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Avoiding the “Too Comfortable in the Saddle” Syndrome: Obtaining High Performance from the Chairperson, CEO and Inside Directors

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1. Introduction

The chairperson (chair) and chief executive officer (CEO) are *the* two key employees of a company that make strategic decisions with long term implications for performance. The chair leads the board of directors plus the selection and performance management processes for the CEO (Johnson, Daily & Ellstrand, 1996; Kiel & Nicholson, 2003a; Dalton & Dalton, 2005; Krause and Semadeni, 2013). The CEO manages the company on a day to day basis and endeavors to deliver outcomes that are valued by stakeholders (Fama & Jensen, 1983; Goodstein & Boecker, 1991; Johnson et al, 1996; Withers, Hillman & Cannella, 2012). Having a CEO and chair with years of company specific experience in their roles is generally seen as an important asset for the company with positive performance implications (Johnson, Schnatterly and Hill, 2013). Research on the performance outcomes of tenure is, however, quite mixed (Johnson et al., 2013) and tends to focus on CEO tenure without taking into account the broader board and governance context (e.g., the insider ratio).

Most corporate governance research to date has been undertaken using samples of United States companies (Boyd, Haynes and Zona, 2011). As a result, these studies tend to focus on United States governance configurations where companies have a strong preference for chair and

CEO duality, meaning that the chair and CEO are the same person. For example, duality is used in more than 68 per cent of cases on the New York Stock Exchange (NYSE) compared with less than 10 per cent in Australia (Fitzroy, Hulbert and Ghobadian, 2012).

As distinct from duality, separation of the chair and CEO is preferred among Australian and London Stock Exchange listed companies (Dalton & Dalton, 2005; Fitzroy et al., 2012). In Australia the chair is usually an outside director, providing an important mentoring and counterbalancing role to the power of the CEO who leads the executive team. Choices on separation and board composition in Australia reflect long run institutional pressures to adopt guidelines for best practice informed by agency theory outlined, for example, in the Australian Stock Exchange (ASX) Corporate Governance Principles and Recommendations (2014). So in the Australian institutional setting the chair has considerable power given his or her right to hire, performance manage and fire the CEO if need be (Kiel and Nicholson, 2003a). In practice the United Kingdom has followed a similar direction on corporate governance practices following findings published in the Cadbury Report of 1992 and the Higgs Review of 2003 (Boyd, 1996; Kiel and Nicholson, 2003a; Aguilera, 2005; Dalton & Dalton, 2005).

By taking an in-depth look at Australian governance structures and performance outcomes, this study tries to contribute to governance theory in general and provide a more robust theoretical underpinning of board effectiveness in different contexts. Since the Australian governance system is biased towards separation, the relationship between the chair and CEO is more likely to be interpersonal with group decision making implications. In such a context, tenure can be an indication of harmony across the management team and board in general.

However, it is also possible that high tenure is a symptom of less healthy group dynamics with limited opportunities to express different views and provide constructive critique (Leenders and Wierenga, 2008). Things can become “too comfortable in the saddle” among work colleagues who lose their performance edge. So while chair CEO co-tenure can be a good thing if the board has a limited number of inside directors, there might be specific boards with a high insider ratio where high chair CEO co-tenure is not very productive.

The contributions of this paper are threefold. First, while there has been much research into the CEO tenure and organization performance relationship in the United States, there has been little research looking at chair and CEO co-tenure and organization performance in business settings such as Australia where separation is the predominant practice. Second, the interplay between chair and CEO co-tenure will be studied in a wider board context that can amplify or mitigate the benefits that high CEO chair co-tenure can have on organization performance. This is achieved by exploring the interaction of chair CEO co-tenure and the insider ratio with organization performance to provide new insight in a not well understood area. This is interesting as the CEO and sometimes a small number of key executives will be appointed to the board as inside directors (Fama & Jensen, 1983; Johnson et al., 1996); the value of the presence of inside directors to the organization is an under researched area (Johnson et al, 1996). The CEO is often the lead inside director in Australian business. Finally, this study provides a methodological contribution by estimating parsimonious models using a holdout sample to predict performance and compare this result with real performance of companies as observed in the marketplace (Woodside, 2013).

The theoretical underpinning for this study is provided by traditional governance theories such as agency theory, stewardship theory, resource dependence theory, institutional theory, legal theory and social network theory (Zahra & Pearce, 1989; Shen, 2003; Lynall, Golden & Hillman, 2003; Boyd et al., 2011). Multi-theoretic research into corporate governance including the integration of theories to enhance the explanatory power of the study (Boyd et al., 2011) is useful in building theoretical and practical insight into the complex human and social interactions of the chair, CEO and inside directors (Johnson et al, 1996; Hillman & Dalziel, 2003; Dalton & Dalton, 2005). In addition, theories on team decision making and the value and limitations of having different perspectives are introduced. As stated before, the aim is to understand the performance amplification and mitigation effects around the co-tenure dyad of the two key positions in most organizations - the chair and CEO. The key argument that is explained in the theoretical framework is that chair CEO co-tenure can deliver high performance outcomes but can also have negative consequences when the inside director ratio is also high, leading to a situation where high performance is not achieved. This is the work situation work colleagues become “too comfortable in the saddle” working together.

The article is structured as follows. First the theoretical background and hypothesis development is provided. Second is the explanation of the method and the data. Third the results are presented followed fourth by the discussion and conclusion.

2. Theoretical background and hypotheses

2.1 Theoretical background

There has been a greater interest in and focus on governance research and practice since the stock market crash of 1987, and the global financial crisis of the 2000s has reinforced this trend. Governance research considers a wide range of issues including but not limited to chief executive officer (CEO) and director selection, the job attributes and tenure of the chair and CEO respectively, the average tenure and ratio of inside directors, the ratio and tenure of outside directors, board size, teamwork on the board, and board effectiveness. Achieving and maintaining the effective contribution of the chair, CEO and board of director members to organization performance through selection, tenure and board process are matters of robust debate in business and academic communities around the world (Johnson et al, 1996; Dalton & Dalton, 2005; Hambrick, Werder & Zajac, 2008; Fuenzalida, Mongrut, Artega & Erausquin, 2013). Time and employee tenure are important research concepts (Mosakowski & Earley, 2000; Simsek, 2007). The empirical research here draws on agency theory, stewardship theory and resource dependence theory.

Agency theory argues that CEOs and inside directors in a position of power and influence will make opportunistic decisions in their own interests possibly to the detriment of the firm's goals and the interests of the owner's they are working for (Johnson et al, 1996; Hillman & Dalziel, 2003). A recommended solution to the principal-agent problem is separation of the role of the chair and the CEO (Dalton & Dalton, 2005; Kakabadse & Kakabadse, 2007). A trend in the governance literature is greater emphasis on the importance of a strong outside director ratio, a voting majority of outside directors, an outside director as chair and high outside director average tenure to counter balance the principal-agent problem that can emerge in the work performance of the CEO and inside directors (Johnson et al, 1996; Walters, Kroll & Wright,

2007). Advocates of agency theory also recommend a small number of inside directors on the board to provide an internal monitoring role and to advise the board on the activities and work performance of the CEO (Fama & Jensen, 1983; Johnson et al, 1996).

