International Review of Business Research Papers
Vol. 8. No.5. July 2012. Pp. 65 – 84

Effective Corporate Monitoring: Independence, Motivation and Means

Lyndal Drennan*, Simone Kelly**, Ray McNamara*** and Michelle Martin****

A feature of the literature on the role of Boards of Directors is the mixed and contradictory findings. This research used continuous listing compliance as a measure of Board performance. A matched pairs design was employed, using governance data on 30 board attributes for firms listed on the Australian Stock Exchange from 1992 to 2000. Factor analysis was used to identify constructs associated with Board composition and firm performance. Discriminant analysis confirmed that the resultant model of performance was a significant predictor of firms' ability to maintain continuous listing compliance. Neither the independence nor assembled knowledge variables were separately significant. Variables capturing directors' motivation to monitor, and board cohesiveness were significant.

JEL Codes: M40, M41, G34

1. Introduction

Separation of ownership and management is a feature of modern corporate structures. By permitting professional managers to run corporations, significant economic benefits accrue to owners who can simultaneously mobilise their capital and diversify their risks without being involved in day-to-day management (for which they may not have the necessary skills). Agency problems have been recognised as perhaps the most pervasive cost of separation, which, if not effectively monitored, provide opportunities for managers with access to private information to act opportunistically rather than in the interests of owners (see for example Jensen (1976); Schleifer, (1997), Abdel-khalik, (2002); Hicheon Kim & Lee (2008) and Roberts McNulty & Stiles (2005)). Researchers have examined different practices of corporate governance, seeking the most effective combination with respect to the interests of owners (Baysinger & Butler 1985; Beasley 1998; J. Byrd & K. Hickman 1992; Kroll, Walters & Wright 2008; Roberts, McNulty & Stiles 2005; de Andres, Azofra & Lopez 2005; Han, Wang & Yue 2004; Lawler III et al. 2002; Rosenstein & Wyatt 1997; Schultz & Walsh 2010; Macher & Mowery 2009; Brown & Caylor 2009). The results of this research have been mixed and sometimes contradictory, suggesting either that the focus on independence as the solution to the agency problem may be misplaced and/or that there is an incomplete understanding of the dynamics of effective monitoring.

This study extends the existing body of research into the relation between board composition and firm performance by examining the Board's performance in ensuring a company's ongoing compliance with certain listing requirements of its stock exchange. Specifically, this research focuses on the opposite of Board effectiveness; its ineffectiveness in monitoring listing risks. Focusing on one measure of ineffectiveness, the failure to maintain stock exchange listing, eliminates the exogeneity problem inherent in many of the traditional methods of board effectiveness (Denis 2001; Schultz & Walsh 2010).

*Lyndal Drennan, James Cook University, Townsville, Queensland, Email: lyndal.drennan@jcu.edu.au
**Simone Kelly, Faculty of Business, Bond University, Australia, Email: skelly@bond.edu.au
*** Ray McNamara, Faculty of Business, Bond University, Australia, Email: rmcnamar@bond.edu.au
****Michelle Martin c/- L Drennan, James Cook University, Email: lyndal.drennan@jcu.edu.au

While a relatively minimal amount of monitoring ensures continuous listing, the consequences of non-compliance (being ineffective) are non-trivial. Suspension from trading divorces the company from the monitoring role of the market; prevents shareholders from trading their equities and thereby locking them into a risk profile they might prefer to diversify or exit. Non-compliance also isolates the company from an important source of funds if suspension is not reversed quickly.

Failure to comply with listing rules is also an important signal to the market. If a company cannot comply with its listing requirements, the chance of its board effectively monitoring other important activities is questionable. The Board is responsible for ensuring senior managers act to provide optimal value for shareholders (Aldamen et al. 2011; Coles, McWilliams & Sen 2001; Smallman, McDonald & Mueller 2010; Tuggle et al. 2010; Arjoon 2006). Failure to maintain listing is indicative of a failure in the control environment of the firm. Committee of Sponsoring Organizations (COSO) of the Treadway Commission and more recently the Sarbanes Oxley Act in the US (Dionne & Triki 2005) others highlight the importance of TATT (Tone at the TOP) in maintaining an effective governance structure (Bishop, Steinberg & Gruber 1992; Chapin 1993; Colbert 1994; Guinan 1992; Johnston 1993; Kelley 1993; Kintzele, Kintzele & Kwiatkowski 1993; May 1993; Ricketts 1992; Tanki & Steinberg 1993; Schwartz, Dunfee & Kline 2005; D'Aquila & Bean 2003; May & Chapin 1993). Failure to maintain listing, whether the consequences are for a day or for a year, indicate that the Board is not fulfilling its monitoring role.

There is also evidence that suspension from listing can be indicative of a broader failure to monitor performance. Whittred and Zimmer (1984) find delays in lodging accounts is indicative of financial distress. Srinivasan (2005) provides evidence of the consequence for outside directors for their failure to monitor. Other market sensitive reasons for a suspension of listing are failures in the internal control systems such that the accounts are not produced on time or the possibility of a dispute with auditors arising from concern about managerial discretion. Performance defined in the form of a failure to be effective has the advantage of being unambiguously linked with the actions (or lack of action) of the board. As a performance measure, it is free from the noise surrounding the use of performance metrics such as stock returns and accounting based performance measures that yielded conflicting results.

This paper argues that the most effective boards will be those whose members are motivated to monitor the actions of management, and are equipped to do this by virtue of their independence and their relevant knowledge and experience. To test the proposition, the study uses a matched pairs design of suspended and non-suspended Australian firms for the period July 1 1992 to June 30 2000. Based on a review of the literature, nineteen variables were collected and subjected to a factor analysis. The parsimonious set of factors produced factor scores for use in a discriminant model. Factors that discriminated between effective and ineffective boards were "General-Board-Governance Knowledge" as measured by the breadth of directorial experience, the "Board Cohesion", and the "Board Independence". While we argue these are necessary conditions to support general board effectiveness they may not be sufficient to guarantee all dimensions of effectiveness (Quinn 1983).

The remainder of this paper proceeds in the following way. Section 2 discusses some of the existing literature on effective board composition and its relation to the present study, and section 3 develops the theory and hypotheses to be tested in this research. The research methodology and variables are described in section 4, with results and

discussion presented in section 5. Section 6 summarises the research and proposes some future research directions arising from this paper.

2. Literature Review

The existing body of literature is vast with in excess of 50,000 research articles (Brown, Beekes & Verhoeven 2011) published to 2010. This body of literature has three broad streams dealing with effective corporate governance. The board composition/performance literature is the most extensive of the three, and includes studies that use both financial and non-financial variables for firm performance. It has conflicting results. Two less extensive areas of research examine the relations between corporate governance mechanisms and the firm's investment opportunity set, and between corporate governance mechanisms and board composition. The research reported in this paper adds to the first body of literature, proposing that more effective boards will not only be independent, but also that their directors will have goal congruence with the firm's shareholders and hold accumulated knowledge relevant to their monitoring responsibilities.

