations no longer only have an economic purpose, but that they also have a social purpose – in other words, not only to create shareholder wealth, but also to create and distribute value and wealth to all their stakeholders (Andreasson 2011; Morck 2014; Perrini, Russo, Tencati & Vurro 2012). Stakeholder theory obtained prominence through its endorsement by good codes of governance, which specifically emphasise that companies have responsibilities to various stakeholders (Morck 2014, Ntim et al. 2012; West 2009). In South Africa, all companies listed on the JSE are required to comply with the King II (IoD 2002) and subsequently the King III (IoD 2009) reports on corporate governance for South Africa, which adopt a stakeholder approach and encourage companies to report on their economic, social and environmental performance.

Implementing good corporate governance places sustainability on the agenda of corporate boards and forces directors to take responsibility for their companies' sustainability performance (Elkington 2006; Jamali et al. 2008; Kruse & Lundbergh 2010; Ricart, Rodriguez & Sanchez 2005). If sustainability performance is therefore the responsibility of the board of directors, it is important to understand why some companies are better sustainability performers than others. This study drew from theory developed to understand how boards affect company financial performance to understand how they could perhaps affect sustainability performance.

A theoretical framework for measuring board attributes and their relationship with company performance

Zahra and Pearce (1989) contributed an integrative model to explain how boards of directors influence corporate financial performance. Although other frameworks and models exist, Zahra and Pearce's model is most frequently used (Ricart et al. 2005; Markarian & Parbonetti 2007), as it provides a useful framework for integrating the literature, mainly from a resource dependency theory, and explaining how boards influence company performance. According to the model developed by Zahra and Pearce (1989), the board performs multiple roles, namely control, service and strategy. Their performance of these roles is influenced by a mix of board attributes, namely composition, characteristics, structure and process. The relationship is contingent on internal and external factors. Corporate performance is in turn a result of a beneficial link between board attributes and board roles. The

theory therefore states that companies that achieve better financial performance have achieved a more beneficial link between their board's attributes and roles.

Based on Zahra and Pearce's (1989) model, Ricart et al. (2005) derived a sustainable corporate governance model and concluded that, in order for a governance system to contribute to the company's sustainability performance, the following four key questions should be answered:

- Who should the board members be?
- What should the board's most important roles be?
- How should the board function in order to fulfil these roles effectively?
- Why should the board embrace sustainable development?

Zahra and Pearce's (1989) model was adapted to include the questions of Ricart et al. (2005), as shown in Figure 1, which illustrates the board's impact on sustainability performance. If the adapted model (Figure 1) is applied to sustainability performance, it would suggest that sustainability performing companies would have a more beneficial link between board attributes and roles than non-sustainability performing companies. This adapted model was applied as the theoretical framework for this study.

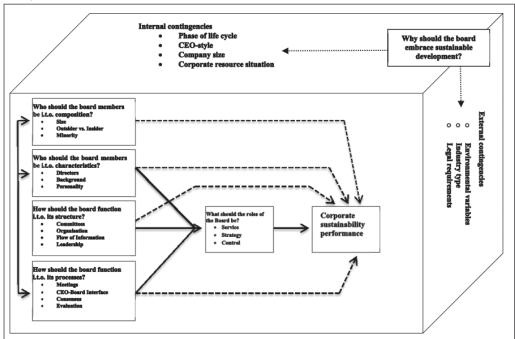


Figure 1: Adapted integrative model of how boards impact company sustainability performance Sources: Zahra & Pearce (1989); Ricart et al. (2005)

For the purposes of this study, only the first question indicated in the work of Ricart et al. (2005) was relevant to the objectives of this study, namely, "Who should the board members be in terms of composition and characteristics?" To answer this question, the study used the following variables in line with Zahra and Pearce's model (1989): (1) gender, (2) ethnicity, (3) independence (insider versus outsider) and (4) director background.

Sustainability performance and board diversity

The general themes from the literature on board characteristics and sustainability performance revolved around board diversity. Adams et al. (2015) categorised board diversity into task-related diversity, such as educational or functional background, non-task-related diversity (including gender, age, race or nationality), as well as structural diversity (namely, board independence and CEO non-duality). The rationales for these can all be found in the fundamental theory underlying the role of the board of directors, namely agency theory, resource dependence theory and stakeholder theory (Van der Walt & Ingley 2003).

