BOARD LEADERSHIP: ANTECEDENTS AND PERFORMANCE OUTCOMES

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Abstract

In this paper several theories, which make different predictions about the effect of board leadership structure on firm performance, are tested. The results indicate that, for Australian listed companies, there is no strong relationship between leadership structure and subsequent performance. It is reported that companies with higher blockholder ownership or lower managerial shareholdings tend to have an affiliated chairman; firm with higher managerial shareholdings tend to have an executive chairman. The evidence suggests that there is no one optimal leadership structure; each structure, which could be an outcome of a rational choice process influenced by other governance characteristics of individual firms, may have associated costs and benefits.

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

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1. Introduction

The most important, controversial and inconclusive questions in corporate governance research and practice, as argued by Finkelstein and D'Aveni (1994), may be whether CEO duality – the practice of one person serving both as a firm's chief executive officer (CEO) and board chairman, contribute to or inhibit firm performance. Two views, drawn from agency theory and stewardship theory, are at odds with each other. Agency theory suggests that splitting the CEO and board chairman positions facilitates more effective monitoring of the CEO, and that firms failing to do so may under-perform those which split the two top positions (Rechner and Dalton, 1991). In contrast, stewardship theory argues that CEO duality establishes a strong and unambiguous leadership, and that 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 literature survey indicates that the empirical evidence around this topic has been most developed in the U.S., which, as shown in Table 1, is mixed. Some authors, for example Elsayed (2007), have noted that many of the prior studies could be challenged on their methodological premise, for example, failure to control for significant variables that might confound the relationship between CEO duality and performance.

In spite of the inconclusive evidence, the consensus among shareholder activists, institutional investors and regulators appears to be that the CEO should not also serve as board chairman (Faleye, 2007). According to Dahya (2004), between 1994 and 2003 regulators and stock exchanges in at least 16 countries had issued reports recommending the separation of CEO and chairman duties. In 2003, the Australian Stock Exchange (ASX) Corporate Governance Council released *Principles of Good Corporate Governance and Best Practice Recommendations* (Guidelines) which reflect "best international practice" by highlighting the importance of independent directors [27]. The stock exchange requires that a majority of each listed company's directors should qualify as independent directors; the roles of chairman and CEO should not be exercised by the same individual, and the chairman should be an independent director.

It is found in the literature survey that the academics in this field have paid little attention to investigating the performance implications of other board leadership structures than CEO duality; we seek to fill this gap by providing robust evidence regarding

[27] 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".

the relationship between different leadership structure and performance. Specifically, we test the applicability of several theories which make different predictions about the effect of board leadership on firm performance, and shed some light on the impact of the recently altered regulatory environment with respect to corporate governance mechanisms. The features of this paper include the use of alternative performance measures and controls for other corporate governance mechanisms, alongside other covariates. We also extend the empirical work to the explanatory factors for different structures, which, to date, are largely unexplored.

2. Hypotheses

Denis and McConnell (2003) observed that the publication of Jensen and Meckling (1976), in which the authors applied agency theory to corporations and modeled the agency costs of outside equity, had produced voluminous works on corporate governance in general, and boards of directors in particular, around the world. A central assumption of the theory is that managers may pursue their own goals rather than seek to maximise shareholder wealth, unless their discretion is kept in check by a vigilant, independent board (Castaldi and Wortmann, 1984; Daily, McDougall, Covin and Dalton, 2002). By emphasising the potential for divergence of interests between investors and managers, agency theorists predict that where the board of directors is more independent of management, company performance would be higher (Fama, 1980; Scott, 1983).

Developed as an alternative to agency theory, stewardship theory highlights a range of non-financial motives for managerial behaviours, such as the need for achievement, intrinsic satisfaction of successful performance, and respect for authority and work ethics (Donaldson and Davis, 1989, 1991, 1994; Fox and Hamilton, 1994; Davis, Schoorman and Donaldson, 1997). Having control empowers managers to maximize corporate profits; the detailed operational knowledge, expertise and commitment to the firm by executive directors, would make firms with a management-dominated board more profitable.

