

CORPORATE GOVERNANCE, INCENTIVE SCHEMES, AND SAFETY PERFORMANCE IN THE CONSTRUCTION INDUSTRY

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Addressing workplace health and safety has been identified as a dimension of Corporate Social Responsibility (CSR). A socially responsible business is characterised by good corporate governance that provides a healthy and safe work environment. Under the umbrella of CSR, this study examined a specific element of corporate governance, i.e. senior executive incentive schemes, which are the key mechanism used by Boards of Directors to align senior management's interests with organizational interests. The specific focus here is long-term incentive plans (LTIPs). This study investigated what senior management have been incentivized to achieve by LTIPs, and whether, or how, the incentives are aligned with the organizational strategic objective of safety performance. Annual Reports of publicly listed construction companies in Australia were collected and subjected to content analysis. The research found that LTIPs were exclusively related to financial measures with safety indicators not included in any LTIPs. This suggests that the structure of LTIPs may only incentivize senior executives to focus on financial performance thus overlooking safety performance. The design of LTIPs may not contribute to corporate governance capable of producing good safety outcomes. Future research is needed to explore ways to align incentives, senior management motivations and safety performance in the construction industry.

Keywords: Corporate Social Responsibility, governance, incentives, senior executives

INTRODUCTION

Safety and Corporate Social Responsibility (CSR)

High injury and fatality rates are recorded annually in the construction industry globally (Sawacha *et al.*, 1999). Workplace injuries and fatalities not only incur substantial economic cost (e.g. compensations and reduced productivity), but also have considerable social impact (e.g. pain and suffering to individuals and their families). Improving workplace safety performance is a strategic priority for many construction companies.

In recent years, the notion of corporate social responsibility (CSR) has been increasingly emphasized in the construction industry. Apart from providing effective and efficient building and constructing services, construction companies are also expected to effectively manage their business to be socially responsible (Petrovic-Lazarevic 2008). CSR is concerned with integrating environmental, social and economic considerations into business strategies and practices (Jones *et al.*, 2006). CSR is defined as the

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continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large (Watts and Holms 2003: 3). Although the focus and meaning of CSR can vary between national and industrial contexts (Carroll and Shabana 2010), generally CSR consists of an internal and an external dimension. The internal dimension primarily relates to employees within an organization and issues such as human resources management, health and safety, and adaptation to change; while the external dimension extends social responsibility beyond the organization to encompass stakeholders such as business partners, suppliers, customers, local communities, and issues such as global environmental concerns (Commission for the European Communities 2001).

Given the inherently dangerous nature of the construction industry, it is not surprising that a strong focus on workplace health and safety (H&S) has been revealed for CSR strategies used by construction organizations. For example, Loosemore and Lim (2017) reported that workplace H&S was ranked as the top CSR focus of companies in the Australian construction industry, with many companies implementing CSR-based strategies to address long-standing issues such as work-life balance, unfair treatment and workplace conditions. Jones *et al.*, (2006) investigated the CSR agendas reported by construction companies in the UK, and identified an explicit and sustained focus on H&S among the companies. In terms of achieving CSR performance, Mackenzie (2007) pointed to the important role of effective corporate governance in attaining CSR objectives by setting CSR related standards and values for companies.

In the following section, a specific element of corporate governance, i.e. executive incentives, will be introduced and the potential role of executive incentives in attaining the CSR objective of H&S in the construction industry will be discussed.

Corporate Governance, Executive Incentives and Safety

Corporate governance provides the structure through which the strategic objectives of a company are set, and the means of attaining those objectives and monitoring performance are determined (OECD 2004 cited in Ferguson 2015). The key group accountable for corporate governance is the Board of Directors, which is responsible, among many other duties, for safeguarding the interests of shareholders, monitoring management, and determining corporate governance strategies (Nicholson and Newton 2010). It is also the Board of Directors that ultimately decides the issues of most importance for the organization, and thus the key priorities that the CEO and other senior executives should focus their attention upon (Ocasio 1997). With the rising importance of CSR, it is not surprising that some Boards are increasingly turning their attention to the objectives encapsulated by CSR and extending their responsibilities beyond the traditionally narrowly defined stakeholder group of shareholders to incorporate a more diverse group of stakeholders such as employees and customers (Mahoney and Thorn 2006).

