



BOARD LEADERSHIP STRUCTURE AND FIRM RISK-TAKING BEHAVIOUR

Yi Wang*, Trevor Wilmshurst**

Abstract

In this paper the conceptual frameworks, which make different predictions about the effect of board leadership structure on firm risk-taking behaviour, are examined. From a sample of 243 Australian listed firms, it is found that leadership structure does not have any significant influence on firm risk; higher blockholder ownership or lower dividend payout is related to increased performance variance. This research suffers from some limitations; the archival study of the functional background of board chairman may not reveal the underlying relationship between the board of directors and firm risk-taking behaviour. We only test the influence of leadership structure on performance variance; further research could investigate the potential impact of board composition on firm risk-taking propensity.

Keywords: Board of directors, leadership structure, firm risk, corporate governance, Australia

* School of Accounting & Corporate Governance, University of Tasmania, Private Bag 1314, Launceston, TAS 7248

Phone: +61 3 63243155

Fax: +61 3 63243711

E-mail: yi.wang@utas.edu.au

** School of Accounting & Corporate Governance, University of Tasmania, Private Bag 1314, Launceston, TAS 7248

1. Introduction

The global movement for corporate governance reforms has gained momentum in the past fifteen years. Panasian *et al* (2003) observed that much of this trend was influenced by the publication of the Cadbury Report (1992) in the U.K. The Report, sometimes referred to as the Magna Carta of Corporate Governance (Gregory, 2001), comments that the board of directors must retain full and effective monitor over the executive management; given the importance and particular nature of the chairman's role, it should be in principle separate from that of the chief executive officer (CEO).

As noted by Faleye (2007), following the momentum created by the Cadbury Report (1992) it

becomes a consensus among shareholder activists, institutional investors and regulators that the CEO should not also serve as chairman. Dahya (2004) found that between 1994 and 2003 regulators and stock exchange in 16 countries issued reports recommending the separation of CEO and chairman duties.

Australia had watched closely as big corporate failures such as Enron and WorldCom had prompted the U.S. regulatory authorities to launch significant reforms. In 2003 the Australian Stock Exchange (ASX) released *Principles of Good Corporate Governance and Best Practice Recommendations* (Guidelines, 2003) which reflects "best international practice", including the recommendation that the roles

of chairman and CEO should not be exercised by the same individual, and the chairman should be an independent director²¹.

Prior research on board leadership has generally focused on the performance dimension, and has provided divergent perceptions regarding the performance outcome of CEO duality. The purpose of this study is to extend this literature to other leadership structures than CEO duality, and firm risk-taking behavior. We attempt to address the following question – does board leadership structure have any effect on firm risk-taking behavior, for a more comprehensive understanding of the consequences of board leadership.

The remainder of this paper is organized as follows. In Section 2 a brief introduction to the recent studies in this area is provided; the potential links between board leadership structure and firm risk as suggested by different theories are discussed in Section 3, resulting in three hypotheses. Section 4 describes the research design used to test these hypotheses. The findings of data analysis are reported in Section 5, leading to conclusions in Section 6.

2. Literature Review

As discussed in Finkelstein and D'Aveni (1994), the most important, controversial and inconclusive question in corporate governance research is whether CEO duality, that is, the practice of one person serving both as a firm's CEO and as board chairman, contributes to or inhibits firm performance. The two views, drawn from agency theory and stewardship theory respectively, would appear to be at odds with each other. Adopting an agency theory perspective it would be argued to split the roles of CEO and board chairman would facilitate more effective monitoring of the CEO, and firms failing to do so may underperform those in which the two positions are split (Rechner and Dalton, 1991). While stewardship theorists argue that the duality of roles establishes a strong and unambiguous leadership, and firms with CEO duality may make better and faster decisions and therefore may out-perform those which split the positions (Donaldson and Davis, 1991).

The empirical evidence, primarily from the US initially and more broadly in recent years, has been mixed. Elsayed (2007) argued that prior studies were subject to a number of research limitations including failure to control for significant variables that would be likely to confound the relationship between CEO duality and performance. The performance measures and resulting finding of prior studies are summarised in Table 1.

Kim and Buchanan (2008) discovered that the literature had paid little attention to investigating the

implications of CEO duality on strategic management practices such as firm risk-taking behaviour. As a consequence little is known about the contribution to agent opportunism or the promotion of stewardship behaviour in a firm's strategic management practices when there is duality at the top.