Stewardship theory argues that company directors are essentially trustworthy individuals and good stewards of firm resources. There is a high level of goal alignment between the shareholders, inside directors and outside directors. Each of these stakeholders is committed to the long run survival and prosperity of the firm and therefore will work in the firm's best interests (Lynall, Golden & Hillman, 2003). Advocates of stewardship theory support the presence of inside directors on the board. With this approach inside directors take on more of an advising role (Fama & Jensen, 1983). They argue that board of director design prescriptions of agency theorists can be counter-productive and an impediment to decision-making. A balance of inside and outside directors improves board deliberation and organization performance (Johnson et al, 1996). Stewardship theory also applies well to small and medium size enterprises which are characterized by strong executive identification with the firm, an involvement-oriented executive, low levels of institutional power, social fulfilment and personal fulfilment of the executives (Johnson et al, 1996; Kroll, Walters & Le, 2007).

Resource dependence theory argues that the board of directors is another instrument that management may use to gain access to the resources required to effectively run the business. Directors in this role may be representing particular institutions or are serving some legitimizing function (Selznick, 1949; Pfeffer, 1972; Johnson et al, 1996). Daily and Dalton (1992) found that the resource dependence role is important for younger small and medium size enterprises

(SMEs) as access to capital, legal services, financial services and/or other organization resource needs is more difficult compared with larger, more established firms (Johnson et al, 1996). In this respect inside directors can provide a useful firm resource in an advisory and monitoring role, keeping the outside directors informed of the activities and job performance of the CEO (Fama & Jensen, 1983; Johnson et al, 1996).

Table 1 below provides summary details of representative studies of CEO tenure, chair CEO co-tenure, the inside director ratio and organization performance that help to inform this study. The dependent variable for the studies in Table 1 are a performance variable and this is not subject to uniform definition. While archival studies using measures such as average return on assets or Tobin's Q are more popular, they do not give the same insight into different dimensions of organization performance provided by perceptual measures (Richard, Devinney, Yip, Johnson, 2009).

TABLE 1 HERE

These representative studies give certain points of guidance to this study. First there is little research considering chair and CEO co-tenure and the implications of this for organization performance. Second there is little consideration given in the literature to identifying constellations where the ratio of inside directors can play a positive or negative role for the organization. This relates to the debate in the corporate governance field on the value of the contribution inside directors make to firm performance and the appropriate time for inside directors to make that contribution. Kroll et al (2007) and Johnson et al (1996), for example,

have called for further research in this inside director area with a view to reintroducing the inside director to the research agenda and exploring aspects of their work context such as their work relationship with the chair and CEO.

2.2 Hypotheses

2.2.1 CEO tenure in a separation context

Stewardship theory indicates that a good steward of the firm in the CEO role will last longer in the job and perform better; this suggests a positive linear relationship between CEO tenure and organization performance (Coles et al., 2001). An alternative view is that there are seasons to CEO tenure with implications for organization performance with a period of improving performance in the early years and a later period of performance decline; this is a curvilinear (inverted U-shape) or quadratic relationship (Hambrick & Fukutomi, 1991; Shen, 2003; Simsek, 2007). The theory informing the quadratic relationship is that early in his or her tenure the CEO is likely to respond to his or her mandate from the chair and board on the change program expected and communicated during the hiring process. After addressing the CEO's initial mandate the second season may be a period of experimentation, but some CEOs may choose to bypass this season if they have strong belief in their view of the organization, the environment and their initial strategy. The third stage is the selection of an enduring theme for how the organization should be structured and positioned. This often reflects a reinforcement of the paradigms the CEO applied in the first and possibly second phase. The fourth stage is one of convergence where the enduring theme is reinforced by a series of incremental choices often related to organization structure, processes, the leadership team or other functional initiatives. The final stage is one of dysfunction where the CEO's continuing presence in the firm is counter-

productive due to fatigue, boredom and/or a dulling of entrepreneurial instincts (Miller, 1991; Simsek, 2007). Long serving CEOs also become less likely to engage in monitoring of the environment and adaptation (Coles et al., 2001). So theory and prior studies give the two possibilities here, a positive linear correlation between CEO tenure and performance, or the curvilinear (inverted U-shape) relationship. The best answer remains a point of debate in the literature. In the under researched separation setting such as Australia the CEO is often the lead or only inside director as distinct from United States studies in a mainly duality practicing setting. Coles et al (2001) argue that the research evidence is so far stronger for the linear relationship reflecting stewardship theory, hence:

H₁: There is a positive relationship between CEO tenure and organization performance.

2.2.2 “Two great stewards” - chair and CEO co-tenure

The chair is mentor and confidant of the CEO and together they exert substantial influence on firm culture. The chair oversees board routines and the building of experience across the inside directors and outside directors respectively. The relational skills of the chair are important for ensuring members of the board work effectively as a group with the CEO, and this can also take time to build, nurture and mature (Kiel & Nicholson, 2003a; Kakabadse & Kakabadse, 2007). A key role of the chair is to monitor the performance of the CEO and keep the CEO focused on the key strategic challenges of the business, ensuring the CEO does not pursue self-interest (i.e. the principal-agent problem) and does pursue the interests of shareholders (Westphal & Zajac, 1995; Kiel & Nicholson, 2003a). The work relationship between the chair and CEO is crucial to business success and it is complicated. There are crucial power, mentoring, values, information

and knowledge exchanges taking place and these exchanges take time to evolve and mature (Westphal, 1999). Kakabadse & Kakabadse (2007: 182) found the chair performed their role best as a “long-term anchor” occupying the role for periods of 12 to 15 years. This long term stewardship provided by the chair provided some balance for the organization and its shareholders with CEO tenure lasting from three to five years. CEOs who are good stewards last longer in the role (Johnson et al, 1996). Given this background a chair and CEO who are both good stewards are more likely to spend more time working together and deliver performance results, hence:

H₂: There is a positive relationship between co-tenure of the chair and CEO and organization performance.

2.2.3 “Two great stewards” or “too comfortable in the saddle” – the interaction effect

Boyd et al. (2011) have identified the importance of using moderation terms to build theoretical and practical insight in corporate governance research. Trying to understand how to obtain high organization performance from the chair, CEO and inside directors is an area that benefit from this approach.

