



Corporate Governance

A hybrid of state regulation and self-regulation for remuneration governance in Australia

Zahid Riaz

Article information:

To cite this document:

Zahid Riaz , (2016), "A hybrid of state regulation and self-regulation for remuneration governance in Australia", Corporate Governance, Vol. 16 Iss 3 pp. 539 - 563

Permanent link to this document:

<http://dx.doi.org/10.1108/CG-10-2015-0133>

Downloaded on: 14 November 2016, At: 20:55 (PT)

References: this document contains references to 105 other documents.

To copy this document: permissions@emeraldinsight.com

The fulltext of this document has been downloaded 123 times since 2016*

Users who downloaded this article also downloaded:

(2016), "Re: duplication of corporate governance codes and the dilemma of firms with dual regulatory jurisdictions", Corporate Governance: The international journal of business in society, Vol. 16 Iss 3 pp. 476-489 <http://dx.doi.org/10.1108/CG-08-2015-0115>

(2016), "Antecedents of voluntary corporate governance disclosure: a post-2007/08 financial crisis evidence from the influential UK Combined Code", Corporate Governance: The international journal of business in society, Vol. 16 Iss 3 pp. 507-538 <http://dx.doi.org/10.1108/CG-01-2016-0006>

Access to this document was granted through an Emerald subscription provided by emerald-srm:563821 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

A hybrid of state regulation and self-regulation for remuneration governance in Australia

Zahid Riaz

Zahid Riaz is Assistant Professor at Lahore School of Economics, Lahore, Pakistan.

Abstract

Purpose – This paper aims to explore an alternative approach to regulation for addressing governance problems relating to director and executive remuneration in publicly listed firms. The author investigates the development of hybrid regulatory framework, composed of state regulation and self-regulation, for remuneration governance in Australia.

Design/methodology/approach – The synthesis of constructs borrowed from agency and institutional theories and its contextual analysis examines the effectiveness of formal (state regulation) and informal (self-regulation) institutions for the development of a hybrid of regulation. Thereafter, the author examines the impact of hybrid regulation on remuneration disclosure behavior in Australia.

Findings – The author finds that improvement in disclosure is primarily driven by the establishment of remuneration committees and separate role of chief executive officer (CEO) and chairperson but weakened by the presence of CEO at remuneration committee and presence of remuneration consultant.

Originality/value – Global crises have called for greater transparency and protection of investors through state regulation alone. However, corporate governance, being a social practice that is shaped by diverse interests, calls for a holistic approach. A useful contribution of this study is that through an in-depth examination into the stages and actors of the government interventions involving the balancing of tension between conflicting forces, it provides insights for developing an effective regulatory hybrid which has greater acceptance for corporate governance. In conclusion, it implies the significance of priming the social arena through active engagement of diverse market forces prior to introducing state regulation.

Keywords Australia, Corporate governance, Agency theory, Institutional theory, Regulation, Director and executive remuneration

Paper type Research paper

In the past decade, director and executive remuneration or (hereafter as remuneration) has become a contentious issue, one that is often associated with, and believed to share some causal factors common in a series of corporate and financial crises in the world (Banks *et al.*, 2010; Hill, 2006; Hill *et al.*, 2010; Hill and Yablon, 2002; Miller, 2004). Failures of corporate governance are often linked to inadequate corporate reporting and disclosure (Whittington, 1993). This raises a fundamental question: are market-based regulatory mechanisms adequate to facilitate good corporate governance (Clarke, 2004; Cullen, 2014; Hill, 2005; Massey, 2010; Mayes, 2010; Stanton, 2010).

Governments around the world including Australia have increasingly been pressured to intervene to ensure accountability and transparency, particularly in matters relating to remuneration (Chapple and Christensen, 2005; Kirkbride and Letza, 2004; Sheehan, 2009). To many regulatory theorists, self-regulation is best, as it is likely to contribute to greater shareholder value (Desmond, 2000). Also, neo-liberalists assert that any interference with current market-based regulatory mechanisms will have a distorting effect (Hart, 1995; Kirkbride and Letza, 2004; McSweeney, 2009; Sheehan, 2009).

Received 8 October 2015
Revised 12 March 2016
Accepted 23 March 2016

However, to what extent can society rely on self-regulation? Should corporate entities be better governed through statute? Governance is a unique social process of interaction between “institutions and actors” (Stoker, 1998, p. 18) and cannot work in isolation from other social and non-economic institutions representing “power, legislation, social relationships and institutional contexts” (Black and Baldwin, 2010; Letza *et al.*, 2004). The purpose of my study is to shed light on the debate regarding the development of a regulatory framework for corporate governance that aligns state regulation designed to protect shareholder interests with self-regulation. Recent academic thinking, backed by empirical research, appears to suggest that appropriate regulation is not a choice between state regulation and self-regulation but a hybrid of both (Bartle and Vass, 2007; Black and Baldwin, 2010; Brown, 2006; Brunoa and Claessensb, 2010; Ford, 2010; Kirkbride and Letza, 2003; Lazzarini and Mello, 2001; Smith, 2004; Verbruggen, 2009). I demonstrate that the hybrid of state regulation and self-regulation reflects the diverse and often competing interests that influence the social practice of corporate governance in the modern society (Ford, 2010; Mashaw, 2006). Currently, there is dearth of research that has theoretically framed and empirically tested the harmonized role of hybrid regulation regarding director and executive remuneration disclosure. This paper aims to fill this gap.

I first explain the development of a hybrid regulatory framework in Australia by focusing on the issue of improving remuneration disclosure. It is pertinent to highlight hybrid regulation is the outcome of Corporate Law Economic Reform Program (CLERP) 9 Act 2004 and the Principles of Good Corporate Governance Practice and Best Practice Recommendations 2003 developed by the Corporate Governance Council of the Australian Securities Exchange (ASX). CLERP 9 Act 2004 has solicited firms to disclose information regarding director and executive remuneration, and ASX besought the listed entities to implement international best governance arrangements regarding director and executive remuneration. I then examine the effect of the hybrid regulation on disclosure behavior in Australian companies and identify the key determinants of disclosure levels before and after the establishment of hybrid regulation in 2004. Thereafter, using econometric analyses, I compare disclosure levels, and the contribution of self-regulatory elements of best practice to disclosure of information, respectively, before and after the introduction of hybrid regulation. I find that disclosure levels are significantly higher after the introduction of hybrid regulation. After controlling for firm-specific characteristics, results indicate that the improvement in disclosure is primarily driven by the implementation of recommended self-regulatory practices, namely, the establishment of remuneration committees and separate role of chief executive officer (CEO) and chairperson. I also find that the presence of CEO at remuneration committee and presence of remuneration consultant can undermine the disclosure level of remuneration. This study thus demonstrates how a hybrid of state regulation and self-regulation can be mutually reinforcing mechanisms rather than competing ones, and through such demonstration, I contribute to the emerging body of literature on the role of hybrid regulation as a contemporary and effective approach for corporate governance.

Theoretical and empirical underpinnings

Agency conflict arises when an agent engages in a self-serving behavior by exploiting firm resources, including time for personal use (Jensen and Meckling, 1976). Lack of perfect contracting and observation of each and every action of agent by principal permits agents to engage in regulatory non-compliance (Eisenhardt, 1989, pp. 59-60; Husted, 2007, p. 181). In the presence of incomplete information, the principal cannot determine whether the agent is acting in the best interests of the organization (Eisenhardt, 1989; Gomez-Mejia and Balkin, 1992, p. 923). Information asymmetries, eventually, give rise to a situation of moral hazard. According to agency theorists, investments in information systems such as budgeting systems, reporting procedures, boards of directors and additional layers of management can curb agent opportunism by keeping the principal informed about what the agent is actually doing. Similarly, a complete and detailed disclosure of remuneration

can assist a principal to monitor the pay-setting process and verify whether agent remuneration was effectively aligned with the interests of principal (Thévenoz and Bahar, 2007, p. 19). *Ex-post* disclosure of performance-based remuneration can empower the principal to price the risk and decide whether to continue business with a controversial fiduciary in future. In other words, disclosure of remuneration information can reduce the incidence of moral hazard problem in a principal-agent relationship and make the pay-for-performance model work more effectively.

Among practices to improve information about agent/executive behavior, Fama and Jensen (1983) describe the information role that firm board may play in controlling managerial behavior. Similarly, a remuneration committee, responsible for developing a remuneration package for executives, can align the interests of agents with principals (Carson, 2002, p. 6). It may also play an important role in provision of information (Williamson, 1984, p. 1,216). Therefore, the presence of a remuneration committee can act as an important mechanism of corporate governance by which the board can set remuneration policies, and provide more disclosure of remuneration to shareholders in a transparent manner (Conyon and Peck, 1998).

One of the first studies that examined remuneration disclosure was conducted in the UK and found that board independence and role separation between CEO and chairperson led to increased levels of remuneration disclosure (Forker, 1992). In Australia, Coulton *et al.* (2001), Nelson and Percy (2005), Clarkson *et al.* (2006); and Bassett *et al.* (2007) have examined the association between the corporate governance factors and remuneration disclosure. Nelson and Percy (2005) found a positive association between the presence of remuneration committee and transparency of executive stock option disclosures. Liu and Taylor (2008) found a negative association between the presence of executive directors on company boards and disclosure of share rights, options and termination benefits. However, with respect to the presence of a remuneration committee, Liu and Taylor (2008) did not find a significant result. Furthermore, the executive stock option disclosure was examined with respect to corporate governance factors by Nelson *et al.* (2010). Factors associated with good internal governance, including board and remuneration committee independence, were found to contribute to improved levels of disclosure. It is imperative to state that most of the aforementioned studies (except Liu and Taylor, 2008; Nelson and Percy, 2005) have yet to delve into the relationship between the presence of a remuneration committee and disclosure level of director and executive remuneration. Likewise, the effects of committee composition such as presence of CEO on the remuneration committee and the presence of remuneration consultant were rarely investigated in the literature.

Agency theory also proposes outcome-oriented contracts (pay-for-performance models), which align the preferences of agents with those of the principal because the rewards for both depend on the same actions. However, the adoption of pay-for-performance models can have unintended effects. In Anglophone countries including Australia, it resulted in an enormous increase of equity-based remuneration of company executives, but not necessarily improvement in performance (Bebchuk and Fried, 2004; Coffee, 2004; Gordon, 2002; Hill, 2005, 2006). The rise of the outcome-oriented control mechanism was an upshot of government policies of public ownership of industries (Dalton and Dalton, 2008). Such public ownership led to an emphasis on ownership property rights rather than ownership responsibilities, leading to speculative buying and selling with little attention focused on ensuring a system of accountability and questioning of management (Bebchuk and Fried, 2003). Large institutional investors often holding controlling interests in firms were also reluctant to interfere with internal workings of firms and were only concerned with dividends and returns. Indeed, the recent focus on ownership rights rather than ownership-responsibility has led to the popularity of outcome-oriented contracts that are driven by performance in capital markets.