Boards of directors have three roles in the management of a firm (Kenton 1995). First, they are responsible for the strategic direction of the firm. Second, they provide a base for networking into the corporate community. Third, they exercise a control function over executive management on behalf of the shareholders. Studies on financial firm performance and boards' composition do not differentiate between the roles being studied and the variables driving the "effectiveness". Consequently, it is difficult to establish any direct nexus between observed financial performance and the board.

This board/performance relationship is confounded in many studies. The events that result in the observed performance include many endogenous and exogenous factors in addition to the board of directors. Endogeneity and exogeniety may cause researchers to fail to find a relationship where one exists or they may find a relationship where one does not exist. It is possible that particular governance mechanisms exist in firms that have a high value in the market but that value may be a function of some other variable. Endogeneity derives from internal factors such as the association between operating leverage and beta and the relationship between Board Composition and performance (Ball & Brown 1969; Lev & Kunitzky 1974; Chenhall & Frank 2007; Brown & Caylor 2009) while the exogeneity comes from external factors such as the state of the economy. There is also a problem with causality in board research. For example, when firms reconstruct, they often add external directors to their board. In these cases, the causal relationship runs from performance to board composition. Time lags between actions and outcomes could further confound observations of hypothesised associations.

These problems could account for the mixed results of studies using financial performance where the same dependent variable sometimes yields positive, negative, or no observed association with performance. Such studies include Kesner and Dalton (1985) who observed a positive relationship between performance and percentage of inside directors; Bhagat and Black (1996) and Hermalin and Weisbach (1991) who found no significant association; and Agrawal and Knoeber (1996) who observed negative associations between the same variables. Hermalin and Weisbach (2003) review the board composition literature and find that firm composition and board size have a positive effect on a range of firm decisions such as the removal of directors, more profitable merger and acquisition decisions, and set CEO compensation contracts

that are more closely aligned with performance. However, the weight of evidence suggests there is no significant relationship between firm performance and the proportion of outside directors. Recent studies when controlling of endogeneity effects find no significant relationship between board characteristics such as independence and firm performance (Coles, Daniel & Naveen 2008; Bhagat & Bolton 2008; Kim, Kim & Lee 2008) . Table 1 summarises the relations observed by different researchers between board composition and performance.

Non-financial performance variables offer an alternative focus for examining hypothesised associations with board independence and other governance mechanisms. Their advantage is the link between board mechanism and performance is direct and unambiguous. Some performance variables used in prior studies deal with ‘conflict of interest’ situations. They have limited significance for observing the board’s on-going monitoring role because they occur infrequently. Examples of non-financial performance measures include the removal of a CEO or repelling an unfriendly takeover. These events occur rarely in the lives of many businesses providing an unsatisfactory basis from which to observe effective or ineffective monitoring. Examples of studies using non-financial dependent performance variables include Weisbach (1988), Shivsdasani (1993), Byrd and Hickman (1992), Dechow, Sloan and Sweeney (1995), and Beasley (1996). This research uses a dichotomous observation of performance: based on whether or not the firm was suspended from listing for failure to lodge an accounting report or failure to pay annual listing fees. The ability to avoid suspension from the ASX is important because compliance with listing regulations is a primary and recurrent area of board responsibility in the Australian environment. The variable satisfies both the requirement for a direct nexus with effective board monitoring and on-going listing (performance.

Baysinger and Butler (1985) made an important contribution to the literature by defining three different classes of directors. Many subsequent studies have retained these definitions, helping to make the findings of these studies more comparable. The same definitions are retained throughout this study. The definitions are:

> **Independent outside directors** are those who do not have any connection, past or present, with the firm other than their positions on the board of directors. The role of independent outside directors is to monitor management.
>
> **Affiliated outside directors** are not currently employed by the company, but have some psychological or economic dependence on the CEO. Theirs is an instrumental role linking transacting organisations.
>
> **Inside directors** are currently employed as executives of the firm and provide a source of expertise. Inside directors are believed to fulfil the executive role.

Baysinger and Butler (1985) reported a positive association between the percentage of independent outside directors in 1970, and firm performance (financial) in 1980. Hermalin and Weisbach (1991) recognised that the association observed by Baysinger and Butler (1985) may have been driven by an alternative corporate governance mechanism that was correlated with the percentage of independent directors. Once managerial stock ownership was included in the model the association between the percentage of independent directors and stock returns disappeared.

Kesner and Dalton (1985) found a positive correlation between the percentage of outside directors and stock returns. However, their study was cross-sectional in nature making inferences regarding causation impossible. They noted that the reason why outside directors were associated with higher stock returns could not be inferred from their results, but suggested that the observation could be a function of either the expertise (knowledge), or the independence of these directors. The proposition argued in this research is that both knowledge and independence are positively associated with performance.

Table 1: Literature Summary - Board Composition and Performance

Relation with Firm Performance / Measure	Positive	Not Significant	Negative
Percentage Independent Directors	Baysinger & Butler (1985); Beasley (1996) Anderson & Reeb (2004)	Brown, Beekes, & Verhoeven (2011) Bhagat, & Bolton (2008) Baysinger & Hoskisson (1990) Caselli & Gatti (2007); Hermalin & Weisbach (2003)	Brown, Beekes, & Verhoeven (2011); Coles, Daniel & Naveen, (2008)
Majority Independent Board	Byrd & Hickman (1992) Dionne & Triki (2005); Roberts, McNulty & Stiles (2005)	Bhagat & Bolton (2008); Caselli & Gatt (2007); Coles, Daniel & Naveen (2008)	Tuggle, Sirmon, Reutzel & Beirman (2010)
Independent Directors Stock Ownership	Beasley, (1996); Bronson, Carcello, Hollingsworth Neal (2009); Klein, (1998); Kroll, Walters & Wright (2008); McConnell, Servaes, & Lins (2008)	Bhagat, & Bolton (2008); Bhagat & Black (1996); Coles, Daniel & Naveen (2008)	
Percentage of Outside Directors	Capezio, Shields & O'Donnell (2011); Kesner & Dalton (1985); Han, Wang & Yue (2004)	Bhagat & Black (1996); Bhagat & Bolton (2008); Coles, Daniel & Naveen (2008); Hermalin & Weisbach (1991); Hermalin & Weisbach (2003); Kesner, & Johnson (1990)	Agrawal & Knoeber, (1996)
Outside Directors Stock Ownership	Bhagat, & Bolton (2008); Byrd & Hickman (1992)	Agrawal & Knoeber, (1996)	
Percentage of Inside Directors	Bhagat & Black (1996); Harris & Raviv (2008)		Brunello, G, Graziano, C & Parigi (2003); Dechow, Sloan & Sweeney (1995)
Majority Inside Board	Coles, JW & Hesterly, (2000)		Dechow, Sloan & Sweeney (1995)
Inside Directors Stock Ownership	Barnhart, Marr & Rosenstein (1994); Byrd & Hickman (1992); Caselli & Gatt (2007); Hermalin & Weisbach (1991); Rosenstein & Wyat (1997); McConnell, Servaes, & Lins (2008)	Agrawal & Knoeber, (1996); Beasley, (1996); Bhagat & Black (1996); de Andres, Azofra & Lopez, (2005)	Hermalin & Weisbach (2003)