Thus, using a sample of 290 large U.S. corporations the authors examined the empirical relationship between CEO duality and firm risk-taking propensity. They reported that consistent with the agency theory perspective, CEO duality reduced firm risk as measured by the standard deviation of ROA. However, traditionally emphasized mechanisms of board independence and managerial shareholdings were found to be ineffective in controlling managerial risk-averse preference. Rather it was found that institutional ownership moderated the negative correlation between the duality structure and firm risk. In this study the work of Kim and Buchanan (2008) is extended beyond CEO duality to other board leadership structures. Specifically the applicability of two theories, agency theory and organizational portfolio theory, which make different predictions about the effect of board leadership on firm risk-taking propensity, are tested; the findings may shed light on the impact of the recent changes to the regulatory environment as introduced by the ASX Guidelines (2003). To our best knowledge it presents the first empirical evidence on the risk preferences of leadership structures in the Australian context.

3. Hypotheses

Denis and McConnell (2003) commented that an extensive literature has built up on corporate governance in general, and boards of directors in particular, following the work of Jensen and Meckling (1976), in which the authors applied agency theory to corporations and modeled the agency costs of outside equity. A central assumption of the theory is that managers will pursue their own goals (self interest) rather than seek to maximise shareholder wealth, unless they are kept in check by a vigilant, independent board (Castaldi and Wortmann 1984, Daily *et al* 2002).

Agency theorists have argued that shareholders (the Principal) generally favor actions that maximize returns, even when accompanied by higher risk, because they are able to diversify against risk by selecting specific stocks for their portfolios. Managers (the Agent), on the other hand, cannot readily diversify their employment risks across a range of investments, as a result they tend to be more risk averse than may be in the interests of shareholders, and would prefer low risk strategies (Jensen and Meckling 1976, Fama 1980, Mizruchi 1983, Knoeber 1986, Eisenhardt 1989, Baysinger and Hoskisson 1990, Prentice 1993, Beatty and Zajac 1994, Coles *et al* 2001, Ellstrand *et al* 2002, Godfrey *et al* 2003).

In other words, if there is a good business opportunity involving high risk, shareholders would

²¹ According to the Guidelines (2003, p.19), “[a]n independent director is independent of management and free of any business or other relationship that could materially interfere with – or could reasonably be perceived to materially interfere with – the exercise of their unfettered and independent judgement”.

expect managers to seize the opportunity as a means to maximize their investment return, while managers would be more likely to be hesitant to take this option as their rewards from risk-taking, particularly if not successful, could be devastating to them (Kim and Buchanan, 2008). Managers are more concerned about their employment risk and firm survival than wealth maximization for shareholders (Baysinger and Hoskisson, 1990). To test the potential link between board leadership and firm risk the following hypothesis is posed:

H₁ : The executive board chairperson will increase firm risk aversion (agency theory).

The Guidelines (2003) identifies several personal and professional affiliations that may limit the independence of non-executive directors. These affiliated directors, or “grey” directors as coined by Baysinger and Bulter (1985), appear to sit somewhere between being executive and independent directors. For most their primary employment is not dependent directly on the firm in which they serve as directors but they do have a personal stake in the firm with financial and/or kinship relationships with the firm or its managers (Ellstrand *et al*, 2002). These affiliations arguably would affect the monitoring role as expected of the board and these directors within agency theory. It could be expected that these affiliated directors could be inclined to support low risk strategies as favoured by management (Johnson *et al* 1996, Ellstrand *et al* 2002). To this expectation the following hypothesis is posed:

H₂ : The affiliated board chairperson will increase firm risk aversion (agency theory).

Heslin and Donaldson (1999) and Donaldson (2000) proposed a new theory of organizational change and success - organizational portfolio theory, which is built on the premise that low performance is required to trigger adaptive organizational changes. It is acknowledged that the theory is at present “... a series of propositions waiting for empirical testing. Only after it has received such empirical confirmation would the policy implications sketched here become valid prescriptions” (Donaldson, 2000, p.395).

Contrary to the assumption of agency theory, Heslin and Donaldson (1999) argued that, in general, executive directors would increase risk (lower levels of risk aversion) and independent directors would reduce risk (higher levels of risk aversion). During periods when executives represent a large proportion of the board, the firm is willingness to take greater risk; when peaks from these high risk strategies occur with favourable combinations of other portfolio factors outstanding performance is likely to result. This reinforces confidence in the integrity and competence of a largely non-independent corporate governance structure and bolsters the position of executives on the board. However, when troughs in these high risk strategies occur simultaneously with

other performance-depressing portfolio factors²², the particularly low performance may trigger the installation of an independent chairman and a higher proportion of independent directors on the board. The resulting risk-averse governance tends to reduce firm performance variance. It is considered that reducing firm risk may be a means of increasing short-term economic value (Brealey and Myers, 1996). Heslin and Donaldson (1999) asserted that risk aversion could prevent the performance crises needed to trigger required structural adaptation; high economic value achieved by lowering risk is thereby prone to inhibiting long-term growth and profitability. It is hypothesised:

H₃ : The independent board chairperson will increase firm risk aversion (organizational portfolio theory).