The foregoing indicates that market-based regulation by itself may be inadequate for corporate governance. Therefore, the question arises: “are there alternative

mechanisms for protecting stakeholder interest”? Institutional theory posits institutions or “rules of the game” (1990, p. 3) which consist of “formal constraints (rules, laws, constitutions, property rights), informal constraints (norms of behavior, taboos, conventions, and self-imposed codes of conduct), and their enforcement characteristics” (North, 1991, p. 97; 1996, p. 344) can, in fact, create an environment in which organizations become institutionalized in certain modes of behavior. Tolbert and Zucker (1983) called organizations the “captives of the institutional environment in which they exist” (p. 22). Regulatory institutions, crafted by governments exert pressures to converge the behavior of organizations toward homogenized practices insofar as it is intended to protect stakeholder interests. Lack of conformity to this formal institutional constraint can be sanctioned (DiMaggio and Powell, 1983, p. 150). Rules and laws which are equipped with power carry out governance systems for organizations. Through state regulation, laws can be enacted by a government to govern the relationships between agent and principal. These governance systems are implemented through protocols or standard operating procedures (SOPs) (Scott, 2008). Using SOPs, a principal can monitor the agent through the disclosure in remuneration reports as set by legal protocols and can spot any non-conforming entity.

Informal institutions, consisting of values and norms (Scott, 2008; Selznick, 1957), are a guide to what processes and procedures to follow and how activities should be performed so that desired goals can be met (Gibbs, 1965). Normative isomorphism arises from professionalization (DiMaggio and Powell, 1983, pp. 152-153). A network of professionals is an important source of norms compliance, either imposed by informal institutions or self-devised by organizations, and can generate standardized practices and processes across different organizations. Norms and values become very important in corporate governance as they evolve (Fiss, 2008; Hill, 2005). Informal institutions thus force organizations to comply with their social obligations and create identical organizational practices and processes (Greenwood *et al.*, 2008, pp. 6-7).

When applied in the debate regarding what approach is to be adopted in developing a regulatory framework that can address agency conflicts for better corporate governance, institutional theory demonstrates that linkages between formal (regulatory) and informal (normative) aspects of institutions are similar to the mechanisms of state regulation and self-regulation, respectively. For example, the formal constraints confer legitimacy to those organizations which comply with established legal requirements brought forth by state regulation (Goodin, 1996; North, 1990). The informal constraints furnish legitimacy to those organizations which conform to certain internalized controls or self-regulatory standards which, in turn, confer legitimacy in the regulatory domain for conformant organizations. In social systems, these institutional mechanisms operate collectively with their distinctive bases of legitimacy (Hall and Gingerich, 2009, p. 450; Scott, 2008, p. 61). Therefore, it has become pertinent to examine the extent of mutual “collaboration between formal and informal institutional elements for devising a hybrid of regulation”.

Traditional studies in regulation suggest that, although state regulation and self-regulation are two competing governance mechanisms for corporate governance, they may, in fact, be designed to become complementary and mutually reinforcing (Eisner, 2004; Essen *et al.*, 2012). Villiers and Boyles (2000) suggest that effective regulation of corporate governance should not rely on the choice between self-regulation and state-based regulation but should involve establishing an appropriate hybrid of both. For example, in the case of remuneration governance, while the state may legislate what information needs to be disclosed, industry is better equipped to guide remuneration practice for effective disclosure. Therefore, while remuneration disclosure is guided by state regulation, remuneration practice is guided by self-regulation (Sheehan, 2009).

Development of a hybrid of regulation in Australia

Formal institutions: state regulation

Prior to CLERP 9 Act 2004, Company Law Review (CLR) Act 1998 introduced Section 300 (A) that demanded the listed companies to disclose three aspects about remuneration:

1. the broad policy regarding emoluments of board members and senior executives of Australian companies;
2. the link between the company remuneration policy and its performance; and
3. remuneration details of each director and five highest paid executives of company.

CLR Act 1998 also came under heavy criticism because of the substantial confusion surrounding the interpretation of the “emoluments” term (Clarkson *et al.*, 2006; Quinn, 1999). This compelled the Australian Securities and Investments Commission (ASIC) to issue an interim period practice note – *PN68* in November 1998 for clarifying CLR Act 1998.

A program of sequential reforms to CLR Act 1998 was implemented under the auspices of the CLERP to further improve the regulatory framework. CLERP 9, the last of these reforms, was enacted as CLERP Act 2004, replacing CLR Act 1998 (Banks *et al.*, 2010, pp. 128-130). An extensive consultative process regarding the amendments of Section 300 (A) was facilitated by the Joint Committee on Corporations and Financial Services, established under ASIC (Sheehan, 2009). This involved public hearings and submissions from an array of registered business associations, audit firms, accounting and legal professional associations, business- and industry-based associations including the Business Council of Australia (BCA) and other stakeholders. The BCA is an association of CEOs of leading corporations of Australia and showed serious concerns over the disclosure component of the CLERP Bill 2003 (BCA, 2003). CLERP 9 Act 2004, which was undertaken in response to calls for curtailment of excessive executive pay in Australia to restore public confidence (Chapple and Christensen, 2005), aimed to strengthen the existing disclosure regime by promoting transparency, accountability and shareholder activism (Banks *et al.*, 2010, p. 130; Sheehan, 2009, p. 275).

Informal institutions for self-regulatory codes of corporate governance

Since the early 1990s, different associations in Australia had attempted to publish corporate governance codes for best practices. However, these market forces had failed to unite the conflicting interests to consolidate and develop a universal code of best practices. To facilitate the development of a framework for self-regulation, the State intervened to support the ASX in leading the development of a framework for self-regulation with industry participation. The ASX played a critical role by establishing the Corporate Governance Council, represented by 21 different business, investment and shareholder associations in 2002, and providing them with a common platform to communicate, develop and enforce corporate governance standards for a common purpose – self-regulation. The Corporate Governance Council of the ASX issued the first edition of the “Principles of Good Corporate Governance Practice and Best Practice Recommendations” in 2003 (ASX, 2008). Representatives with disparate backgrounds including the Australian Shareholders’ Association (ASA), BCA and the Australian Institute of Company Directors contributed to the key advisory guidelines and recommended best practices for corporate governance.

The ASX best practices recommended institutionalizing the presence of remuneration committee on company board and having a majority of non-executive directors on the remuneration committee of ASX 300 companies (ASX, 2003). The ASX recommended best practices were not legally binding; however, in case of non-compliance, listed companies were required to provide an explanation for their lack of compliance, addressing the “if not” and “why not” aspects of the recommended remuneration governance mechanisms (Banks *et al.*, 2010, p. 135).

ASIC was also involved in the educational role of governance by engaging with the ASX. Both institutions signed a Memorandum of Understanding in 2004 regarding information sharing and enforcing the CLERP Act 2004 on a mutual basis (ASIC & ASX, 2004). This document became publicly available, and this Memorandum was to be used for the implementation of the CLERP Act 2004 (ASIC & ASX, 2004).

The government facilitated the creation of an organized forum led by ASX which enabled creating discourse among diverse actors such as ASA and BCA with conflicting interests, to develop a practical framework for self-regulation which had acceptance both in industry and shareholder group (Hughes, 2003). The ASX principles and recommendations as self-regulatory codes of practice guided the design of the subsequent state regulation embodied in CLERP 9 – enabling state regulation to be linked to self-regulation. Overall, through the combination of self-regulation and state regulation, the government was able to achieve a more socially acceptable framework for corporate governance that comprised a hybrid of self-regulation and state regulation. Thus, CLERP 9 and ASX (2003) Principles, that were introduced within a relatively short time frame in response to the various corporate collapses in Australia, were two distinct forms of regulation that complemented each other to provide a hybrid regulatory framework.

Effect of the hybrid of state regulation and self-regulation

To assess the impact of the hybrid regulation on disclosure behavior, an empirical analysis was conducted to determine whether or not the shift from a state-based regulation to a regime of hybrid regulation improved remuneration disclosure and its relationship with governance practices in Australia. A relationship depicting recommended best practices and other plausible determinants of the level of disclosure practices in Australian corporations was modeled for before and after hybrid regulation. In 1997 and 2002, state regulation alone was in force, while in 2006, a hybrid regulation (CLERP 9 and ASX code) guided remuneration disclosure. A difference in the relationship between remuneration practice adopted by firms and their level of disclosure under these two systems of regulation was predicted. Using multivariate analysis, this study compared disclosure level of remuneration and identified the key determinants of disclosure index before and after the implementation of the hybrid regulatory framework, respectively.

Factors influencing disclosure level – independent variables

While the disclosure level of remuneration (the dependent variable) for a given year can be influenced by several factors (the independent variables), this research focused on a set of internationally accepted best practices related to remuneration governance that overlapped with the ASX (2003) Guidelines which had been shown in previous studies to be associated with remuneration disclosure (Clarkson *et al.*, 2006; Liu and Taylor, 2008; Nelson *et al.*, 2010).

Remuneration committee

The presence of a remuneration committee can provide a powerful governance arrangement by which the board can set remuneration policies to align shareholder interests in a more transparent manner (Conyon and Peck, 1998, p. 148). Uzun *et al.* (2004) discusses that the presence of a remuneration committee on the company board is positively associated with decreased likelihood of fraud. In a similar vein, the positive association has been found between presence and effectiveness of remuneration committee and executive stock option disclosures (Nelson *et al.*, 2010; Nelson and Percy, 2005). Liu and Taylor (2008, p. 64) have argued that the remuneration committee can opt on a role of pushing the board and top executives to provide more rather than less information about director and executive remuneration in the firm's annual report. This corporate governance mechanism – remuneration committee can thereby prompt the board and executives to provide better information about their remuneration policies

(Liu and Taylor, 2008; Nelson *et al.*, 2010; Nelson and Percy, 2005). Consequently, this influence can lead toward better disclosure level of remuneration as proposed in the following hypothesis:

H1. Disclosure level of remuneration will be positively associated with the presence of the remuneration committee on the company board.