Table 1: Literature Summary - Board Composition and Performance (Con't)

Other Directorships	Klein (1998)	Byrd and Hickman (1992)	Beasley (1996)
CEO Stock Ownership	Core, Holthausen & Larcker (1999); Sanders & Carpenter (1998)	Agrawal & Knoeber, (1996); Bhagat & Black (1996)	Han, Wang, & Yue (2004)
CEO Tenure	Ryan, Wang, & Wiggins, (2009); Weisbach (1988)	Beasley, (1996); Boyd, Haynes, and Zona (2011) (Beasley 1996)	Hermalin & Weisbach (1991)
CEO = Chair	Lam and Lee, (2008)	Beasley, (1996); Booth, Cornett & Tehranian (2002); Rechner & Dalton (1989); Tuggle, Sirmon, Reutzel & Beirman (2010);	Bhagat and Bolton (2008); Chahine and Tohme (2009); Dechow Sloan & Sweeney (1995); Han, Wang, & Yue (2004); Lam and Lee, (2008);
External Blockholder	Aldamen et al. (2011); Hicheon, Kim & Lee (2008)	Beasley (1996) Agrawal & Knoeber (1996);	Andres, (2008); Ozkan (2011)
No. of External Blockholders	Liu & Sun (2005) Sloan & Sweeney (1995)		Bhagat & Black (1996); Ozkan (2011)
Board Size	Larmou & Valeas (2010)	de Andres, Azofra & Lopez, (2005)	Core, Holthausen & Larcker (1999); Han, Wang & Yue (2004)
Audit Committee AC)	Bhagat & Black (1996); Dechow, Sloan & Sweeney (1995); Dionne & Triki (2005)	Beasley (1996); Bronson, SN, Carcello, JV, Hollingsworth, CW & Neal (2009)	
Independent Directors on AC	McDaniel, Martin & Maines, (2002); Wright (1996)	Beasley (1996); Klein (1996)	

*The relation observed in Baysinger and Butler (1985) was between board composition in 1970 and performance in 1980.
+The relation observed in Hermalin and Weisbach (1991) was found only beyond the threshold level of 15 years.

More recent studies challenge the association observed by Baysinger and Butler (1985) across different time periods. Contrary to the observations of Baysinger and Butler (1985), Agrawal and Knoeber (1996) found a negative association between the percentage of outside directors and firm performance for 800 firms in 1987. Bhagat and Black (1996) examined the relation between board composition in 1991 and firm performance during a 'retrospective' period of 1983-1990 and during a 'prospective' period of 1991-1995. They utilised both accounting and stock return measures of performance and found no association between the percentage of independent directors in 1991 and firm performance in the prospective period. This result is inconsistent with the primary result of Baysinger and Butler (1985). Bhagat and Black (1996) used a longitudinal design thereby avoiding the interpretation difficulties faced by Kesner and Dalton (1985). Their finding that the percentage of independent directors was associated with slower growth in the retrospective period, and the percentage of inside directors was associated with higher performance in the retrospective period, suggested that causation may run from performance to board composition rather than from board composition to performance. In a more recent study Bhagat and Bolton (2008) found that better governance, stock ownership of board members, and the separation of the CEO and the Chairman of the Board significantly positively correlate with operating performance but not with future stock performance. McDaniel, Martin & Maines, (2002) found independent directors with financial expertise and literacy increased the quality financial reporting.

3. Model and Method

Prior literature has taken the position that the level of board independence is a crucial factor in delivering effective monitoring in the interests of shareholders. The mixed and contradictory findings from this line of research suggest that there are other factors contributing to effective monitoring. In this paper it is argued that to monitor effectively the board of directors requires both the motivation to act in the interests of shareholders as well as the appropriate knowledge and competence. Being independent does not necessarily provide a director with the knowledge or competence to monitor, nor is it sufficient in itself to motivate a director to undertake rigorous monitoring activity. Since Baysinger and Butler (1985) identified three classes of directors on boards, the following section discusses the likely competence and motivations of each.

Independent Directors

Following Baysinger and Butler's (1985) definition, independent directors have no present or past connection with the firm, other than their positions on the board. Kesner and Johnson (1990) argue that appointment to a board is likely to take place for three reasons, the first being that directors are a valuable source of experience and business knowledge. Jensen and Meckling (1976) referred to knowledge gained through experience as 'assembled knowledge'. They noted that it is transferable, and therefore can also be acquired through formal qualifications (as evidenced from the practice of attending business schools), but sometimes at considerable cost unlike general knowledge, which is presumed to be available to all who are interested in it. If Kesner and Johnson are correct, independent board members are invited onto the board because of their assembled knowledge. It is assembled knowledge that is important for effective regulatory and day-to-day monitoring purposes. The second reason advanced by Kesner and Johnson (1990)for board appointment was independence from the CEO, and third, their contacts which may enhance management's ability to secure scarce resources.

However, neither independence nor breadth of knowledge provides motivation to monitor in the interests of shareholders. The risks of independent directors are diversified in that most have other forms of income beyond their directorship of a single firm and may also hold a diversified portfolio of investments. However, they can be sued under the Corporations Law for certain defined breaches, and in this event would suffer a loss of reputation as well as any damages under that action. Beyond their natural desire to acquit themselves fully and honestly in their role, and to avoid actions under the Corporations Law, they are not necessarily bonded to the interests of shareholders. Congruence with shareholders' interests could be procured by thorough monitoring pressures applied by large blockholders on their reputation as directors, or through holding shares in the firm.

Affiliated Directors

These directors are usually on the board as a result of an interest in the firm by another company, perhaps a provider of credit, or related large supplier. Their role is instrumental, linking the other organisation with the interests of the firm. As external directors they can be sued under the Corporations Law in the same way as independent outside directors. Their risk is partly diversified, as they are usually an employee of another firm and have no personal economic or reputational dependence on the performance of the firm on whose board they serve. Although they cannot be regarded as independent, they are likely to possess both relevant assembled and general knowledge as well as some firm-specific knowledge about the relationship that resulted in their being on the board. Presumably their motivation is to monitor effectively in the interests of the organisation whom they represent (e.g. significant creditors such as a bank) and although this interest may be mostly congruent with those of the shareholders, it is also possible to envisage circumstances when their interests may diverge for example where an insolvency situation is threatening. Consequently, for this group of directors different definitions of firm performance may yield different observed relations. For example, it is clearly in the interests of the creditor organisation for the monitored firm to perform well economically, and to comply with listing requirements. However, their different risk profile is likely to result in different appreciations of future strategic opportunities or threats and be reflected in a more risk-averse approach to board responsibilities such as committing to risky future developments or capital projects.

Inside Directors

This group of directors has undiversified risk, with incomes, careers, reputations, and responsibilities under the law as directors all concentrated in the performance of the firm. They can be sued under the Corporations law, as well as under contract, equity, and common law for their actions in relation to the firm. It is possible that they may therefore be more risk averse than shareholders, but it seems unlikely that they would not rigorously monitor the firm's performance. An executive bonus share scheme based on firm performance would align their interests with shareholders even further, but further concentrate their risk exposure to the firm.