Agency theory contends that a key activity for boards is monitoring management on behalf of shareholders, and that effective monitoring can improve performance by reducing agency costs (Hillman & Dalziel 2003). Agency theory requires board diversity in a balance between executive and non-executive directors to prevent domination in decision-making (Zhu et al. 2014). A homogeneous board has frequently been related to directors' inability to consider diverse perspectives and their tendency to abide by social norms (Adams et al. 2015; Zhu et al. 2014). The most appropriate board comprises a mixture of various types of directors, to serve the firm beyond legal governance functions (Hillman 2015), and a board composed of a balance between executive and non-executive directors is more efficient than one with an excessive number of non-executive directors (De Andres & Vallelado 2008).

Resource dependence theorists examine how board capital, namely the board members' 'experience, expertise, reputation and networks', leads to the provision of resources to the organisation. Empirical studies in the resource dependence tradition have shown a relationship between board capital and performance (Hillman & Dalziel 2003). In determining which types of directors will be most effective in fulfilling the resource dependence role, it is important to consider which type of resources and links are most salient in a given environment (Hillman & Dalziel 2003; Markarian & Parbonetti 2007).

The moral basis for diversity is explained in the context of stakeholder theory, where the board's role includes the ethical treatment of all stakeholders. If stakeholders

feel that the company violates their expectations of ethical behaviour, they have the power to damage the company's reputation (Jo & Harioto 2012; Nelson, Zollinger & Singh 2001). Boards of directors are an important way to legitimate stakeholder interests, and therefore companies are including stakeholder directors on their boards (Ayuso & Argandona 2007). One of the core dilemmas facing boards in South Africa is that they are required to operate responsibly to a wide variety of stakeholders, while simultaneously attending to the commercial needs of business (Serretta, Bendixen & Sutherland 2009). In order for the board to assess and satisfy the needs of various stakeholders, it has to be comprised of diverse directors, with different backgrounds, skills and perspectives that represent the considerations of the various stakeholders (Kaufman & Englander 2005).

The literature further reflects propositions of which type of directors should be included on the board in order to effectively perform its role in corporate social responsibility. The most notable propositions are:

- That the board should include directors who represent the social and natural systems in which the company operates (Ayuso & Argandona 2007).
- Boards will be better equipped to deal with sustainability if they are composed
 of a diversity of nationalities, skills, professional experiences, genders, ethnicities
 and ages (Nelson et al. 2001).
- Directors with hybrid backgrounds (NGO and business experience) will be considered more valuable than directors with only business experience (Strandberg 2008).

Although some studies have investigated director background in relation to corporate performance and sustainability, they generally focused on different types of functional backgrounds. Limited research has been performed specifically on the relationship between directors from a business background and those with a non-business background. Directors with a non-business background are likely to be directors whose expertise lies within academia, government, the arts, science, politics, law, the military or clergy (Ayuso & Argandona 2007; Peterson & Philpot 2009). Although this study will investigate structural diversity in terms of board independence, and non-task diversity in terms of gender and ethnicity, its unique contribution lies in exploring task-related diversity in terms of the effect that the inclusion of directors from a non-business background on corporate boards has on sustainability performance.

Zahra and Pearce (1989) put forward a detailed agenda for future research. They indicate a need for a better understanding of what boards do in practice rather than putting forward more propositions of what they should do, with more descriptive and

comparative research. There is a need to describe the current status of board diversity in order to better understand which elements matter for sustainability performance. Despite Zahra and Pearce's (1989) call for more descriptive and comparative research, this type of research is still to a large extent absent (Adams et al. 2015; Hillman 2015). To contribute to these needs, this study followed a research design as described next.

Methodology

To understand how boards influence sustainability performance, the study used a cross-sectional design in the form of a comparative analysis to explore whether the board composition and characteristics of sustainability performing companies are different from those of other companies listed on the FTSE/JSE All Share Index in terms of the gender, ethnicity, independence and background of the directors. Furthermore, it used a longitudinal design in the form of a trend analysis to explore how these characteristics have evolved over time.

Sampling

This study used the JSE Social Responsible Investment (SRI) Index as a proxy for sustainability performance. Two samples were constructed, namely social responsible investment (SRI) companies and a sample of other companies referred to as non-social responsible investment companies (NSRI).