Incentive schemes for senior executives are a central mechanism used by Boards to emphasize the strategic importance of key priorities (Gupta and Wowak 2017). Boards are bound by fiduciary requirements to design incentive schemes in ways that motivate senior executives to act with organizational interests at heart. Thus, incentive schemes, and senior executive decision-making, are integrally linked to organizational performance (Gupta and Wowak 2017; Nicholson and Newton 2010). Incentive schemes are also important because they are used by Boards of Directors to direct senior executive attention to CSR objectives, including safety performance.

Broadly speaking, incentive schemes consist of a short-term incentive plan (STIP) and a long-term incentive plan (LTIP). The STIP applies to management personnel of different levels (e.g. executives, senior managers, divisional managers, etc.) with payments made annually, although part may be deferred for a period of time (e.g. one year). Payments are granted by measuring individual performance against key performance indicators (KPIs), which are typically linked to organizational strategic objectives such as productivity, financial performance, client satisfaction, and workplace safety performance. In contrast to STIPs, LTIPs are only applicable to the CEO, the Managing Director (MD), and other executive key management personal (KMP). In broad terms, LTIPs generally share common structural features, although with some variations to align with particular organizational objectives. Generally, LTIPs are the largest component of total executive remuneration, with CEOs of major organizations often paid bonuses several times the value of fixed salaries (Shields *et al.*, 2003). This suggests that incentive schemes can provide significant motivation for senior executives to strive for improved organizational performance.

RESEARCH AIM

Under the broad umbrella of CSR, this research examined publicly listed construction companies in Australia to understand how safety is positioned as an organisational objective, and examine the structure of executive incentive schemes, with a particular focus on the structure of LTIPs. The purpose is to explore what metrics are typically included in LTIPs to evaluate the performance of senior executives, and whether LTIPs include any safety related metrics to direct senior executives to focus on the safety performance.

Hopkins and Maslen (2015) examined executive incentives in the resources and energy sector. They identified a poor alignment between incentive schemes and the need to have a senior management focus on safety. Hopkins and Maslen's work provides the basis for exploring what senior management are incentivised to achieve by LTIPs, and whether the incentives are aligned to safety performance as a CSR objective in the construction industry. This is important because the misalignment can possibly result in unintended consequence. For example, the catastrophic accident of 2005 BP Texas City refinery disaster killed 15 workers and injured another 180 people (CSB, 2007), and led to investigations of senior executive incentive structures and major accident risks. Analysis of the Texas City case revealed that incentive structures directed senior management attention towards business and financial objectives rather than safety (Hopkins, 2010). The Texas City case influenced BP as well as other companies involved in hazardous industries to include indicators of major accident risk management in their incentive plans (Maslen and Hopkins, 2014).

RESEARCH METHOD

The research reported here was conducted during 2015-2016 as the first stage of a long-term project investigating senior executive incentive schemes and safety performance in the Australian construction industry. Annual Reports of publicly listed companies in non-domestic construction sector were collected and subjected to a content analysis to examine senior executive incentive schemes and their relationship, if any, with safety performance. Publicly listed construction companies were identified using information available online from the Australian Constructors Association (ACA), the Housing Industry Association's (HIA) HIA-Cordell Construction 100 2013/14 Report and the Australian Securities Exchange (ASX). A limited number of companies are engaged in non-domestic construction in Australia, with even fewer publicly listed. As a result, the

eight Annual Reports discussed here constitute the complete population of publicly listed non-domestic construction companies in Australia.

Publicly listed companies were used because these organizations are required to disclose details about senior executive incentives and the associated KPIs in their Annual Reports, which are freely accessible. The LTIP was chosen because Annual Reports provide detailed information about those plans. In contrast, Annual Reports provide relatively limited information about STIPs because the KPIs used to assess individual performance under these plans are part of confidential work responsibility agreements and are not publicly available. However, Annual Reports have been criticised as a data source because managerial disclosure in these documents tends to be biased and self-laudatory with information selectively disclosed and manipulated to create positive stakeholder perceptions of organizational performance (Deegan and Rankin 1997: 562; Godfrey *et al.*, 2003). A focus on reporting positive results means key hazards or risks are not identified and the efficacy of risk control strategies is not discussed (Jenkins and Yakovleva 2006).