Consequently, we argue that the most assiduous monitoring would be more likely to come from the internal directors, as they have most to lose. Fama (1980) pointed out that directors who are firm executives have an incentive to monitor the CEO and other firm management because firm performance can have an effect on their own reputations. External directors have least to lose, and face lower risks at law (than internal directors) along with affiliated directors. The problem with relying on monitoring by inside directors is that they may not have the specific board-related knowledge for this function. They in turn may tend to rely on the external directors for this element of monitoring expertise.

To monitor effectively the board of directors requires information about the actions of management and the motivation to act upon it. The performance that is the focus of this research (ie. compliance with certain ASX regulatory requirements) does not require firm-specific knowledge; rather it calls for assembled knowledge of business practices and stock exchange requirements. As argued above, the group of directors most likely to hold this knowledge are those with business experience, formal business or law qualifications, or experience gained in similar roles on other boards. In addition to holding the necessary knowledge, board members must be motivated to use it to monitor management's actions to ensure that the interests of shareholders prevail.

Consequently, it is hypothesised that the performance of a firm in compliance with regulatory requirements of the ASX (as defined) is a function of:

- the extent of assembled business knowledge within the board, and
- the degree to which the board's interests are congruent with shareholders' interests.

Prior literature and research has focussed extensively on the independence on the board as a requirement for effective monitoring. Consequently, this research also includes the independence variable in the model of effective performance, although the preceding argument suggests that being independent alone provides limited grounds from which to argue that effective monitoring can or will take place. Because we have argued within this research that effective board performance results from an amalgam of many variables operating simultaneously, we propose and test a multivariate model initially, before examining the effect of each of the independent variables in its univariate relation with the dependent variable.

The hypothesised multivariate model is:

H1: *Efffective monitoring of performance is associated with the presence of assembled business and board-related knowledge and expertise, the motivation to monitor in the interests of shareholders, and director independence.*

Dependent Variable

The performance variable chosen for this study is the incidence of temporary suspension from trading due to failure to comply with listing requirements in relation to accounting reports and listing fees. Stock exchange data reveal that these non-compliances did occur, the length of each period of suspension in days, and whether the cause was failure to lodge an accounting report by the due date, or failure to pay a required listing fee. However, the underlying causes of these listing omissions are not revealed.

The choice of this variable to operationalize corporate performance rests on recognising the undesirable effects of non-compliance on shareholders, *viz.* that suspension from trading divorces the company from the monitoring role of the market, and that owners cannot trade their equities. Non-compliance also separates the company from an important source of funds if suspension is not reversed quickly. Performance defined in this way has the advantage of being unambiguously linked with the actions (or failure to act) of the board. Performance is therefore operationalized as a dichotomous variable coded as –1 where a suspension occurred, and 0 where no suspension was recorded.

The Independent Variables

The extant literature has used many variables in an attempt to locate the most effective components of boards of directors. Given the plethora of variables used in various studies some researchers (Brown & Caylor 2009; Bebchuk, Cohen & Ferrell 2009), find

parsimonious indices are more effective than including all available characteristics. Further, Brown and Caylor (2009) used a parsimonious-composite-governance score of seven governance ‘provisions’ underlying the 51 variables used in governance studies. From thirty-nine separate variables selected from the studies listed in Table 1, a principal components factor analysis was undertaken using a varimax rotation. An interpretation of the resultant constructs resulted in retention of nineteen items that loaded onto five constructs.

Table 2 shows the results of the factor analysis and the loadings of the variables onto five constructs. The first construct described balance sheet strength, and was not used in testing the hypotheses in this study. It was omitted because of the ambiguous relationship with performance identified by Bhagat and Black (1996), from which it is possible to hypothesise that causality runs from good performance to board composition, rather than in the opposite direction as previously presumed. The remaining four constructs incorporate sixteen items described in Table 2.

The four factors capture the complex ideas of goal congruence (Share Ownership) with shareholders, business experience (Reputation) and board related knowledge (Knowledge), and a variable that was tentatively named ‘board cohesion’. Each factor is described in turn below:

Factor 2 – congruence through share ownership

Four items loaded onto this factor, two describing the share ownership of directors and two describing the share ownership of CEO’s. The two variables describing the shareholding interests of directors load more heavily on this factor than the corresponding two describing the CEO’s share interests. Both sets incorporated beneficial ownership through individuals and other company structures. Consistent with the agency and managerial incentives literatures (Jensen and Meckling (1976); Baker, Jensen and Murphy (1988)), share ownership should bond the interests of directors and CEO’s to the interests of owners. This construct is included in the model as a measure of the extent to which directors have congruence with the interests of shareholders.

Factor 3 – reputation as directors

This construct captures the idea that directors develop and wish to retain reputations for competence and effectiveness. Holding a reputation for probity, business acumen, and being associated with successful companies is valuable for professional directors who are likely to hold multiple directorships, and seek others as part of their livelihood. Professional directors are expected to be responsive to lobbying and pressures from blocks and concentrations of shareholders who may hold within their power the gift of this and other directorships. Four variables loaded onto this factor all with very similar weightings, including the number of non-related directorships held by board members, the total number of their directorships, and the sizes and numbers of block share holdings in the firm. This construct is also included in the model as a measure of congruence with shareholders’ interests.

Factor 4 – board cohesion

The name tentatively ascribed to this factor was chosen to convey the impact of the four variables that loaded onto it. Total board remuneration (excluding that of the CEO), the number of inside directors, the number of years that the CEO had been on the board of directors, and the presence of an audit committee all suggest that a mutually satisfactory process of board functioning has been established. This is an interesting variable in that it suggests that the process of the board as a separate organisation may be an important

consideration in describing its effectiveness as a monitor. Most of the extant studies have taken the approach that the board has no 'life' of its own, and that it exists merely as a vehicle or conduit through which effective monitoring of the firm must be delivered. It offers another line of enquiry into board effectiveness that would see the board as a separate organisation, with its own set of goals and values and its own controls and performance measures.

Factor 5 – professional qualifications and related experience

Four items loaded onto this factor, all of which describe either professional qualifications or business and board related experience. The construct was included in the model as a measure of assembled knowledge relevant to the monitoring requirement for ASX listing compliance as in the performance measure chosen for this study.

The remaining variable, independence, was operationalised consistent with Baysinger and Butler (1985) as the percentage of independent outside directors on the board. Values of the variable therefore range from a low of 0 (all internal directors) to a high of 1 (all external directors). In a small number of cases (8), details were not available to establish the extent of board independence, and these cases were ascribed the mean value for independence for the whole sample.