Therefore, the potential link between board leadership structure and firm performance as expected by agency theory and stewardship theory could be illustrated as follows:

H_1: *There is a positive effect of independent chairman on firm financial performance (agency theory); and*

H_2: *There is positive effect of executive chairman on firm financial performance (stewardship theory).*

From the 1980s, two theories founded on the organizational literature have been increasingly used by academics in investigating corporate governance issues, i.e., resource-based theory and resource-dependence theory. The resource-based approach generally argues that a firm's internal environment, in terms of its resources and capabilities, is critical for creating sustainable competitive advantage (Prahalad and Hamel, 1990; Teece, Pisano and Shuen, 1997). Being aware of, improving, and protecting the unique resources of the firm would reinforce its strengths and rearrange its weaknesses, and improve its competitive position and, thereby, performance.

However, firms are generally characterized by a lack of internal resources, and in-house knowledge may in many cases be scarce or non-existent (Storey, 1994). It has in this respect been considered important to have a board with outside members in order to overcome this internal lack of resources and complement the management with experience, knowledge and skills (Castaldi and Wortmann, 1984). Outside directors, especially affiliated directors, may be considered as a bundle of strategic resources to be used by and within the firm as they can provide advice and counsel to the management in areas where in-firm knowledge is limited or lacking. They are viewed as a valuable source of competitive advantage through their professional and personal qualifications.

From a different point of view, resource-dependence theory proposes that the long-term survival and success of a firm is dependent on its abilities to link the firm with its external environment (Pfeffer, 1972; Pfeffer and Salancik, 1978). A basic argument in this theory is that firms must constantly interact with their external environments either to purchase resources, or to distribute their finished products. Firms should seek to gain control over their environments to create more stable flows of resources and lessen the effects of environmental uncertainties. Outside directors, as boundary spanners, could form links with the external environment, which may be useful for the managers in the achievement of the various goals of the organization (Pfeffer and Salancik, 1978; Zahra and Pearce, 1989; Pearce and Zahra, 1992; Borch and Huse, 1993).

Specifically, outside directors may help firms initiate and maintain control over critical relationships, assets and contacts in the external environment. The firm may also co-opt representatives from important organizations as board members in order to achieve organizational goals and manage environmental contingencies. Directors who are prestigious in their professions and communities can be a source of timely information for executives. They become involved in supporting the organization by influencing their other constituencies on behalf of the focal organization (Pfeffer, 1972; Pfeffer and Salancik, 1978).

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*
Baliga, Moyer and Rao (1996)	U.S.	ROE and shareholder return	Insignificant
Brickley, Coles and Jarrell (1997)	U.S.	ROI and shareholder return	Positive
Worrell, Nemec and Davidson (1997)	U.S.	Shareholder return	Negative
Dalton, Daily, Ellstrand and Johnson (1998)	U.S.	Market and accounting measures	Insignificant
Coles, McWilliams and Sen (2001)	U.S.	Economic value added	Positive
Dehaene, Vuyst and Ooghe (2001)	Belgium	ROA	Positive
Abdullah (2004)	Malaysia	ROA, ROE, EPS and profit margin	Insignificant
Balatbat, Taylor and Walter (2004)	Australia	Operating return	Positive
Dahya (2004)	U.K.	ROA	Insignificant
Peng (2004)	China	ROE and sales growth	Positive
Chen, Cheung, Stouraitis and Wong (2005)	Hong Kong	market-to-book ratio	Negative
Elsayed (2007)	Egypt	ROA and Tobin's *q*	Contingent**
Peng, Zhang and Li (2007)	China	ROE and sales growth	Positive
Chan and Li (2008)	U.S.	Tobin's *q*	Negative

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

Outside directors comprise independent directors and affiliated directors, or "grey directors" as termed by Baysinger and Bulter (1985). It appears that resource-based theory and resource-dependence theory are more interested in affiliated directors and their experience, knowledge and linkages with other organizations (Pfeffer and Salancik, 1978; Castaldi and Wortmann, 1984; Zahra, 1990). Consequently, with respect to the relationship between leadership structure and performance, the following hypothesis could be developed:

H_3: *There is a positive effect of affiliated chairman on firm financial performance (resource-based theory and resource-dependence theory).*

3. Empirical Tests

The initial dataset comprises the top 500 companies listed on the ASX, ranked by market capitalisation. Each year the ASX collects information on these companies to calculate its All Ordinaries Index, the primary indicator of the Australian equity market. At December 31, 2003, the top 500 companies represent 95% of the total market capitalisation of the ASX-listed companies (Standard & Poor's, 2004). Thus, this dataset offers a reasonable coverage for the population of interest - Australian public corporations.

There are 503 firms in the 2003 list of top 500 companies provided by *Huntleys' Shareholder* (2003). In line with previous studies, financial institutions are eliminated from the list due to lack of comparable data (Muth and Donaldson, 1998; Kiel and Nicholson, 2003; Cotter and Silverster, 2003), resulting in a sample of 384 firms. The sources of data include *Connect 4* database containing the annual reports on the top 500 companies, *Fin Analysis* database giving market information and statistics of Australian firms, and *Huntleys' Shareholder* (2003) providing some information on firm age and lines of business. The sample is further reduced to 243 firms due to missing data.

3.1. Research Variables

Following the approach supported by most prior research in the area of board composition and structure, the leadership structures of the sample companies are examined at one point in time, i.e., mid-2003; three binary variables for board leadership, i.e., CMAFF, CMEXE and CMIND, are developed to assess whether the chairman is an affiliated director, executive director or independent director.

If the chairman is an outside director and the sources of information only divide board members into executives and non-executives, it would be necessary to classify the chairman as an affiliated or independent director, using the definition of independence proposed by the ASX Corporate

Governance Council as a benchmark[28]. 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 the information could not provide an objective basis for determining director independence, the company is excluded from the analysis.

Chakravarthy (1986) observed that there was no consensus concerning the selection of an appropriate set of measures to account for corporate financial performance; according to Daily and Dalton (1992), it is unlikely that any one performance indicator could sufficiently capture this performance dimension. It is common for several indices to be used because organizations legitimately seek to accomplish a variety of objectives, ranging from profitability to effective asset utilization and high stockholder returns (Hofer, 1983).

Some authors note that there are two broad groups of performance measures – "accounting measures drawn from the accounting systems used by firms to track their internal affairs and financial market measures relating to the share prices and dividend streams observed in the operation of financial markets" (Devinney, Richard, Yip and Johnson, 2005, p.15). Accounting measures are historical and therefore experience a backward- and inward- looking focus; developed as a reporting mechanism, they represent the impact of many factors, including the successes of advice given from the board to the management; they are the traditional mainstay of corporate performance factors (Kiel and Nicholson, 2003).

However, accounting measures are "distortable"; this distortion arises from such sources as accounting procedures and policies, government policies towards specific activities, human error and purposeful deception (Devinney et al, 2005). Nevertheless, ROA and ROE are included in this study as performance measures; as noted by Muth and Donaldson (1998), ROA and ROE had been extensively used in the research on board composition and structure.

Market-based measures are forward-looking indicators that reflect current plans and strategies, and represent the discounted value of future cash flows (Fisher and McGowan, 1983). Related to the value placed on the firm by the market, they are not susceptible to the impact of accounting policy changes or mere timing effects; they are objective in the sense that they exist outside of the influence of individuals (Devinney et al, 2005). Examples of market measures frequently employed by academics include shareholder return and Tobin's *q*. Shareholder return is used in this research given that there is strong market efficiency in Australia (e.g., Ball, Brown, Finn and Officer, 1989; Kasa, 1992).

[28] 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 director tenure consideration.

Shrader, Taylor and Dalton (1984), in examining the literature on the empirical relationship between strategic planning and organizational performance, found that most studies had chosen 3- or 5-year periods as their time frames, as suggested to be appropriate for a given strategic planning intervention to take effect. To reduce the influence of short-term fluctuations, the prior performance or subsequent performance figures tested in this study are the three-year averages over 2000-2003 or 2003-2006, respectively.