Board independence through role separation between chief executive officer and chairperson

Yermack (1996, p. 198) suggested that high levels of agency problems can be due to CEO role duality. In case of role duality, the monitoring activity as one of the prime functions of the company board can be compromised when the flow of information is controlled by the insider (CEO) to the outsiders (Williamson, 1984; Yermack, 1996). This information control can lead to opportunistic behavior by the agent, resulting in a lower level of information disclosure if it is in the interest of management. Additionally, CEO role duality can lead toward a low level of transparency because of increased possibilities of financial manipulations (Dechow *et al.*, 1996). For instance, Bassett *et al.* (2007) have found that dual role of CEO and chairperson of the board is associated with lower levels of mandatory disclosure of employee stock options. In the context of executive stock option disclosure, Forker (1992) found that there is a positive and significant association between the executive stock option disclosure and role separation between CEO and chairperson. Conversely, Nelson *et al.* (2010) have found a negative association between CEO role duality and disclosure of executive stock option. In regards to CEO remuneration disclosure, Coulton *et al.* (2001) did not find any relationship, but Clarkson *et al.* (2006) had observed a positive and significant relationship between CEO remuneration disclosure and CEO and chair role separation. In the light of this emerging empirical evidence, *H2* proposes a positive association between the separation of the roles of CEO and chairperson and disclosure level of remuneration:

H2. Disclosure level of remuneration is positively associated with the separation of roles of CEO and chairperson.

Presence of chief executive officer on remuneration committee

Another important governance mechanism is the practice of ensuring that a remuneration committee is able to exercise independent judgment regarding executive remuneration and incentive policies. In this regard, the early efforts can be observed from the recommendations of the Greenbury Committee (Conyon and Peck, 1998). The Greenbury Committee has urged the adoption of remuneration committee that solely consists of non-executive (outside) directors (Conyon and Peck, 1998; Greenbury, 1995). It is imperative to emphasize that the contemporary codes of corporate governance and listing rules of stock exchanges have also emphasized the independence of remuneration committee. For instance, in the absence of an independent remuneration committee, Williamson (1984, p. 1216) argues that it would be similar to a situation in which an executive writes his/her employment contract with one hand and signs with the other. It is due to the fact that inside directors or stewards will be less inclined to act as effective monitors than non-executive directors who have various other outside directorships (Fama and Jensen, 1983, p. 315). In this regard, Ryan and Wiggins (2004) found that CEO compensation was related to the power and influence that the CEO has on the board, and this finding is in line with the managerial power approach. This approach argues that corporate boards do not operate at arm's length in developing executive remuneration arrangements (Bebchuk *et al.*, 2002). In fact, executives have power to influence the pay-setting process, and in doing so, they extract rents. Anderson and Bizjak (2003) analyzed the role of board independence with respect to the shareholders' interests, and more importantly, they examined the relationship between presence of the CEO on the compensation committee and the opportunistic pay structure. They found little evidence that greater committee independence affects executive pay. In a recent study, Boyle and

Roberts (2013) obtained mixed results about the relationship between presence of CEO on remuneration committee and growth in CEO remuneration. It is imperative to state that most of the studies have examined the relationship between the presence of CEO on remuneration committee and pay structure of executives rather than remuneration disclosure. Moreover, in the context of these diverging findings with respect to the presence of CEO on remuneration committee, it has become more relevant to examine the role of an independent remuneration committee with respect to disclosure of director and executive remuneration. By adopting the managerial power argument, this study proposes to examine the association between CEO presence on remuneration committee and disclosure level of director and executive remuneration. Drawing on this argument, this study proposes a negative association between the presence of the CEO on the remuneration committee and disclosure level of remuneration in *H3*:

H3. Disclosure level of remuneration will be negatively associated with the presence of the CEO on the remuneration committee.

Presence of remuneration consultants

Companies usually deploy remuneration consultants to furnish advice on the pay-setting process (Bebchuk *et al.*, 2002, p. 789). Remuneration consultants provide expert opinions on the design of remuneration packages which are based upon surveys and industry data of remuneration, and these sources of information are not usually shared among companies. Therefore, the use of a remuneration consultant can allow firms to offer a competitive pay package and improve retention of the required talent pool. Even so, the recruitment process and reporting arrangements of a remuneration consultant in a firm can be subverted (Bebchuk *et al.*, 2002; Conyon *et al.*, 2009; Voulgaris *et al.*, 2010). As per the rent-extraction or managerial power theory, managers/CEOs can use their power and influence over the compensation consultants to extract excess pay in a number of ways (Bebchuk and Fried, 2006; Bebchuk *et al.*, 2002; Conyon *et al.*, 2009; Finkelstein and Hambrick, 1989). For example, the compensation consultant may be hired by the CEO and thus, he/she may feel obliged to promote the CEO's interests above shareholders. The favor can be returned by designing and conducting remuneration surveys which can make the case for higher salaries (Bebchuk *et al.*, 2002, p. 790). Also, it has been argued that if the consultant is offering multiple business services to the firm, then the consultant may be tempted to offer pay contracts that are beneficial to the CEO and executives to foster his/her other lines of business (Bebchuk and Fried, 2004; Holmström and Milgrom, 1991). In doing so, consultants may be toothless to reinforce such pay practices which can link pay to shareholder value (Baker *et al.*, 1988; Conyon *et al.*, 2009). This discussion suggests that the problem is not consultants *per se*, but the fact that the issue on which the consulting eventuates represents a potential conflict of interest between the CEO (or executives) and the company (or shareholders) (Conyon *et al.*, 2009). Moreover, empirical evidence indicates that CEO pay including cash advances is generally greater in those firms which use remuneration consultant (Conyon *et al.*, 2009; Voulgaris *et al.*, 2010). In a recent study, it has been found that remuneration consultants can be used as a justification for higher executive pay (Chu *et al.* 2015). Managerial power theory and empirical evidence indicate that this potential conflict of interest can undermine shareholder value, and therefore, it can also potentially suppress transparency and disclosure of director and executive remuneration. This study, therefore, predicts a negative association between disclosure level of remuneration and the presence of remuneration consultants in *H4*:

H4. Disclosure level of remuneration will be negatively related with the presence of remuneration consultants.

Firm-based factors that include firm characteristics could also affect the level of exposure to public scrutiny. Hence, BCA membership status, firm profitability level, foreign listing status, auditor type, listed age of the firm, leverage, firm size and industry type are included as control variables in this study (please see Ahmed and Courtis, 1999; Ahmed and

Nicholls, 1994; Cerf, 1961; Courtis, 1979; Firth, 1979; Gelb, 2002; Owusu-Ansah and Yeoh, 2005).

Research design

Sampling process

The sampling frame for this research consisted of the top 300 Australian listed firms. Standard and Poor's or S&P/ASX 300 index firms represent 81 per cent of the total market capitalization (S&P, 2010, p. 5). The sampling criteria of this study takes into consideration the following aspects: first, the firms which are listed during or after 1997 are not included; second, listed trusts, mutual and superannuation fund management entities are excluded because these firms do not have an executive style of management and have different reporting requirements; and finally, firms which experience any abnormal activity (merger, acquisition, delisting, etc.) that can affect their disclosure practices are excluded from the selection of the final sample of this research. Using above stated sampling criteria, a final sample of 113 firms from S&P/ASX 300 index firms was drawn, as shown in Table I.

Disclosure index – dependent variable

For this study, the *relative disclosure index* is the dependent variable that measures disclosure level of remuneration. Disclosure indices have been widely used by researchers to determine the level of company disclosure practices (Ahmed and Courtis, 1999; Beattie *et al.*, 2004; Donnelly and Mulcahy, 2008; Guthrie *et al.*, 2004; Owusu-Anash and Yeoh, 2005). The level of disclosure practices of each company was determined through a scoring template that was used to derive a disclosure index. The formulation of the disclosure index was based on general principles of content analysis of company annual reports containing relevant remuneration information (Beattie *et al.*, 2004; Campbell and Slack, 2008, p. 193; Guthrie *et al.*, 2004) (Beattie *et al.*, 2004, p. 214; Guthrie *et al.*, 2004) and a category system. Disclosure index studies adopt self-constructed disclosure indices and assume that the level or extent of disclosure is a proxy of disclosure quality (Beretta and Bozzolan, 2008, p. 335). Conversely, it has been argued that disclosure quality is an abstract and subjective concept and its measurement is complex (Beretta and Bozzolan, 2008, p. 339). Accounting scholars have deliberated these difficulties associated for directly assessing disclosure quality in annual reports and argued that researchers tend to positively relate disclosure quality with the quantity of disclosure (Beattie *et al.*, 2004; Beretta and Bozzolan, 2008). By considering these limitations of disclosure measurement, this study has used *disclosure level* instead of disclosure quality or quantity. Generally, a disclosure index deploys a simple binary coding scheme to record the presence of absence of an item (Beattie *et al.*, 2004; Beretta and Bozzolan, 2008). Other coding schemes incorporate ordinal measures that usually comprise three or more levels. On similar lines, this study has adopted an ordinal coding scheme that comprises three and more levels.

To ascertain the level of remuneration disclosure, the category system draws on three aspects of executive remuneration:

1. general disclosure of remuneration pertaining to the requirements of Section 300 (A) and the Australian Accounting Standards Board;

Table I Sampling process

Total S&P/ASX 300 index firms	294
Less firms which listed during or after 1996	173
Less listed fund management entities and trusts	5
Less non-registered Australian firm	1
Less firms with missing annual reports	2
Grand total of research sample	113

2. disclosure of the company's pay-for-performance model related to Section 300 (A); and
3. the engagement and participation of shareholders in deciding executive remuneration during the annual general meetings as per Sections 250 (S) and 250 (SA).

The identification of these three categories for analyzing the disclosure level of remuneration allows the construction of this remuneration disclosure index (see [Appendix 1](#) for details).

The disclosure index comprises 13 disclosure index items representing the aforementioned three main facets of remuneration disclosure. The level of general disclosure of director and executive remuneration is ascertained by considering Section 300 (A) (1) (c) and the AASB 1046 and AASB 124. Section 296 (1) makes it compulsory for companies to prepare their financial reports and accounts as per the accounting standards of Australia. The first five disclosure items measure the disclosure level of general remuneration information by considering the following aspects: primary benefits; post-employment benefits; equity remuneration; stock options for directors and executives along with their valuation details; and any other benefits offered to directors and executives. The details about these items and the disclosure level ranking criteria for each item are presented in [Appendix 1](#).

The second category of the disclosure index measures the disclosure level of the pay-for-performance model with the help of seven disclosure items. These items include the following:

1. remuneration policy of the company and key factors influencing this policy;
2. company performance discussion including the total shareholder return in the current and previous four years;
3. a detailed summary regarding performance conditions upon which any short- and/or long-term element of remuneration is dependent;
4. justification about the selection of performance conditions on which any remuneration element is dependent;
5. summary of methods used to assess the satisfaction of performance conditions and an explanation why such methods were selected;
6. if the performance condition involves comparison with external factors, then these factors such as other companies or indices should be disclosed; and
7. if any securities element of remuneration is not dependent on any performance condition, then an explanation should be provided in this regard.