Table 2: Factor loadings (Rotated Component Matrix)

Variable	Balance Sheet strength	Share ownership	Reputation	Cohesion	Knowledge
MVA	**0.9840**	- 0.0370	- 0.0091	0.0421	0.0479
BVTA	**0.9830**	- 0.0339	- 0.0036	0.0449	0.0474
BVD	**0.9830**	- 0.0344	- 0.0036	0.0445	0.0476
DIR.ALLS	- 0.0041	**0.8410**	0.0783	- 0.2370	0.1520
DIR.BENS	- 0.0005	**0.8180**	0.1210	- 0.2640	0.1720
CEO.BENS	- 0.0542	**0.6840**	- 0.1520	0.2030	- 0.0329
CEO.ALLS	- 0.0424	**0.6640**	- 0.1140	0.3100	- 0.1310
SHCONC	- 0.1590	- 0.1440	**0.7070**	- 0.2330	0.0171
NRELDIRS	0.3070	0.2660	**0.6960**	0.3660	- 0.1340
TOTDIRSH	0.2650	0.2720	**0.6840**	0.3130	0.0896
NO.BLOCK	- 0.1780	- 0.2960	**0.6820**	- 0.1180	- 0.0262
INSDIR	- 0.0857	0.0702	- 0.1670	**0.6290**	0.0790
BRDREM	0.2010	0.0503	0.3490	**0.6080**	0.2060
YRSCEO	- 0.0443	- 0.0559	- 0.0681	**0.5580**	- 0.0579
AUDITCOM	0.2210	- 0.0180	0.1500	**0.5280**	0.0178
PROFESS	0.2010	0.0863	0.1150	0.0780	**0.7250**
BUSEXP	0.3640	0.0735	0.2240	0.1720	**0.6670**
UGRADBUS	- 0.0812	0.0035	- 0.1880	0.1080	**0.6330**
RELDIRSH	- 0.1070	- 0.0106	- 0.0350	- 0.1570	**0.6020**

MVA = Total value of assets
DIR.BENS = Shares held individually for directors
BVTA = Book value of tangible assets
NRELDIRS = Directorships on non-related Boards
BVD = Book value of debt
DIR.ALLS = Other shares held for directors
CEO.ALLS = Shares directly held for the CEO
CEO.BENS = Shares held for the benefit of the CEO
TOTDIRSH = Directorships held by board members
BRDREM = Remuneration paid to non-ex directors
SHCONC = % of shares held by 5% or more of owners
NO.BLOCK = Number of block shareholdings
INSDIR = Number of inside directors
AUDITCOM = Existence of a board audit committee
YRSCEO = Years of tenure of the CEO on the board
PROFESS = Directors with accounting or legal quals
BUSEXP = Directors with general business experience
UGRADBUS = Directors with business degree
RELDIRSH = No. of directors with directorships in related companies
INDEP = % of independent directors

The Sample

The *Australian Market Quote (AMQ)* database for the period 1 July 1992 to 30 June 2000 provided the sample for this study. Searching initially with the keyword 'suspension' followed by examination to ascertain the reason for suspension yielded a total of 151 firms across the five-year period suspended for failure to pay annual listing fees or lodge an accounting report. This number was reduced as follows:

- 11 firms undergoing merger, acquisition, or liquidation were excluded
- 4 newly listed firms were excluded as they were thought to be a-typical monitoring environments
- 4 were property trusts or funds managed by other companies
- 12 lacked significant amounts of data
- 14 could not be matched with a close pair for the matched pairs testing design.
- 14 instances of the same firm with multiple transgressions (where this occurred, we selected the first event within the 1992 – 2000 sample time, and omitted subsequent events).

The remaining 92 firms made up the final sample. Each firm within the sample was matched with another firm that had not been suspended using matching variables chosen to control for the investment opportunity set. The variables were: industry, total assets at the end of the financial year prior to suspension, and growth options (sum of the market value of equity plus the book value of debt, divided by the tangible assets – taken at the end of the financial year prior to suspension).

A matched pairs chi-square test revealed that there was no significant difference between the total assets of the suspended group and not suspended group ($p = 0.28$). There was also no significant difference between the growth options of the suspended group and not suspended group ($p = 0.17$). The percentage of firms by industry can be determined for the population of ASX listed companies from the *ASX Industry Classification Report*. Since the sample contains suspended firms from 1992 onwards, the 1992 version of the *ASX Industry Classification Report* was used. A matched pairs chi-square test on industry code frequencies revealed that there was no significant difference between the industry membership of the sample and the industry membership of the ASX market ($p = 0.51$). Approximately 70% of sampled firms had total assets of less than $10 million, however comparative statistics on the total assets of all firms listed on the Australian market are not available. Approximately 70% of firms had a market-to-book ratio of 2.00 or less.

4. The Findings

The purpose of this research was to develop a model to predict which firms are likely to be in the suspended or non-suspended groups for non-compliance with ASX listing requirements as discussed in Section 2. The dimensions along which the groups are hypothesised to differ are the level of board independence, the level of board knowledge and expertise related to the monitoring requirement, and the board's motivation to engage in monitoring. Discriminant function analysis was chosen as the statistical treatment most suited to the goals of this research, because the primary goal of this method is to determine the dimensions along which groups differ and to produce a classification function that will predict group membership (Tabachnick and Fidell, (2001)). Various transformations were tested to reduce kurtosis and skewness in a number of items within constructs, however the results of testing with transformed variables did not differ from

results using original data, and thus all reported results and discussion relate to the original data.

The first model tested included five variables, two representing different aspects of director motivation to monitor, one each for board independence and board assembled knowledge, and the fifth being the construct identified as board cohesion. The model, as shown in Table 3, was significant overall (p = 0.027), correctly predicting the group in 62.5% of cases. Suspended firms were correctly classified in 58.7% of cases, and 66.3% of non-suspended firms were correctly classified. This overall result is significantly better than would be expected by chance. Wilks' Lambda and univariate F statistics revealed that only two of the variables were significant, and that independence, share ownership and knowledge were not significant, contrary to their relative hypothesis.

Table 3: Discriminant function model statistics

	Wilks' Lambda	F	df1	df2	Sig.
Independence	1	0.02	1	174	0.888
Share ownership	0.991	1.609	1	174	0.206
Reputation	0.979	3.662	1	174	0.057*
Cohesion	0.977	4.086	1	174	0.045*
Knowledge	1	0.062	1	174	0.804

**Significant at p < .05*

Group means for each of the variables in the model reveal that the level of independence in the two groups was almost the same (suspended group mean was 0.806 and non-suspended was 0.801). The overall small size of the business expertise variable probably reflected the incomplete data that was available on the public record. We argue that non-significance of this variable may at least partly be due to measurement problems, and suggest that further research using better measurement methods is required to test for any relation between this variable and performance.

Given the similarity of level of the mean value for independence in the two groups, another exploratory discriminant function model was tested, this time omitting the independence variable. The four variable model was significant at p = 0.052, and correctly classified 57.6% of cases (54% correct for suspended firms, and 61% correct for non-suspended firms). The explanatory power of this model is not significantly impaired by removing the independence variable. Consistent with the theory in Section 2, independence alone provides little motivation for rigorous monitoring to take place. Our result is consistent with findings reported by Bhagat and Black (1996).