4. Empirical Testing

Sample selection commenced with the top 500 companies listed on the ASX, ranked by market capitalisation. The 2003 list of top 500 companies provided by *Huntleys' Shareholder* (2003) was used to source the sample. At December 31, 2003, the top 500 companies represented 95% of the total market capitalisation of the ASX-listed companies (Standard & Poor's, 2004). As a result this dataset offers good coverage for the population of interest, that is, the Australian public corporation.

In conformity with prior studies financial institutions including property trusts and investment funds were removed from the dataset due to a lack of comparable data in the financial institutions section (for example, Muth and Donaldson 1998, Kiel and Nicholson 2003, Cotter and Silverster 2003). The resultant sample consisted of 384 companies.

In gathering the information required to complete the testing in this study, in addition to *Huntley's Shareholder* (2003) providing information on firm age and lines of business, the *Connect 4* database containing the annual reports of the top 500 companies, and the *Fin Analysis* database containing market information and statistics of Australian firms were used. Due to the non-availability of items of required data from these sources the sample was further reduced to 243 firms.

²² In Heslin and Donaldson (1999) three factors, namely, *diversification*, *divisionalization* and *divestment* that are likely to prevent instances of poor performance and forestall calls for tougher and more independent boards, are identified. They also identified three factors that could contribute to poor performance and lead to a call for the appointment of additional non-executive people as board members or chairpersons - *business cycles*, *competition* and *debt*.

Table 1. Empirical Evidence: Contribution of CEO Duality on Firm Performance

Authors	Country	Performance Measures	Results
Berg and Smith (1978)	U.S.	ROE, ROI and shareholder return	Insignificant
Rechner and Dalton (1989)	U.S.	Shareholder return	Insignificant
Donaldson and Davis (1991)	U.S.	ROE and shareholder return	Positive
Rechner and Dalton (1991)	U.S.	ROI and Profit margin	Negative
Daily and Dalton (1993)	U.S.	ROA, ROE and price/earnings ratio	Insignificant
Pi and Timme (1993)	U.S.	ROA and production efficiency	Negative
Boyd (1995)	U.S.	ROI, market share and sales growth	Contingent ²³
Baliga <i>et al</i> (1996)	U.S.	ROE and shareholder return	Insignificant
Brickley <i>et al</i> (1997)	U.S.	ROI and shareholder return	Positive
Worrell <i>et al</i> (1997)	U.S.	Shareholder return	Negative
Dalton <i>et al</i> (1998)	U.S.	Market and accounting measures	Insignificant
Coles <i>et al</i> (2001)	U.S.	Economic value added	Positive
Dehaene <i>et al</i> (2001)	Belgium	ROA	Positive
Abdullah (2004)	Malaysia	ROA, ROE, EPS and profit margin	Insignificant
Balatbat <i>et al</i> (2004)	Australia	Operating return	Positive
Dahya (2004)	U.K.	ROA	Insignificant
Peng (2004)	China	ROE and sales growth	Positive
Chen <i>et al</i> (2005)	Hong Kong	market-to-book ratio	Negative
Elsayed (2007)	Egypt	ROA and Tobin's <i>q</i>	Contingent ²⁴
Peng <i>et al</i> (2007)	China	ROE and sales growth	Positive
Chan and Li (2008)	U.S.	Tobin's <i>q</i>	Negative

²³ Boyd (1995) concluded that CEO duality might be advantageous under conditions of resource scarcity and environmental dynamism, i.e., unpredictability of changes.

²⁴ Elsayed (2007) found that the impact of CEO duality varied across industries, and CEO duality attracted a positive coefficient only when firm performance was low.

Following the approach adopted by prior studies on the relationship between CEO duality and firm performance (for example, Daily and Dalton 1993, Dehaene *et al* 2001, Chan and Li 2008) the leadership structure of sample companies is examined at one point in time, i.e., mid-2003. Three binary variables for board leadership - executive chairman (CMEXE), independent chairman (CMIND) and affiliated chairman (CMAFF) - are developed to assess whether the chairman is an affiliated director, executive director or an independent director.

If the chairman is an outside director and the sources of information only divide board members into executives and non-executives, the chairman will be classified as an affiliated or independent director, using the definition of independence adopted by the ASX Corporate Governance Council as the benchmark²⁵. The details of directors are available in the director's report, corporate governance statement and related party note to the financial statements. If a close analysis of this information was not able to provide an objective basis for determining director independence, the company was excluded from the analysis.