Bathala and Rao (1995), Coles, McWilliams and Sen (2001) and Elsayed (2007) suggested that the conflicting evidence on the existence or non-existence of an impact of the board of directors on financial performance might be attributed to the omission of other variables that affect performance. To identify the specific effect of board leadership on performance, a number of covariates are introduced into the analysis to control for confounding influence. According to Bathala and Rao (1995), while the agency literature recognizes the importance of board of directors in monitoring of management decisions, this is only one of the mechanisms used to control agency conflicts. The literature identifies a few other devices which ensure that managers' interests are aligned with those of shareholders, such as managerial ownership, dividend payout and leverage.

Jensen and Meckling (1976) asserted that increasing managerial ownership could mitigate agency conflicts; the higher the proportion of equity owned by managers, the greater the alignment between managers and shareholder interests. The evidence supporting this view could be found in Morck, Shleifer and Vishny (1988), Kim, Lee and Francis (1988), McConell and Servaes (1990) and Hudson, Jahera and Lloyd (1992).

Regarding leverage and dividend payout, Jensen (1986) argued that the payment of dividends and the contractual obligations associated with debt reduced the amount of discretionary funds available to management, thereby reducing their incentive to engage in non-optimal activities. Similarly, Grossman and Hart (1980) suggested that increased debt would cause managers to become more efficient in order to lessen the probability of bankruptcy, and loss of control and reputation. The regular payment of dividends would force firms to go to the capital markets for investment funding; scrutiny of firms accessing the markets would act as a deterrent to opportunistic behaviours by managers (Easterbrook, 1984). Harris and Raviv (1991) confirmed that the empirical evidence was broadly consistent with the proposition that debt could mitigate agency conflicts.

Drawing on the empirical models identified in prior research the analysis includes several other controls, which capture the firm characteristics likely to be associated with performance or board structure, including board size, diversification, blockholder ownership, firm age and firm size. Consistent with the performance figures, dividend payout, firm size and

leverage are calculated as the three-year averages for 2000-2003 or 2003-2006. Like the measures of board independence, data on board size, blockholder and executive director shareholdings, diversification and firm age are collected for the 2003 financial year.

Table 2. Description of Research Variables

Measure	Abbreviation	Definition
Board Leadership		
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
Firm Performance		
ROA	ROA	Ratio of EBIT to book value of total assets
ROE	ROE	Ratio of profit after interest and tax to book value of equity
Shareholder return	SHRET1, 2*	Realised rate of return incorporating capital gains and dividend payments
Control		
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	DIVR1, 2	Ratio of dividend payments to profit after interest and tax
Managerial ownership	EQED	Percentage of equity including options held by executive directors
Leverage	GEAR1, 2	Ratio of short-term and long-term debt to book value of equity
Firm size	LogMCAP1, 2	Natural logarithms of market value of common stocks (in $million)
Diversification	SEGMT	Number of industrial and geographical segments
Board size	SIZE	Number of directors on the board

*SHRET, DIVR, GEAR and LogMCAP are coded 1 for 2000-2003, and 2 for 2003-2006.

3.2. Data Analysis

Ordinary least squares (OLS) and logit regressions are constructed for the research variables. In the models to test the influence of board leadership on performance, firm performance serves as the dependent variable; the independent variables consist of leadership structure, firm age, blockholder and managerial shareholdings, dividend payout, leverage, firm size, diversification and board size. An algebraic statement of the models is as follows:

$$Y_i = \alpha + \beta_1(Leadership)_i + \beta_2(AGE)_i + \beta_3(BLOCK)_i + \beta_4(DIVR2)_i + \beta_5(EQED)_i + \beta_6(GEAR2)_i + \beta_7(LogMCAP2)_i + \beta_8(SEGMT)_i + \beta_9(SIZE)_i + \mu_i$$