The details about the relevant sections of the aforementioned disclosure index items with relevant disclosure-level ranking criteria are provided in [Appendix 1](#).

The third disclosure index category examines the level of the "say on pay" phenomenon introduced in Australia through the CLERP Act 2004. This aspect is assessed through the level of discussion about director and executive remuneration during annual general meetings as provided in meeting minutes. The details about the criteria of disclosure-level rankings and legal sections representing these disclosure index items of the "say on pay" phenomenon are given in [Appendix 1](#).

The 13 disclosure index items were validated using the work of following accounting and law scholars ([Clarkson et al., 2006](#); [Coulton et al., 2001](#); [Liu and Taylor, 2008](#); [Nelson et al., 2010](#); [Nelson and Percy, 2005](#)). Also, the ranking criteria of the disclosure index were guided by these above-mentioned studies conducted in Australia. The validated disclosure index was thereafter applied to company annual reports containing information about remuneration and minutes of the annual general meetings to measure the level of remuneration disclosure. The index and scoring scheme quantified the disclosure level of remuneration. The maximum score for the level of these disclosure categories is 36 –

depending upon the nature and different types of remuneration elements paid to company directors and executives.

The validated disclosure index computed the actual scores of remuneration disclosure in before (1997 and 2002) and after (2006) periods of hybrid regulation in Australia. Thereafter, a *relative index* of disclosure was calculated for each company for the years 1997, 2002 and 2006, following the methodology used by Owusu-Ansah and Yeoh (2005, p. 97), as shown in equation (1):

$$D_{ijt} = \frac{\sum_{i=1}^{mjt} dijt}{\sum_{i=1}^{njt} dijt} \quad (1)$$

where D_{ijt} related to company j in year t (where year t can be 1997, 2002 and 2006) and coded as per the ranking score of the respective disclosure index item; mjt is the number of disclosure items which are relevant to company j and were actually disclosed in its annual report for year t ; and njt is the maximum number of disclosure items that can be disclosed by company j in its annual report in year t .

The model

The model as shown in equation (2) defines the relationship between dependent variable and independent variables including control variables in each year of interest (1997, 2002 and 2006). Three separate models enable a simultaneous comparison between three periods, which differed in the system of regulation for corporate governance.

$$\begin{aligned} D_{ijt} = & \beta_0 + \beta_1 \text{Presence of remuneration committee}_{jt} \\ & + \beta_2 \text{Separate role of CEO and chairperson}_{jt} \\ & + \beta_3 \text{Presence of CEO on remuneration committee}_{jt} \\ & + \beta_4 \text{Presene of Remuneration Consultant}_{jt} + \beta_5 \text{BCA membership}_{jt} \\ & + \beta_6 \text{Return on Assets}_{jt} + \beta_7 \text{Earnings per share}_{jt} + \beta_8 \text{Foreign listing status}_{jt} \\ & + \beta_9 \text{Auditor type}_{jt} + \beta_{10} \text{Listed age of the firm}_{jt} + \beta_{11} \text{Leverage}_{jt} \\ & + \beta_{12} \text{Firm size}_{jt} + \beta_{13} \text{Services}_{jt} + e_o \end{aligned} \quad (2)$$

where D_{ijt} is the disclosure value for a disclosure index item i related to company j in year t ($t= 1-3$) and e_o is the stochastic disturbance or error term and assumed to be independent and normally distributed with the same variance.

A set of equations that share a common error structure with non-zero covariance can be contemporaneously correlated. In this case, the assumption of independence can be violated by deploying ordinary least squares (OLS) and single-equation approach will be inefficient (Judge *et al.*, 1988). Zellner (1962) devised seemingly unrelated regression (SUR) technique to control for contemporaneous correlations (Wooldridge, 2002). Inferences derived from the estimation of set of three separate equations as a system are econometrically more appropriate than the inferences drawn from the estimation of three separate equations through OLS (Jiambalvo *et al.*, 2002). The definitions of study variables are presented in Table II.

Findings and discussion

Tables III-V present the pair-wise Pearson product-moment correlation coefficients of the variables for years 1997, 2002 and 2006, respectively, with four significance levels as $p < 0.001$; $p < 0.01$; $p < 0.05$; and $p < 0.10$, respectively.

The correlation coefficients values show that there is no problem of collinearity because the values of correlation coefficients are less than 0.90, as shown in Tables III-Table V; hence, I can infer that multicollinearity is not a concern. This aspect is also evident from the values of variance inflation factors and tolerance of each variable as illustrated in Tables III-Table V.

Table II Definitions of dependent, independent and control variables

Variable name	Label	Variable definition
Relative disclosure index	Disclosure Index	A measure of disclosure level of director and executive remuneration both in pre- and post- eras of hybrid regulation. It is a ratio between the actual disclosure of each company in its annual report and the maximum level of disclosure it can show
Presence of remuneration committee on company board	RemCommitt	Indicator variable to record the presence of remuneration committee on company board and coded as: 0 =absent and 1= present
Separate role of CEO and Chairperson	SeparateCEO	Indicator variable to record the role separation between the company chairperson and CEO and coded as: 0 = no and 1 = yes
Presence of CEO on the remuneration committee	CEOonRemCommitt	This variable records the presence of CEO on the remuneration committee of the firms and coded as: 0 = not present and 1 = present
Presence of remuneration consultant	RemConsultant	This variable records the presence of remuneration consultants in the sample firms and coded as: 0 = not present and 1 = present
BCA membership status	BCA	This variable records the membership status of sample firms with the BCA and is coded as: 0 = non-member and 1= member
Return on assets	RetAssets	The firm's profitability is measured by return on assets ratio. This ratio determines the return (profit) on the assets employed during the respective financial year
Earnings per share	EarnsShare	The firm performance is assessed by earnings per share. This ratio indicates the allocation of the company earnings for each common share during the respective financial year
Foreign listing status	UKListing	Indicator variable to record the listing status of sample firms on London Stock Exchange (UK) and coded as: 0 = no and 1 = yes
Auditor type	BigFour	Indicator variable for the type of external auditor; 1, if auditor is affiliated with a Big Four international audit firm and 0 if otherwise
Listed age of the firm	ListAge	This variable illustrates the age of sample firms. Age is measured as the number of years since the company is listed on the stock exchange
Debt to asset ratio	DebtAssets	The ratio that indicate the proportion of assets which are being financed by debt in the respective financial year
Firm size	Logequity	Firm size is measured through the natural log values of firm equity
Industry type	Services	Indicator variable that shows industry type (services or non-services) of sample firms and coded as: 1= services, 0 = non-services

Results prior to the hybrid regulatory era

The results of the model for year 1997 (Model 1) and year 2002 (Model 2) suggest that prior to hybrid regulation, with the exception of the presence of remuneration consultant, only firm-specific characteristics such as BCA membership, foreign listing status, type of audit firm and listed age of firm made a significant positive contribution to the level of disclosure information (Model 1: $R^2 = 0.45$ and $X^2 = 96.85$ with $p < 0.001$) and (Model 2: $R^2 = 0.49$ and $X^2 = 108.42$ with $p < 0.001$), as shown in Table VI. These findings highlight that in the absence of a hybrid regulation, when remuneration disclosure is guided by state regulations alone, firms are not accountable if they do not implement industry best practices for disclosure. A significant positive relationship between the presence of a remuneration consultant in the era of pre-hybrid regulation (remuneration consultant: $p < 0.10$, with $z = 1.89$) for 1997 and for 2002 (remuneration consultant: $p < 0.05$, with

Table III Pearson correlation coefficients and collinearity statistics of 1997 ($N = 114$)

Serial no.	Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	15	Variance inflation factor	Tolerance
1	Relative disclosure index	1															
2	RemCommitt	0.189*	1													1.800	0.556
3	SeparateCEO	0.058	0.249**	1												1.180	0.848
4	CEConRemCommitt	0.044	0.355***	0.009	1											1.300	0.772
5	RemConsultant	0.268**	0.411***	0.219*	-0.003	1										1.380	0.724
6	BCA	0.195*	0.124	0.202*	0.084	0.068	1									1.550	0.646
7	RetAssets	0.100	0.321***	0.072	0.106	0.109	0.169†	1								1.190	0.839
8	EarnsShare	0.216*	0.110	0.148	-0.033	0.048	0.261**	0.009	1							1.260	0.791
9	UKListing	0.585***	0.093	0.041	0.094	0.189*	0.205*	0.029	0.118	1						1.510	0.664
10	BigFour	0.154†	0.162†	0.069	-0.047	0.054	0.132	0.029	0.214*	-0.059	1					1.150	0.867
11	ListAge	0.196*	0.042	0.007	0.089	0.131	0.332***	0.026	0.097	0.543***	0.059	1				1.990	0.501
12	DebtAssets	0.018	0.085	0.168†	-0.017	0.095	-0.070	-0.022	0.101	0.045	-0.049	-0.025	1			1.140	0.875
13	Logequity	0.295***	0.368***	0.208*	0.065	0.262**	0.517***	0.232*	0.353***	0.268**	0.211*	0.412***	0.200*	1		2.350	0.425
14	Services	0.013	0.177†	0.060	0.152	0.190*	0.140	0.220*	0.232*	-0.108	-0.062	-0.232*	0.066	0.299***	1	1.550	0.647

Notes: ***Significant at $p < = 0.001$; ** significant at $p < = 0.01$; * significant at $p < = 0.05$; †significant at $p < = 0.10$; 1. Relative disclosure index; 2. Presence of remuneration committee; 3. Separate role of CEO and chairperson; 4. Presence of CEO on the remuneration committee; 5. Presence of remuneration consultant; 6. BCA membership; 7. Return on assets; 8. Earnings per share; 9. Foreign listing status; 10. Auditor type; 11. Listed age of the firm; 12. Leverage; 13. Firm size; 14. Industry type

Table IV Pearson correlation coefficients and collinearity statistics of 2002 ($N = 114$)

