

The Impact of Board Structure on Corporate Social Responsibility: A Temporal View

Jeremy Galbreath*

Curtin University, Perth, Western Australia, Australia

ABSTRACT

Time plays an important role in corporate social responsibility (CSR) decisions. In the context of time and the boardroom, the consideration of CSR can be affected by board structure. For example, because of considerable short-term pressures, this study posits that insiders on the board are less likely to prioritize the longer-term time horizons needed to affect CSR. Following this perspective, a hypothesis is put forth that insiders generally have temporal orientations that are more short term in nature and that they therefore have a negative effect on CSR. A study of 300 of Australia's largest firms confirmed this hypothesis. However, when inside director compensation linked to environmental and social metrics and inside director CSR training are introduced as moderating variables, their interactive effects lead to positive results: both positively moderate the negative insider–CSR relationship in environmental and social dimensions. The study contributes to a temporal view of boards of directors, as well as to corporate governance and CSR. Copyright © 2016 John Wiley & Sons, Ltd and ERP Environment

Received 02 December 2015; revised 08 March 2016; accepted 11 April 2016

Keywords: boards of directors; corporate governance; corporate social responsibility; inside directors; time

Introduction

BOARDS OF DIRECTORS HAVE EMERGED AS A GOVERNING BODY EXPECTED TO TAKE ACTION ON VOLUNTARY ACTIVITIES and programs related to corporate social responsibility (CSR) (Brammer and Pavelin, 2008; Amran *et al.*, 2014). However, any level of influence a board might have on CSR is likely to be subject to the extent to which they readily and systematically embrace a long-term view (Joireman *et al.*, 2004, 2006; Hahn *et al.*, 2015; Ortiz-de-Mandojana and Bansal, 2015; Slawinski and Bansal, 2015). In other words, a *temporal orientation* is a likely factor linking boards to CSR. Temporal orientation refers to the relative importance that an actor places on past, present or future time frames (Bluedorn and Denhardt, 1988; Ashkanasy *et al.*, 2004; Souder and Bromiley, 2012).

The consideration of boards' temporal orientations requires investigation of board structure. Most boards have a structure that consists of inside and outside board members, each of which have different roles to perform. Given these role differences, there is an expectation that members of the board are likely to have different temporal orientations. Inside directors ('insiders'), for example, are executive employees of the firm, are dependent on the firm for their livelihood and face considerable pressure to deliver short-term outcomes. This may result in insiders

*Correspondence to: Jeremy Galbreath, Curtin University, Perth, Western Australia, Australia. E-mail: jeremy.galbreath@gsb.curtin.edu.au

attempting to influence boards to give priority to actions that demonstrate quantifiable, short-term returns, rather than those that require a longer-term view such as CSR (Joireman *et al.*, 2004, 2006; Hahn *et al.*, 2015; Ortiz-de-Mandojana and Bansal, 2015; Slawinski and Bansal, 2015).

I posit that insiders present a particularly interesting context to study the temporal orientations of boards and CSR. There is evidence to suggest that insiders have been consistently linked to actions that are likely to trade off future firm benefits in favor of short-term gain (Beasley, 1996; Dechow *et al.*, 1996; Brochet *et al.*, 2012; Graham *et al.*, 2006; Pearlstein, 2014). In part, such actions reinforce the call for greater – if not total – board independence. Yet, insiders continue to reside on boards (Joseph *et al.*, 2014; Krause and Semadeni, 2014). This may be a point of contention, particularly where higher concentrations of insiders exist, because they might have considerable ability to influence decisions that are short-term orientated to the detriment of long-term opportunity. However, the study of the temporal orientation of insiders in the context of CSR remains largely uncharted.

To redress this oversight, this paper explores the following research question: *To what degree do insiders impact on CSR?* I argue that insiders have a temporal orientation such that their effect on CSR is likely negative. I also posit that, to attenuate the negative impact of insiders on CSR, certain mechanisms are needed to influence them to adopt the longer-term thinking needed to affect CSR. These include specific kinds of incentive and training on CSR. By studying a sample of 300 large public firms in Australia I found a negative relationship between insiders and CSR, and that insider compensation linked to environmental and social metrics and insider CSR training positively moderated this relationship.

Theoretical Perspective

CSR refers to a firm's voluntary prosocial actions (Barnett, 2007). These include activities and programs that further the social good, outstrip the firm's economic goals and go beyond legal or regulatory requirements (Barnett, 2007). Typical CSR activities and programs include the preservation of natural or environmental capital by means such as reducing waste, leveraging reverse supply chains and curbing carbon emissions; and the delivery of social improvements, such as advanced employee training, safer working environments and contributions to communities (McWilliams and Siegel, 2001; Shen and Benson, 2014). A focus on CSR moves firm attention away from a purely profit maximizing objective in the exclusive interest of shareholders to one that considers the interests of a broader set of stakeholders (Barnett, 2007). Yet, this shift in attention is one that relies on temporal orientation.

A temporal orientation is one that refers to the relative importance of past, present and future time frames (Bluedorn and Denhardt, 1988; Ashkanasy *et al.*, 2004; Souder and Bromiley, 2012). A past orientation entails the repeated use of past memories in decision making (Clark and Collins, 1993). A present orientation focuses on the 'here and now' and emphasizes short timeframes and more immediate results in decision making (Ashkanasy *et al.*, 2004). A future orientation carefully considers what the future holds and seeks to envision future events and consequences (Bluedorn, 2002).

At the level of the individual, according to Miller (2002), a present or myopic temporal orientation is a cognitive bias that can affect decision making in the sense that future opportunity or benefit can be discounted or ignored in favor of immediate gratification.¹ However, rather than a cognitive bias of an individual, a present or short-term focus can be a disposition of a collective – and even subsets of individuals within groups (cf. Jones, 1988; Laverty, 1996; Ancona *et al.*, 2001; Ashkanasy *et al.*, 2004). For example, Samuel (2000) suggests that shareholder myopia is the tendency of shareholders as a collective to focus on the behavior of stock prices in the short term as opposed to the long term. Similarly, management teams that have a tendency as a group to overtly focus on issues that appear in profit and loss statements tend to be short-term orientated (Van der Stede, 2000). In this sense, workgroups – such as boards – can consist of individual actors' temporal orientations as well as a group disposition or a general tendency towards a given temporal bias.