The measurement of firm risk has been discussed by a number of researchers (Baird and Thomas 1990, Beatty and Zajac 1994). Baird and Thomas (1990) discussed the way risk has been conceptualized by different disciplines. They considered management, finance, marketing and psychology, and concluded that researchers in the field of strategic management typically defined risk as the unpredictability of business outcome variables, for example, the variability of accounting or shareholder return. Kim and Buchanan (2008) employed income stream variance as the measure, i.e., the standard deviation of ROA. They argued that this would reflect managerial risk-taking behaviour.

In the finance literature risk is viewed as a systematic risk or unsystematic risk (for example, Ross *et al* 2005, Reilly and Brown 2006). Schellenger *et al* (1989) argued that the board was able to influence both the systematic and unsystematic risk. Other researchers have also found that the board of directors is able to raise or reduce the level of risk faced by the firm (Hill and Snell 1988, Lorsch and MacIver 1989, Baysinger *et al* 1991, Davis and Thompson 1994, Heslin and Donaldson 1999, Donaldson 2000). In this study the measure of risk adopted will be the standard deviation of shareholder return. In order to reduce the influence of short-term fluctuations three-year averages of data were used; the averages were across the 2003-2006 financial years.

To locate the specific effect of leadership structure on firm risk aversion this study considered empirical models identified in prior research that had

looked at board composition and structure (for example, Bhagat and Black 2000, Coles *et al* 2001, Singh and Davidson III 2003, Randoy and Jenssen 2004, Krivogorsky 2006). Several covariates are introduced into this analysis to control for potentially confounding influences, including board size, prior performance, blockholder ownership, diversification, dividend payout, firm age and size, leverage and managerial shareholdings.

Consistent with the risk measure, dividend payout, leverage and firm size are calculated for the period of 2003-2006. Like the measures for board leadership, data on board size, firm age, blockholder ownership, diversification and managerial shareholdings are collected for the 2003 financial year; prior performance is measure by the average shareholder return for the years 2000-2003. A summary of the research variables adopted in this study are shown on Table 2.

Ordinary least squares (OLS) regressions are developed for the research variables as described in Table 2, in which firm risk serves as the dependent variable; the independent variables consist of leadership structure, firm age, blockholder and managerial shareholdings, dividend payout, leverage, firm size, diversification, prior performance and board size. Moreover, sensitivity tests on the regressions without firm size control are performed to assess the robustness of findings. An algebraic statement of the models is presented below:

$$Y_i = \alpha + \beta_1(\text{Leadership})_i + \beta_2(\text{AGE})_i + \beta_3(\text{BLOCK})_i + \beta_4(\text{DIVR})_i + \beta_5(\text{EQED})_i + \beta_6(\text{GEAR})_i + \beta_7(\text{LogMCAP})_i + \beta_8(\text{SEGMT})_i + \beta_9(\text{SHRET})_i + \beta_{10}(\text{SIZE})_i + \mu_i$$

Where, for the i^{th} company

Y	= RISK
α	= Constant of the equation
β	= Coefficient of the variable
Leadership	= CMAFF, CMEXE or CMIND
μ	= Error term

5. Results

An overview of descriptive characteristics is provided in Table 3 showing firm characteristics for the sample in 2003²⁶. Among the 243 chairpersons of the boards of directors 47 (19.34%) were executive directors, 114 (46.91%) were independent directors and 82 (33.74%) were affiliated directors.

²⁵ There is a list of the persons who should not be considered independent in Box 2.1 of the Guidelines (2003); however, it is unclear how long an independent director could serve on the same board. This research follows the U.K. Higgs Report (2003) which nominates ten years in relation to the director tenure consideration.

²⁶ The descriptive statistics of other research variables are available from the Authors.

Table 2. Description of Research Variables

Measure	Abbreviation	Definition
<i>Board Leadership</i>		
Affiliated chairman	CMAFF	Binary variable to assess whether or not the chairman is an affiliated director
Executive chairman	CMEXE	Binary variable to assess whether or not the chairman is an executive director
Independent chairman	CMIND	Binary variable to assess whether or not the chairman is an independent director
<i>Firm Risk</i>		
Firm risk	RISK	Standard deviation of shareholder return
<i>Control</i>		
Firm age	AGE	Number of years listed on the ASX
Blockholder ownership	BLOCK	The percentage of common stocks held by the top 20 shareholders
Dividend payout	DIVR	Ratio of dividend payments to profit after interest and tax
Managerial ownership	EQED	Percentage of equity including options held by executive directors
Leverage	GEAR	Ratio of short-term and long-term debt to book value of equity
Firm size	LogMCAP	Natural logarithms of market value of common stocks (in \$million)
Diversification	SEGMT	Number of industrial and geographical segments
Prior performance	SHRET	Realised return of returns incorporating capital gains and dividend payments
Board size	SIZE	Number of directors on the board