Serial no.	Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	15	Variance inflation factor	Tolerance
1	Relative disclosure index	1															
2	RemCommitt	0.326**	1													1.670	0.598
3	SeparateCEO	0.108	0.167†	1												1.060	0.940
4	CEOonRemCommitt	-0.001	0.281**	-0.059	1											1.160	0.859
5	RemConsultant	0.315***	0.378***	0.054	0.015	1										1.290	0.777
6	BCA	0.438***	0.243**	0.154	-0.034	0.069	1									1.810	0.552
7	RetAssets	0.222*	0.269**	0.178†	0.133	0.131	0.187*	1								1.420	0.704
8	EarnsShare	0.123	0.021	0.002	0.053	-0.072	0.212**	0.506***	1							1.900	0.526
9	UKListing	0.534***	0.069	0.031	-0.073	0.149	0.205*	0.037	0.043	1						1.480	0.677
10	BigFour	0.171†	0.327***	0.122	0.169†	0.327***	0.111	0.193*	0.037*	0.056	1					1.370	0.728
11	ListAge	0.409***	0.075	0.042	0.028	0.099	0.331***	0.050	0.107	0.543***	0.116	1				1.890	0.529
12	DebtAssets	0.090	0.159†	-0.140	0.006	0.198*	-0.140	-0.122	-0.541***	0.046	0.106	-0.046	1			1.390	0.720
13	Logequity	0.482***	0.520***	0.091	0.124	0.269**	0.503***	0.388***	0.502***	0.255†	0.380***	0.322***	0.443***	1		3.350	0.298
14	Services	0.153	0.197*	0.030	0.074	0.067	0.140	0.232*	0.163†	-0.108	0.036	-0.233*	0.095	0.432***	1	1.670	0.598

Notes: ***Significant at $p < = 0.001$; **significant at $p < = 0.01$; *significant at $p < = 0.05$; †significant at $p < = 0.10$; 1. Relative disclosure index; 2. Presence of remuneration committee; 3. Separate role of CEO and chairperson; 4. Presence of CEO on the remuneration committee; 5. Presence of remuneration consultant; 6. BCA membership; 7. Return on assets; 8. Earnings per share; 9. Foreign listing status; 10. Auditor type; 11. Listed age of the firm; 12. Leverage; 13. Firm size; 14. Industry type

Table V Pearson correlation coefficients and collinearity statistics of 2006 ($N = 114$)

Serial no.	Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	15	Variance inflation factor	Tolerance
1	Relative disclosure index	1															
2	RemCommitt	0.518***	1													2.760	0.361
3	SeparateCEO	0.350***	0.375***	1												1.290	0.774
4	CEOonRemCommitt	-0.159†	0.164†	-0.033	1											1.110	0.897
5	RemConsultant	0.395***	0.752***	0.299***	0.066	1										2.330	0.429
6	BCA	0.471***	0.213*	0.179†	-0.137	0.197*	1									1.870	0.535
7	RetAssets	0.327***	0.271**	0.088	-0.149	0.305***	0.163†	1								1.250	0.797
8	EarnShare	0.436***	0.177†	0.112	-0.149	0.202*	0.569***	0.238*	1							2.710	0.369
9	UKListing	0.156†	0.044	0.037	-0.067	0.052	0.205*	0.157†	0.557***	1						2.130	0.470
10	BigFour	0.380***	0.350***	0.009	-0.028	0.350***	0.174†	0.403***	0.192*	0.048	1					1.360	0.737
11	ListAge	0.212*	0.059	0.100	-0.034	0.038	0.334***	0.140	0.309**	0.543***	0.087	1				1.770	0.564
12	DebtAssets	0.063	-0.035	0.043	-0.007	-0.022	-0.019	-0.471***	-0.076	-0.056	-0.097	1				1.310	0.762
13	Logequity	0.708***	0.448***	0.245*	-0.125	0.387**	0.549***	0.264**	0.564***	0.288**	0.382***	0.411***	1			2.710	0.369
14	Services	0.336***	0.203*	0.011	-0.004	0.261**	0.140	0.107	0.235*	-0.108	0.177†	-0.229*	0.200*	0.366***	1	1.540	0.650

Notes: ***Significant at $p < 0.001$; **significant at $p < 0.01$; *significant at $p < 0.05$; †significant at $p < 0.10$; 1. Relative disclosure index; 2. Presence of remuneration committee; 3. Separate role of CEO and chairperson; 4. Presence of CEO on the remuneration committee; 5. Presence of remuneration consultant; 6. BCA membership; 7. Return on assets; 8. Earnings per share; 9. Foreign listing status; 10. Auditor type; 11. Listed age of the firm; 12. Leverage; 13. Firm size; 14. Industry type

Table VI Results of seemingly unrelated regression analysis for relative disclosure indices of 1997, 2002 and 2006 (N = 111)

Variables	Model 1 (1997)	Model 2 (2002)	Model 3 (2006)
Presence of remuneration committee	-0.210 (0.009)	1.130 (0.016)	2.800** (0.057)
Separate role of CEO and chairperson	-0.840 (0.012)	0.440 (0.025)	2.380* (0.043)
Presence of CEO on the remuneration committee	0.590 (0.009)	-0.180 (0.013)	-2.060* (0.025)
Presence of remuneration consultant	1.890 [†] (0.008)	2.140* (0.011)	-1.690 [†] (0.044)
BCA membership	0.390 (0.009)	2.090* (0.015)	1.260 (0.029)
Return on assets	0.670 (0.000)	0.310 (0.000)	1.310 (0.001)
Earnings per share	1.520 (0.011)	0.880 (0.014)	0.740 (0.018)
Foreign listing status	7.740*** (0.030)	4.770 (0.048)	-0.840 (0.106)
Auditor type	2.430* (0.007)	-0.810 (0.017)	0.760 (0.036)
Listed age of the firm	-3.090** (0.000)	1.100 (0.000)	0.920 (0.001)
Leverage	-0.030 (0.000)	0.290 (0.000)	0.990 (0.001)
Firm size	1.300 (0.005)	0.710 (0.010)	3.800*** (0.019)
Industry type	-1.140 (0.008)	1.040 (0.014)	1.620 (0.024)
R ²	0.452	0.492	0.599
χ ²	96.850***	108.420***	166.70***

Notes: ***Significant at $p < 0.001$; **significant at $p < 0.01$; *significant at $p < 0.05$; [†]significant at $p < 0.10$

$z = 2.14$) contradicts the view of the managerial power approach, which contends that the use of remuneration consultant can lead to agency problems. This finding indicates that the remuneration consultants do not directly contribute toward the agency problem, but the issue on which consulting takes place characterizes a potential conflict of interest between the CEO or executive and the company or shareholders, as suggested by [Conyon et al. \(2009\)](#). This conflict of interest is more evident in the forthcoming discussion of the results of the post-hybrid regulatory period. In sum, prior to hybrid regulation, firm-specific characteristics, not other self-regulatory mechanisms, appear to be the key determinants of disclosure. The results of the SUR analysis are presented in [Table VI](#).

Results for post-hybrid regulatory period

In contrast, as the results of Model 3 (for the year 2006) demonstrated in [Table VI](#) suggest, the implementation of hybrid regulation catalyzed the adoption of such governance mechanisms that can improve disclosure level of remuneration, making firm-specific characteristics less relevant. Moreover, results of SUR analysis show the extent of change in disclosure level due to hybrid regulatory framework in Australia. A substantial increase in the value of the coefficient of determination (R^2) from 0.45 in 1997 and 0.49 in 2002 to 0.60 in 2006 suggests that the shift to a hybrid regulation have led to an overall improvement in the impact of remuneration governance practices on disclosure levels, as shown in [Table VI](#). Results for Model 3 (Model 3: $R^2 = 0.60$ and $\chi^2 = 166.70$ with $p < 0.001$) reveal that the predicted variables – presence of remuneration committee ($H1$), separate role of CEO and chairperson ($H2$), presence of CEO on remuneration committee ($H3$) and presence of remuneration consultant ($H4$) are significant in determining disclosure level of remuneration.

As hypothesized in $H1$, the relationship between the presence of the remuneration committee on the company board and disclosure level of remuneration is significant (Presence of Remuneration Committee: $p < 0.01$ with $z = 2.80$) in the hybrid regulatory period. In contrast to the years 1997 and 2002, the presence of a self-regulation ([ASX, 2003](#)) system under hybrid regulation in 2006 facilitated the implementation of remuneration practices by firms recommended by ASX guidelines to improve disclosure level. For $H2$, I found a positive and significant relationship between the level of remuneration disclosure and separate roles for CEO and chairperson (separate role of CEO and chairperson: $p < 0.05$, with $z = 2.38$) during the hybrid regulatory period in 2006. The positive relationship between the role separation between CEO and chairperson and disclosure level highlights the relevance of self-regulation ([ASX, 2003](#)) system under hybrid

regulation in 2006. With the implementation of hybrid regulation via informal institutions (ASX Corporate Governance Council), ASX-listed firms were obliged to provide an explanation when they did not implement a recommended practice. The provision of such an explanation under ASX (2003) corporate governance recommendations resulted in greater transparency regarding firm situation, and led to improved adoption of best practices devised by informal institutions and confirmed *H1* and *H2*. Therefore, in contrast to 1997 and 2002, the presence of a hybrid system of regulation in 2006 facilitated the implementation of remuneration governance practices by firms recommended by ASX guidelines to improve disclosure levels.

Results for *H3* indicated that the presence of the CEO on the remuneration committee is negatively associated with disclosure level of remuneration (presence of CEO on the remuneration committee: $p < 0.05$, with $z = -2.06$). The negative relationship between the presence of CEO on remuneration committee and remuneration disclosure level confirms that a steward, such as CEO, will be a less effective monitor than will non-executive director who have various other outside directorships (Fama and Jensen, 1983, p. 315). This finding provides evidence for managerial power approach and demonstrates that corporate boards and committees do not operate at arm's length in developing and disclosing executive remuneration arrangements (Bebchuk *et al.*, 2002). It is relevant to underline that the ASX has revised its listing rule in 2011. As per the ASX listing rule 12.8, it has been made compulsory for the S&P/ASX 300 index firms that these firms will constitute remuneration committees those will comprise solely of non-executive directors (ASX, 2011).

As predicted in *H4*, there was a negative association between the presence of a remuneration consultant and the level of disclosure information (presence of remuneration consultant: $p < 0.10$, with $\beta = -1.69$). It is imperative to mention that there has been a tremendous increase (54 per cent) of the utilization of consultants from 1997 to 2006 by the sample firms. This increasing trend and the negative association between remuneration consultant presence and disclosure level imply that there is a potential of conflict of interests regarding the engagement of remuneration consultants. Also, this finding is in line with the argument of the rent-extraction or managerial power theory. This theory proposes that CEOs/managers can use their power and influence over the compensation consultants to extract excess pay (Bebchuk and Fried, 2006; Bebchuk *et al.*, 2002; Conyon *et al.*, 2009; Finkelstein and Hambrick, 1989). In this regard, Sections 206K-206M have been presented in Corporations Amendment (Improving Accountability on Director and Executive Remuneration) Act 2011 that specifically deal with the engagement and advise procedures of remuneration consultants in a firm. Other control variables except firm size did not show any relationship with disclosure level of remuneration in the hybrid regulatory period.