Where, for the i^{th} company

Y = ROA, ROE or SHRET2

α = Constant of the equation

β = Coefficient of the variable

Leadership = CMAFF, CMEXE or CMIND

μ = Error term

In the regressions to investigate the explanatory factors for leadership structure, the independent variables include firm age, blockholder and managerial shareholdings, dividend payout, leverage, firm size, diversification, prior performance and board size.

$$Y_i = \alpha + \beta_1(AGE)_i + \beta_2(BLOCK)_i + \beta_3(DIVR1)_i + \beta_4(EQED)_i + \beta_5(GEAR1)_i + \beta_6(LogMCAP1)_i + \beta_7(SEGMT)_i + \beta_8(SHRET1)_i + \beta_9(SIZE)_i + \mu_i$$

Where, for the i^{th} company

Y = CMAFF, CMEXE or CMIND

α = Constant of the equation

β = Coefficient of the variable

μ = Error term

In addition, sensitivity tests on the above regressions without firm size control are performed to assess the robustness of findings.

4. Results

Table 3 gives a description of firm characteristics for the sample in 2003[29]. Among the 243 chairs of boards of directors, 82 (33.74%) are affiliated directors, and 47 (19.34%) are executive directors; 114 (46.91%) are independent directors.

Casual observation of the Table reveals that the sample contains a wide range of firms. The number of years the company has been listed on the stock exchange ranges from a low of 3 to a high of 132, with an average close to 17. The percentage of equity held by blockholders or executive directors varies between 0% and 99.86%, with a mean of 65.10% or 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.

[29] The descriptive statistics of other research variables are available from the Authors.

4.1. Regressions: Board Leadership and Firm Performance

The contribution of affiliated chairman and other variables to firm performance is reported in Table 4; according to the table, there is no statistically significant relationship between the existence of affiliated chairman and subsequent ROA, ROE and shareholder return.

The regression results in relation to independent chairman are provided in Table 6, which indicates that there is no significant relationship between executive chairman and subsequent performance.

Regarding the control variables used in the analysis, some consistent patterns emerge from the above tables; it is found that higher blockholder ownership or lower managerial shareholdings enhances performance as measured by shareholder return.

For the effect of blockholder ownership on performance, it is presumed in Coles et al (2001) that blockholders have the capacity to monitor their investments and, by virtue of the magnitude of their investments, can affect managerial behaviour; the threat that blockholders will 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 that institutional investors and other blockholders do impact managerial behaviour and therefore firm performance (e.g., Barclay and Holderness, 1991; Van Nuys, 1993; Brickley, Lease and Smith, 1994; Shome and Singh, 1995; Bethel, Liebeskind and Opler, 1998; Allen and Phillips, 2000).

Although the impact of executive ownership on firm performance has been frequently tested, the resulting evidence is mixed (Sundaramurthy, Rhoades and Rechner, 2005). Jensen and Meckling (1976) proposed that increasing managerial ownership could mitigate agency conflicts; the studies supporting their view include Morck et al (1988), Kim et al (1988) and Hudson et al (1992). Tsetsekos and DeFusco (1990) and Sundaramurthy, Rhoades and Rechner (2005) failed to locate any relationship between managerial shareholdings and performance; there are a number of papers, for example, McConnell and Servaes (1990) and Brailsford, Oliver and Pua (2002), identifying a non-linear relationship.

It is not surprising to find that dividend payments of sample firms reflect the accounting measures of ROA and ROE, which indicate that, in Australia, dividend payout is based on the historic performance. However, the results show that ROE is negatively related to leverage over the 2003-2006 financial years.

According to Modigliani and Miller (1958), capital structure is irrelevant in determining firm value; the firm's value is determined by its real assets, not by the securities it issues. Jensen and Meckling (1976), however, argued that leverage could affect managers' choice of operating activities and that these activities could in turn affect performance. As concluded by some authors, the research that attempts to solve the leverage-performance puzzle continues to report contradictory findings (Barton and Gordon, 1987; Harris and Raviv, 1991; Ghosh, 1992; Robinson and Mcdougall, 2001; O'Brien, 2003).