Table 3. Descriptive Statistics

N: 243

Variable	Mean	Median	Maximum	Minimum	Std. Dev	Skewness	Kurtosis
AGE	16.90	11.00	132.00	3.00	17.81	2.90	15.39
BLOCK	65.10%	67.09%	99.86%	13.60%	0.18	-0.42	2.74
EQED	11.84%	2.21%	80.99%	0	0.18	1.70	4.89
SEGMT	4.46	4.00	11.00	1.00	2.23	0.84	3.19
SIZE	6.33	6.00	15.00	3.00	2.05	1.02	4.53

Table 4. OLS Regressions: Board Leadership Structure and Firm Risk

N: 243

Coefficient	RISK		
t-Statistic			
Intercept	0.904	0.969	0.898
	1.615	1.715	1.554
CMAFF	0.112		
	0.472		
CMEXE		-0.210	
		-0.710	
CMIND			0.019
			0.089
AGE	0.003	0.003	0.003
	0.491	0.513	0.497
BLOCK	1.624	1.649	1.669
	2.604**	2.670**	2.687**
DIVR	-0.577	-0.594	-0.576
	-2.390*	-2.448*	-2.383*
EQED	-1.342	-1.245	-1.410
	-2.012*	-1.803	-2.166*
GEAR	0.039	0.040	0.035
	0.728	0.753	0.672
LogMCAP	-0.101	-0.105	-0.105
	-1.129	-1.175	-1.173
SEGMT	-0.031	-0.028	-0.030
	-0.532	-0.485	-0.521
SHRET	-0.067	-0.064	-0.064
	-0.916	-0.879	-0.882
SIZE	-0.044	-0.044	-0.039
	-0.620	-0.626	-0.551
R^2	0.088	0.089	0.087
Std Error (Regression)	1.656	1.655	1.657
F-Statistic	2.229	2.260	2.206
Probability (F-Statistic)	0.017	0.015	0.018
Durbin-Watson	1.998	1.994	1.987

* Significance at the 5% level

** Significance at the 1% level

Table 5. Sensitivity Tests: Board Leadership Structure and Firm Risk

N: 243

Coefficient t-Statistic		RISK	
Intercept	0.695	0.752	0.695
	1.315	1.407	1.260
CMAFF	0.134		
	0.563		
CMEXE		-0.209	
		-0.703	
CMIND			-0.0002
			-0.0009
AGE	0.002	0.002	0.002
	0.286	0.300	0.282
BLOCK	1.582	1.614	1.628
	2.540**	2.614**	2.623**
DIVR	-0.629	-0.648	-0.629
	-2.657**	-2.721**	-2.647**
EQED	-1.135	-1.045	-1.212
	-1.769	-1.560	-1.927
GEAR	0.031	0.032	0.027
	0.596	0.603	0.524
SEGMT	-0.048	-0.046	-0.048
	-0.851	-0.815	-0.856
SHRET	-0.068	-0.065	-0.065
	-0.930	-0.888	-0.896
SIZE	-0.085	-0.086	-0.081
	-1.390	-1.406	-1.330
R^2	0.083	0.083	0.081
Std Error (Regression)	1.657	1.657	1.658
F-Statistic	2.332	2.354	2.294
Probability (F-Statistic)	0.016	0.015	0.017
Durbin-Watson	2.004	1.998	1.992

* Significance at the 5% level

** Significance at the 1% level

The Table reveals that the sample contains a wide range of firms. The number of years the company had been listed on the stock exchange ranges from a low of 3 to a high of 132, with an average of almost 17 years. Block ownership varies from a minimum of 13.60% to almost 100% while managerial ownership varies from none to 81% with a mean of 65.10% and 11.84% respectively. The number of business segments ranges from 1 to 11, and number of directors on the board ranges from 3 to 15, with an average of just over 4 and 6, respectively.

The contribution of board leadership and other variables to performance variance is reported in Table 4. According to the Table there is no statistically significant relationship between the presence of executive, independent or affiliated chairperson, and the risk measure.

Table 5 displays the results for sensitivity tests without firm size control, in which no significant influence of leadership structure on firm risk-taking behaviour could be identified. With respect to the control variables used in the analysis, some consistent patterns emerge from Table 4 and 5. Some of these patterns coincide with the evidence as reported in

Kim and Buchanan (2008) - blockholder ownership has a positive impact on risk. Coles *et al* (2001) suggested that blockholders had the capacity to monitor their investments and, by virtue of the magnitude of their investments, could affect managerial behaviour. The threat that blockholders might sell large blocks of shares if the firm fails to provide an acceptable return, or is not responsive to governance concerns that investors view as critical, is a significant issue for managers. There is empirical evidence for the impact of institutional investors and other blockholders on managerial behaviour (Barclay and Holderness 1991, Van Nuys 1993, Brickley *et al* 1994, Shome and Singh 1995, Bethel 1998, Allen and Phillips 2000).