The target population for the SRI sample consisted of all companies listed on the FTSE/JSE All Share Index that were included on the SRI index for *all three* periods investigated, namely 2004, 2007 and 2010. The second population, namely NSRI companies, consisted of FTSE/JSE All Share Index companies not included in the index for the periods 2004, 2007 and 2010.

Socially responsible investment (SRI) is defined as an investment strategy for funds owned by individuals or institution that seeks to maximise both financial return and social good. SRI indices consist of a series of companies that meet the requirement of corporate social responsibility and serve as a benchmark for SRI (Sun, Nagata & Onoda 2011). The JSE SRI Index was launched in May 2004 with the objective of identifying those companies listed on the FTSE/JSE that integrate sustainability principles and good governance into their business activities. The United Nations Principles for Responsible Investment form the basis for measurement criteria and appropriately address all three areas of the triple bottom line, namely, environment, society and economy. Further credibility is added to the selection process in that an independent panel of experts (Advisory Committee) has been appointed by the JSE to oversee the management and workings of the SRI Index. Reviews are conducted

annually, and the index is announced at the end of November each year. The eligible population is companies in the FTSE/JSE All Share Index, and participation for companies other than the JSE Top 40 companies was voluntary up until 2010 (JSE & EIRIS 2007–2010). Inclusion in the index is conditional, which means that for a company to be included in the index, it must meet the minimum core and desirable indicators as described by the assessment criteria. Companies that participated, but did not meet these minimum criteria, are not included in the index. To date the JSE has not published how companies fared relative to one another or disclosed those companies that participated but did not qualify for inclusion in the index. The index was regarded as a valid proxy for identifying SRI companies. It is important to note that this study cannot fully justify the validity of the measure for non-sustainability performance for the sample of NSRI companies, because it could not be assumed that all listed companies that were not included in the SRI constituted sustainability non-performing companies. This is because until 2010, only the Top 40 companies were automatically assessed against the criteria and participation for the remaining listed companies was voluntary (JSE & EIRIS 2007-2010). The implication was that the results of this study could only be limited to the companies included in the samples and therefore could not be generalised to the whole population. However, at the time that the study was conducted, no recognised measure for the NSRI companies was available, and therefore a default measure, namely non-inclusion in the SRI Index, was deemed the most appropriate. In favour of this default method, it was determined that it would be unlikely that a company that took sustainability seriously would not want to participate in the index. However, the possibility that the NSRI sample might include a company that was a sustainability performer rather than a non-performer could not be excluded. Due to the exploratory nature of the research, a level of uncertainty was deemed acceptable.

The SRI companies were identified by obtaining the list of SRI constituents for the 2004, 2007 and 2010 years from the JSE website (JSE 2014). Thirty companies that were constituents of the index for all three periods were identified and formed the SRI sample. A control sample was constructed by using the list of the Top 200 South African companies that is compiled annually by the *Financial Mail* based on financial data. The top 30 companies from the *Financial Mail* (2011) list that were not included in the SRI Index during 2004, 2007 or 2010 formed the NSRI sample.

An objective of the study was to obtain a longitudinal view of the impact of board diversity on the sustainability performance of companies over time, because the impact of board decisions are not seen immediately, but can only be detected over time. The SRI Index was first published in 2004, justifying the starting period of the study as 2004. The rotation period for directors is usually three years, and it was therefore decided to allow three years between the periods selected for testing,

namely 2007 and 2010. As the assessment criteria for inclusion in the SRI changed in 2011, only data up to 2010 were included to allow for the valid comparison of companies included in each sample.

Data collection and analysis

Secondary data on board composition were obtained from each of the sample companies' annual reports. These reports were extracted from the McGregor BFA database. Director information that was not available in the annual reports was sourced from *Who's Who SA*, *Business Week*'s executive profile and biography, or by means of a director search on McGregor BFA. The following data were compiled for each of the sample companies: percentage of female directors, percentage directors from different ethnic groups, percentage of non-executive directors and percentage of directors with a non-traditional background.