Although these are important points to consider when using Annual Reports as a data source, they are not relevant here. This is because the objective of the research was not to examine the texts as a reflection of reality (Silverman, 2001, p.201), which is also a criticism of content analysis as a research method discussed below. Rather, the aim of the research was to explore the voluntary narrative (Ferguson, 2015, p.64; Leung *et al.*, 2015) provided in Annual Reports, including how organizations position safety, linked to organizational values and objectives and how LTIPs are structured. Thus, the ‘voluntary narrative’ in Annual Reports provides an organizing, or conceptual, framework for the analysis and a practical way to compare how organizations prioritize safety and structure senior executive incentive plans.

The Annual Reports were interrogated using a content analysis approach, which is a method that has been widely used to investigate Annual Reports in a range of contexts (Fuolo, 2107). Some research has used content analysis to code text into explicit categories that are then subjected to statistical analysis (see for example Dumay and Cai, 2014), often described as the quantitative analysis of qualitative data (Hsieh and Shannon, 2005, p.1278). In contrast, this research examined texts for themes using central concepts or statements, the communicative context in which those statements appear and to assign these to relevant research categories (Flick 2002: 194). In this case, the themes emerged from a close and independent reading of the Annual Reports by the researchers who were guided by the overall research aim, namely to understand how companies positioned safety compared with the structure of senior executive LTIPs.

CONTENT ANALYSIS RESULTS

Safety Commitment

All companies in the sample group expressed a strong commitment to safety in their Annual Reports using terms such as ‘Vision,’ ‘Focus,’ ‘Priority’ and ‘Value’ to position safety as part of organizational values. For example, organizations described their organizational vision as Injury Free Everyday with safety positioned as their ... number one priority with an uncompromising commitment to operate incident and injury free ... or as ... absolute priority and a core value. There was also an organizational commitment to maintaining and improving safety performance. For example, one company expressed their safety commitment as “...our focus is on continued improvement and keeping our people safe”. Safety commitment was also expressed as an integral part of long-term organizational culture and values, as this representative comment shows:

...Pursuit of Excellence is the philosophy that drives the [Company] culture ... at the core of our values system, which embodies the areas of performance, productivity ... and Zero Harm....

The expressions used to discuss safety send a strong message to readers that safety is valued and prioritized as a key organizational operational objective and commitment to improving safety performance to below industry levels or, preferably, to zero. It is not unreasonable to anticipate that LTIPs would include performance indicators, in some form, that reflected such a strongly articulated commitment to safety as a long-term organizational goal.

Structure of LTIPS

In all companies examined, LTIP participants are restricted to CEOs, Managing Directors (MDs), and Key Management Personnel (KMP). The amount of remuneration available in LTIPs for CEOs and MDs can range from about 67% to as much as 150% of fixed salary. For executive KMP the range can be from 50% to 90% of fixed salary. The LTIPs for six out the eight companies in the sample used performance shares, and the remaining two companies used share options.

Performance shares

In LTIPs that use performance shares, senior executives are provisionally granted a certain number of shares that can only vest after a period of time (e.g. between 2 to 4 years) and only if pre-defined vesting conditions have been satisfied. Vesting conditions relate exclusively to financial performance indicators and include both relative and absolute indicators. Normally, 50% of the performance shares are linked to the relative indicator with the other 50% linked to the absolute indicator.

Relative performance indicators compare an organization's performance against a comparator group, with the most commonly used indicator Relative Total Share Return (TSR). This indicator measures the total amount returned to investors benchmarked against an external comparator group, such as the top 100 ASX listed companies across different industries or the top 200 ASX listed companies from a specific industry. The TSR of the median company in the chosen comparator group (i.e. the 50th percentile) is normally the index against which TSR performance is evaluated. Figure 1(a) illustrates the most typical vesting condition of LTIP linked to relative TSR across the sample group. As Figure 1(a) shows, if TSR performance sits exactly on the 50th percentile at the end of the vesting period, senior executives can be awarded 50% of the performance shares linked to TSR.