¹'Short-termism' is generally used interchangeably with managerial 'myopia' to denote a temporal orientation that mainly focuses on the short term (Laverty, 1996; Merchant and Van der Stede, 2007; Marginson and McAulay, 2008). Short term has been used to describe time horizons of a year or less (Krehmeyer *et al.*, 2006; Marginson and McAulay, 2008; Brochet *et al.*, 2012; Kang, 2013).

Measuring temporal orientation is very difficult (Souder and Bromiley, 2012), and in the context of boards is made even more difficult, as access to this elite group is extremely difficult (Leblanc and Schwartz, 2007). However, following Souder and Bromiley (2012), one can draw inferences about an actor's relative temporal orientation, for example, by studying whether or not they are linked to actions that require longer-term payback horizons (e.g. CAPEX). This is because temporal orientations reflect the behavioral patterns and routines of decision makers. I argue that analyzing the relationship between board structure and firm actions such as CSR enables similar inferences to be made.

Finally, with respect to board structure and perspectives of time, board members are likely to have different temporal orientations. This is due to the fact that directors play different roles on the board. For example, insiders are employees and are dependent on the firm for their livelihoods. They are required to be experts on the firm itself and to provide deep insight into strategies and direction (Hillman *et al.*, 2000). However, insiders have been criticized for being self-interested (Fama and Jensen, 1983). Self-interest could be detrimental to CSR, for example, in that insiders seek to prioritize and demonstrate short-term financial results in order to advance their own agendas, careers or rewards (Fama and Jensen, 1983). Alternatively, outsiders on the board are likely to be in a position to positively affect CSR. This is because independent, outside directors do not have a material relationship with the focal firm and its management, have careers that are not dependent on the focal firm's CEO and do not feel the pressure of competitors so closely. This likely permits outsiders to more freely engage in the longer-term thinking needed to affect CSR in the focal firm, while feeling less restrained in advocating CSR activities and programs that, in general, may only provide substantive benefits in the long term, if at all. There is evidence to suggest that outsiders are linked to CSR, confirming these postulates (Ibrahim and Angelidis, 1995; McKendall *et al.*, 1999; Ibrahim *et al.*, 2003; de Villiers *et al.*, 2011; Post *et al.*, 2011). Given that board members play different roles and likely have different sets of motivations, their temporal orientations are also likely to differ, which may impact on CSR differently.

Hypotheses

This study does acknowledge that inside board members are moral beings who might have some level of motivation to respond to voluntary actions such as CSR, might have some level of interest in a particular aspect of social responsibility and/or might profess concern about the longer-term interests of the firms they manage. However, a larger matter is to what extent these would take *precedence* or *priority* over delivering short-term economic results (Epstein *et al.*, 2015). For example, evidence suggests that corporate executives (and by implication insiders) would go as far as risking the pollution of the environment in order to increase shareholders' short-term wealth or forgo an attractive, voluntary corporate social program if the cost would cause the firm to even marginally miss its quarterly earnings target (Pearlstein, 2014).

Other studies demonstrate that firms that engage in financial statement fraud and short-term earnings manipulation tend to have more insiders on the board (Beasley, 1996; Dechow *et al.*, 1996). Similarly, the study of Brochet *et al.* (2012) suggests that firms that are oriented to the short term are more likely to be influenced by inside directors versus other types (i.e. independent directors). This is supported by Graham *et al.* (2006), who find that over 80 percent of corporate executives say that they would decrease voluntary projects (e.g. CSR) to meet quarterly or annual earnings targets, while a further 50 percent say that they would willingly sacrifice the potential of long-term profits in order to meet the short-term earnings expectations of the market.

The inherent trade-offs required to address shareholder and other stakeholder concerns are complex, and may cause an insider to favor corporate actions that demonstrate clearly defined short-term returns over those of voluntary CSR activities and programs (Post *et al.*, 2011; Hahn *et al.*, 2015; Slawinski and Bansal, 2015). For example, the demands of CSR place an increased burden on resource use in an already scarce market for resources. Further, if resources are allocated to their most immediate efficient use, then the demands of meeting CSR requirements are heightened given that they consist of much unquantified risk and are likely to require longer periods of time for generating benefits – if 'quantifiable' benefits are even achievable (Bansal, 2005; Ortiz-de-Mandojana and Bansal, 2015). Alternatively, because engaging in CSR requires significant change in organizations and strategies (Shrivastava and Hart, 1995), it demands managerial time. Hence, while outsiders on the board – because they

do not have a material relationship with the focal firm – may not be burdened by any ‘internal’ pressures over increased expended effort or time, insiders may prefer to expend time and resources on known pathways and strategies that have less risk and greater quantified, shorter-term financial benefits. By doing so, insiders may even be able to increase their own short-term financial rewards (Lavery, 1996), therefore reinforcing a short-term temporal orientation.

While insiders are expected to add value to boards through their specialized knowledge of the inner workings of the firms where they are employed (see, e.g., Fama and Jensen, 1983; Fairfax, 2010), there is evidence to suggest that they are likely to be short-term orientated (Beasley, 1996; Dechow *et al.*, 1996; Brochet *et al.*, 2012; Graham *et al.*, 2006). This may be influenced by a market logic that exerts pressures on insiders to produce quarterly and annual results (Lavery, 1996), cognitive biases that favor less risk (Eisenhardt, 1989) and decisions that favor actions that align to quick results (Hayes and Abernathy, 1980; Porter, 1992). Any positive impact that insiders otherwise might have on a firm’s CSR could be undermined by a temporal orientation that motivates them to maximize profits in the short term, that seeks to increase their own short-term rewards by demonstrating short-term financial gains on behalf of the firm or that otherwise discounts the future in favor of present returns. With this in mind, I present the following.