Criteria were constructed to identify directors with a non-traditional background. This was necessary because no similar set of criteria could be found in the literature. A director was categorised as having a traditional background when his/her experience and skills were gained through working in various positions in business, and as having a non-traditional background when it was gained through working in other organisations or institutions, for example NGOs, government, politics or academia. In order to be categorised as having a non-traditional background, the director had to have served in an executive capacity in those organisations or institutions. This study thus did not differentiate between directors with a purely non-business background, and directors with a combination of business and non-business backgrounds.

The collected data were imported into SPSS to perform statistical analysis. Descriptive statistics were used to describe the board characteristics at specific times, namely 2004, 2007 and 2010 for both SRI and NSRI samples, as well as how these characteristics had changed over time (2004 to 2010). T-tests (p < .05) were used to perform the comparative analysis to identify any significant differences between SRI and NSRI companies in terms of gender, ethnicity, percentage non-executive and having a non-traditional background. Repeated measure analysis of variance (ANOVA) (p < .05) was used to identify longitudinal trends and compare how the variables related to the SRI and NSRI companies had changed between 2004, 2007 and 2010.

Findings

The research objective was to describe and compare the board characteristics of the SRI sample with the NSRI sample in terms of board diversity at specified points in time so as to identify changes over time.

Descriptive statistics

The summary of findings related to the descriptive statistics of the SRI sample is presented in Table 1, and for NSRI companies in Table 2.

Table 1: Summary of descriptive statistics for the SRI sample

SRI sample					
	2004	2007	2010		
	Percentage directors, on average				
Female directors on the board	8.13	13.89	15.76		
Ethnic minority directors on the board	22.38	31.27	37.77		
Non-executive directors on the board	69.75	74.90	75.37		
Directors with a non-traditional background on the board	16.77	18.92	18.49		

Table 2: Summary of descriptive statistics for the NSRI sample

NSRI sample					
	2004	2007	2010		
	Percentage directors, on average				
Female directors on the board	5.50	8.67	13.53		
Ethnic minority directors on the board	19.40	25.20	29.37		
Non-executive directors on the board	64.47	64.37	67.83		
Directors with a non-traditional background on the board	11.27	12.73	12.00		

The results show that the boards of both SRI and NSRI sample companies are diverse to some extent and that this diversity is on the increase. The findings provide insight into the various diversity characteristics incorporated by corporate boards in South Africa.

It is important to note that within the South African environment, board structures are influenced not only by the King II (IoD 2002) and King III (IoD 2009) Reports of Corporate Governance but also the Broad-based Black Economic Empowerment (B-BBEE) Act (No. 53 of 2003), which legislates economic advantages to previously disadvantaged communities. The King reports require that corporate boards consist of a majority of non-executive directors, and although not a requirement, it is further

stated that demographic diversity should be an "obvious consideration" (IoD 2002; 2009). The B-BBEE Act specifically legislates the ethnic and gender profiles that should be adhered to within company structures. Accordingly, the governance environment in South Africa favours the inclusion of non-executive, female and ethnic minority directors on corporate boards.

There was a clear distinction in the proportion of non-executive directors on the boards compared to the percentage of female and ethnic minority directors. This is evident from Tables 1 and 2 for all three periods (2004, 2007 and 2010) for both the SRI and NSRI samples, with the majority of the board being non-executive directors and the minority being female and ethnic minority directors. This finding was not surprising because of the King II (IoD 2002) and the King III (IoD 2009) requirement to include majority non-executive directors on boards.

For both the SRI and NSRI samples, the percentage of female and ethnic minority directors increased from 2004 to 2010 (Tables 1 and 2). It appears as if the preferred method for South African companies to diversify the demographic composition of their boards is through ethnic minority directors, as opposed to female directors. In both the SRI and NSRI samples, for all three periods, the percentage of ethnic minority directors exceeded the percentage of female directors.

The results show that companies in South Africa, irrespective of whether they are sustainability performing or other companies, have improved board diversity by including directors with non-traditional backgrounds. For both the SRI and NSRI samples, the percentage of directors with non-traditional backgrounds increased from 2004 to 2010. There are no specific governance requirements for companies to include directors with non-traditional backgrounds.