The findings of this study coincide with Alaganar (2004) in which the author documented an inverse relationship between leverage and ROE for the top ASX 100 companies from 1994 to 2003; he reported that this relationship was becoming more dramatic through time. One possible explanation is that newly acquired debt may be deployed on projects that have a negative impact on profitability; the earnings generated by investments funded by new debt are not adequate to offset the additional interest expense. This may have been fuelled by the prevailing low interest rate environment where firms were inclined to undertake such projects (Alaganar, 2004). There may be another possibility - more profitable companies may tend to reduce gearing; we leave this issue for future investigation.

4.2. Regressions: Determinants of Board Leadership

Table 7 provides regression estimates in relation to the explanatory factors for board leadership. It is reported that companies with higher blockholder ownership or with lower managerial shareholdings have a higher chance that the chairman is an affiliated director; companies with higher managerial shareholdings have a higher chance that the chairman is a current executive. However, no significant association is located between the presence of independent chairman and other variables tested in the regression.

Table 3. Descriptive Statistics

Sample Period: 2003
Included Observations: 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: Affiliated Chairman and Firm Performance

Sample Period: 2003-2006
Included Observations: 243

Coefficient t-Statistic	ROA	ROE	SHERT2
Intercept	-0.371	-0.039	-0.089
	-1.963	-0.076	-0.269
CMAFF	0.071	0.224	0.053
	0.887	1.025	0.377
AGE	0.0008	-0.003	0.002
	0.381	-0.491	0.470
BLOCK	-0.030	-0.909	1.050
	-0.140	-1.581	2.824**
DIVR2	0.199	0.499	-0.247
	2.452*	2.261*	-1.732
EQED	-0.313	0.154	-0.941
	-1.389	0.252	-2.380*
GEAR2	-0.017	-0.694	0.004
	-0.950	-14.205**	0.117
LogMCAP2	0.056	0.133	0.050
	1.841	1.609	0.946
SEGMT	-0.002	0.098	-0.029
	-0.125	1.839	-0.853
SIZE	-0.005	-0.080	-0.041
	-0.222	-1.220	-0.961
R^2	0.096	0.491	0.073
Std Error (Regression)	0.562	1.528	0.988
F-Statistic	2.748	25.006	2.050
Probability (F-Statistic)	0.005	0	0.035
Durbin-Watson	2.048	2.033	2.021

* Significance at the 5% level ** Significance at the 1% level

Table 5. OLS Regressions: Executive Chairman and Firm Performance

Sample Period: 2003-2006
Included Observations: 243

Coefficient t-Statistic	ROA	ROE	SHERT2
Intercept	-0.346	-0.014	-0.050
	-1.810	-0.028	-0.148
CMEXE	-0.070	-0.028	-0.127
	-0.694	-0.102	-0.717
AGE	0.0009	-0.003	0.002
	0.409	-0.476	0.494
BLOCK	-0.009	-0.830	1.060
	-0.042	-1.454	2.880**
DIVR2	0.193	0.498	-0.258
	2.364*	2.237*	-1.799
EQED	-0.301	0.037	-0.873
	-1.287	0.058	-2.128*
GEAR2	-0.018	-0.700	0.005
	-0.975	-14.289**	0.156
LogMCAP2	0.054	0.126	0.049
	1.772	1.529	0.916
SEGMT	-0.002	0.099	-0.028
	-0.078	1.845	-0.809
SIZE	-0.004	-0.071	-0.042
	-0.165	-1.086	-0.985
R^2	0.095	0.489	0.075
Std Error (Regression)	0.562	1.531	0.987
F-Statistic	2.710	24.779	2.095
Probability (F-Statistic)	0.005	0	0.031
Durbin-Watson	2.044	2.026	2.018