The results show that poor dividend payout may be related to increased performance variance. However, contrary to the findings in Kim and Buchanan (2008), it appears that higher managerial shareholdings would reduce firm risk-taking propensity (see Table 4), although the effect of managerial ownership becomes insignificant in the additional tests without firm size control (see Table 5); we leave this issue for future investigation.

6. Conclusions

This study focuses on an area often overlooked in the literature, namely, the relationship between the board of directors and firm risk-taking behaviour. The results do not support the three hypotheses which have been developed from agency theory and organizational portfolio model. It could be concluded that, in the Australian market, board leadership structure does not have any significant influence on firm risk.

The data analysis suggests that higher blockholder ownership increases performance variance; the evidence supports the proposition that blockholders could affect management practices. Moreover, it is found that poor dividend payout leads to increased risk. There are some limitations for this study. First, the archival investigation of the functional background of chairman may not reveal the underlying relationship between the board of directors and performance risk. Second, the sample tested is restricted to companies listed on the ASX; therefore the conclusions should not be extrapolated to all Australian firms. Finally, we only test the influence of leadership structure on performance variance; further research is required to investigate the potential impact of board composition as measure by, for example, the proportion of affiliated, executive or independent directors on the board, on firm risk.

References

1. Abdullah, S. (2004), "Board Composition, CEO Duality and Performance among Malaysian Listed Companies", *Corporate Governance: The International Journal of Effective Board Performance*, Vol. 4 No. 4, pp. 47-61.
2. Allen, J. W. and Phillips, G. M. (2000), "Corporate Equity Ownership, Strategic Alliance, and Product Market Relationships", *Journal of Finance*, Vol. 55.
3. Aspect Huntley (2003), *Huntleys' Shareholder*, Wrightbooks, Milton, Queensland.
4. ASX Corporate Governance Council (2003), *Principles of Good Corporate Governance and Best Practice Recommendations* (Guidelines).
5. ASX Corporate Governance Council (2007), *Corporate Governance Principles and Recommendations* (Guidelines).
6. Baird, I. S. and Thomas, H. (1990), "What is Risk anyway?" in Bettis, R. A. and Thomas, H., *Risk, Strategy and management*, JAI Press, Greenwich, Connecticut, pp. 21-52.
7. Balatbat, M. C. A., Taylor, S. L. and Walter, T. S. (2004), "Corporate Governance, Insider Ownership and Operating Performance of Australian Initial Public Offerings", *Accounting and Finance*, Vol. 44 No. 3.
8. Baliga, B., Moyer, N. and Rao, R. (1996), "CEO duality and Firm Performance: What's the Fuss", *Strategic Management Journal*, Vol. 17, pp. 41-53.
9. Barclay, M. and Holderness, C. (1991), "Control of Corporations by Active Block Investors", *Journal of Applied Corporate Finance*, Vol. 4, pp. 68-77.
10. Baysinger, B. D. and Butler, H. N. (1985), "Corporate Governance and the Board of Directors: Performance Effects of Changes in Board Composition", *Journal of Law, Economics and Organization*, Vol. 1 No. 1, pp. 101-124.
11. Baysinger, B. D. and Hoskisson, R. E. (1990), "The Composition of Board of Directors and Strategic Control: Effects on Corporate Strategy", *Academy of Management Review*, Vol. 15, pp. 72-87.
12. Baysinger, B. D., Kosnik, R. T. and Turk, T. A. (1991), "Effects of Board and Ownership Structure on Corporate R&D Strategy", *Academy of Management Journal*, Vol. 34 No. 1, pp. 205-214.
13. Beatty, R. P. and Zajac, E. J. (1994), "Managerial Incentives, Monitoring, and Risk Bearing: A Study of Executive Compensation, Ownership, and Board Structure in Initial Public Offerings", *Administrative Science Quarterly*, Vol. 39, pp. 313-335.
14. Berg, S. V. and Smith, S. K. (1978), "CEO and Board Chairman: A Quantitative Study of Dual v. Unitary Board Leadership", *Directors and Boards*, Vol. 3.
15. Bethel, J., Liebeskind, J. and Opler, T. (1998), "Block Share Repurchases and Corporate Performance", *Journal of Finance*, Vol. 53, pp. 605-634.
16. Bhagat, S. and Black, B. (2000), *Boar Independence and Long-Term Firm Performance*, Working paper, University of Colorado, Denver, Colorado.
17. Boyd, B. (1995), "CEO Duality and Firm Performance: A Contingency Model", *Strategic Management Journal*, Vol. 16, pp. 301-312.
18. Brealey, R. A. and Myers, S. C. (1996), *Principles of Corporate Finance*, McGraw-Hill, New York.
19. Brickley, J., Coles, J. and Jarrell, G. (1997), "Leadership Structure: Separating the CEO and Chairman of the Board", *Journal of Corporate Finance*, Vol. 4, pp. 189-220.
20. Brickley, J. A., Lease, R. C. and Smith, C. W. (1994), "Corporate Voting: Evidence from Charter Amendment Proposals", *Journal of Corporate Finance*, Vol. 1, pp. 5-31.
21. Castaldi, R. and Wortmann Jr, M. S. (1984), "Boards of Directors in Small Corporations: An Untapped Resource", *American Journal of Small Business*, Vol. 9 No. 2, pp. 1-10.
22. Chan, K. C. and Li, J. (2008), "Audit Committee and Firm Value: Evidence on Outside Top Executives as Expert-Independent Directors", *Corporate Governance: An International Review*, Vol. 16 No. 1.
23. Chen, Z., Cheung, Y. L., Stouraitis, A. and Wong, A. W. S. (2005), "Ownership Concentration, Firm Performance, and Dividend Policy in Hong Kong", *Pacific-Basin Finance Journal*, Vol. 13, pp. 431-449.
24. Coles, J. W., McWilliams, V. B. and Sen, N. (2001), "An Examination of Relationship of Governance Mechanisms to Performance", *Journal of Management*, Vol. 27, pp. 23-50.
25. Cotter, J. and Silverster, M. (2003), "Board and Monitoring Committee Independence", *ABACUS*, Vol. 39 No. 2, pp. 211-232.
26. Dahya, J. (2004), *One Man Two Hats – What's All the Commotion*, Working paper, City University of New York, New York.
27. Daily, C. M. and Dalton, D. R. (1993), "Board of Directors Leadership and Structure: Control and Performance Implications", *Entrepreneurship Theory and Practice* Spring, pp. 65-81.
28. Daily, C. M., McDougall, P. P., Covin J. G. and Dalton, D. R. (2002), "Governance and Strategic Leadership in Entrepreneurial Firms", *Journal of Management*, Vol. 28 No. 3, pp. 387-412.