H1: *As the concentration of insiders on the board increases, this is likely to have a negative association with CSR.*

Contingencies

Incentives

Based on the literature (Merriman and Sen, 2012), to motivate insiders to consider CSR issues, certain incentives may be able to shift or expand their temporal orientations. Similarly, following Berrone and Gomez-Mejia (2009), unless insiders are appropriately incentivized, they are less likely to deploy efforts and commit resources to CSR initiatives in favor of shorter-term actions. In the current case, one way to use incentives would be to tie a portion of insiders’ compensation packages to non-financial outcomes or measures of performance such as CSR. As insiders are offered incentives for achieving non-financial outcomes or measures of performance, they would be more likely to attend to CSR strategies that can lift the non-financial outcomes of the firms they govern (Deckop *et al.*, 2006; Kock *et al.*, 2012). Further, because consideration of actions related to CSR requires that actors engage in long-term thinking (Joireman *et al.*, 2004, 2006; Post *et al.*, 2011; Hahn *et al.*, 2015; Slawinski and Bansal, 2015), including the consideration of the trade-offs inherent between potential short-term losses for long-term gain, incentives linked to CSR would also be expected to expand insiders’ temporal orientations to more readily embrace future perspectives. Therefore, I propose the following.

H2: *The relationship between insiders and CSR is positively moderated by insider compensation linked to environmental and social outcomes.*

Insider CSR Training

Insiders are expected to focus on known pathways and the short term, because doing so reduces complexity (Lewis, 2000). In order to respond to the pressure of a market logic, insiders are also likely to attempt to influence boards in such a way that short-term economic performance takes precedence in boardroom deliberations (cf. Lavery, 1996; Thornton *et al.*, 2012). Such behaviors are likely to be at odds with CSR because CSR poses new challenges that require a longer-term perspective and the ability to engage in intertemporal thinking so as to reduce bias towards the short term.

More specifically, for firms to proactively engage in CSR, they may be required to consider changes in product features (e.g. more environmentally friendly features) that may take time to develop and introduce into the market (McWilliams and Siegel, 2000). In some cases, for a firm to be more environmentally sensitive may require significant work and time commitments to re-engineer, for example, existing production or supply chain processes (Siebenhüner and Arnold, 2007). On the other hand, the benefits of introducing advanced, socially responsible

employee practices likely require time to take effect. Ultimately, a shift in corporate culture designed to embrace CSR is unlikely to be an overnight endeavor. Such efforts require temporal orientations that are long term in nature.

As insiders confront such efforts that are brought to the board's attention, their temporal bias likely needs to be shifted – or at least 'exposed' in such a way that they can work towards embracing a longer-term view that is required to understand and influence CSR. I posit that one way this shift can be made (in addition to the incentives noted above) is through training efforts. Training, at a fundamental level, is the action of teaching a person a particular skill or behavior. Thus, as an individual receives training and believes she has gained the requisite skills needed to perform the behavior of interest, the more likely she will do it (Ajzen, 1991). In the case of CSR, training provided to individuals on the subject is expected to direct (if not shift) mind-sets and actions towards achieving the prosocial goals of the firm (see, e.g., Milliman and Clair, 1996; Egri and Hermal, 2002). Further, as CSR principles are embedded in training offered to employees, this is expected to engender the long-term thinking needed to create environmental and social well-being in the firm (see, e.g., Ehnert, 2009).

With respect to insiders, training on CSR is likely to lift and/or shift the awareness, strategic insight and intertemporal abilities needed to account for environmental and social issues. Therefore, insider training on CSR is likely to alter any bias towards shareholders and the short term, increase cognitive capacity to understand stakeholder interests in environmental and social outcomes, and expand temporal horizons so that they can engage in the longer-term thinking needed for CSR decision making. Hence, I have the following.

H3: *The relationship between insiders and CSR is positively moderated by CSR training provided to insiders.*

Method

Data and Sample

This study comprises public firms listed in 2012 in the Australian Securities Exchange (ASX) 300 index. The firms are rated by GES Investment Services (GES). GES has been used in a variety of CSR studies (e.g. Lopatta and Kaspereit, 2014; Semenova and Hassel, 2015; Lopatta *et al.*, 2016), and is a top three global CSR rating research agency (Schäfer *et al.*, 2006). In all, 300 firms were analyzed.

This study complements the GES CSR data with data from DatAnalysis, a secondary database containing financial information and information on boards of directors in Australian-listed firms. Company annual and supplemental (i.e. CSR) reports were also sourced for data collection.

Dependent Variables

CSR includes voluntary initiatives designed to improve a firm's response to its environmental and social systems (Barnett, 2007), and is argued to be a multidimensional construct (Waddock and Graves, 1997; Hillman and Keim, 2001). To measure CSR, I therefore included both environmental and social dimensions. For the *environmental* dimension, GES includes a battery of 21 indicators to rate how a firm handles its environmental impacts in terms of product performance, energy use, greenhouse gas (GHG) and volatile organic compound (VOC) emissions, waste treatment, water use and other environmental outcomes. For the *social* dimension, assessment is based on employee, community and supplier subcategories. For employees, firms are rated on health and safety programs, fairness in wages and labor policies, and diversity programs; for community, on local community involvement and contributions; and for suppliers, on forced and child labor, and certification programs. For each social subcategory, there are between three and six indicators. GES provides scores for each indicator in each subcategory (where appropriate) in alphabetical form ranging from C (weakness) to A+ (strength). I convert these scores into a metric variable from 1 (significant weakness) to 7 (significant strength) for analysis. Scores for each dimension and subcategory (i.e. the social dimension subcategories) were then taken for each firm for the year 2012, and the average calculated.

Predictor and Moderating Variables

All predictor variables were measured for the year 2012. The concentration of *insiders* on the board is measured as the percentage of board members who are insiders employed by the firm (this was determined by examining corporate governance statements in annual reports). To assess incentives and CSR training, I relied on annual and CSR reports. Annual and CSR reports are commonly used to collect firm-specific information. More specifically, annual or CSR reports are useful in the study of organizational behavior and strategy because they provide comparable sets of data and represent an account of a firm's activities (Arndt and Bigelow, 2000). Annual and CSR reports are also reliable. There is evidence to suggest that there is a correlation between discussion offered in such reports on specific dimensions of firm activity and objective measures of these same dimensions (see, e.g., Clarkson et al., 2008). Last, although public material could be inflated, companies need to be cautious in doing this because they can be held to their commitments (Krut and Munis, 1998). Therefore, sufficient accuracy and transparency in annual and CSR reports was assumed.²

For publicly listed firms in Australia, boards are required to report executive compensation policies to their shareholders in their annual reports. Hence, for each firm, data on *insider compensation linked to environmental and social metrics* was used. Firms are coded a 1 if there is evidence of any such link in the annual report, 0 otherwise. For *insider CSR training*, following Ricart et al. (2005), if evidence was found that training on CSR was provided to inside board members, the training variable was coded 1, 0 otherwise.³ As a robustness check, a second researcher coded separately insider CSR training. Inter-rater reliability revealed a pi of 0.913, which was acceptable (Hackston and Milne, 1996).