Stewardship theory and agency theory suggest that at least a few inside directors can have a favorable influence on organization performance (Fama & Jensen, 1983; Johnson et al, 1996; Kiel & Nicholson, 2003b; Kroll et al, 2007). On the other hand a strong and experienced chair and CEO team may prefer to limit the number of inside directors - most likely the CEO only - to maximize their strategic and financial influence. Elite chair and CEO talent – “two great stewards” - is rare and special with long tenure evidence of good stewardship (Kakabadse &

Kakabadse, 2007). Long tenure for the chair CEO duo allows time for mentoring, sharing of values plus sharing of information and knowledge. For elite performers this creates a powerful combination of human resources beneficial to organization performance. However, this relationship may be less productive if there are more inside directors on the board.

The possible adverse side effect of the chair and CEO working together for too long with a larger number of inside directors is that the company can experience a situation where cohesiveness and harmony become too high. When this occurs there may be a lack of strategic tension, a lack of constructive conflict, a weakening of entrepreneurial instinct and a loss of competitive edge for the organization as a whole. In this situation it is possible that external voices from independent outside directors are not heard leading to a state of the chair, CEO and inside directors becoming too close and comfortable in their professional relationships similar to a lack of constructive conflict in innovation management (Souder, 1987; Leenders and Wierenga, 2008). The consequence of this, labeled “too comfortable in the saddle” syndrome, is likely to result in lower organization performance (Simsek, 2007). This is especially problematic in the context of the different and competing goals organizations have to balance that can challenge chair, CEO and inside director problem identification, problem solving and situation management skills (Hillman et al., 2000).

In summary, whereas having a low inside director ratio can have a favorable influence on organization performance when chair CEO co-tenure is long (Fama & Jensen, 1983; Johnson et al, 1996; Kiel & Nicholson, 2003b; Kroll et al, 2007), having a high inside director ratio in an organization where chair CEO co-tenure is long, can be less beneficial for performance. This

background provides the basis for a relationship that is multiplicative with long chair CEO co-tenure relationship in firms likely to perform best with a smaller number of inside directors (Boyd et al., 2011):

H₃: Chair CEO co-tenure moderates the relationship between the inside director ratio and organization performance such that where chair CEO co-tenure is high and the inside director ratio is low then organization performance is high.

Methods

3.1 Sample selection

The data for analysis is provided by 102 Australian Stock Exchange Listed firms who responded to a mail out survey conducted in the 2008-2009 financial year. An initial sampling frame of 1000 companies was developed. A total of 52 surveys were returned unopened (respondent moved, incorrect address etc.) giving a response rate of 10.8 % from a double mail out; this is an acceptable outcome for upper echelons and/or key informant research (Simsek, Veiga, Lubatkin & Dino, 2005; Simsek, 2007; Heavey, Simsek, Roche & Kelly, 2009). The mail out was directed to the Managing Director and/or CEO in each firm who had the discretion to respond to the survey or delegate the survey to their chosen key informant to provide a company response. A total of 90 surveys were returned by Managing Directors and/or CEOs, five by the Senior Strategy Officer, three by Company Secretary's, two by Chief Financial Officers, and two by top managers. Each respondent confirmed in the survey they were the key informant providing the company response. The survey received 12 responses from firms with more than

1000 employees, 23 responses from firms with 100 to 1000 employees, and 67 responses from firms with less than 100 employees.

ANOVA tests were conducted to detect any bias in the survey responses for the key constructs to determine if the early respondents (N = 51) differed from the later respondents (N = 51). There were no significant differences between the two groups, indicating that non response is not a major concern (Newbert, 2008). In addition, the sample resembles the ASX well in terms of size and industries providing additional evidence that the sample is generalizable towards the broader population. The survey used for this study is provided in the Appendix below.

3.2 Measures

3.2.1 Independent variables

The survey in the Appendix shows that in relation to the governance questions the key informant respondent was asked questions on tenure in years and months of the chair and the CEO in the organization, the number of inside directors on the board, and the number of directors in total on the board. The overlap of the chair and CEO tenure in their respective roles was then calculated for the chair CEO co-tenure variable. The responses to these questions were used as variables in the study for *CEO tenure*, *chair CEO co-tenure* and the *insider ratio* (i.e. the number of inside directors divided by board size). This survey data was then cross-checked back to company annual reports for the 67 companies that reported their name on 10 questions that could be checked with archival sources to verify accuracy (i.e. 670 data entries). Only two minor amendments were required in the 670 data entries confirming the quality of the data.

3.2.3 *Dependent variable*

The dependent variable for this study is ‘outside the box’ in that a *perceived organization performance* survey instrument is used to gather key informant opinion. Most corporate governance research uses archival measures of financial performance (e.g. Tobin’s Q, average return on assets) though an increasingly diverse range of dependent variables (e.g. corporate R & D strategy) are being used (Baysinger et al, 1991; Johnson et al, 1996; Kiel & Nicholson, 2003b). Richard, Devinney, Yip and Johnson (2009: 719) note that organization performance is “the ultimate dependent variable of interest” for business and management researchers. In relation to organization performance this section of the survey asked key informant respondents for their assessment of the non-financial and financial performance of their organization compared with their rivals over the past three years on Likert scale ratings from 1 = Very Poor to 7 = Excellent. A selection of six items was prepared adapting Homburg, Krohmer and Workman’s (1999) multi-dimensional organization performance survey scale giving *content validity*.

Perceived organization performance scales provide a superior insight on strategic performance and an alternative to archival data on financial performance. Archival sources on strategic performance are limited (e.g. percentage sales growth) when compared with the breadth of key informant insight that can be obtained from a perceptual survey scale providing a multi-dimensional insight into the construct (Richard et al, 2009). Company annual reports were used to obtain return on assets (i.e. net income divided by total assets) data for the 2009-2010 and 2010-2011 financial years for the respondent companies where this information was available (N = 67). Average two years return on assets was then calculated to provide an actual measure of

objective organization performance for comparison with the dependent variable used throughout the study.

3.2.4 Control variables

Information on *years listed on the stock exchange* and also *firm size measured by total number of employees* was collected; this data was positively skewed so the common log (i.e. base 10 log) was calculated for both variables and used in the analysis. *Average board of director size, average board of director tenure* and *chair tenure* was used to give an indication of board experience and expertise. Information on *separation* of the chair and CEO role was obtained in the survey and a categorical variable with 1 = Separation and 0 = Duality prepared.

Industries represented in the sample include materials (28 companies), healthcare (18 companies) with the remaining firms (56 companies) from the financial services, industrials, information technology, telecommunications, energy, and consumer discretionary industries. To provide a broad insight on industry influence dummy variables for *materials, healthcare* and *other industries* were prepared (Simsek, Veiga & Lubatkin, 2007). The materials and healthcare dummy variables were included in the bivariate correlations and multiple regression that follows (Tabachnick & Fidell, 2001).