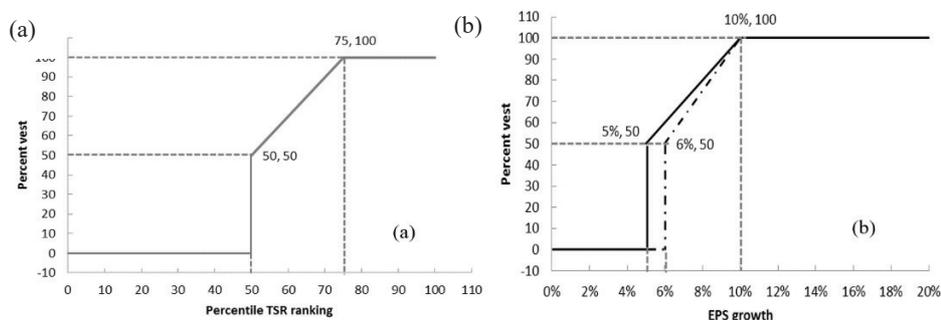


Figure 1: a) Vesting condition of LTIP linked to relative TSR; b) Vesting conditions of LTIPs linked to EPS growth

If TSR performance sits between the 50th and 75th percentile, senior executives can be granted shares pro rata from 50% to 100% on a sliding scale. If the TSR performance sits

at or above the 75th percentile, then 100% of the performance shares linked to TSR can be awarded. However, if the TSR is below the 50th percentile at the end of the vesting period, senior executives will not be awarded the performance shares linked to that indicator. The vesting conditions place significant pressure on executives to achieve the 50th percentile of TSR performance. Absolute performance indicators compare an organizations current performance against its own organizational performance in previous years, reflected as per cent of growth.

The companies in the sample group used three absolute performance indicators, specifically Annualized Earnings per Share (EPS), Annualized Return of Equity (ROE), and Return on Invested Capital (ROIC). All three indicators measure the companies' absolute profitability (i.e. not relative to a comparator group). Figure 1(b) shows two companies in the sample group that used the same vesting conditions in relation to annualized EPS growth as an example to illustrate how LTIP vesting conditions are linked to absolute indicators. Specifically, the threshold for senior executives to be awarded with any performance shares is an EPS growth of 5%, at which point senior executives can obtain 50% of shares linked to EPS growth. After the threshold of 5%, the per cent of shares that can be granted rises pro rata as the EPS growth increases until 100% of shares vest when EPS growth reaches 10%.

Share options

Two companies in the sample used share options, where senior executive are granted options to buy company-owned shares at a share price that is much lower than the market price. The difference between the market value of the shares and the amount paid to buy the shares is in effect a bonus for the senior executives. However, in order to exercise share options, certain conditions need to be satisfied at the end of the vesting period. For example, the vesting condition for one of the organizations using share options is linked to share price with a specified vesting period of three years. At the end of the second year of the vesting period, if the company's shares hit or exceed the target (described as the hurdle price) and trade with that price continually for at least 10 days, senior executives can exercise 50% of the share options at a much lower exercise price per share. Another 50% of the option can be exercised if the same share performance is achieved at the end of the total three-year vesting period.

DISCUSSION

This study aims to understand how safety is positioned and where safety sits in the LTIPs of publicly listed construction companies in Australia. Analysis of the Annual Reports for the companies examined showed a strongly articulated safety commitment, often described as the 'number one priority,' and linked to organizational values and vision as defined in the respective Annual Reports. Safety was also positioned as a long-term organizational objective, which requires continuing effort to achieve Zero Harm safety goals. However, and notwithstanding expressions of a strong safety commitment, when the LTIPs were examined for performance indicators, organizational safety performance is not considered at all. This reveals a mismatch between stated organizational safety objectives and the operational targets that CEOs and KMPs are being incentivized to achieve in LTIPs.

Similarly to research in the energy sector (Hopkins and Maslen 2015), this research found that irrespective of the type of financial indicator considered, the design of LTIPs places significant pressure on senior executives to prioritize organizational financial performance. Added to that, because even higher rewards are available if financial performance exceeds certain thresholds, there is a significant incentive for senior

executives to push for even higher financial returns for their organization. One consequence of this is that LTIPs may direct the attention of CEOs and KMP to initiatives that focus on share price and earning performance and, as a result, overlook safety performance.