Robustness check

To avoid the problem of endogeneity, this study has performed multiple regression analyses before and after the introduction of hybrid regulation by using independent lagged variable. The robustness of above-mentioned results was determined by comparing with SUR analysis results and found to be consistent with each other – thereby highlighting the validity of earlier reported results, as shown in Table VII.

Implications and conclusions

The occurrence of persistent market failures, corporate collapses and the recent global economic crises have called for greater transparency and better protection of investors through state regulation of corporate governance. However, corporate governance, being a social practice, calls for holistic approach to its regulation. In this paper, it has been proposed that a hybrid of state regulation and self-regulation in which state regulation catalyzes market-based best practices of corporate governance can minimize agency conflicts. The Australian evidence presented in the study and its empirical analysis makes an important empirical contribution by exhibiting that corporate governance not only needs

Table VII Results of multiple regression analysis for relative disclosure indices of 2002 and 2006 with lagged variables ($N = 113$)

Variables	Model 1 (2002)		Model 2 (2006)	
Presence of remuneration committee	(0.016)	0.800	(0.035)	1.83 [†]
Separate role of CEO and chairperson	(0.022)	0.350	(0.054)	0.13
Presence of CEO on the remuneration committee	(0.016)	-0.970	(0.028)	-1.68 [†]
Presence of remuneration consultant	(0.014)	1.220	(0.025)	1.3
BCA membership	(0.015)	2.750**	(0.032)	2.3*
Return on assets	(0.000)	0.380	(0.000)	0.73
Earnings per share	(0.017)	0.340	(0.031)	-0.61
Foreign listing status	(0.052)	4.320***	(0.100)	-0.41
Auditor type	(0.013)	-1.460	(0.036)	1.12
Listed age of the firm	(0.001)	1.030	(0.001)	0.32
Leverage	(0.000)	-0.320	(0.001)	0.06
Firm size	(0.009)	0.720	(0.021)	3.51***
Industry type	(0.014)	1.280	(0.029)	1.2
Adjusted R^2		0.41		0.51

Notes: ***Significant at $p < 0.001$; **significant at $p < 0.01$; *significant at $p < 0.05$; [†]significant at $p < 0.10$

market-based mechanisms but also requires a visible hand of the state to strengthen the market. This study has explored in-depth remuneration governance process in Australia and its impact on disclosure practices – an important aspect of the agency problem believed to be a common cause of many collapses. The findings of this research validates that a hybrid of state regulation and self-regulation have the potential to address remuneration governance problems and lend support to the emerging body of literature that underlines the use of state regulation and self-regulation through formal and informal institutions as a more pragmatic approach for regulating the modern corporation in today's globalized world.

My study findings demonstrate for policymakers that state regulation alone is inadequate to address remuneration governance problems, and indeed, a hybrid of state and self-regulation greatly improves disclosure practices. Practitioners and policymakers can develop an effective mode of regulation by creating a hybrid of state regulation and self-regulation. The results of the empirical analysis suggest that under hybrid regulation, the system of self-regulation (ASX Principles, 2003) facilitated the implementation of recommended remuneration practices, such as establishing a remuneration committee with majority of non-executive directors and role separation between CEO and chairperson to support improved disclosure mandated by legislative reform (CLERP Act, 2004). This research, therefore, demonstrates to practitioners that government interventions can align state regulation with market-based regulation, two seemingly competing mechanisms, so as to render them mutually reinforcing.

To deal with principal-agent problems, corporate governance requires the active engagement of and mutual participation among wide array of formal and informal institutions including public, private and professional bodies and associations, often with diverging interests and stakes. In the policymaking process, governments need to involve the relevant institutions because their involvement can facilitate diverging entities to communicate their concerns and understand perspectives of others more effectively. To the advocates of neo-liberalism, these results exhibit that consensus-based market-oriented interventions can attenuate corporate governance problems. Hence, a hybrid approach of regulation can help governments for effective enforcement of regulatory interventions demonstrated in my research.

Hybrid regulation presents a contemporary approach that is relevant for the emerging politics of corporate governance in a contemporary society. Although this research was conducted in Australia, the findings have applicability in other capitalist societies which hold protection of the rights of shareholders as an important agency issue. My research,

therefore, sheds light on the applicability of hybrid regulation as an effective approach for providing an optimal governance framework for modern corporations in market economies and societies. One of the first applications of such an approach was observed in Britain which enacted the Directors' Remuneration Report Regulations, 2002. My research, therefore, sheds light on the characters of state regulation and self-regulation as amalgamative governance mechanism for providing an optimal remuneration governance framework for contemporary corporations in market economies. Also, it is imperative to note that very recent regulatory initiatives (Corporations Amendment – Improving Accountability on Director and Executive Remuneration Act 2011 and ASX Corporate Governance Principles and Recommendations 2014) taken by the Australian Government and the ASX highlight the preference for and relevance of mixed regulatory regime for modern democratic and capitalistic countries as deliberated in the results section earlier.

Research on practical applications of hybrid regulation is valuable because it sets a fresh new agenda for future studies in the area of corporate governance. The evidence adds value to the emerging body of knowledge in this area and acts as a reference point for cross-country comparative future studies which are becoming increasingly important in the current climate of globalization of capital markets. Future studies can consider other important corporate governance aspects such as ownership structure, demographic and educational backgrounds of executive and non-executive directors of remuneration committee, presence and structure of audit committees, board structure, director interlocking and other firm-level corporate governance factors which could also explain variances in disclosure level.

References

- Ahmed, K. and Courtis, J.K. (1999), "Associations between corporate characteristics and disclosure levels in annual reports: a meta-analysis", *British Accounting Review*, Vol. 31 No. 1, pp. 35-61.
- Ahmed, K. and Nicholls, D. (1994), "The impact of non-financial company characteristics on mandatory disclosure compliance in developing countries: the case of Bangladesh", *The International Journal of Accounting*, Vol. 29 No. 1, pp. 62-77.
- Anderson, R.C. and Bizjak, J.M. (2003), "An empirical examination of the role of the CEO and the compensation committee in structuring executive pay", *Journal of Banking & Finance*, Vol. 27 No. 7, pp. 1323-1348.
- ASIC & ASX (2004), "Memorandum of understanding between ASIC and ASX. (ACN 008624691)", Retrieved from Sydney, available at: www.asx.com.au/about/pdf/ASICMOU.pdf
- ASX (2003), "Principles of good corporate governance and best practice recommendations", 1st ed., available at: www.shareholder.com/shared/dynamicdoc/ASX/364/ASXRecommendations.pdf
- ASX (2008), "First edition – principles of good corporate governance", available at: www.asx.com.au/supervision/governance/principles_good_corporate_governance.htm#top
- ASX (2011), "New listing rule on remuneration", available at: www.asx.com.au/education/listed-at-asx/new-listing-rule-on-remuneration.htm
- Baker, G.P., Jensen, M.C. and Murphy, K.J. (1988), "Compensation and incentives: practice vs. theory", *The Journal of Finance*, Vol. 43 No. 3, pp. 593-616.
- Banks, G., Fitzgerald, R. and Fels, A. (2010), "Executive remuneration in Australia", available at: www.pc.gov.au/inquiries/completed/executive-remuneration/report/executive-remuneration-report.pdf
- Bartle, I. and Vass, P. (2007), "Self-regulation within the regulatory state: towards a new regulatory paradigm?", *Public Administration*, Vol. 85 No. 4, pp. 885-905.
- Bassett, M., Koh, P. and Tutticci, I. (2007), "The association between employee stock option disclosures and corporate governance: evidence from an enhanced disclosure regime", *The British Accounting Review*, Vol. 39 No. 4, pp. 303-322.
- BCA (2003), *Submission to the Treasury on the Corporate Law Economic Reform Program (audit reform and corporate disclosure) Bill*, available at: www.bca.com.au/publications/submission-regarding-the-clerp-audit-reform-and-corporate-disclosure-bill

- Beattie, V., McInnes, B. and Fearnley, S. (2004), "A methodology for analysing and evaluating narratives in annual reports: a comprehensive descriptive profile and metrics for disclosure quality attributes", *Accounting Forum*, Vol. 28 No. 3, pp. 205-236.
- Bebchuk, L.A. and Fried, J.M. (2003), "Executive compensation as an agency problem", *Journal of Economic Perspectives*, Vol. 17 No. 3, pp. 71-92, available at: www.nber.org/papers/w9813
- Bebchuk, L.A. and Fried, J. (2004), *Pay without Performance: The Unfulfilled Promise of Executive Compensation*, Harvard University Press, Cambridge, MA.
- Bebchuk, L.A. and Fried, J.M. (2006), "Pay without performance: overview of the issues", *The Academy of Management Perspectives*, Vol. 20 No. 1, pp. 5-24.
- Bebchuk, L.A., Fried, J.M. and Walker, D.I. (2002), "Managerial power and rent extraction in the design of executive compensation", *The University of Chicago Law Review*, Vol. 69 No. 3, pp. 751-846.
- Beretta, S. and Bozzolan, S. (2008), "Quality versus quantity: the case of forward-looking disclosure", *Journal of Accounting, Auditing & Finance*, Vol. 23 No. 3, pp. 333-376.
- Black, J. and Baldwin, O. (2010), "Really responsive risk-based regulation", *Law & Policy*, Vol. 32 No. 2, pp. 181-213.
- Boyle, G. and Roberts, H. (2013), "CEO presence on the compensation committee: a puzzle", *Journal of Economics and Business*, 70(November–December 2013), pp. 16-26.
- Brown, A. (2006), "Advertising regulation and co-regulation: the challenge of change", *Economic Affairs*, Vol. 26 No. 2, pp. 31-36.
- Brunoa, V. and Claessensb, S. (2010), "Corporate governance and regulation: can there be too much of a good thing?", *Journal of Financial Intermediation*, Vol. 19 No. 4, pp. 461-482.
- Campbell, D. and Slack, R. (2008), "Corporate "Philanthropy Strategy" and "Strategic Philanthropy" some insights from voluntary disclosures in annual reports", *Business and Society*, Vol. 47 No. 2, pp. 187-212.
- Carson, E. (2002), "Factors associated with the development of board sub-committees", *Corporate Governance: An International Review*, Vol. 10 No. 1, pp. 4-18.
- Cerf, A.R. (1961), *Corporate Reporting and Investment Decisions*, The University of California Press, Berkeley, CA.
- Chapple, L. and Christensen, B. (2005), "The non-binding vote on executive pay: a review of the CLERP 9 reform", *Australian Journal of Corporate Law*, Vol. 18 No. 3, pp. 263-287.
- Chu, J., Faasse, J. and Rau, P.R. (2015), "Do compensation consultants enable higher CEO pay?", New evidence from recent disclosure rule changes, available at: <http://ssrn.com/abstract=2500054> or <http://dx.doi.org/10.2139/ssrn.2500054>
- Clarke, T. (2004), "Cycles of crisis and regulation: the enduring agency and stewardship problems of corporate governance", *Corporate Governance: An International Review*, Vol. 12 No. 2, pp. 153-161, available at: www.blackwell-synergy.com/doi/abs/10.1111/j.1467-8683.2004.00354.x
- Clarkson, P., Van-Bueren, A.L. and Walker, J. (2006), "Chief executive officer remuneration disclosure quality: corporate responses to an evolving disclosure requirement", *Accounting and Finance*, Vol. 46 No. 5, pp. 771-796.
- Coffee, J.C. (2004), "What caused Enron?, A capsule social and economic history of the 1990s" *Cornell Law Review*, Vol. 89 No. 2, pp. 269-308.
- Conyon, M.J. and Peck, S.I. (1998), "Board control, remuneration committees and top management compensation", *Academy of Management Journal*, Vol. 41 No. 2, pp. 146-157.
- Conyon, M.J., Peck, S.I. and Sadler, G.V. (2009), "Compensation consultants and executive pay: evidence from the United States and the United Kingdom", *The Academy of Management Perspectives*, Vol. 23 No. 1, pp. 43-55.
- Coulton, J., James, C. and Taylor, S.L. (2001), "The effect of compensation design and corporate governance on the transparency of CEO compensation disclosures", UTS School of Accounting Working Paper, (45).
- Courtis, J.K. (1979), "Annual report disclosure in New Zealand : analysis of selected corporate attributes", *University of New England. Department of Accounting and Financial Management*, Armidale, N.S.W.
- Cullen, J. (2014), *Executive Compensation in Imperfect Financial Markets*, Edward Elgar Publishing, Cheltenham.