3.2.5 Survey scale reliability and validity

Hinkin's (1995, 1998) guidance on preparing survey scales that evidence reliability (i.e. the measure is free from error and yields consistent results) and validity (i.e. we are measuring what we say we measure) was carefully followed (Cortina, 1993). Before the mail out the organization

performance survey was inspected by two University professors and two prominent Australian company directors for *face or content validity*. There was general agreement among the reviewers that the “scale logically appears to be accurately reflecting what was intended to be measured” (Zikmund, 1997: 443). Following preliminary analysis to check for data quality and accuracy, exploratory factor analysis (EFA) using principal axis factoring with oblique rotation was used for the initial data reduction for the organization performance scale resulting in two factors. Factor 1 is the financial performance sub-scale. Factor 2 is the strategic performance sub-scale. Factor loadings are above 0.40 (Ford, McCallum & Tait, 1986; Kim & Mueller, 1978). The residual correlation matrix evidenced acceptable levels of correlation between the items and there were no cross loading or complex items (Kline, 1994). Communalities were sound.

TABLE 2 HERE

AMOS was then used to perform a CFA on the two factor solution. Results showed that the fit of the two factor model was adequate with $\Delta\chi^2 (8, N = 102) = 11.83$, CFI = 1.00, TLI = 0.99, NFI = 0.99, RMSEA = 0.07. A one factor solution as an alternative to the two factor model was then explored, seeking to ascertain if the strategic performance and financial performance sub-scales evidencing acceptable correlation in the EFA correlation matrix should merge. The fit of the one factor model to the data was significantly worse $\Delta\chi^2 (10, N = 102) = 271.44$, CFI = 0.68, TLI = .33, NFI = .68, RMSEA = 0.51. This finding confirms the suitability of the two factor model and provides some evidence of *discriminant validity* of the strategic and financial dimensions of organization performance. The Cronbach’s alpha for the strategic performance sub-scale is 0.89 and for the financial performance sub-scale 0.98. The bivariate correlations

(Table 3 below) were then examined to ensure no presence of multicollinearity or singularity (Tabachnick & Fidell, 2001) and obtain a univariate grasp of the relationship between the dependent variable and each of the independent variables (Coakes & Steed, 2001).

Multiple regression analysis was then used to test the correlation between perceived financial performance and actual average two year return on assets to try and better understand the overall study. This relationship was significant with the control variables included in the analysis ($B = 8.07$, $s.e. = 3.41$, $p < .05$) in a significant overall model ($p < .05$, $N = 65$, $R^2 = .46$). This finding provides evidence in support of the predictive validity of the perceived organization performance survey scale (Hart & Banbury, 1994; Richard et al, 2009; Khan, 2011).

INSERT TABLE 3 ABOUT HERE

3.2.6 Common method variance

Common method variance (CMV) refers to the variance that is attributable to the measurement method rather than to the construct of interest. CMV may exist due to the single survey method used to collect responses. This potential threat was addressed by following Podsakoff, MacKenzie, Lee & Podsakoff (2003). At the design stage of the study, four experts (two academic and two from industry) were invited to review the survey and certain revisions were made to specific items based on their feedback. The survey items in each of the three sections were worded quite differently and required a variety of different style of response from a period of time (e.g. CEO tenure), to a yes/no response (e.g. Is the current Chairman and CEO the same person: Yes/No (please circle)), to Likert scale items on organization performance; this was done to reduce the potential impact of CMV. At the data analysis stage of the study, three

statistical techniques were applied to assess CMV. The Harman's one-factor test indicated that there was more than one factor that accounted for the majority of covariance. In the partial correlation procedures, the measurement model was shown not to be affected greatly after a general factor was added into the model. Finally, the marker-variable technique indicated a low percentage (< .7%) of significance change to variable correlations when adjusted for CMV. In sum, the analysis shows that CMV is not a big concern in this study.

4. RESULTS

4.1 Multiple regression results

Table 5 and Table 6 present the result of the multiple regression analysis for the dependent variables strategic performance and financial performance respectively. The relationships are examined in this study using multiple regression and moderated multiple regression (Baron & Kenny, 1986). The moderator variable used in the study is the insider ratio. Before preparing the two-way interaction term used in this study (i.e. chair CEO co-tenure x insider ratio) component variables were centred to reduce multicollinearity (Aiken & West, 1991; Walters et al, 2007). Model 1 in Table 5 with the dependent variable strategic performance and Model 1 in Table 6 with the dependent variable financial performance present the models with the controls only. Table 4 Model 2 and Table 5 Model 2 present the results of the multiple regression analysis for the independent variables and the moderation variable. The results for hypothesis one, two and three are presented in Table 4 Model 3 and Table 5 Model 3 respectively. The parsimonious models are provided in Table 4 Model 4 and Table 5 Model 4 respectively.

Hypothesis 1 states that there is a positive relationship between CEO tenure and organization performance. The bivariate correlations in Table 3 evidence positive significant support for this hypothesis for both strategic performance ($p < .01$) and financial performance ($p < .05$). Model 3 will be used for hypothesis testing and interpretation as this model includes all relationships (Edwards, 2008). CEO tenure is significant in Model 3 for both strategic performance ($p < .05$) and financial performance ($p < .01$). This supports Hypothesis 1. Interestingly, similar results are also found for the parsimonious model for strategic performance ($p < .05$) and financial performance ($p < .05$) respectively. Hypothesis 2 states that there is a positive relationship between chair CEO co-tenure and organization performance however in Table 4 Model 3 and Table 5 Model 6 respectively this hypothesis is not supported. Bivariate correlations in Table 3 show positive significant support for the dependent variable strategic performance ($p > .05$). Finally hypothesis 3 states that chair CEO co-tenure moderates the relationship between the inside director ratio and organization performance such that where chair CEO co-tenure is high and the inside director ratio is low then organization performance is high. In Table 4 Model 3 the moderator term ($p < .01$) is highly significant in a negative relationship with strategic performance in support of the hypothesis. Model 3 is highly significant overall ($p < .01$). Table 5 Model 3 shows the result for the dependent variable perceived financial performance. In step three the moderator term is a significant negative influence ($p < .05$). The model is significant overall ($p < .05$). Hypothesis three is supported.

In order to understand the results of hypothesis three in more detail moderation plots were prepared. Figure 1 plots the significant interaction term for the dependent variable strategic performance. Where the chair CEO co-tenure is high and the inside director ratio is low strategic

performance is at its highest level. Figure 2 plots the significant interaction term for the dependent variable financial performance. Where chair CEO tenure is high and the inside director ratio is low financial performance is at its highest level again. These plots support the theory development on “two great stewards” and hypothesis three. An interesting anomaly is that the high insider ratio moderation plot in Figure 1 and Figure 2 indicates that a high insider ratio helps the company achieve better strategic performance and financial performance levels where there is low chair CEO co-tenure.