Descriptive analysis of board characteristics of SRI and NSRI companies

Inferential statistics in the form of t-tests were performed to determine whether the differences in gender, affiliation, ethnicity and business background variables were statistically significant between the SRI and NSRI samples for 2004, 2007 and 2010. Furthermore, a repeated measure ANOVA test was performed to determine whether the differences within each sample over time were statistically significant. A difference was considered significant if the p-value measured lower than .05 (p < .05).

The summary of comparative results is shown in Table 3.

Table 3: Summary results of comparative analysis

	2004	2007	2010
Female directors on the board	SRI > NSRI	SRI > NSRI*	SRI > NSRI
	[0.154]	[0.013]	[0.387]
Ethnic minority directors on the board	SRI > NSRI	SRI > NSRI	SRI > NSRI
	[0.558]	[0.160]	[0.070]
Non-executive directors on the board	SRI > NSRI	SRI > NSRI*	SRI > NSRI*
	[0.152]	[0.002]	[0.016]
Directors with a non-traditional background on the board	SRI > NSRI	SRI > NSRI*	SRI > NSRI*
	[0.101]	[0.030]	[0.021]

Note: * indicates p < .05

In all three periods, the SRI sample had on average more female, ethnic minority, non-executive and directors with a non-traditional background on their boards than the NSRI sample. The differences were not significant for any of the board characteristics in 2004. In 2007, the SRI sample had significantly more female, non-executive and directors with a non-traditional background on their boards than the NSRI sample. In 2010, the only significant difference was in the percentage of non-executive and directors with a non-traditional background.

The results suggest that the SRI sample was leading the transformation process, with the NSRI sample lagging behind (Table 4). In terms of the percentage of non-executive directors, the increase for the SRI sample was significant between 2004 and 2007, but not between 2007 and 2010. The NSRI sample lagged behind with an insignificant increase period on period.

In terms of the percentage of female directors, the increase for the SRI sample was significant between 2004 and 2007, but not between 2007 and 2010. The NSRI sample lagged behind with an insignificant increase between 2004 and 2007, but picked up pace between 2007 and 2010 with a significant increase.

In terms of the percentage of ethnic minority directors, the increase for the SRI sample was significant between 2004 and 2007 as well as between 2007 and 2010. The NSRI sample lagged behind with an insignificant increase between 2004 and 2007, as well as between 2007 and 2010.

Conclusion

Sustainability performance entails the consideration of the needs of all stakeholders, and not just the needs of the shareholders (Andreasson 2011; Ntim et al. 2012). To meet the needs of all shareholders, directors need diversity in terms of skills, know-

Table 4: Summary results of trend analysis

SRI sample					
	Differences over time (mean)				
	2004–2010	2004–2007	2007–2010		
Female directors on the board	Increase*	Increase*	Increase		
	[0.000]	[0.000]	[0.175]		
Ethnic minority directors on the board	Increase*	Increase*	Increase*		
	[0.000]	[0.001]	[0.001]		
Non-executive directors on the board	Increase*	Increase*	Increase*		
	[0.006]	[0.005]	[0.781]		
Directors with a non-traditional background on the board	Increase	Increase	Decrease		
	[0.391]	[0.204]	[0.021]		
NSRI sample					
	Differences over time (mean)				
	2004–2010	2004–2007	2007–2010		
Female directors on the board	Increase*	Increase	Increase*		
	[0.001]	[0.064]	[0.019]		
Ethnic minority directors on the board	Increase*	Increase	Increase*		
	[0.011]	[0.084]	[0.107]		
Non-executive directors on the board	Increase	Decrease	Increase*		
	[0.160]	[0.953]	[0.089]		
Directors with a non-traditional background on the board	Increase	Increase	Decrease		
	[0.635]	[0.404]	[0.531]		

Note: * indicates p < .05

ledge and experience (Kruse & Lundbergh 2010). To understand how boards are influencing sustainability performance, there is a need to describe the current status and progress that has been made in terms of board diversity and its relationship with sustainability. This study contributed to obtaining an understanding of how boards in South Africa organise themselves in practice to effectively perform their role of creating sustainable organisations. This was done firstly by describing the composition of the boards of sustainability performing (SRI) companies compared with other (NSRI) companies listed on the FTSE/JSE All Share Index, and secondly by exploring the difference in board composition of the two samples quantitatively as well as over time in terms of gender, ethnicity, affiliation and, uniquely, the inclusion of directors from a non-business background.