* Significance at the 5% level ** Significance at the 1% level

Table 6. OLS Regressions: Independent Chairman and Firm Performance

Sample Period: 2003-2006
Included Observations: 243

Coefficient t-Statistic	ROA	ROE	SHERT2
Intercept	-0.351	0.088	-0.100
	-1.801	0.167	-0.293
CMIND	-0.022	-0.172	0.023
	-0.302	-0.860	0.179
AGE	0.0008	-0.003	0.002
	0.382	-0.504	0.480
BLOCK	-0.010	-0.879	1.076
	-0.050	-1.533	2.905**
DIVR2	0.201	0.515	-0.249
	2.469*	2.324*	-1.738
EQED	-0.361	-0.016	-0.970
	-1.639	-0.027	-2.511*
GEAR2	-0.019	-0.700	0.002
	-1.055	-14.398**	0.068
LogMCAP2	0.054	0.131	0.048
	1.792	1.592	0.902
SEGMT	-0.002	0.096	-0.029
	-0.132	1.801	-0.841
SIZE	-0.003	-0.074	-0.038
	-0.113	-1.132	-0.905
R^2	0.093	0.491	0.073
Std Error (Regression)	0.563	1.529	0.988
F-Statistic	2.662	24.938	2.037
Probability (F-Statistic)	0.006	0	0.036
Durbin-Watson	2.040	2.038	2.011

* Significance at the 5% level ** Significance at the 1% level

Table 7. Logit Regressions: Determinants of Board Leadership

Sample Period: 2000-2003
Included Observations: 243

Coefficient t-Statistic	CMAFF	CMEXE	CMIND
Intercept	-2.192	-0.380	0.844
	-2.810**	-0.401	1.199
AGE	0.001	0.003	-0.003
	0.174	0.254	-0.351
BLOCK	1.739	-0.789	-1.130
	2.079*	-0.737	-1.487
DIVR1	-0.069	-0.628	0.293
	-0.216	-1.227	0.958
EQED	-3.446	4.545	-0.784
	-3.261**	4.672**	-0.982
GEAR1	-0.143	0.040	0.135
	-1.245	0.262	1.045
LogMCAP1	-0.079	-0.016	0.076
	-0.577	-0.088	0.592
SEGMT	-0.004	0.097	-0.052
	-0.053	0.965	-0.694
SHERT1	0.073	0.005	-0.140
	0.741	0.048	-0.906
SIZE	0.190	-0.230	-0.068
	1.953	-1.688	-0.758
McFadden R^2	0.080	0.155	0.029
Std Error (Dependent Variable)	0.474	0.396	0.500
LR-Statistic	24.931	36.998	9.626
Probability (LR-Statistic)	0.003	0.00003	0.382

* Significance at the 5% level ** Significance at the 1% level

5. Conclusions

The results do not support the three hypotheses which have been developed from agency theory, stewardship theory, and resource-based and resource-dependence models. Based on the analysis, it could be concluded that, for Australian public corporations, there does not appear to be a strong relationship between board leadership structure and performance.

Regarding the determinants of leadership structure, it is found that firms with higher blockholder ownership or lower managerial shareholdings tend to have an affiliated chairman, and firm with higher managerial shareholdings tend to have an executive chairman. Additional tests without firm size control yield findings consistent with those as reported in Tables 4-7[30].

The absence of a leadership structure-financial performance link indicates that there is no one optimal leadership structure; each structure may have associated costs and benefits. Moreover, the above findings suggest that observed leadership structure is more likely an outcome of a rational choice process influenced by other governance characteristics of individual firms, such as blockholder and managerial ownership.

It could be argued that some types of affiliated, executive or independent chairman may be valuable, while others may not; the argument, however, would lead to the conclusion that to push for a certain leadership structure, such as the one endorsed by the ASX Guidelines (2003), may be fruitless, unless the chairman has some particular attributes, which are currently unclear. Therefore, for policy-makers, practitioners and scholars, it is recommended that whether "best international practice" would enhance corporate performance should be empirically tested in the national context. Consequently a concern that may be raised about our analysis is whether the evidence from Australian firms can be generalized to other countries that have adopted similar codes of best governance practice; we expect future studies by others will explore this question.

[30] The results of robustness tests without firm size control are available from the Authors.

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