29. Dalton, D., Daily, C., Ellstrand, A. and Johnson, J. (1998), "Meta-Analytical Reviews of Board Composition, Leadership Structure, and Financial Performance", *Strategic Management Journal*, Vol. 19, pp. 269-290.
30. Davis, G. F. and Thompson, T. A. (1994), "A Social Movement Perspective on Corporate Control", *Administrative Science Quarterly*, Vol. 39.
31. Dehaene, A., Vuyst, V. D. and Ooghe, H. (2001), "Corporate Performance and Board Structure in Belgian Companies", *Long Range Planning*, Vol. 34, pp. 383-398.
32. Denis, D. K. and McConnell, J. J. (2003), "International Corporate Governance", *Journal of Financial and Quantitative Analysis*, Vol. 38 No. 1.
33. Department for Trade and Industry (2003), *Higgs Review on the Role and Effectiveness of Non-Executive Directors* (Higgs Report).
34. Donaldson, L. (2000), "Organizational Portfolio Theory: Performance-Driven Organizational Change", *Contemporary Economic Policy*, Vol. 18 No. 4, pp. 386-396.
35. Donaldson, L. and Davis, J. H. (1991), "Stewardship Theory and Agency Theory: CEO Governance and Shareholder Returns", *Australian Journal of Management*, Vol. 16, pp. 49-64.
36. Eisenhardt, K. (1989), "Agency Theory: An Assessment and Review", *Academy of Management Review*, Vol. 14, pp. 57-74.
37. Ellstrand, A. E., Tihanyi, L. and Johnson, J. L. (2002), "Board Structure and International Political Risk", *Academy of Management Journal*, Vol. 45.
38. Elsayed, K. (2007), "Does CEO Duality Really Affect Corporate Performance?" *Corporate Governance: An International Review*, Vol. 16 No. 6, pp. 1203-1214.
39. Faleye, O. (2007), "Does One Hat Fit All?" *The Case of Corporate Leadership Structure*, Working paper, Northeastern University, Boston.
40. Fama, E. F. (1980), "Agency Problem and the Theory of Firm", *Journal of Political Economy*, Vol. 88 No. 2, pp. 288-307.
41. Finkelstein, S. and D'Aveni, R. A. (1994), "CEO Duality as a Double-Edged Sword: How Boards of Directors Balance Entrenchment Avoidance and Unity of Command", *Academy of Management Journal*, Vol. 37, pp. 1079-1108.
42. Godfrey, J., Hodgson, A. and Holmes, S. (2003), *Accounting Theory*, Wiley, Milton, Queensland.
43. Heslin, P. A. and Donaldson, L. (1999), "An Organizational Portfolio Theory of Board Composition", *Corporate Governance: An International Review*, Vol. 7 No. 1, pp. 81-88.
44. Hill, C. W. L. and Snell, S. A. (1988), "External Control, Corporate Strategy, and Firm Performance in Research-Intensive Industries", *Strategic Management Journal*, Vol. 9 No. 6, pp. 577-590.
45. Jensen, M. C. and Meckling, W. H. (1976), "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure", *Journal of Financial Economics*, Vol. 2, pp. 305-360.
46. Johnson, J. L., Daily, C. M. and Ellstrand, A. E. (1996), "Boards of Directors: A Review and Research Agenda", *Journal of Management*, Vol. 22.
47. Kiel, G. C. and Nicholson, G. J. (2003), "Board Composition and Corporate Performance: How the Australian Experience Informs Contrasting Theories of Corporate Governance", *Corporate Governance: An International Review*, Vol. 11 No. 3, pp. 189-205.