The descriptive analysis suggests that board diversity is on the agenda of corporate boards in South Africa, irrespective of whether a company is sustainability performing or not. This is in line with the findings from the literature that board diversity is

considered by all companies and not only by those embracing sustainability (Adams et al 2015; Hillman 2015; Van der Walt & Ingley 2003).

Listed companies in South Africa are required to increase the number of non-executive, female and ethnic minority directors on their boards. The findings suggest that companies in the SRI sample react more quickly to changes in the external environment than their NSRI counterparts. Webb (2004) reported findings that sustainability performing companies have stronger governance structures in place than non-sustainability performing companies. The findings of this study suggest that companies that have stronger governance structures in place could adapt more quickly to the external environment. This might further suggest that sustainability performing companies are able to adapt more quickly to the external environment.

This study indicated that companies in South Africa, irrespective of whether they are sustainability performing or non-performing, have improved board diversity by including directors with non-traditional backgrounds.

The comparative analysis showed that the SRI sample, for all three periods, had consistently more female, ethnic minority, non-executive and directors with non-traditional backgrounds on their boards than NSRI companies. However, significant differences were only found for the percentage of non-executive directors and those with non-traditional backgrounds.

O'Neill et al. (1989) state that it is the unique skills, experiences and knowledge that a director brings to a board that makes him/her valuable and not whether such person is male or female, and executive or non-executive. It is therefore not surprising that no significant differences were found between the SRI and NSRI in terms of the percentage of female and ethnic minority directors. However, the fact that the percentage of non-executive directors differed significantly between the SRI and NSRI samples should be interpreted with caution. SRI companies consist of a large percentage of non-executive directors. These directors normally come from more diverse backgrounds than executive directors (Rindova 1999). It could therefore be interpreted that, whether a director is a non-executive is not as relevant as the unique skills, experience and knowledge that the particular non-executive director brings to the board (De Andres & Vallelado 2008).

In line with previous findings, this study found that it is not the attributes of gender, ethnicity and non-executive/executive that are likely to influence a director's orientation towards sustainability, but rather the director's background in terms of non-business experience. This study by no means suggests that gender, ethnicity and affiliation have no influence on a director's orientation towards sustainability, but rather that director background cannot be ignored when examining the relation between boards of directors and sustainability performance.

It should be noted that, because of the inherent limitations of using the SRI Index as a proxy for sustainability performance, the conclusions on board characteristics of SRI and NSRI companies in this article cannot be generalised but apply only to the boards of the companies included in the samples. Despite this limitation, the study addressed the need to describe the current status of board diversity in order to better understand which elements matter for sustainability performance and what progress has been made in becoming more diverse.

This study further provides support for the relationships put forward in the model of Zahra and Pearce (1989), which recognised director background as a board attribute linked to the board's performance of its roles. This study found that director background is likely to be related to the board's performance of their role in sustainability. The model of Ricart et al. (2005) proposed that directors should consider who the board members should be. Accordingly, this study provided insight into who should be the board members, namely including non-executive directors with non-business experience.

Recognising the values of individual directors is emerging as a theme in the literature (Adams et al. 2015; Hillman 2015; Ryan et al. 2010; Zhu et al. 2014). The findings of this study suggest that this is a worthwhile avenue to explore further. This study adopted a simplistic approach to capturing the orientation of directors from a non-business background. Future researchers are encouraged to refine the measurement of director's orientation in order to facilitate empirical research. Recent literature suggested better measures for sustainability performance (Kocmanová & Šimberová (2014). Such measures would allow for more robust comparison of national and international companies' sustainability performance in relation to board diversity. In addition, longitudinal studies linking financial performance, sustainability performance and board diversity could add significant value to the body of knowledge.

References

Adams, R.B., De Haan, J., Terjesen, S. & Van Ees, H. 2015. 'Board diversity: Moving the field forward', *Corporate Governance: An International Review*, 23(2): 77–82.

Anderson, R.C., Reeb, D.M., Upadhyay, A. & Zhao, W. 2011. 'The economics of director heterogeneity', *Financial Management*, 40: 5–38.

Andreasson, S. 2011. 'Understanding corporate governance reform in South Africa: Anglo-American divergence, the King reports, and hybridization', *Business and Society*, 50(4): 647–673.