Opinions diverge with respect to control variables and whether to include them or not (Woodside, 2013). More importantly, whereas more control variables increase fit, achieving fit does not necessarily mean the model is good, and choosing the model with the best fit is likely to result in poor predictions (Woolridge, 2013). As a result, we estimate the parsimonious model using half the data (50%) and estimate the performance outcome variable in a holdout sample and compare it to the real values. This was done for strategic performance (predictive model: $y_1 = 4.846 + .008 (x_1) + .006 (x_2) + 1.063 (x_3) - .042 (x_4)$) and financial performance (predictive model: $z_1 = 4.376 + .013 (x_1) + .004 (x_2) + 2.669 (x_3) - .043 (x_4)$). Using the observations in the holdout sample the predictions are significantly correlated with the real performance outcomes $r = .35$ ($p < .02$) and $r = .33$ ($p < .03$) offering support that the model has predictive power (Gigerenzer & Brighton, 2009).

4.2.2 Endogeneity bias

The key aim in the study is to find out whether high chair CEO co-tenure causes better performance in the context of a low insider ratio. In an ideal research setting, to test such a

cause and effect proposition, examining the impact of chair CEO co-tenure on organization performance would be done by randomly assigning firms to different co-tenure and insider ratio groups. Performance levels would then be observed across the groups (Angrist & Krueger, 2001). In this survey study, the firms are not randomly selected and this may lead to unreliable estimates (Woolridge, 2013).

A comprehensive approach to explore the severity of possible endogeneity issues is pursued. First, in the design of the study, there is effort to ensure sources of endogeneity problems such as omission of important variables, reverse causality, and measurement error in the variables of interest are minimized (Roberts & Whited, 2011). In terms of missing variables for example, this study is one of the most comprehensive studies to date by studying chair CEO co-tenure and the insider ratio in one theoretical framework. This is an under researched area (Johnson et al.' 1996; Boyd et al., 2011). In terms of reverse causality, many studies support the notion argued in this paper that tenure affects performance through company specific resource accumulation and exploitation (e.g. Coles et al., 2001; Tian et al., 2011). In essence, the inclusion of control variables in a multivariate regression is another attempt to deal with the non-random nature of the treatment effect. What the results do show is that the inclusion of control variables is not affecting the core relationships found in the results, evidencing that the relationships have been investigated in a relatively controlled environment. Finally, several Hausman Wu (Hausman, 1978) tests were conducted to determine the existence of an endogeneity issue, and thus the appropriateness of using multiple regression. Using instrumental variables that can predict chair CEO tenure (but that are not related to the dependent variable), results from the two stage least squares approach show that endogeneity is not a major concern. The null hypothesis that there is

an endogeneity problem is rejected for both performance variables using different sets of instrumental variables. For example, using the previous chair's tenure and some (previously not used) industry dummies as a predictor of current chair CEO co-tenure, endogeneity issues are clearly rejected ($F = .676$, $p = .732$ for strategic performance), and ($F = 1.503$, $p = .23$ for financial performance). A possible weak identification problem is also rejected with first stage F values below 4 ($F = 1.314$ for strategic performance; $F = 1.884$ for strategic performance). Similar patterns were observed across different instrumental variable sets.

5. Discussion and conclusion

5.1 Theoretical implications

Theory development on governance and tenure is often based on United States governance configurations. In these studies there are most frequently limited to zero differences in tenure between the chair and CEO because of the wide practice of duality. In Anglo legal jurisdictions including Australia and the United Kingdom there is much wider practice of separation with the appointment of a different person to the chair and the CEO roles respectively (Kiel and Nicholson, 2003a). This study shows that new governance insights emerge from studying non-United States governance configurations, in this case the Australian configuration has important theoretical and practical implications for chair, CEO and inside director research. This study unpacks the complex relationship between the chair, the CEO and inside directors in an environment of separation and shows how these people working together can deliver better organization performance.

In the first instance this study shows that stewardship theory provides the theoretical underpinning for the argument that CEOs who are good stewards with long tenure will work for organizations that perform strongly over time. This was supported in the results with the financial performance dependent variable for hypothesis 1 in an Anglo separation environment. This result supports the observation of Coles et al. (2001) that the weight of evidence favours the linear relationship for this hypothesis and provides important insight into the context for the next two hypotheses as understanding of the role of inside directors in the organization is developed here. The CEO is often the only or the lead inside director making this insight here relevant, timely and complementary to theory building for hypothesis 2 and hypothesis 3.

The theoretical argument for hypothesis 2 notes the critical work relationship between the chair and the CEO that develops over time (Daily and Dalton, 1997). This chair CEO co-tenure and performance relationship was not supported in the multiple regression results of this study but the hypothesis merits further investigation given the theory presented here and the positive significant bivariate correlation result for the dependent variable strategic performance. There is a sound theoretical case that when “two great stewards” work together in the chair and CEO role for a period of time a synergy can develop in their work relationship through the sharing of crucial power, mentoring, values, information and knowledge exchanges.

The moderated multiple regression result for hypothesis 3 is of most interest given the limited insight into inside directors in the literature (Johnson et al., 1996). The learning from the result for hypothesis 3 is that there is value to the organization in having a strong, capable, experienced chair and CEO duo and a low inside director ratio to achieve the highest levels of strategic

performance and also the highest levels of financial performance. The plots for Figure 1 and Figure 2 respectively reinforce this “two great stewards” theory. There are exceptional strategists out there in the business community working together in chair and CEO roles and companies benefit from their long tenure working together (Kakabadse & Kakabadse, 2007). Another side to this story on reflection could be that the elite chair and CEO duo may benefit from having more access to outside directors and external consultants to challenge their thinking and formulate an effective strategy when the inside director ratio is low. However consistent with Kiel and Nicholson (2003a) we remain sceptical on the value of outside directors on the board after our analysis here shows when inside directors can add value to organization performance.

The theory development also identifies another situation where the general benefit of having “two great stewards” leading to high performance becomes more complex because of the side-effect of having both the CEO and the chair in their role for a longer period of time working with a large number of inside directors. This is the first study that discusses and evidences less than optimal performance outcomes and a risk of being “too comfortable in the saddle” when cohesiveness and harmony of the chair, CEO and inside directors working together become too high. Related to this is the important supporting role inside directors can play at the right time in the history of the tenure structure of the organization, supporting the chair and CEO duo when they lack co-work experience to improve organization performance when the performance alternative with low chair CEO co-tenure and a low insider ratio is not viable (Johnson et al., 1996).

5.2 Practical implications

In relation to the main effects in hypothesis 1 and hypothesis 2 the major practical implication is the benefit to the organization of having the right person in the chair and CEO role respectively and giving those strategy workers the time to formulate and implement a strategy. There also appears to be some evidence that this duo working together for a period of time has a beneficial impact but that the organization will need to invest time in allowing this work relationship to mature. If the chair and CEO are performing well in their respective roles then they should enjoy the support of the investment community and key shareholders to allow them to establish their work relationship and build a track record of performance.