- Dalton, D.R. and Dalton, C.M. (2008), "Corporate governance in the post Sarbanes-Oxley period: compensation disclosure and analysis (CD&A)", *Business Horizons*, Vol. 51 No. 2, pp. 85-92.
- Dechow, P.M., Sloan, R.G. and Sweeney, A.P. (1996), "Causes and consequences of earnings manipulations: an analysis of firms subject to enforcement actions by the SEC", *Contemporary Accounting Research*, Vol. 13 No. 1, pp. 1-36.
- Desmond, P. (2000), "Twenty-first century investing – Conclusions from the five dinner dialogues", Paper presented at the The 3rd International Conference on Corporate Governance and Direction, Henley.
- DiMaggio, P. and Powell, W. (1983), "The iron cage revisited: institutional isomorphism and collective rationality in organizational fields", *American Sociological Review*, Vol. 48 No. 2, pp. 147-160.
- Donnelly, R. and Mulcahy, M. (2008), "Board structure, ownership, and voluntary disclosure in Ireland", *Corporate Governance: An International Review*, Vol. 15 No. 5, pp. 416-429.
- Eisenhardt, K.M. (1989), "Agency theory: an assessment and review", *The Academy of Management Review*, Vol. 14 No. 1, pp. 57-74.
- Eisner, M.A. (2004), "Corporate environmentalism, regulatory reform, and industry self-regulation: toward genuine regulatory reinvention in the United States", *Governance*, Vol. 17 No. 2, pp. 145-167. doi: [10.1111/j.1468-0491.2004.00241.x](https://doi.org/10.1111/j.1468-0491.2004.00241.x).
- Essen, M.V., Heugens, P.P., Otten, J. and Oosterhout, J.H.v. (2012), "An institution-based view of executive compensation: a multilevel meta-analytic test", *Journal of International Business Studies*, Vol. 43 No. 4, pp. 396-423.
- Fama, E.F. and Jensen, M.C. (1983), "Separation of ownership and control", *The Journal of Law and Economics*, Vol. 26 No. 2, pp. 301-325.
- Finkelstein, S. and Hambrick, D.C. (1989), "Chief executive compensation: a study of the intersection of markets and political processes", *Strategic Management Journal*, Vol. 10 No. 2, pp. 121-134.
- Firth, M. (1979), "The impact of size, stock market listing, and auditors on voluntary disclosure in corporate annual reports", *Accounting and Business Research*, Vol. 9 No. 36, pp. 273-280.
- Fiss, P.C. (2008), "Institutions and corporate governance", in Greenwood, R., Oliver, C., Suddaby, R. and Sahlin-Andersson, K. (Eds), *The SAGE Handbook of Organizational Institutionalism*, Sage Publications Limited, London, pp. 389-410.
- Ford, C. (2010), "Principles-based securities regulation in the wake of the global financial crisis", *McGill Law Journal*, Vol. 55 No. 2, pp. 257-310.
- Forker, J.J. (1992), "Corporate governance and disclosure quality", *Accounting and Business Research*, Vol. 22 No. 86, pp. 111-124.
- Gelb, D.S. (2002), "Intangible assets and firms' disclosures: an empirical investigation", *Journal of Business Finance & Accounting*, Vol. 29 Nos 3/4, pp. 457-476.
- Gibbs, J.P. (1965), "Norms: the problem of definition and classification", *The American Journal of Sociology*, Vol. 70 No. 5, pp. 586-594.
- Gomez-Mejia, L.R. and Balkin, D.B. (1992), "Determinants of faculty pay: an agency theory perspective", *Academy of Management Journal*, Vol. 35 No. 5, pp. 921-955.
- Goodin, R.E. (1996), "Institutions and their design", in Goodin, R.E. (Ed.), *The Theory of Institutional Design*, Cambridge University Press, Cambridge, pp. 1-53.
- Gordon, J.N. (2002), "What Enron means for the management and control of the modern business corporation: some initial reflections", *The University of Chicago Law Review*, Vol. 69 No. 3, pp. 1233-1250, available at: <http://links.jstor.org/sici?sici=0041-9494%28200222%2969%3A3%3C1233%3AWEMFTM%3E2.0.CO%3B2-V>
- Greenbury, R. (1995), "Report on directors pay", available at: www.ecgi.org/codes/documents/greenbury.pdf
- Greenwood, R., Oliver, C., Suddaby, R. and Sahlin-Andersson, K. (2008), "Introduction", in Greenwood, R., Oliver, C., Suddaby, R. and Sahlin-Andersson, K. (Eds), *The SAGE Handbook of Organizational Institutionalism*, Sage Publications Limited, London, pp. 1-46.
- Guthrie, J., Petty, R. and Yongvanich, K. (2004), "Using content analysis as a research method to inquire into intellectual capital reporting", *Journal of Intellectual Capital*, Vol. 5 No. 2, pp. 282-293.

- Hall, P.A. and Gingerich, D.W. (2009), "Varieties of capitalism and institutional complementarities in the political economy: an empirical analysis", *British Journal of Political Science*, Vol. 39 No. 3, pp. 449-482.
- Hart, O. (1995), "Corporate governance: some theory and implications", *Economic Journal*, Vol. 105 No. 430, pp. 678-689, available at: <http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=9506153432&site=ehost-live>
- Hill, J. (2005), "Regulatory responses to global corporate scandals", *Wisconsin International Law Journal*, Vol. 23 No. 3, pp. 367-416.
- Hill, J. (2006), "Regulating executive remuneration: International developments in the post-scandal era", *European Company Law*, Vol. 3 No. 2, pp. 64-74.
- Hill, J. and Yablon, C.M. (2002), "Corporate governance and executive remuneration: rediscovering managerial positional conflict", *UNSW Law Journal*, Vol. 25 No. 2, pp. 294-319.
- Hill, J., Masulis, R.W. and Thomas, R.S. (2010), "Comparing CEO employment contract provisions: differences between Australia and the United States", *Vanderbilt Law Review*, Vol. 64 No. 2, pp. 560-608.
- Holmström, B. and Milgrom, P. (1991), "Multitask principal-agent analyses: incentive contracts, asset ownership, and job design", *Journal of Law, Economics, & Organization*, Vol. 7 No. 1, pp. 24-52.
- Hughes, A. (2003), "Morgan hits back at bad law", *The Age*, available at: www.theage.com.au/articles/2003/12/01/1070127348871.html
- Husted, B.W. (2007), "Agency, information, and the structure of moral problems in business", *Organization Studies*, Vol. 28 No. 2, pp. 177-195.
- Jensen, M.C. and Meckling, W. (1976), "Theory of the firm: managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, Vol. 3 No. 4, pp. 305-360, available at: www.sciencedirect.com/science/article/B6VBX-45N4YVT-B/2/a755023b5a471578bbb1eb39133f9810
- Jiambalvo, J., Rajgopal, S. and Venkatachalam, M. (2002), "Institutional ownership and the extent to which stock prices reflect future earnings", *Contemporary Accounting Research*, Vol. 19 No. 1, pp. 117-145.
- Judge, G.G., Hill, R.C., Griffiths, W.E., Lütkepohl, H. and Lee, T.C. (1988), *Introduction to the Theory and Practice of Econometrics*, 2nd ed., John Wiley & Sons, New York, NY.
- Kirkbride, J. and Letza, S. (2003), "Establishing the boundaries of regulation in corporate governance: is the UK moving toward a process of collibration?", *Business and Society Review*, Vol. 108 No. 4, pp. 463-485.
- Kirkbride, J. and Letza, S. (2004), "Regulation, governance and regulatory collibration: achieving an 'holistic' approach", *Corporate Governance: An International Review*, Vol. 12 No. 1, pp. 85-92.
- Lazzarini, S.G. and Mello, P.C.D. (2001), "Governmental versus self-regulation of derivative markets: examining the US and Brazilian experience", *Journal of Economics and Business*, Vol. 53 Nos 2/3, pp. 185-207.
- Letza, S., Sun, X. and Kirkbride, J. (2004), "Shareholding versus stakeholding: a critical review of corporate governance", *Corporate Governance: An International Review*, Vol. 12 No. 3, pp. 242-262. doi: 10.1111/j.1467-8683.2004.00367.x.
- Liu, J. and Taylor, D. (2008), "Legitimacy and corporate governance determinants of executives' remuneration disclosures", *Corporate Governance*, Vol. 8 No. 1, pp. 59-72.
- McSweeney, B. (2009), "The roles of financial asset market failure denial and the economic crisis: reflections on accounting and financial theories and practices", *Accounting, Organizations and Society*, Vol. 34 Nos 6/7, pp. 835-848.
- Mashaw, J.L. (2006), "Accountability and institutional design: some thoughts on the grammar of governance", in Dowdle, M.W. (Ed.), *Public Accountability: Designs, Dilemmas and Experiences*, Cambridge University Press, Cambridge, pp. 115-156.
- Massey, A. (2010), "Nonsense on stilts: United Kingdom perspectives on the global financial crisis and governance", *Public Organization Review*, Vol. 11 No. 1, pp. 61-75.
- Mayes, D.G. (2010), "The future of financial markets: financial crisis avoidance", *Empirica*, Vol. 38 No. 1, pp. 77-101.
- Miller, G.P. (2004), "Catastrophic financial failures: enron and more", *Cornell Law Review*, Vol. 89 No. 2, pp. 423-440.