5. Summary and Conclusions

A tentative conclusion consistent with these observations would be that board monitoring performance appears to be positively affected by an exogenous variable deriving from shareholder power or influence, at the same time that it is a function of an exogenous variable reflecting the ability of individual board members to create a mutually supportive, stable monitoring environment. The four items in the Cohesion variable together speak of a combination of stability (longer CEO tenure on the board), of awareness of the need to be vigilant (the audit committee), remuneration to board members other than the CEO, and

the presence of numbers of inside directors (as argued previously in this paper, the directors with greatest risk concentration in the firm).

The model developed in this research was successful in predicting which firms were suspended or not, and by extension, in predicting the effectiveness of monitoring. The independence variable which has been the focus of many past research studies was here again found to be not significant. The mixed results associated with independence suggest it may not be the critically important monitoring variable that has been presumed in much of the previous literature. Indeed, the significance of board cohesion and board reputation variables suggests that for directors to be more effective in their monitoring role they need to have formed a strong working relationship with their board, as well as being sensibly aware of the power that shareholders may choose to exert as a block, and further, that independence may at times even be inconsistent with this. The results in this study indicate that congruence between the board and the shareholders was more important than board independence.

The findings reported in this research suggest that investigation into the board as an organisation in its own right might prove to be a fruitful direction in search of more effective corporate governance practices. Boards are associations of people who come together for a defined purpose, and are therefore subject to similar organisational forces as have been recognised in the management and organisational behaviour literatures for some time. Bonding board members by reputation, reward, and value structures to the achievement of board goals may prove more effective than expecting that their independence will cause them to monitor effectively the actions of another organisation. In addition, the balancing effect of potential shareholder power through share concentration was observed within this research to provide an exogenous source of performance control for the board. One other point suggested by the findings in this research is that the performance variable is in reality a complex one, comprising many different outcomes some of which may not be observable in either financial or regulatory forms. Performance may comprise intangibles such as firm values or other organisational strengths, or alternatively if observable, may not be unidimensional as most studies (including this one) presume.

The attempt to incorporate knowledge in the predictive model provided no explanatory power with respect to the failure to monitor. A possible explanation is that the data available on the public records were incomplete. However, the alternative explanation is also possible in that knowledge is not an important predictor of effective corporate monitoring. Another direction for future research would involve supplementing the available data with improved procedures to access the qualifications and experience of directors, possibly using a questionnaire.

A methodological problem with this research must also be acknowledged. Ideally, the model and constructs developed in a sample should be tested using a different sample of firms. Replication using a different data set is therefore a requirement before any attempt to generalise is made. In addition, the results apply uniquely to the Australian regulatory environment, although the choice of similar performance variables might be appropriate in other jurisdictions. Finally, the cross-sectional nature of the design precludes any inferences about causality. A longitudinal study should investigate the relation between instances of suspension and preceding events on the board of directors to establish if there are any causal relations.

Notwithstanding the limitations of this research, the results suggest a number of fruitful avenues to further advance research into effective corporate governance practices. Its

findings can assist shareholders, regulators, and boards of directors in their search for effective governance by increasing their understanding of different monitoring mechanisms and their ultimate impact on desirable corporate performance.

Because the purpose of corporate governance mechanisms is to safeguard the interests of owners, research has concentrated on locating mechanisms that are effective in minimising agency problems between management and owners. The issue of independence of board members has therefore been a central focus of this literature, the usual presumption being that greater independence within the board of directors is likely to be associated with more effective monitoring and therefore better corporate performance. Independence has been operationalized in such a way as to preclude the independent board member from having any firm-specific knowledge of either the firm or its environment i.e. The independent director is defined as having no connection (past or present) with the firm (Baysinger & Butler 1985). The obvious cost to the monitoring body is that those who are independent (as defined) have thereby only their assembled and general knowledge and their reputations to bring to the board.

This research questions the necessity of such a trade-off between independence and relevant knowledge, proposing that a more effective board would incorporate both high levels of independence and high levels of relevant and possibly firm-specific knowledge. Whilst it is probable that those with greatest firm-specific knowledge will be the inside directors, and would therefore be less independent than external directors, there seems to be no sound reason for presuming that valuable knowledge can only be obtained from within the firm at the cost of diminished independence. Conversely, independent outside directors who have long tenure on a board might be argued to have acquired diminished independence which, if true, would further confound any hypothesised associations between the independence variable and firm outcomes. Further, we argue that independence in itself is not sufficient to ensure rigorous monitoring in the interests of shareholders. Effective monitoring in the interests of shareholders requires that the interests of board members be congruent with those of shareholders.

References

Abdel-khalik, AR 2002, 'Reforming corporate governance post Enron: Shareholders' Board of Trustees and the auditor', *Journal of Accounting and Public Policy*, vol. 21, no. 2, pp. 97-103.

Agrawal, A & Knoeber, CR 1996, 'Firm performance and mechanisms to control agency problems between managers and shareholders', *Journal of Financial & Quantitative Analysis*, vol. 31, no. 3, p. 377.

Aldamen, H, Duncan, K, Kelly, S, McNamara, R & Nagel, S 2011, 'Audit committee characteristics and firm performance during the global financial crisis', *Accounting & Finance*, vol. Forthcoming.

Anderson, RC & Reeb, DM 2004, 'Board Composition: Balancing Family Influence in S&P 500 Firms', *Administrative Science Quarterly*, vol. 49, no. 2, pp. 209-237.

Andres, C 2008, 'Large shareholders and firm performance—An empirical examination of founding-family ownership', *Journal of Corporate Finance*, vol. 14, no. 4, pp. 431-445.

Arjoon, S 2006, 'Striking a Balance Between Rules and Principles-based Approaches for Effective Governance: A Risks-based Approach', *Journal of Business Ethics*, vol. 68, no. 1, pp. 53-82.

Baker, GP, Jensen, MC & Murphy, KJ 1988, 'Compensation and Incentives: Practice vs. Theory', *The Journal of Finance*, vol. 43, no. 3, pp. 593-616.

Ball, R & Brown, P 1969, 'Portfolio Theory and Accounting', *Journal of Accounting Research*, vol. 7, no. 2, pp. 300-323.

Barnhart, SW, Marr, MW & Rosenstein, S 1994, 'Firm Performance and Board Composition: Some New Evidence', *Managerial & Decision Economics*, vol. 15, no. 4, p. 329.

Baysinger, B & Hoskisson, RE 1990, 'The Composition of Boards of Directors and Strategic Control: Effects on Corporate Strategy', *Academy of Management Review*, vol. 15, no. 1, p. 72.

Baysinger, BD & Butler, HN 1985, 'Corporate Governance and the Board of Directors: Performance Effects of Changes in Board Composition', *Journal of Law, Economics & Organization*, vol. 1, no. 1, p. 101.

Beasley, M 1996, 'An Empirical Analysis of the Relation Between the Board of Director Composition and Financial Statement Fraud ', *The Accounting Review*, vol. 71, pp. 443-465.

Beasley, MS 1998, 'Boards of directors and fraud', *CPA Journal*, vol. 68, no. 4, p. 56.

Bebchuk, L, Cohen, A & Ferrell, A 2009, 'What Matters in Corporate Governance?', *Review of Financial Studies*, vol. 22, no. 2, pp. 783-827. Available from: bth.