Aras, G. & Crowther, D. 2008. 'Governance and sustainability: An investigation into the relationship between corporate governance and corporate sustainability', *Management Decision*, 46(3): 433–448.

- Ayuso, S. & Argandona, A. 2007. 'Responsible corporate governance: Towards a stakeholder board of directors?' [Online] Available at: http://ssrn.com/abstract=1349090. Accessed: 2 March 2010.
- Ben-Amar, W., Francoeur, C., Hafsi, T., & Labelle, R. 2013. 'What makes better boards? A closer look at diversity and ownership', *British Journal of Management*, 24: 85–101.
- *Business Week*. 2012. Executive profile and biography. [Online] Available at: http://investing.businessweek.com. Accessed: 3 September 2012.
- Carter, D.A., D'Souza, F., Simkins, B.J. & Simpson, W.G. 2010. 'The gender and ethnic diversity of US boards and board committees and firm financial performance', *Corporate Governance: An International Review*, 18(5): 396–414.
- De Andres, P. & Vallelado, E. 2008. 'Corporate governance in banking: The role of the board of directors', *Journal of Banking and Finance*, 32: 2570–2580.
- Elkington, J. 2006. 'Governance for sustainability', *Corporate Governance: An International Review*, 14(6): 522–529.
- Financial Mail. 2011. Top companies survey. 23 June.
- Finegold, D., Benson, G.S. & Hecht, D. 2007. 'Corporate boards and company performance: Review of research in light of recent reforms', *Corporate Governance: An International Review*, 15(5): 865–878.
- Hillman, A.J. 2015. 'Board diversity: Beginning to unpeel the onion', *Corporate Governance: An International Review*, 23(2): 104–107.
- Hillman, A.J. & Dalziel, T. 2003. 'Boards of directors and firm performance: Integrating agency and resource dependence perspectives', *Academy of Management Review*, 28(3): 383–396.
- Jamali, D., Safieddine, A. M. & Rabbath, M. 2008. 'Corporate governance and corporate social responsibility synergies and interrelationships', *Corporate Governance: An International Review*, 16(5): 443–459.
- Jo, H. & Harjoto, A. M. 2012. 'The causal effect of corporate governance on corporate social responsibility', *Journal of Business Ethics*, 106(1): 53–72.
- JSE & EIRIS. 2007–2010. Johannesburg Stock Exchange SRI Index: Background and selection criteria. Johannesburg: JSE & EIRIS.
- JSE. 2014. 2004–2014 SRI Index constituencies. [Online] Available at: https://www.jse.co.za/services/market-data/indices/socially-responsible-investment-index. Accessed: 3 September 2014.
- Kaufman, A. & Englander, E. 2005. 'A team production model of corporate governance', *Academy of Management Executive*, 19(3): 9–22.
- IoD (Institute of Directors in Southern Africa). 2002. King II Report on Corporate Governance for South Africa.
- IoD (Institute of Directors in Southern Africa). 2009. King III Report on Corporate Governance for South Africa.
- Kocmanová, A., Hřebíček, J. & Dočekalová, M. 2011. 'Corporate governance and sustainability', *Economics and Management*, 16: 543–550.