Control Variables

All control variables were measured for the year 2012. *Size* is widely used as a control variable in studies of CSR. For example, larger firms are thought to have more resources that can be channeled towards CSR (McWilliams and Siegel, 2001). To control for firm size, the natural logarithm of total assets was taken. Slack in more fungible financial resources is expected to offer management the opportunity to take advantage of emergent business needs such as those required by CSR activities and programs. Therefore, *financial slack* was calculated as current assets minus current liabilities (Brealey and Myers, 1996), and its log was taken.

Corporate governance control variables include the following. First, powerful CEOs can divert board attention away from activities considered non-essential or those such as CSR that are considered to have longer payback periods (Galbreath, 2012). Hence, *CEO duality* was controlled for by assessing its presence or absence (CEO duality, 1; 0 otherwise). Quarterly or annual cash bonuses may particularly motivate insiders to take short-term decisions that bolster current profits, but are detrimental for the firm's future value. Therefore, *insider short-term cash bonuses* are the log transformation of the sum of insider short-term cash bonuses as disclosed in the annual report. Insiders who receive long-term pay are more likely to make risky decisions, given that they are expected to participate in the future upside potential of these decisions. This could influence the long-term thinking and motivations necessary to affect CSR outcomes. Hence, I account for *insider long-term incentives*. This is measured by the mix of compensation paid to insiders in the form of stock options that have long-term vesting (i.e. over one year) divided by total compensation, as disclosed in the annual reports. With respect to the value of stock options, they were calculated using the Black–Scholes option-pricing model, which is consistent with prior research (Kock et al., 2012). Demographic characteristics such as age have been shown to influence individual beliefs, values, opinions and actions (Knight et al., 1999), and thus may influence insiders' temporal orientations. To control for this potential confounding effect, *insider age* is measured as the age of each insider on the board in number of years as reported in annual reports, and the mean was computed where appropriate.

²One reviewer noted that there is a possibility that a firm provided insider CSR training but did *not* report it. I acknowledge this possibility.

³First, keywords searched included 'CSR/sustainability' and 'training' and 'induction training' and 'CSR/sustainability'. Second, where keywords were identified, the documents were examined further to determine if such training was provided to top corporate officers, including those officers residing on the board. This was generally evidenced if firms described providing CSR/sustainability training to their 'top corporate officers on the board', 'officers on the board', or 'executives on the board'.

Other control variables include the type of ownership. Family ownership of firms can influence CSR strategies due to the expectation that families might give higher priority to non-financial goals such as identity, longevity and reputation (Berrone *et al.*, 2010). To control for *family ownership*, I determined if families held at least 20 percent of total stocks, as specified by Desender *et al.* (2013). In order to differentiate those firms with family ownership from those without, where the criterion was met the variable was coded 1, 0 otherwise (Perrini *et al.*, 2008). Because profitability can have some influence on the degree to which firms engage in CSR (Waddock and Graves, 1997), I measure *ROA* (return on assets), which was collected from DatAnalysis. Last, different industries face different institutional pressure to respond to CSR (Bansal, 2005). To account for the potential differences in *industry* effects, I created 11 dummy variables, which account for firms in consumer discretionary, consumer staples, energy, financials, healthcare, industrials, IT, materials, property, telecommunication services and utilities industries. The consumer discretionary dummy was the referent group and was omitted from the analysis.

Results

Means, standard deviations and correlations are presented in Table 1. Because of some relatively high correlations, multicollinearity was checked by assessing tolerance values and variation inflation factors (VIFs). The lowest tolerance value was 0.34. Alternatively, the highest VIF was 2.92. These values suggest that multicollinearity was likely not present (O’Brien, 2007).

Given that CSR is measured using two separate variables, I used seemingly unrelated regression (SUR) analysis to account for potential correlations of the error terms between the environmental and social CSR equations. This technique allows for the incorporation of relevant information from each into its final estimate for each regression model (Griffiths *et al.*, 1993). I ran three SUR models using the *systemfit* function in the statistical software package R. The first model, the baseline, includes only the control variables; the second model adds the predictor variables and the third model adds the interactions. Table 2 shows the SUR models. I used the SUR estimation in R to generate an assessment of goodness of fit of the system effect, which is analogous to an *R*² (McElroy, 1977). The overall

Variable	Mean	S.D	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Environmental	2.16	1.07	1.00												
2. Social	2.24	0.80	0.13	1.00											
3. Firm size	5.04	3.13	0.17*	0.22**	1.00										
4. Financial slack	0.67	1.04	-0.14	-0.12	-0.10	1.00									
5. CEO duality	0.08	0.26	-0.04	-0.05	-0.01	0.05	1.00								
6. Insider short-term cash bonuses	2.19	3.31	-0.14	-0.14	0.21**	-0.05	0.18**	1.00							
7. Insider long-term incentives	0.32	0.24	0.12	0.16	0.19**	-0.14	0.06	-0.40**	1.00						
8. Insider age	57.20	2.52	0.00	0.05	0.02	0.00	0.07	0.11	0.02	1.00					
9. Family ownership	0.13	0.34	0.07	0.15*	-0.17*	0.05	-0.03	0.02	-0.07	-0.01	1.00				
10. ROA	8.19	4.19	0.11	0.20**	0.06	-0.14*	0.04	0.05	0.07	0.00	0.07	1.00			
11. Insiders	0.28	0.17	-0.27**	-0.25**	-0.10	0.17*	0.05	-0.03	0.17*	-0.07	-0.03	-0.02	1.00		
12. Insider compensation linked to E&S metrics ^a	0.12	0.07	0.20**	0.18**	0.07	-0.08	-0.04	0.09	0.14*	0.01	0.01	-0.04	-0.05	1.00	
13. Insider CSR training	0.09	0.14	0.65**	0.62**	0.17*	-0.10	-0.05	0.10	0.28**	-0.03	0.17*	0.11	-0.12	0.13	1.00

Table 1. Descriptive statistics and correlations

**p* = 0.05

***p* = 0.01.

^aE (Environmental) & S (Social).