Bhagat, S & Black, B 1996, *Do independent directors matter? Working paper*, Columbia University, New York.

Bhagat, S & Bolton, B 2008, 'Corporate governance and firm performance', *Journal of Corporate Finance*, vol. 14, no. 3, pp. 257-273.

Bishop, WG, III, Steinberg, RM & Gruber, DH 1992, 'Everything You Always Wanted to Know About Internal Control But Were Afraid to Ask', *Internal Auditor*, vol. 49, no. 6, pp. 53-56.

Booth, JR, Cornett, MM & Tehranian, H 2002, 'Boards of directors, ownership, and regulation', *Journal of Banking & Finance*, vol. 26, no. 10, p. 1973.

Boyd, BK, Haynes, KT & Zona, F 2011, 'Dimensions of CEO–Board Relations', *Journal of Management Studies*, vol. 48, no. 8, pp. 1892-1923.

Bronson, SN, Carcello, JV, Hollingsworth, CW & Neal, TL 2009, 'Are fully independent audit committees really necessary? ', *Journal of Accounting and Public Policy*, vol. 28, no. 265-280.

Brown, L & Caylor, M 2009, 'Corporate governance and firm operating performance', *Review of Quantitative Finance and Accounting*, vol. 32, no. 2, pp. 129-144.

Brown, P, Beekes, W & Verhoeven, P 2011, 'Corporate governance, accounting, and finance: A review', *Accounting and Finance*, vol. 51, pp. 96-172.

Brunello, G, Graziano, C & Parigi, BM 2003, 'CEO turnover in insider-dominated boards: The Italian case', *Journal of Banking & Finance*, vol. 27, no. 6, pp. 1027-1051.

Byrd, J & Hickman, K 1992, ' Do Outside Directors Monitor Managers? Evidence from Tender Offer Bids', *Journal of Financial Economics*, vol. Vol. 32, pp. pp. 195-207.

Byrd, JW & Hickman, KA 1992, 'Do outside directors monitor managers?', *Journal of Financial Economics*, vol. 32, no. 2, p. 195.

Capezio, A, Shields, J & O'Donnell, M 2011, 'Too Good to be True: Board Structural Independence as a Moderator of CEO Pay-for-Firm-Performance', *Journal of Management Studies*, vol. 48, no. 3, pp. 487-513.

Caselli, S & Gatti, S 2007, *Corporate governance and independent directors: Much ado about nothing? The evidence behind private equity investment performance* in SSRN eLibrary, SSRN.

Chahine, S & Tohmé, NS 2009, 'Is CEO Duality Always Negative? An Exploration of CEO Duality and Ownership Structure in the Arab IPO Context', *Corporate Governance: An International Review*, vol. 17, no. 2, pp. 123-141.

Chapin, DH 1993, 'COSO - Internal control: COSO responds to GAO criticism of its report', *Management Accounting*, vol. 74, no. 9, pp. 57-60.

Chenhall, R & Frank, M 2007, 'The Issue of Endogeneity within Theory-Based, Quantitative Management Acounting Research', *European Accounting Review*, vol. 16, no. 1, pp. 173-195.

Colbert, JL 1994, 'Internal control reporting: The COSO report', *Internal Auditing*, vol. 9, no. 4, pp. 3-9.

Coles, JL, Daniel, ND & Naveen, L 2008, 'Boards: Does one size fit all?', *Journal of Financial Economics*, vol. 87, no. 2, pp. 329-356.

Coles, JW & Hesterly, WS 2000, 'Independence of the chairman and board composition: firm choices and shareholder value', *Journal of Management*, vol. 26, no. 2, pp. 195-214.

Coles, JW, McWilliams, VB & Sen, N 2001, 'An examination of the relationship of governance mechanisms to performance', *Journal of Management*, vol. 27, no. 1, pp. 23-50.

Core, JE, Holthausen, RW & Larcker, DF 1999, 'Corporate governance, chief executive officer compensation, and firm performance', *Journal of Financial Economics*, vol. 51, no. 3, pp. 371-406.

D'Aquila, JM & Bean, DF 2003, 'Does A Tone At The Top That Fosters Ethical Decisions Impact Financial Reporting Decisions: An Experimental Analysis', *International Business & Economics Research Journal*, vol. 2, no. 8, pp. 41-54.

de Andres, P, Azofra, V & Lopez, F 2005, 'Corporate Boards in OECD Countries: size, composition, functioning and effectiveness', *Corporate Governance: An International Review*, vol. 13, no. 2, pp. 197-210.

Dechow, PM, Sloan, RG & Sweeney, AP 1995, 'Detecting Earnings Management', *The Accounting Review*, vol. 70, no. 2, pp. 193-225.

Denis, DK 2001, 'Twenty-five years of corporate governance research ... and counting', *Review of Financial Economics*, vol. 10, no. 3, pp. 191-212.

Dionne, G & Triki, T 2005, *Risk Management and Corporate Governance: The Importance of Independence and Financial Knowledge for the Board and the Audit Committee*, SSRN.

Fama, EF 1980, 'Agency Problems and the Theory of the Firm', *Journal of Political Economy*, vol. 88, no. 2, p. 288.

Guinan, JM 1992, 'Controlling the Control Function', *Pennsylvania CPA Journal*, vol. 62, no. 4, pp. 23-26.

Han, D, Wang, F & Yue, H 2004, 'Board Structure, Political Influence and Firm Performance - An Empirical Study on Publicly Listed Firms in China ', *Asia-Pacific Journal of Accounting and Economics*, vol. Vol. 11, , no. No. 1.

Harris, M & Raviv, A 2008, 'A Theory of Board Control and Size', *Review of Financial Studies*, vol. 21, no. 4, pp. 1797-1832.

Hermalin, BE & Weisbach, MS 1991, 'The effects of board composition and direct incentives on firm performance', *Financial Management*, vol. 20, no. 4, p. 101.

Hermalin, BE & Weisbach, MS 2003, 'Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature', *Economic Policy Review (Federal Reserve Bank of New York)*, vol. 9, no. 1, p. 7.

Hicheon, K, Kim, H & Lee, PM 2008, 'Ownership Structure and the Relationship between Financial Slack and R&D Investments: Evidence from Korean Firms', *Organization Science*, vol. 19, no. 3, pp. 404-418.

Jensen, MC, and Meckling, W.H. 1976, 'Theory of the firm: managerial behavior, agency costs, and ownership structure', *Journal of Financial Economics*, vol. 3, pp. 305-360.

Jensen, MC & Meckling, WH 1976, 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure', *Journal of Financial Economics*, vol. 3, no. 4, p. 305.

Johnston, W 1993, 'Does the COSO report pass muster?', *Financial Executive*, vol. 9, no. 5, pp. 12-13.

Kelley, TP 1993, 'The COSO report: Challenge and counterchallenge', *Journal of Accountancy*, vol. 175, no. 2, pp. 10-18.

Kenton, B 1995, 'What is a director's role', *Executive Development*, vol. 8, no. 2, pp. 16-18.