- Kocmanová, A. & Šimberová, I. 2014. 'Determination of environmental, social and corporate governance indicators: Framework in the measurement of sustainable performance', *Journal of Business Economics and Management*, 15(5): 1017–1033.
- Kruse, C. & Lundbergh, S. 2010. 'The governance of corporate sustainability', *Rotman International Journal of Pension Management*, 3(2): 46–51.
- Markarian, G. & Parbonetti, A. 2007. 'Firm complexity and board of director composition', Corporate Governance: An International Review, 15(6): 1224–1243.
- McGregor BFA. [Online] Available at: http://www.mcgregorbfa.com. Accessed: June to December 2011.
- Morck, R. 2014. 'The social value of shareholder value', *Corporate Governance: An International Review*, 22(3): 185–193.
- Naude, K. 2009. Business strategy and corporate social responsibility. Lecture at the University of Johannesburg, 13 October.
- Nelson, J., Zollinger, P. & Singh, A. 2001. 'The power to change: Mobilising board leadership to deliver sustainable value to markets and society', SustainAbility/International Business Leaders Forum, London.
- Ntim, C.G., Opong, K.K. & Danbolt, J. 2012. 'The value relevance of shareholder versus stakeholder corporate governance disclosure policy reforms in South Africa', *Corporate Governance: An International Review*, 20(1): 84–105.
- Ntim, C.G. & Soobaroyen, T. 2013. 'Corporate governance and performance in socially responsible corporations: New empirical insights from a neo-institutional framework', *Corporate Governance: An International Review*, 21(5): 468–494.
- Nguyen, D.D., Hagendorff, J. & Eshraghi, A. 2015. 'Which executive characteristics create value in banking? Evidence from appointment announcements', *Corporate Governance: An International Review*, 23(2): 112–128.
- O'Neill, H.M., Saunders, C. & McCarthy, A. 1989. 'Board members' background characteristics and their level of corporate social responsiveness orientation: A multivariate investigation', *Academy of Management Annual Meeting Proceedings*, 1: 32–36.
- Perrini, F., Russo, A., Tencati, A. & Vurro, C. 2012. 'Deconstructing the relationship between corporate social and financial performance', *Journal of Business Ethics*, 102(1): 194–211.
- Peterson, C.A. & Philpot, J. 2009. 'Roles of academic directors on US Fortune 500 boards', *Corporate Governance*, 9(2): 202–215.
- Ricart, J.E., Rodriguez, M.A. & Sanchez, P. 2005. 'Sustainability in the boardroom: An empirical examination of Dow Jones Sustainability World Index leaders', *Corporate Governance: International Journal of Effective Board Performance*, 5(3): 24–41.
- Rindova, V.P. 1999. 'What corporate boards have to do with strategy: A cognitive perspective', *Journal of Management Studies*, 36(7): 953–975.
- Rodriguez, M.A., Ricart, J.E. & Sanchez, P. 2002. 'Sustainable development and the sustainability of competitive advantage: A dynamic and sustainable view of the firm', *Corporate Governance: An International Review*, 11(3): 135–146.

- Ryan, L.V., Buchholtz, A.K. & Kolb, R.W. 2010. 'New directions in corporate governance and finance: Implications for business ethics research', *Business Ethics Quarterly* 20(4): 673–694.
- Serretta, H., Bendixen, M. & Sutherland, M. 2009. 'Core corporate governance dilemmas facing boards: A South African perspective', *South African Journal of Economic and Management Studies*, 12(2): 194–210.
- Strandberg, C. 2008. *The Role of the Board of Directors in Corporate Social Responsibility*. Conference Board of Canada (incorporated as AERIC Inc.).
- Sun, M., Nagata, K. & Onoda, H. 2011. 'The investigation of the current status of social responsible investment indices', *Journal of Economics and International Finance*, 3(13): 676–684.
- Tounes, A., Gribaa, F. & Chakroun, W. 2011. 'A spatio-temporal odyssey around the concepts of sustainable development and corporate social responsibility: Boundaries to be determined?', *Journal of Modern Accounting and Auditing*, 7(10): 1158–1168.
- Van der Walt, N., Ingley, C., Shergill, G.S. & Townsend, A. 2006. 'Board configuration: Are diverse boards better boards?', *Corporate Governance: International Journal of Business in Society*, 6(2): 129–147.
- Van der Walt, N. & Ingley, C. 2003. 'Board dynamics and the influence of professional background, gender and ethnic diversity of directors', *Corporate Governance: An International Review*, 11(3): 218–234.
- Webb, E. 2004. 'An examination of socially responsible firms' board structure', *Journal of Management and Governance*, 8(1): 255–277.
- West, A. 2009. 'The ethics of corporate governance: A South African perspective', *International Journal of Law and Management*, 51(1): 10–16.
- Who's Who SA. [Online] Available at: http://whoswho.co.za. Accessed: 10 January 2013.
- Zahra, S.A. & Pearce, J.A. 1989. 'Boards of directors and corporate financial performance: A review and integrative model', *Journal of Management*, 15(2): 291–334.
- Zhu, D.H., Shen, W. & Hillman, A.J. 2014. 'Recategorization into the in-group: The appointment of demographically different new directors and their subsequent position on corporate boards', *Administrative Science*, 59(2): 240–270.