In relation to the interaction effect the plot of the moderated multiple regression results shown in Figure 1 and Figure 2 below do provide telling and slightly different insights into practice from this study that have implications for board structure and human resource succession practices and this will be unpacked now.

Firstly Figure 1 shows that strategic performance is highest where there is high chair CEO co-tenure and a low insider ratio from hypothesis three. This is the optimal board composition and human resource setting for strategic performance and companies need to carefully plan chair and CEO succession to achieve these high levels of resource capability. This human resource setting is hard to acquire with a long path dependency requiring careful planning, sound human performance and organization performance to ensure the chair and CEO working as “two great stewards” have time to mature in their respective roles together. Another practical insight in Figure 1 is the comparatively flat slope of the high insider ratio plot compared with the low insider ratio plot. This indicates where low chair CEO co-tenure occurs due to illness, death,

executive or board sacking, or poaching of executive talent a decision to increase the insider ratio can help the organization achieve sound performance but not optimal performance. Sound but not optimal performance can also be achieved with high chair CEO co-tenure and a high insider ratio but this is evidence of the “too comfortable in the saddle” syndrome; this setting does not achieve the high levels of strategic performance of high chair and CEO co-tenure and a low insider ratio. Lowest levels of strategic performance occur where there is low chair CEO co-tenure and a low insider ratio and should be avoided in board composition and succession planning.

Figure 2 depicts the plot for the dependent variable financial performance in hypothesis three. Financial performance is highest where there is high chair CEO co-tenure and a low insider ratio; this again is the optimal human resource setting for financial performance with a long path dependency. An interesting scenario is where there is high chair CEO co-tenure and a high insider ratio. This is again the “too comfortable in the saddle” scenario where the chair and CEO working together are no longer delivering optimal financial performance but a sound level of financial performance. Sound but not optimal levels of financial performance are achieved also with low chair CEO co-tenure and a high insider ratio; this result is superior to high chair CEO co-tenure and a high insider ratio. This particular scenario is favorable where there is illness, death, executive or board sacking, or poaching of executive talent upsetting board composition and board succession planning. Johnson et al (1996) and Boyd et al. (2011) identified this as an area of future research interest and these practical implications help to address this gap, especially in relation to when the appointment of inside directors is useful to the organization.

5.3 Limitations

A view expressed in the literature is that key informant surveys do require some caution in terms of interpretation, so the key informant design of this research is a limitation of this paper (Bowman & Ambrosini, 1997). However, key informant research surveys are a credible source of data collection for corporate governance research (Kumar, Stern & Anderson, 1993). The sample collected includes 10.8% of the survey database which is acceptable for an upper echelon study. Important checks on the quality of data collection were included in the research, with survey scale and analysis techniques at the upper level of rigor suggested by Hinkin (1995, 1998). The mail out targeted the chair, CEO or executive chair depending on the organization structure of the company targeted for the survey. Questions in the survey were prepared to allow the chair, CEO or executive chair, or the key informant chosen by the organization, to prepare the response. Questions in the survey on the structure and experience of the board of directors were arranged and worded quite differently to the questions on perceived organization performance, reducing risk of common method bias (Podsakoff et al., 2003). Overall the research presented here is a plausible, reliable and valid piece of evidence informed by use of quality received literature.

5.4 Future research

There is evidence in the literature of wide differences in practices of corporate governance between countries. An example of difference is the two-tier board structure in countries such as Germany and Holland compared with the single tier boards of the United Kingdom, the United States and Australia. There is also some discussion of convergence of some corporate governance practices between Anglo-American countries and Asian countries. The core

argument in this study is that the chair and the CEO need time, resources and stability to work together effectively and establish compatible work patterns. An interesting anomaly in the results is that at certain moments in the development of an organization inside directors can make a useful contribution (Fama & Jensen, 1983; Kroll et al, 2007). It is quite likely that the practice of matters discussed in this study on giving the chair and the CEO time and resources to work together does vary from country to country, and between big business and small and medium size enterprises. This study was conducted in Australia and these findings are likely to transfer well to similar legal systems and business cultures (e.g. United Kingdom, Canada). Replication of this study in other legal jurisdictions and business cultures (e.g. China, Japan) or less mature stock exchanges (e.g. Saudi Arabia) may yield interesting results for comparison. A number of leading writers including Hambrick, Verder & Zajac (2008), Hambrick et al. (2008) and Dalton and Dalton (2005) identify a number of interesting organization studies matters for research that apply to corporate governance. These matters include but are not solely limited to how a company board builds group cohesion, teamwork, compatible work patterns, firm knowledge, industry knowledge and networks. This is a wide and substantial future research agenda.

5.5 Conclusion

The learning from this study on the trade-off companies can make on chair CEO co-tenure and the number of inside directors on the board is a useful new insight that connects well with the findings of Kroll et al. (2007). As expected from the theory development here strong chair CEO co-tenure and a low insider ratio delivers optimal strategic and financial performance results; “two great stewards” deliver the highest performance levels. High chair CEO co-tenure and a high insider ratio delivers sound but not optimal performance, giving evidence of the “too

comfortable in the saddle” syndrome when work colleagues lose their competitive edge working together. In an interesting anomaly the high insider ratio moderation plots in Figure 1 and Figure 2 show that a high insider ratio helps the company achieve better strategic performance and financial performance levels where there is low chair CEO co-tenure. In the circumstance of low chair CEO co-tenure then having a high inside director ratio on the board can be a useful human resource approach for the organization that can be controlled by the human resource team with a quicker and easier path dependency.

References

- Agrist, J. and Krueger, A (2001). Instrumental variables and the search for identification: From supply and demand to natural experiments. *Journal of Economic Perspectives*, 15 (4), 69-85.
- Aguilera, R. (2005). Corporate governance and director accountability: an institutional comparative perspective. *British Journal of Management*, 16, s39-s53.
- Aiken, L., & West, S. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park: Sage Publications.
- Australian Stock Exchange Corporate Governance Council (2014) *Governance Principles and Recommendations*, (3rd Edition), Sydney, Australia. <http://www.asx.com.au/regulation/corporate-governance-council.htm>, downloaded 19 May 2014.
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychology research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Baysinger, B., Kosnik, R., & Turk, T. (1991). Effects of board and corporate structure on corporate R & D strategy. *Academy of Management Journal*, 34, 205-214.
- Bowman, C., & Ambrosini, V. (1997). Using single respondents in strategy research. *British Journal of Management*, 8, 119-131.
- Boyd, C. (1996). Ethics and corporate governance: The issues raised by the Cadbury Report in the United Kingdom. *Journal of Business Ethics*, 15, 167-182.
- Boyd, B. Haynes, K.T. and Zona, F. (2011). Dimensions of CEO-board relations. *Journal of Management Studies*, 48, 1892-1923.