The findings discussed here suggest that the way that the LTIPs are designed influences senior executives to focus on shareholders and organizational financial performance. This seems to be not aligned with the notion of CSR, which requires senior management to attend to broader stakeholders and issues of concern to those groups, including safety. Research has shown that excessive focus on a firm's financial performance can be detrimental to the promotion of social and environmental objectives (Mahoney and Thorn 2006). For example, Wowak *et al.*, (2015) found that incentive schemes, such as those that include stock options in LTIPs with a focus on 'big wins', play a significant role in promoting a lack of caution in CEO decision-making. They note that there can be consequences that are not socially responsible including an impact on public safety, such as when unsafe products are released into the marketplace.

Despite positioning safety as a long-term organizational objective, no safety metrics are included in LTIPs. Rather, safety metrics are only mentioned in STIPs and are typically lagging indicators, e.g. lost time injury frequency rate (LTIFR) and total recordable injury frequency rate (TRIFR). However, these measures are essentially short-term productivity, not safety, measures and, as such, efforts to drive down those measures provide little insight into factors contributing to injuries or fatalities (O'Neill *et al.*, 2016; Safe Work Australia 2013). The ultimate goal of these measures is to reach 'zero harm' or 'injury free' workplaces. However, a commitment to zero harm or injury free as key CSR objectives can be problematic because it can, albeit unintentionally, lead to the development of bureaucratic accountability processes (Dekker 2014: 34). One consequence of such an increasingly bureaucratized approach to safety is that compliance becomes an end in itself, or in other words, safety becomes 'trapped' into rules (Bourrier and Bieder 2013).

The issues noted above raise questions around safety governance, and whether the way that safety policies are developed and the fundamental design of LTIPs really support positive CSR outcomes in terms of safety.

CONCLUSIONS

The research reported here found that all the companies examined in the group of publicly listed companies in the Australian non-domestic construction sector expressed a strong commitment to safety in their Annual Reports. However, the pattern of LTIPs and their vesting conditions across the group reveals that senior executives are primarily incentivized to improve organizational financial performance. These results are similar to those of Hopkins and Maslen in the energy sector, where LTIPs exclusively depend on financial performance while safety performance is essentially irrelevant (2015: 75). Despite claims prioritizing safety as part of the organizational vision, values, and mission, there were no indicators in the LTIPs relating to strategic organizational safety objectives linked to CSR.

Importantly, the results do not suggest that existing lagging safety performance indicators must or should be part of LTIPs. That type of approach could potentially increase problems such as the manipulation of measurement and underreporting of injuries (see also Safe Work Australia 2013). However, the research findings do suggest that more valid and meaningful safety performance measures should be developed and included in

the LTIPs to align incentives and more effectively manage safety performance in the construction industry from the top down. This would include considerations of alternative frameworks that provide effective KPIs linked to incentives but that also avoid any further bureaucratisation of safety. The ultimate aim is not only to motivate senior executives to consider long term organizational financial growth but also to include ways to ensure that safety performance, as a key CSR objective, can be improved.

This research is a useful starting point in understanding senior executive incentive schemes in the construction industry and how these align executive decision-making with safety performance. It is expected that these research findings will generate substantial interest in the construction management community regarding what senior executives are incentivized to achieve and how safety is relevant to evaluations of their performance linked to incentive payments.