Variables	CSR		CSR		CSR	
	Environmental	Social	Environmental	Social	Environmental	Social
Controls						
Firm size	0.66*** (0.00)	0.74*** (0.00)	0.45*** (0.00)	0.57*** (0.00)	0.43*** (0.00)	0.52*** (0.00)
Financial slack	0.13* (0.01)	0.17** (0.01)	0.08 (0.01)	0.13* (0.01)	0.08 (0.01)	0.13* (0.01)
CEO duality	-0.03 (0.03)	-0.05 (0.04)	-0.03 (0.02)	-0.04 (0.03)	-0.03 (0.03)	-0.06 (0.04)
Insider short-term cash bonuses	-0.17** (0.08)	-0.49*** (0.00)	-0.23** (0.00)	-0.37*** (0.00)	-0.15* (0.08)	-0.31*** (0.00)
Insider long-term incentives	-0.03 (0.00)	-0.09 (0.00)	0.01 (0.00)	-0.07 (0.00)	0.00 (0.00)	-0.06 (0.00)
Insider age	-0.16* (0.00)	-0.10 (0.01)	-0.08 (0.00)	-0.04 (0.00)	-0.08 (0.00)	-0.03 (0.00)
Family ownership	0.07 (0.04)	0.12* (0.06)	0.04 (0.04)	0.12* (0.06)	0.03 (0.04)	-0.10† (0.06)
ROA	0.10 (0.00)	0.21** (0.00)	0.08 (0.00)	0.20** (0.00)	0.08 (0.00)	0.15* (0.00)
Industry dummies	included	included	included	included	included	included
Direct effect						
Insiders			-0.22** (0.05)	-0.19** (0.07)	-0.15* (0.06)	-0.12* (0.08)
Insider compensation linked to E&S metrics ^a			0.21** (0.00)	0.18*** (0.04)	0.31** (0.03)	0.07 (0.04)
Insider CSR training			0.46*** (0.00)	0.35*** (0.00)	0.46*** (0.00)	0.42*** (0.00)
Interactions						
Insiders × insider compensation linked to E&S metrics ^a					0.16* (0.03)	0.19** (0.04)
Insiders × insider CSR training					0.18** (0.00)	0.22** (0.00)
Individual equation R ²	0.35	0.40	0.47	0.46	0.62	0.56
Individual equation adjusted R ²	0.29	0.33	0.36	0.40	0.56	0.47
System weighted R ²	0.44					

Table 2. SUR analysis for CSR

†p < 0.10

*p < 0.05

**p < 0.01

***p < 0.001.

^aE, environmental, & S, social.

system weighted R² is 0.44. To test for significance, I used the likelihood ratio test between the models (Greene, 2003), which showed significant statistics (between controls and predictors $\chi^2 = 23.85$, $p < 0.001$; between the controls and predictors and the interactions $\chi^2 = 14.66$, $p < 0.05$). Finally, in the regression analysis, interaction variables were mean centered.

Table 2 reports results of the hypotheses. Hypothesis 1 predicted that insider concentration is negatively associated with CSR. Insiders are significant and negatively related to the environmental ($\beta = -0.15$, $p < 0.05$) and social ($\beta = -0.13$, $p < 0.05$) dimensions of CSR. This suggests indicative support for Hypothesis 1. There is also support for Hypothesis 2, which predicted that the negative relationship between insiders and CSR would be positively moderated by insider compensation linked to environmental and social metrics. The interaction term reveals that, when insider compensation linked to environmental and social metrics is present (environmental, $\beta = 0.16$, $p < 0.05$;

social, $\beta = 0.19$, $p < 0.01$), the negative relationship between insiders and CSR is positively attenuated. This is also the case for insider training on CSR (environmental, $\beta = 0.18$, $p < 0.01$; social, $\beta = 0.22$, $p < 0.01$), offering support for Hypothesis 3.

Robustness Check

To reduce concerns related to endogeneity, I employed a critical check recommended by Greene (2003): namely, omitted variable bias. Omitted variable bias can lead to over- or under-estimating the effect of one of the other factors. Hence, beyond the carefully selected set of control variables, it is recognized that boards in this sample include outside directors. I have to account for the possibility that some outsiders may hold stock in the focal firm. Holding stock in the focal firm could provide an incentive or motivation for outsiders to seek to increase short-term returns, which could come at the expense of their attention to CSR. The tenure of an inside director could also influence their temporal orientation. Therefore, I also included insider tenure. Another variable I consider is research and development (R&D) expense, because this could influence CSR in areas such as environmental technologies or processes. On the basis of information collected from DataAnalysis and company annual reports, outsider holdings of stock are not significant (environmental, $\beta = -0.01$, n.s.; social, $\beta = -0.05$, n.s.), nor is insider tenure (environmental, $\beta = -0.04$, n.s.; social, $\beta = 0.06$, n.s.). Similarly, R&D expense is not significant (environmental, $\beta = 0.11$, n.s.; social, $\beta = -0.07$, n.s.). The results regarding the variables of interest remain substantively unchanged.

Discussion

This study shows that, as the concentration of insiders increases on boards, it has a negative effect on CSR. However, I find that insider compensation linked to non-financial outcomes (environmental, social) and insider training on CSR positively moderate the relationship between insiders and CSR. I argue that these mechanisms not only provide motivation, but also can work to shift any short-term temporal orientations and cognitive biases of insiders. In this way, insiders are expected to more readily embrace future perspectives and the longer-term thinking needed to understand some of the short-term trade-offs required for long-term benefits with respect to CSR (Hahn *et al.*, 2015; Ortiz-de-Mandojana and Bansal, 2015; Slawinski and Bansal, 2015).