- Nelson, J. and Percy, M. (2005), "The transparency of executive stock option disclosures in Australian annual reports", *Financial Reporting, Regulation and Governance*, Vol. 4 No. 2.
- Nelson, J., Gallerya, G. and Percy, M. (2010), "Role of corporate governance in mitigating the selective disclosure of executive stock option information", *Accounting and Finance*, Vol. 50 No. 3, pp. 685-717.
- North, D.C. (1990), *Institutions, Institutional Change and Economic Performance*, Norton, New York, NY.
- North, D.C. (1991), "Institutions", *Journal of Economic Perspectives*, Vol. 5 No. 1, pp. 97-112.
- North, D.C. (1996), "Epilogue: economic performance through time", in Alston, L.J., Eggertsson, T. and North, D.C. (Eds), *Empirical Studies in Institutional Change*, Cambridge University Press, Cambridge, pp. 342-355.
- Owusu-Anash, S. and Yeoh, J. (2005), "The effect of legislation on corporate disclosure practices", *ABACUS*, Vol. 41 No. 1, pp. 92-109.
- Quinn, M. (1999), "The unchangeables – director and executive remuneration disclosure in Australia", *Australian Journal of Corporate Law*, Vol. 10 No. 1, pp. 89-107.
- Ryan, H.E. and Wiggins, R.A. (2004), "Who is in whose pocket? Director compensation, board independence, and barriers to effective monitoring", *Journal of Financial Economics*, Vol. 73 No. 3, pp. 497-524.
- Scott, W.R. (2008), *Institutions and Organizations*, 3rd ed., Sage Publications Inc, Thousand Oaks, CA.
- Selznick, P. (1957), *Leadership in Administration: A Sociological Interpretation*, Harper & Row, New York, NY.
- Sheehan, K. (2009), "The regulatory framework for executive remuneration in Australia", *Sydney Law Review*, Vol. 31 No. 2, pp. 273-308.
- Smith, D.K. (2004), "Beyond the rule of law? Decentered regulation in online investing", *Law & Policy*, Vol. 26 Nos 3/4, pp. 439-476.
- S&P (2010), "Standard & Poor's: S&P Australian indices index methodology", Retrieved from New York, available at: <http://asia.spindices.com/regional-exposure/asia-pacific/australia>
- Stanton, T.H. (2010), "Governance implications of the global financial crisis: United States experience", *Public Organization Review*, Vol. 11 No. 1, pp. 45-59.
- Stoker, G. (1998), "Governance as theory: five propositions", *International Social Science Journal*, Vol. 50 No. 155, pp. 17-28.
- Thévenoz, L. and Bahar, R. (2007), "Conflicts of interest: disclosure, incentives and the market", in Thévenoz, L. and Bahar, R. (Eds), *Conflicts of Interest: Corporate Governance and Financial Markets*, Kluwer Law International, Alphen aan den Rijn, pp. 1-29.
- Tolbert, P.S. and Zucker, L.G. (1983), "Institutional sources of change in the formal structure of organizations: the diffusion of civil service reform", *Administrative Science Quarterly*, Vol. 28 No. 1, pp. 22-39.
- Uzun, H., Szewczyk, S.H. and Varma, R. (2004), "Board composition and corporate fraud", *Financial Analysts Journal*, Vol. 60 No. 3, pp. 33-43.
- Verbruggen, P. (2009), "Does co-regulation strengthen EU legitimacy?", *European Law Journal*, Vol. 15 No. 4, pp. 425-441.
- Villiers, C. and Boyle, G. (2000), "Corporate governance and the approach to regulation", in Macgregor, L., Prosser, T. and Billiers, C. (Eds), *Regulation and Markets Beyond 2000*, Ashgate, London, pp. 221-242.
- Voulgaris, G., Stathopoulos, K. and Walker, M. (2010), "Compensation consultants and CEO pay: UK evidence", *Corporate Governance: An International Review*, Vol. 18 No. 6, pp. 511-526, available at: <http://dx.doi.org/10.1111/j.1467-8683.2010.00822.x>
- Whittington, G. (1993), "Corporate governance and the regulation of financial reporting", *Accounting and Business Research*, Vol. 23 No. 91A, pp. 311-319.
- Williamson, O. (1984), "Corporate governance", *Yale Law Journal*, Vol. 93 No. 7, pp. 1197-1230.
- Wooldridge, J.M. (2002), *Econometric Analysis of Cross Section and Panel Data*, 2nd ed., The MIT Press, Cambridge, MA.
- Yermack, D. (1996), "Higher market valuation of companies with a small board of directors", *Journal of Financial Economics*, Vol. 40 No. 2, pp. 185-211.
- Zellner, A. (1962), "An efficient method of estimating seemingly unrelated regression equations and test for aggregation bias", *Journal of American Statistical Association*, Vol. 57 No. 298, pp. 348-368.

Appendix 1

Table A1 Disclosure index for years 1997, 2002 and 2006

Disclosure index category	Disclosure index item description	Disclosure level ranking details	Legal section(s)
General disclosure of director and executive remuneration	Total amount of salary, fees and commissions; cash-profit sharing and bonuses; and non-monetary benefits of executive and non-executive directors. (Primary benefits)	0 = No details 1 = Aggregated 2 = Disaggregated	S 300 (A) (1) (c) including AASB 1046 and AASB 124
	Total amount of any remuneration for pension and superannuation; prescribed benefits; and other termination benefits of executive and non-executive directors. (Post-employment benefits)	0 = No details 1 = Aggregated 2 = Disaggregated 3 = Disaggregated and details regarding retirement plans and/or allowances including actual conditions or obligations	
	Long term incentive schemes with total value of shares and units; value of options and rights; and value of other equity remuneration of executive and non-executive directors. (Equity remuneration)	0 = No details 1 = Aggregated 2 = Disaggregated 3 = Detailed discussion about each scheme and performance conditions attached to it	
	Details of options for executive and non-executive directors with respect to the number of options and rights granted and vested; and particular terms and conditions of each share options including value, exercise price, amount paid/payable by recipient, expiry date and the date from which the option may be exercised; and summary of service and performance criteria upon which the award or exercise is conditional. (Options valuation details)	0 = No details 1 = General discussion about option grants. 2 = Valuation method and option value disclosed 3 = Valuation method and option value disclosed along with valuation model input (exercise price, expiry date, exercise date, volatility)	
	All other benefits of executive and non-executive directors including prescribed and other benefits. (Other remuneration benefits)	0 = No details 1 = Aggregated 2 = Disaggregated 3 = Disaggregated with detailed discussion	
Pay-for-performance model disclosure	Remuneration policy for the following financial year and subsequent financial years highlighting the following factors: Key factors influencing remuneration policy. Labor market conditions. Benchmarking of remuneration package against other companies and details of those companies. Explanation of salary increases. Wider context of all employee reward. Explanation of any proposed changes in the remuneration plan and policy in the following financial year	0 = No explanation 1 = Broad summary including one or two factors only 2 = Some details which include three or four factors 3 = Greater or good level of detail including all six factors	S 300 (A) (1) (a) (i) & (ii)
	Performance discussion should justify company performance by illustrating the total shareholder return in the current financial year and previous four financial years. The TSR can be used as a measure that illustrate the dividend paid and the changes in share prices for each five financial years. (performance graph)	0 = No explanation 1 = Broad summary only 2 = Some details by comparing company TSR to TSR of other indices 3 = Greater or good level by providing justification for the selection of comparative indices	S 300 (A) (1AA) and S 300 (A) (1AB) (a) (b)
	A detailed summary of any performance conditions upon which any remuneration element (short term and long term) is dependent	0 = No explanation 1 = Broad statement only 2 = Some details highlighting short and long term incentives 3 = Greater or good level of detail highlighting plan differences applicable to individual directors with respect to both short and long term	S 300 (A) (1) (ba) (i)

(continued)

Table A1 Disclosure index for years 1997, 2002 and 2006

<i>Disclosure index category</i>	<i>Disclosure index item description</i>	<i>Disclosure level ranking details</i>	<i>Legal section(s)</i>
	An explanation as to why any such performance conditions were selected for any remuneration element (short term and long term)	0 = No explanation 1 = Broad statement which highlights TSR details only 2 = Greater or good level of detail that explains rationale by comparing more than one performance conditions for both short and long term incentives and goes beyond the description of TSR	S 300 (A) (1) (ba) (ii)
	A summary of the methods used in assessing whether the performance condition is satisfied and an explanation why those methods were selected	0 = No explanation 1 = Broad summary of methods 2 = Some details highlighting the TSR or EPS calculations. 3 = Good level of detail highlighting the TSR or EPS calculations and justifying the choice of selected methods	S 300 (A) (1) (ba) (iii)
	If the performance condition involves a comparison with external factors then these factors should be mentioned. If these factors are related to another company(ies) or an index, in which the securities of the company or companies are included, then the identity of the company(ies) or index should also be disclosed	0 = No explanation 1 = Broad statement only including detail of historical and present awards. 2 = Some details highlighting past, present and future awards 3 = Greater or good level of detail not only including past, present and future awards but discussing any change for previous rewards or expected change for future awards	S 300 (A) (1) (ba) (iv)
	If there is securities element of the remuneration of a director which is not dependent on a performance condition then the explanation should be provided for this element	0 = No explanation 1 = Broad statement only 2 = Some details 3 = Greater or good level of detail	S 300 (A) (1) (d)
Disclosure about shareholder participation	Discussion about voting details of the director and executive remuneration report during the annual general meeting in meeting minutes	0 = No discussion 1 = Broad voting details 2 = Detailed discussion about the shareholders' voting	S 250 (S) and S 250 (SA)

Corresponding author

Zahid Riaz can be contacted at: zahidriaz@lahoreschool.edu.pk

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgroupublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com