REFERENCES

- Bourrier, M and Bieder, C (Eds) (2013) *Trapping Safety into Rules: How Desirable or Avoidable is Proceduralization?* Farnham, UK: Ashgate Publishing Ltd.
- Carroll, A B and Shabana, K M (2010) The business case of corporate social responsibility: a review of concepts, research and practice. *International Journal of Management Reviews*, **12**(1), 85-105.
- Commission of the European Communities (2001) *Promoting A European Framework for Corporate Social Responsibility*. Available at http://europa.eu/rapid/press-release_DOC-01-9_en.pdf [Accessed 28th July 2017].
- Deegan, C M and Rankin, M (1997) The materiality of environmental information to users of Annual Reports. *Accounting, Auditing and Accountability Journal*, **10**(4), 562-583.
- Dekker, S (2014) Employees: A problem to control or solution to harness. *Professional Safety*, **59**(08) [ASSE-14-08-32].
- Dumay, J and Cai, L (2014) A review and critique of content analysis as a methodology for inquiring into IC disclosure. *Journal of Intellectual Capital*, **15**(2), 264-290.
- Ferguson, K (2015) *A Study of Safety Leadership and Safety Governance for Board Members and Senior Executives*. Doctoral Thesis, School of Management, Queensland University of Technology, Queensland.
- Flick, U (2002) *An Introduction to Qualitative Research*. London: Sage Publications Ltd.
- Fuolo, M (2017) Building a trustworthy corporate identity: A corpus-based analysis of stance in annual and corporate social responsibility reports. *Applied Linguistics*. Available from doi:10.1093/applin/amw058
- Godfrey, J, Mather, P and Ramsay, A (2003) Earnings and impression management in financial reports: The case of CEO changes. *Abacus*, **39**(1), 95-123.
- Gupta, A and Wowak, A J (2017) The Elephant (or Donkey) in the Boardroom: How Board Political Ideology Affects CEO Pay. *Administrative Science Quarterly*, **62**(1), 1-30.
- Hsieh, H F and Shannon, S E (2005) Three approaches to qualitative content analysis. *Qualitative Health Research*, **15**(9), 1277-1288.
- Hopkins, A (2010) *Failure to Learn: The BP Texas City Refinery disaster*. North Ryde, CCH Australia Limited.
- Hopkins, A and Maslen, S (2015) *Risky Rewards*. Surrey, England: Ashgate Publishing Ltd.

- Jenkins, H and Yakovleva, N (2006) Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure. *Journal of Cleaner Production*, **14**(3), 271-284.
- Jones, P, Comfort, D and Hillier, D (2006) Corporate social responsibility and the UK construction industry. *Journal of Corporate Real Estate*, **8**(3): 134-150.
- Leung, S, Parker, L and Courtis, J (2015) Impression management through minimal narrative disclosure in annual reports. *The British Accounting Review*, **47**(3), 275-289.
- Loosemore, M, and Lim, B (2017) Linking corporate social responsibility and organizational performance in the construction industry. *Construction Management and Economics*, **35**(3), 90-105.
- Mackenzie, C (2007) Boards, incentives and corporate social responsibility: The case for a change of emphasis. *Corporate Governance: An International Review*, **15**(5), 935-943.
- Mahoney, L S and Thorn, L (2006) An examination of the structure of executive compensation and corporate social responsibility: A Canadian investigation. *Journal of Business Ethics*, **69**(2), 149-162.
- Maslen, S and Hopkins, A (2014) Do incentives work? A qualitative study of managers' motivations in hazardous industries. *Safety Science*, **70**, 419-428.
- Nicholson, G J and Newton, C (2010). The role of the board of directors: Perceptions of managerial elites. *Journal of Management and Organization*, **16**(2), 201-218.
- Ocasio, W (1997) Towards an attention-based view of the firm. *Strategic Management Journal*, **18**(Summer), 187-206.
- O'Neill, S, Flanagan, J and Clarke, K (2016) Safewash! Risk attenuation and the (Mis)reporting of corporate safety performance to investors. *Safety Science*, **83**, 114-130.
- Petrovic-Lazarevic, S (2008) The development of corporate social responsibility in the Australian construction industry. *Construction Management and Economics*, **26**(2), 93-101.
- Safe Work Australia (2013) *Issues in the Measurement and Reporting of Work Health and Safety Performance*. Canberra, ACT: Commonwealth of Australia.
- Sawacha, E, Naoum, S and Fong, D (1999) Factors affecting safety performance on construction sites. *International Journal of Project Management*, **17**(5), 309-315.
- Shields, J, O'Donnell, M and O'Brien, J (2003) *The Bucks Stop Here: Private Sector Remuneration in Australia*. A Report Prepared for the Labor Council of New South Wales, Sydney.
- Silverman, D (2001) *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction*. London: Sage Publications Ltd.
- U.S. Chemical Safety and Hazard Investigation Board (CSB) (2007) *Investigation Report Refinery Explosion and Fire, BP Texas City, Texas*. Washington, DC: U.S. Chemical Safety and Hazard Investigation Board.
- Watts, P and Holme, L (2003) *Corporate Social Responsibility*. Conches-Geneva, Switzerland: World Business Council for Sustainable Development.
- Wowak, A J, Mannor, M M and Wowak, K D (2015) throwing caution to the wind: the effect of CEO stock option pay on the incidence of product safety problems. *Strategic Management Journal*, **36**(7), 1082-1092.