The findings of this study contribute to the study of corporate governance and CSR. First, boards of directors consist of a mix of individuals with different human and social capital (Hillman and Dalziel, 2003). This study suggests that boards also comprise individuals who are likely to have differences in temporal orientations. Temporal orientations influence the time frames considered – and the types of decision made. While this study does not discount the prospect of their interest in CSR, the findings corroborate previous research, which suggests that insiders are likely to be focused more on the short term at the possible expense of the long term (Beasley, 1996; Dechow *et al.*, 1996; Graham *et al.*, 2006; Brochet *et al.*, 2012). Incorporating temporal considerations into corporate governance discussion and research therefore offers the possibility of expanding insights beyond the dominant agency and resource dependence perspectives (Hillman and Dalziel, 2003).

Second, one way to advance studies of corporate governance is to explore contingencies (Boyd, 1995). This study argues that insiders are likely to have some positive affect on CSR – when certain contingencies are in place (cf. Barnea and Rubin, 2010). Specifically, temporal orientations may be malleable. That is, as individuals, such as directors, are incentivized or educated to look beyond their immediate or dominant temporal orientations, they may be more likely to consider alternative time frames or give greater weight to long-term views in their decision making. This study does find that compensation linked to environmental and social metrics and CSR training appear to positively attenuate the negative insider–CSR relationship, thus advancing contingency perspectives of corporate governance.

Last, findings from this study can also inform management practice. A recent study finds that fewer than half of the board members surveyed report that training within their firms is focused on CSR (Lawler and Mohrman, 2013). Further, some board members report that they do not know enough about CSR to make adequately informed decisions (Lawler and Mohrman, 2013). Given that boards are increasingly expected to influence CSR decisions

(Brammer and Pavelin, 2008; Amran *et al.*, 2014), for firms who wish to better equip their inside directors to respond to CSR and to take more of a leadership role in this area, the results of this study suggest some practical ways that this might be achieved.

Limitations, Future Research and Conclusion

This study is not without limitations. First, this study is cross-sectional. This limits the ability to study insider concentration on the board over time and whether or not variations in insider concentration affect CSR similarly to the results reported here. Future studies could include panel data, where both variations in insider concentration and the temporal and interdomain consistency of CSR could be examined (cf. Wang and Choi, 2013).

Another limitation that requires attention is the fact that I did not measure directly the temporal orientation of insiders. However, measuring temporal orientation is very difficult (Souder and Bromiley, 2012). Alternatively, Souder and Bromiley (2012) demonstrate that temporal orientations can be inferred – and measured – by looking at firm activities and programs that require long-term decision making (e.g. CAPEX, CSR). This study followed the suggestion of Souder and Bromiley (2012) in two ways: (1) by postulating that temporal orientations of boards can be inferred by examining director types and (2) by relying on the measurement of activities and programs that require long-term time considerations. Future research could attempt to measure temporal orientation by directly surveying or interviewing directors. It would be of particular interest to examine the temporal orientations of insiders and outsiders with respect to short- and long-term decision making, and how any trade-offs are absorbed between these two types of director.

A third limitation is the examination of one demographic characteristic, namely, age (tenure was later included as part of endogeneity tests). I found a significant effect regarding insider age only with respect to the first model (control variables) and only with respect to the environmental dimension of CSR. I encourage future researchers to study additional demographic characteristics. For example, following the board capital perspective (Hillman and Dalziel, 2003), studies could explore how characteristics of directors such as gender, level of education or occupational background influence – either directly or indirectly – the temporal orientations of boards, and thus their impact on firm outcomes. As time-based and intertemporal research on CSR is currently lacking (Ortiz-de-Mandojana and Bansal, 2015; Slawinski and Bansal, 2015), such studies are expected to make important empirical contributions, while uncovering practical implications.

Fourth, this study consists of Australia's largest 300 firms. It may be, for example, that only large firms can offer insider compensation linked to environmental and social metrics. Further, it may be that only large firms can offer insider CSR training. Hence, the generalizability of the results to smaller or medium firms – or to non-Australian firms – is limited.

Finally, caution must be taken regarding causality conclusions. One could argue that, for example, CSR outcomes and the focus on CSR training for insiders are self-reinforcing. That is, a focus on CSR then focuses the firm on providing CSR training to insiders. The problem of potential reverse causality is not unique to my data and, I suggest, less of a concern for the overall conclusions. The key argument is more about the relationship between an insider's temporal orientation and CSR, and the role that CSR training (and compensation linked to CSR) plays in positively moderating this relationship; as such, whether the process is self-reinforcing or unidirectional is less important, as this focuses on the genesis of the relationship rather than its on-going impact.

In conclusion, how the temporal orientation of boards influences CSR is an important question facing corporate governance researchers and practitioners, particularly given that boards are increasingly tasked with taking action with respect to how firms respond to social responsibilities. By studying insider concentration on boards, the analysis here demonstrates that insiders are negatively associated with CSR. However, both insider compensation linked to environmental and social metrics and insider training on CSR positively attenuate this relationship. The findings may assist boards as they seek to ensure that insiders are attuned to CSR, while embracing a temporal orientation that aligns longer-term thinking to CSR actions.

Acknowledgements

This research was supported by a Discovery Grant from the Australian Research Council.