48. Kim, K. H. and Buchanan, R. (2008), "CEO Duality Leadership and Firm Risk-Taking Propensity", *Journal of Applied Business Research*, Vol. 24 No. 1.
49. Knoeber, C. R. (1986), "Golden Parachutes, Shark Repellents and Hostile Tender Offers", *American Economic Review*, Vol. 76, pp. 155-167.
50. Krivogorsky, V. (2006), "Ownership, Board Structure, and Performance in Continental Europe", *International Journal of Accounting*, Vol. 41, pp. 176-197.
51. Lorsch, J. W. and MacIver, E. (1989), *Pawns or Potentates: The Reality of America's Corporate Boards*, Harvard Business School Press, Boston.
52. Mizuchi, M. S. (1983), "Who Controls Whom? An Examination of the Relation between Management and Boards of Directors in Large American Corporations", *Academy of Management Review*, Vol. 8, pp. 426-435.
53. Muth, M. M. and Donaldson, L. (1998), "Stewardship Theory and Board Structure: A Contingency Approach", *Corporate Governance: An International Review*, Vol. 6 No. 1, pp. 5-28.
54. Peng, M. W. (2004), "Outside Directors and Firm Performance during Institutional Transactions", *Strategic Management Journal*, Vol. 25, pp. 453-471.
55. Pi, L. and Timme, A. (1993), "Corporate Control and Bank Efficiency", *Journal of Banking and Finance*, Vol. 17, pp. 515-530.
56. Prentice, D. D. (1993), "Some Aspects of Corporate Governance Debate", in Prentice, D. D. and Holland, P. R. J., *Contemporary Issues in Corporate Governance*, Oxford University Press, Oxford.
57. Randoy, T. and Jenssen, J. I. (2004), "Board Independence and Product Market Competition in Swedish Firms", *Corporate Governance: An International Review*, Vol. 12 No. 3, pp. 281-289.
58. Rechner, P. L. and Dalton, D. R. (1989), "The Impact of CEO as Board Chairperson on Corporate Performance: Evidence vs. Rhetoric", *Academy of Management Executive*, Vol. 3, pp. 141-143.
59. Rechner, P. L. and Dalton, D. R. (1991), "CEO Duality and Organizational Performance: A Longitudinal Analysis", *Strategic Management Journal*, Vol. 12, pp. 155-160.
60. Ross, S. A., Westerfield, R. W. and Jaffe, J. (2005), *Corporate Finance*, McGraw-Hill, Irwin.
61. Schellenger, M. H., Wood, D. D. and Tashakori, A. (1989), "Board of Directors Composition, Shareholder Wealth, and Dividend Policy", *Journal of Management*, Vol. 15, pp. 457-467.
62. Shome, D. and Singh, S. (1995), "Firm Value and External Blockholdings", *Financial Management*, Vol. 24, pp. 3-14.
63. Singh, M. and Davidson III, W. N. (2003), "Agency Costs, Ownership Structure and Corporate Governance Mechanisms", *Journal of Banking & Finance*, Vol. 27, pp. 793-816.
64. Standard & Poor's (2004), *Understanding Indices*, [created May 2004; cited October 2007], available from http://www2.standardandpoors.com/spf/pdf/index/A5_CMYK_UIndices.pdf.
65. Van Nuys, K. (1993), "Corporate Governance through the Proxy Process: Evidence from the 1989 Honeywell Proxy Solicitation", *Journal of Financial Economics*, Vol. 34, pp. 101-132.
66. Worrell, D., Nemeč, C. and Davidson, W. (1997), "One Hat too Many: Key Executive Plurality and Shareholder Wealth", *Strategic Management Journal*, Vol. 18, pp. 499-507.