- Cadbury, A (1992). *Report of the committee on the financial aspects of corporate governance*, The Committee on the Financial Aspects of Corporate Governance, Gee and Co. Ltd., London, UK.
- Coakes, S.J., & Steed, L.G. (2001). *SPSS: analysis without anguish*. Milton, Qld: John Wiley and Sons.
- Coles, J., Daniel, N., & Naveen, L. (2008). Boards: Does one size fit all? *Journal of Financial Economics*, 87, 329-356.
- Coles, J., McWilliams, V., & Sen, N. (2001). An examination of the relationship of governance mechanisms to performance. *Journal of Management*, 27, 23-50.
- Cortina, J.J. (1993). What is coefficient alpha? *Journal of Applied Psychology*, 78, 98-104.
- Daily, C., & Dalton, D. (1992). The relationship between governance structure and corporate performance in entrepreneurial firms. *Journal of Business Venturing*, 7, 375-386.
- Daily, C., & Dalton, D. (1997). CEO and board chair roles held jointly and separately: Much ado about nothing? *Academy of Management Executive*, 11 (3), 11-20.
- Dalton, C.M., & Dalton D.R. (2005). Boards of directors: Utilizing empirical evidence in developing practical prescriptions, *British Journal of Management*, 16, S91-S97.
- Edwards, J. (2008). Seven deadly myths of testing moderation in organizational research. In C.E. Lance, and R.J. Vandenberg (eds.), *Statistical and methodological myths and urban legends: Received doctrine, verity, and fable in the organizational sciences*, 145-166. New York: Routledge.
- Fama, E., & Jensen, M. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26, 301-325.

- Fitzroy, P., Hulbert, J., & Ghobadian, A. (2012). *Strategic management: The challenge of creating value*. Routledge, Milton Park, UK.
- Ford, J.K., McCallum, R.C., & Tait, M. (1986). The application of exploratory factor analysis in applied psychology: A critical review and analysis. *Personnel Psychology*, 39, 291-314.
- Fuenzalida, D., Mongrut, S., Artega, J., & Erasquin, A. (2013). Good corporate governance: Does it pay in Peru? *Journal of Business Research*, 66, 1759-1770.
- Gigerenzer, G. & Brighton, H. (2009). Homo heuristics: Why biased minds make better inferences. *Topics in Cognitive Science*, 1, 107-143.
- Goodstein, J., & Becker, W. (1991). Turbulence at the top: A new perspective on governance structure changes and strategic change. *Academy of Management Journal*, 34, 306-330.
- Hambrick D., & Fukotomi G. (1991). The seasons of a CEO's tenure. *Academy of Management Review*, 16, 717-742.
- Hambrick, D., Verder, A., & Zajac, E. (2008). New directions in corporate governance research. *Organization Science*, 19, 381-385.
- Hart, S. and Banbury, C. (1994). How strategy making processes can make a difference, *Strategic Management Journal*, 15, 251-269.
- Hausman, J. (1978). Specification tests in Econometrics. *Econometrica*, 46, 1251-1271.
- Heavey, C., Simsek, Z., Roche F., & Kelly A. (2009). Decision comprehensiveness and corporate entrepreneurship: The moderating role of managerial uncertainty preferences and environmental dynamism. *Journal of Management Studies*, 46, 1289-1314.
- Henderson, A., Miller, D., & Hambrick, D. (2006). How quickly do CEOs become obsolete? Industry dynamism, CEO tenure, and company performance. *Strategic Management Journal*, 27, 447-460.

- Higgs, D. (2003). *Review of the role and effectiveness of non-executive directors*, The Department of Trade and Industry, London, UK.
- Hillman, A., Cannella, A. and Paetzold, R. (2000). The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management Studies*, 37 (2), 235-255.
- Hillman, A., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives, *Academy of Management Review*, 28, 383-396.
- Hinkin, T. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, 21, 967-988.
- Hinkin, T. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, 1, 104-121.
- Homburg, C., Krohmer H., & Workman J. (1999). Strategic consensus and performance: The role of strategy type and market-related dynamism. *Strategic Management Journal*, 20, 339-357.
- Johnson, J., Daily, C., & Ellstrand, A. (1996). Board of directors: A review and research agenda, *Journal of Management*, 22, 409-438.
- Johnson, S., Schnatterly, K. and Hill, A. 2013. Board composition and beyond independence: Social capital, human capital, and demographics. *Journal of Management*, 39: 232-262.
- Kakabadse, N., & Kakabadse A. (2007). Chairman of the board: Demographics effects on role pursuit. *Journal of Management Development*, 26, 169-192.
- Kiel, G., & Nicholson, G. (2003a). *Boards that work*. North Ryde, NSW: McGraw-Hill.

- Kiel, G., & Nicholson, G. (2003b). Board composition and corporate performance: how the Australian experience informs contrasting theories of corporate governance. *Corporate Governance: An International Review*, 11 (3), 189-205.
- Kim O., & Mueller, C.W. (1978). *Factor Analysis*. Beverly Hills. CA: Sage.
- Khan, J. (2011). Validation in marketing experiments revisited. *Journal of Business Research*, 64, 687-692.
- Kline, P. (1994). *An easy guide to factor analysis*. London, UK: Routledge.
- Krause, R. and Semadeni, M. (2013). Apprentice, departure, and demotion: An examination of the three types of CEO-Boar Chair separation, *Academy of Management Journal*, 56, 805-826.
- Kroll, M., Walters, B., & Le, S. (2007). The impact of board composition and top management team ownership structure on post-IPO performance in young entrepreneurial firms. *Academy of Management Journal*, 50, 1198-1216.
- Kumar, N., Stern, L., & Anderson, J. 1993. Conducting interorganizational research using key informants. *Academy of Management Journal*, 36, 1633-1651.
- Leenders, M. & Wierenga, B. (2008). The effect of the marketing-R&D interface on new product performance: The critical role of resources and scope. *International Journal of Research in Marketing*, 25, 56-68.
- Lynall, M., Golden, B., & Hillman, A. (2003). Board composition from adolescence to maturity: A multitheoretic view. *Academy of Management Review*, 28, 416-431.
- Miller, D. (1991). Stale in the saddle: CEO tenure and the match between organization and environment. *Management Science*, 37, 34-52.