References

- Ajzen I. 1991. The theory of planned behavior. *Organizational Behavior and Human Decision Processes* 50: 179–211.
- Amran A, Ping Lee S, Susela DS. 2014. The influence of governance structure and strategic corporate social responsibility toward sustainability quality reporting. *Business Strategy and the Environment* 23: 217–235.
- Ancona DG, Okhuysen GA, Perlow LA. 2001. Taking time to integrate temporal research. *Academy of Management Review* 26: 512–529.
- Arndt M, Bigelow B. 2000. Presenting structural innovation in an institutional environment: hospitals' use of impression management. *Administrative Science Quarterly* 45: 494–522.
- Ashkanasy N, Gupta V, Mayfield MS, Trevor-Roberts E. 2004. Future orientation. In *Culture, Leadership and Organizations*, House RJ, Hanges PJ, Javidan PW, Dorfman PW, Gupta V (eds). Sage: Thousand Oaks, CA; 282–342.
- Bansal P. 2005. Evolving sustainability: a longitudinal study of corporate sustainable development. *Strategic Management Journal* 26: 197–218.
- Barnea A, Rubin A. 2010. Corporate social responsibility as a conflict between shareholders. *Journal of Business Ethics* 97: 71–86.
- Barnett ML. 2007. Stakeholder influence capacity and the variability of financial returns to corporate social responsibility. *Academy of Management Review* 32: 794–816.
- Beasley MS. 1996. An empirical analysis of the relation between the board of director composition and financial statement fraud. *Accounting Review* 71: 443–465.
- Berrone P, Cruz C, Gómez-Mejía LR, Larrazza-Kintana M. 2010. Socioemotional wealth and corporate responses to institutional pressures: do family-controlled firms pollute less? *Administrative Science Quarterly* 55: 82–113.
- Berrone P, Gomez-Mejia LR. 2009. The pros and cons of rewarding social responsibility at the top. *Human Resource Management* 48: 959–971.
- Bluedorn AC. 2002. *The Human Organization of Time: Temporal Realities and Experience*. Stanford University Press: Stanford, CA.
- Bluedorn AC, Denhardt RB. 1988. Time and organizations. *Journal of Management* 14: 299–320.
- Boyd B. 1995. CEO duality and firm performance: a contingency model. *Strategic Management Journal* 16: 301–312.
- Brammer S, Pavelin S. 2008. Factors influencing the quality of corporate environmental disclosure. *Business Strategy and the Environment* 17: 120–136.
- Brealey RA, Myers SC. 1996. *Principles of Corporate Finance*. McGraw-Hill: New York.
- Brochet F, Loumioti M, Serafeim G. 2012. *Short-termism, Investor Clientele, and Firm Risk*. Working Paper 12-072, Harvard Business School, Harvard University.
- Clark LF, Collins JE. 1993. Remembering old flames: how the past affects assessments of the present. *Personality and Social Psychology Bulletin* 19: 399–408.
- Clarkson PM, Li Y, Richardson GD, Vasvari FP. 2008. Revisiting the relation between environmental performance and environmental disclosure: an empirical analysis. *Accounting, Organizations and Society* 33: 303–327.
- Dechow PM, Sloan RG, Sweeney AP. 1996. Causes and consequences of earnings manipulation: an analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research* 13: 1–36.
- Deckop JR, Merriman KK, Gupta S. 2006. The effects of CEO pay structure on corporate social performance. *Journal of Management* 32: 329–342.
- Desender KA, Aguilera RV, Crespi R, García-Cestona M. 2013. When does ownership matter? Board characteristics and behavior. *Strategic Management Journal* 34: 823–842.
- de Villiers C, Naiker V, van Staden CJ. 2011. The effect of board characteristics on firm environmental performance. *Journal of Management* 37: 1636–1663.
- Egri CP, Hornal RC. 2002. Strategic environmental human resources management in organizational performance: an exploratory study of the Canadian manufacturing sector. In *Research on Corporate Sustainability: The Evolving Theory and Practice of Organizations in the Natural Environment*, Sharma S, Starik M (eds). Elgar: Northampton, MA; 205–236.
- Ehnert I. 2009. *Sustainable Human Resource Management: a Conceptual and Exploratory Analysis from a Paradox Perspective*. Springer: New York.
- Eisenhardt KM. 1989. Agency theory: an assessment and review. *Academy of Management Review* 14: 57–74.
- Epstein MJ, Buhovac AR, Yuthas K. 2015. Managing social, environmental and financial performance simultaneously. *Long Range Planning* 48: 35–45.
- Fairfax LM. 2010. The uneasy case for the inside director. *Iowa Law Review* 96: 127–193.
- Fama EF, Jensen MC. 1983. Separation of ownership and control. *Journal of Law and Economics* 26: 301–325.
- Galbreath J. 2012. Are boards on board? A model of corporate board influence on sustainability performance. *Journal of Management and Organization* 18: 445–460.
- Graham JR, Harvey CR, Rajgopal S. 2006. Value destruction and financial reporting decisions. *Financial Analysts Journal* 62: 27–39.
- Greene WH. 2003. *Econometric Analysis*, 5th edition. Upper Saddle River, NJ: Prentice Hall.
- Griffiths WE, Hill RC, Judge GG. 1993. *Learning and Practicing Econometrics*. Wiley: New York.
- Hackston D, Milne JJ. 1996. Some determinants of social and environmental disclosures in New Zealand companies. *Accounting, Auditing and Accountability Journal* 9: 77–108.