Kesner, IF & Dalton, DR 1985, 'The Effect of Board Composition on Ceo Succession and Organizational Performance', *Quarterly Journal of Business & Economics*, vol. 24, no. 2, p. 3.

Kesner, IF & Johnson, RB 1990, 'Research Notes and Communications an Investigation of the Relationship between Board Composition and Stockholder Suits', *Strategic Management Journal*, vol. 11, no. 4, pp. 327-336.

Kim, H, Kim, H & Lee, PM 2008, 'Ownership Structure and the Relationship Between Financial Slack and R&D Investments: Evidence from Korean Firms', *Organization Science*, vol. 19, no. 3, pp. 404-418.

Kintzele, MR, Kintzele, PL & Kwiatkowski, VE 1993, 'Reporting on Internal Control in Annual Reports', *Internal Auditing*, vol. 8, no. 3, pp. 3-15.

Klein, A 1998, 'Firm Performance and Board Committee Structure', *Journal of Law & Economics*, vol. 41, no. 1, p. 275.

Kroll, M, Walters, BA & Wright, P 2008, 'Board Vigilance, Director Experience, and Corporate Outcomes', *Strategic Management Journal*, vol. 29, no. 4, pp. 363-382.

Lam, TY & Lee, SK 2008, 'CEO duality and firm performance: evidence from Hong Kong', *Corporate Governance*, vol. 8, no. 3, pp. 299-316.

Larmou, S & Vafeas, N 2010, 'The relation between board size and firm performance in firms with a history of poor operating performance', *Journal of Management and Governance*, vol. 14, no. 1, pp. 61-85.

Lawler III, EE, Finegold, D, Benson, G, Conger, J & Spiller, PT 2002, 'Adding Value in the Boardroom', *MIT Sloan Management Review*, vol. 43, no. 2, p. 92.

Lev, B & Kunitzky, S 1974, 'On the Association between Smoothing Measures and the Risk of Common Stocks', *The Accounting Review*, vol. 49, no. 2, pp. 259-270.

Liu, GS & Sun, P 2005, 'The Class of Shareholdings and its Impacts on Corporate Performance: a case of state shareholding composition in Chinese public corporations', *Corporate Governance: An International Review*, vol. 13, no. 1, pp. 46-59.

Macher, J & Mowery, DC 2009, 'Measuring dynamic capabilities: practices and performance in semiconductor manufacturing', *British Journal of Management*, vol. 20, no. s1, pp. S41-S62.

May, RL 1993, 'COSO - Internal control: Committee of sponsoring organizations of the Treadway Commission', *Management Accounting*, vol. 74, no. 9, pp. 60-63.

May, RL & Chapin, DH 1993, 'The COSO Report: Challenge and Counterchallenge', *Journal of Accountancy*, vol. 175, no. 2, pp. 57-67.

McConnell, JJ, Servaes, H & Lins, KV 2008, 'Changes in insider ownership and changes in the market value of the firm', *Journal of Corporate Finance*, vol. 14, no. 2, pp. 92-106.

McDaniel, L, Martin, RD & Maines, LA 2002, 'Evaluating Financial Reporting Quality: The Effects of Financial Expertise vs. Financial Literacy', *The Accounting Review*, vol. 77, no. ArticleType: research-article / Issue Title: Supplement: Quality of Earnings Conference / Full publication date: 2002 / Copyright © 2002 American Accounting Association, pp. 139-167.

Ozkan, N 2011, 'CEO Compensation and Firm Performance: an Empirical Investigation of UK Panel Data', *European Financial Management*, vol. 17, no. 2, pp. 260-285.

Quinn, REC, K. 1983, 'Organizational life cycles and shifting criteria of effectiveness: Some preliminary evidence.', *Management Science*, vol. 29, no. 1, pp. 33-51.

Ricketts, JB 1992, 'New Internal Control Framework and Evaluation Proposed by COSO', *Ohio CPA Journal*, vol. 51, no. 3, pp. 35-36.

Roberts, J, McNulty, T & Stiles, P 2005, 'Beyond Agency Conceptions of the Work of the Non-Executive Director: Creating Accountability in the Boardroom', *British Journal of Management*, vol. 16, no. 1, pp. 5-26.

Rosenstein, S & Wyatt, JG 1997, 'Inside directors, board effectiveness, and shareholder wealth', *Journal of Financial Economics*, vol. 44, no. 2, pp. 229-250.

Ryan, HE, Wang, L & Wiggins, RA 2009, *Board-of-Director Monitoring and CEO Tenure*, SSRN.

Sanders, WG & Carpenter, MA 1998, 'Internationalization and Firm Governance: The Roles of CEO Compensation, Top Team Composition, and Board Structure', *Academy of Management*, vol. 41, no. 2, Special Research Forum on Managerial Compensation and Firm Performance, pp. 158-178.

Schultz, EL & Walsh, KD 2010, 'Endogeneity and corporate governance - performance relation', *Australian journal of Management*, vol. 35, no. 2, pp. 145-163.

Schwartz, M, Dunfee, T & Kline, M 2005, 'Tone at the Top: An Ethics Code for Directors?', *Journal of Business Ethics*, vol. 58, no. 1, pp. 79-100.

Shivdasani, A 1993, 'Board composition, ownership structure, and hostile takeovers', *Journal of Accounting and Economics*, vol. 16, no. 1-3, pp. 167-198.

Shleifer, AaV, R. W. 1997, 'A survey of corporate governance', *Journal of Finance*, vol. 52, pp. 737-783.

Smallman, C, McDonald, G & Mueller, J 2010, 'Prologue: Governing the corporation: Structure, process and behaviour', *Journal of Management & Organization*, vol. 16, no. 2, pp. 194-198.

Srinivasan, S 2005, 'Consequences of Financial Reporting Failure for Outside Directors: Evidence from Accounting Restatements and Audit Committee Members', *Journal of Accounting Research*, vol. 43, no. 2, pp. 291-334.

Tabachnick, BG & Fidell, LS 2001, *Using Multivariate Statistics*, 5 edn, Allyn and Bacon, Boston.

Tanki, FJ & Steinberg, RM 1993, 'Internal control - Integrated Framework: A landmark study', *CPA Journal*, vol. 63, no. 6, pp. 16-20.

Tuggle, CS, Sirmon, DG, Reutzel, CR & Bierman, L 2010, 'Commanding board of director attention: investigating how organizational performance and CEO duality affect board members' attention to monitoring', *Strategic Management Journal*, vol. 31, no. 9, pp. 946-968.

Weisbach, MS 1988, 'Outside directors and CEO turnover', *Journal of Financial Economics*, vol. 20, pp. 431-460.

Whittred, G & Zimmer, I 1984, 'Timeliness of Financial Reporting and Financial Distress', *Accounting Review*, vol. 59, no. 2, p. 287.

Wright, DW 1996, *Evidence on the Relation Between Corporate Governance Characteristics and the Quality of Financial Reporting*, Available at SSRN: http://ssrn.com/abstract=10138 or http://dx.doi.org/10.2139/ssrn.10138.