- Hahn T, Pinske J, Preuss L, Figge F. 2015. Tensions in corporate sustainability: towards an integrative framework. *Journal of Business Ethics* 127: 297–316.
- Hayes R, Abernathy WJ. 1980. Managing our way to economic decline. *Harvard Business Review* 58: 67–78.
- Hillman AJ, Cannella AA Jr, Paetzold RL. 2000. The resource dependence role of corporate directors: strategic adaptation of board composition in response to environmental change. *Journal of Management Studies* 37: 235–255.
- Hillman AJ, Dalziel T. 2003. Boards of directors and firm performance: integrating agency and resource dependence perspectives. *Academy of Management Review* 28: 383–396.
- Hillman AJ, Keim GD. 2001. Shareholder value, stakeholder management, and social issues: what's the bottom line? *Strategic Management Journal* 22: 125–139.
- Ibrahim NA, Angelidis JP. 1995. The corporate social responsiveness orientation of board members: are there differences between inside and outside directors? *Journal of Business Ethics* 14: 405–410.
- Ibrahim NA, Howard DP, Angelidis JP. 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: 393–401.
- Joireman JA, Kamdar D, Daniels D, Duell B. 2006. Good citizens to the end? It depends: empathy and concern with future consequences moderate the impact of short-term time horizon on organizational citizenship behaviors. *Journal of Applied Psychology* 91: 1307–1320.
- Joireman JA, Van Lange PA, Van Vugt M. 2004. Who cares about the environmental impact of cars? Those with an eye toward the future. *Environment and Behavior* 36: 187–206.
- Jones JM. 1988. Culture differences in temporal perspectives. In *The Social Psychology of Time: New Perspectives*, McGrath JE (ed). Sage: Beverly Hills, CA; 21–38.
- Joseph J, Ocasio W, McDonnell M-H. 2014. The structural elaboration of board independence: executive power, institutional logics, and the adoption of CEO-only board structures in U.S. corporate governance. *Academy of Management Journal* 57: 1834–1858.
- Kang J. 2013. The relationship between corporate diversification and corporate social performance. *Strategic Management Journal* 34: 94–109.
- Knight D, Pearce CL, Smith KG, Olian JD, Sims HP, Smith KA, Flod P. 1999. Top management team diversity, group process and strategic consensus. *Strategic Management Journal* 20: 445–465.
- Kock CJ, Santaló J, Diestre L. 2012. Corporate governance and the environment: what type of governance creates greener companies? *Journal of Management Studies* 49: 492–513.
- Krause R, Semadeni M. 2014. Last dance or second chance? Firm performance, CEO career horizon, and the separation of board leadership roles. *Strategic Management Journal* 35: 808–825.
- Krehmeyer D, Orsagh M, Schacht KN. 2006. Breaking the Short-Term Cycle. CFA Institute–Business Roundtable Institute for Corporate Ethics: Charlottesville, VA.
- Krut R, Munis K. 1998. Sustainable industrial development: benchmarking environmental policies and reports. *Greener Management International* 21: 88–98.
- Laverty K. 1996. Economic short-termism: the debate, the unresolved issues, and the implications for management practice and research. *Academy of Management Review* 21: 825–860.
- Lawler EE III, Mohrman SA. 2013. *Sustainability: What Should Boards Do?* Centre for Effective Organizations Publication G13-2 (621). University of Southern California: Marshall School of Business.
- Leblanc RW, Schwartz MS. 2007. The black box of board process: gaining access to a difficult subject. *Corporate Governance* 15: 843–851.
- Lewis MW. 2000. Exploring paradox: toward a more comprehensive guide. *Academy of Management Review* 25: 760–776.
- Lopatta K, Buchholz F, Kasperit T. 2016. Asymmetric information and corporate social responsibility. *Business and Society* 55: 458–488.
- Lopatta K, Kasperit T. 2014. The world capital markets' perception of sustainability and the impact of the financial crisis. *Journal of Business Ethics* 122: 475–500.
- Marginson D, McAulay L. 2008. Exploring the debate on short-termism: a theoretical and empirical analysis. *Strategic Management Journal* 29: 273–292.
- McElroy MB. 1977. Goodness of fit for seemingly unrelated regressions. *Journal of Econometrics* 6: 381–387.
- McKendall M, Sánchez C, Sicilian P. 1999. Corporate governance and corporate illegality: the effects of board structure on environmental violations. *International Journal of Organizational Analysis* 7: 201–223.
- McWilliams A, Siegel D. 2000. Corporate social responsibility and financial performance: correlation or mis-specification. *Strategic Management Journal* 21: 603–609.
- McWilliams A, Siegel D. 2001. Corporate social responsibility: a theory of the firm perspective. *Academy of Management Review* 26: 117–127.
- Merchant KA, Van der Stede WA. 2007. *Management Control Systems: Performance Measurement, Evaluation and Incentives*. Harlow: Pearson Education.
- Merriman KK, Sen S. 2012. Incenting managers toward the triple bottom line: an agency and social norm perspective. *Human Resource Management* 51: 851–872.
- Miller KD. 2002. Knowledge inventories and managerial myopia. *Strategic Management Journal* 23: 689–706.
- Milliman J, Clair J. 1996. Best environmental HRM practices in the U.S. In *Greening People: Human Resources and Environmental Management*, Wehrmeyer W (ed). Greenleaf: Sheffield, UK; 49–73.
- O'Brien RM. 2007. A caution regarding rules of thumb for variance inflation factors. *Quality and Quantity* 41: 673–690.
- Ortiz-de-Mandojana N, Bansal P. 2015. The long-term benefits or organizational resilience through sustainable business practices. *Strategic Management Journal*. DOI: 10.1002/smj.2410
- Pearlstein S. 2014. When shareholder capitalism came to town. *American Prospect* 25: 40–48.
- Perrini F, Rossi G, Rovetta B. 2008. Does ownership structure affect performance? Evidence from the Italian market. *Corporate Governance* 16: 312–325.

- Porter ME. 1992. Capital disadvantage: America's failing capital investment system. *Harvard Business Review* 70: 65–82.
- Post C, Rahman N, Rubow E. 2011. Green governance: boards of directors' composition and environmental corporate social responsibility. *Business and Society* 50: 189–223.
- Ricart JE, Rodriguez MA, Sanchez P. 2005. Sustainability in the boardroom. *Corporate Governance* 5: 24–41.
- Samuel C. 2000. Does shareholder myopia lead to managerial myopia? *Applied Financial Economics* 10: 493–505.
- Schäfer H, Beer J, Zenker J, Fernandes P. 2006. *Who is Who in Corporate Social Responsibility Rating? A Survey of Internationally Established Rating Systems that Measure Corporate Social Responsibility*. Bertelsmann Foundation–University of Stuttgart: Stuttgart.
- Semenova N, Hassel LG. 2015. On the validity of environmental performance metrics. *Journal of Business Ethics* 132: 249–258.
- Shen J, Benson J. 2014. When CSR is a social norm: how socially responsible human resource management affects employee work behavior. *Journal of Management*. DOI: 10.1177/0149206314522300
- Shrivastava P, Hart S. 1995. Creating sustainable corporations. *Business Strategy and the Environment* 4: 154–165.
- Siebenhüner B, Arnold M. 2007. Organizational learning to manage sustainable development. *Business Strategy and the Environment* 16: 339–353.
- Slawinski N, Bansal P. 2015. Short on time: intertemporal tensions in business sustainability. *Organization Science* 26: 531–549.
- Souder D, Bromiley P. 2012. Explaining temporal orientation: evidence from the durability of firms' capital investments. *Strategic Management Journal* 33: 550–569.
- Thornton PH, Ocasio W, Lounsbury M. 2012. *The Institutional Logics Perspective*. Oxford University Press: Oxford.
- Van der Stede WA. 2000. The relationship between two consequences of budgetary controls: budgetary slack creation and managerial short-term orientation. *Accounting, Organizations and Society* 25: 609–622.
- Waddock SA, Graves SB. 1997. The corporate social performance–financial performance link. *Strategic Management Journal* 18: 303–319.
- Wang H, Choi J. 2013. A new look at the corporate social–financial performance relationship: the moderating roles of temporal and interdomain consistency in corporate social performance. *Journal of Management* 39: 416–441.