- Mosakowski, E., & Earley, P. (2000). A selective review of time assumptions in strategy research. *Academy of Management Review*, 25, 796-812.
- Newbert, S. (2008). Value, rareness, competitive advantage, and performance: A conceptual-level empirical investigation of the resource-based view of the firm. *Strategic Management Journal*, 29, 745-768.
- Pfeffer, J. (1972). Size and composition of corporate boards of directors: The organisation and its environment. *Administrative Science Quarterly*, 17, 218-228.
- Richard, P., Devinney, T., Yip, G., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management*, 35, 718-804.
- Roberts, M. & Whited, T. (2011). Endogeneity in empirical corporate finance. *Working Paper No. FR11-29*, University of Rochester, August.
- Podsakoff, P., MacKenzie, S., Lee, J., & Podsakoff, N. (2003). Common method bias in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903.
- Selznick, A. (1949). *TVA and the grass roots*. Berkeley, CA: University of California Press.
- Shen, W. (2003). The dynamics of the CEO-Board relationship: An evolutionary perspective. *Academy of Management Review*, 28, 466-476.
- Shen, W., & Cannella, A. (2002). Revisiting the performance consequences of CEO succession: The impacts of successor type, postsuccession senior executive turnover, and departing CEO tenure. *Academy of Management Journal*, 45, 717-733.
- Simsek, Z., Veiga, J. and Lubatkin, M. (2007). The impact of managerial environmental perceptions on corporate entrepreneurship: Toward's understanding discretionary slack's pivotal role. *Journal of Management Studies*, 44 (8), 1398-1424.

- Simsek, Z., Veiga, J., Lubatkin, M., & Dino, R. (2005). Modeling the multilevel determinants of top management team behavioural integration. *Academy of Management Journal*, 48, 69-84.
- Simsek, Z. (2007). CEO tenure and organizational performance: An intervening model. *Strategic Management Journal*, 28, 653-662.
- Souder, W. (1987). *Managing New Product Innovations*, Lexington, MA: Lexington Press.
- Tabachnick, B.G., & Fidell, L.S. (2001). *Using multivariate statistics* (4th ed.). Needham Heights: Allyn and Bacon.
- Tian, J., Halebian, J. & Rajagopalan, N. (2011) The effects of board human capital and social capital on investor reactions to new CEO selection, *Strategic Management Journal*, 32, 731-747.
- Walters, B., Kroll, M., & Wright, P. (2007) CEO tenure, boards of directors, and acquisition performance. *Journal of Business Research*, 60, 331-338.
- Westphal, J. (1999). Collaboration in the boardroom: Behavioral and performance consequences of CEO-board social ties. *Academy of Management Journal*, 42: 7-24.
- Westphal, J. & Zajac, E. (1995). Who shall govern? CEO/board power, demographic similarity, and new director selection. *Administrative Science Quarterly*, 40, 60-83.
- Withers, M., Hillman, A. & Cannella, A. (2012). A multidisciplinary review of the director selection literature, *Journal of Management*, 38, 243-277.
- Woodside, A. (2013). Moving beyond multiple regression analysis to algorithms: Calling for adoption of a paradigm shift from symmetric to asymmetric thinking in data analysis and crafting theory, *Journal of Business Research*, 66, 463-472.

Woolridge, J. (2013). *Introductory Econometrics: A Modern Approach*, (5th ed.), Mason, OH : South-West.

Wu, S., Levitas, E., & Priem, R. (2005). CEO tenure and company invention under differing levels of technological dynamism. *Academy of Management Journal*, 48, 859-873.

Zahra, S. & Pearce, J. (1989). Board of directors and corporate financial performance: A review and integrative model. *Journal of Management*, 15, 291-334.

Zikmund, W.G. (1997). *Business research methods*. (5th ed.) Fort Worth, TX: Harcourt Brace.

Table 1: Representative studies of CEO tenure, chair CEO co-tenure, the inside director ratio and organization performance

Author	Year	Focus of the Study	Sample Size	Method(s)	Board of Director and/or CEO Tenure Conclusions
Pfeffer	1972	Size and composition of corporate boards	80	Spearman correlation	Deviations from the industry expected inside director-outside director ratio resulted in below industry average performance.
Baysinger, Kosnik and Turk	1991	Influence of board structure and share ownership on research and development (R & D) spending	176	Multiple regression	The percentage of inside directors correlates positively with research and development spending.
Miller	1991	CEO tenure and the match of strategy and structure to the environment	95	Structural equation modelling	The path from CEO tenure to performance was not significant. The path from CEO tenure to performance works through the match of strategy and structure to the environment.
Coles et al.	2001	Governance mechanisms and performance	144	Multiple regression including moderation	CEOs with long tenure and boards comprising insiders jointly correlate with declining market performance.
Shen and Cannella	2002	Performance consequences of CEO succession	228	Hierarchical multiple regression	There is an inverted U-shape relationship between departing CEO tenure and post succession return on assets. Inversion point is when CEO tenure is approximately 14 years.
Wu, Levitas and Priem	2005	CEO tenure and company invention where technological dynamism varies	339	Poisson regression	There is an inverted U-shape relationship between CEO tenure and invention. Shorter tenure CEOs achieve more invention in more dynamic technological environments, long tenure CEOs achieve more invention in more stable environments.

Table 1: Representative studies of CEO tenure, chair CEO co-tenure, the inside director ratio and organization performance (continued)

Author	Year	Focus of the Study	Sample Size	Method(s)	Board of Director and/or CEO Tenure Conclusions
Henderson, Miller and Hambrick	2006	Industry dynamism, CEO tenure and firm performance	326	Generalized estimating equations	In the stable food industry firm performance improved with tenure and declined only for the few CEOs serving more than 10-15 years. In the dynamic computer industry CEOs performed more strongly early in their tenure, then performance declined steadily.
Simsek	2007	CEO tenure and organization performance	465	Structural equation modelling	CEO tenure indirectly influences firm performance through its direct influence on top management team (TMT) risk-taking propensity and pursuit of entrepreneurial initiatives. CEO tenure has a positive linear relationship with TMT risk-taking.
Kakabadse and Kakabadse	2007	Chair	103	In-depth interviews	Chair serves as the long term anchor of the firm. CEO and chair interrelations are critical, especially building trust and respect over time.
Walters et al	2007	CEO tenure, board structure and firm acquisition performance	313	Multiple regression	Where the board is not vigilant CEO tenure has a curvilinear relationship with performance (inverted U-shape). Where the board is vigilant length of CEO tenure correlates positively with performance.
Coles, Daniel and Laveen	2008	Different aspects of corporate governance and performance	144	Multiple regression	A greater number of inside directors compared with outside directors and the greater the period of the CEO in the job, then performance declines. No difference between linear and curvilinear analysis of CEO tenure and performance.
Tian et al.	2011	New CEO selection events and investor reactions	208	Multiple regression	Overlap of board co-working experience correlates positively with cumulative abnormal stock return.

Table 2 Organization performance scale - principal axis factoring with oblique rotation

	1	2
Return on equity	.98	
Return on assets	.98	
Net profit before tax	.92	
Achieving customer retention		.94
Achieving customer satisfaction		.94
Achieving sales growth		.64
Eigenvalues	3.93	1.44
Percentage of variance explained	65.51	23.94

Note: Principal axis factoring with Oblique Rotation delta -0.2. Factor loadings below 0.40 have been suppressed.

Table 3 Means, standard deviation and bivariate correlations

	Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1	Log of size by number employees	1.70	1.05	1										
2	Log of years listed ASX	.78	.42	.36***	1									
3	Board average tenure	50.61	33.54	.28**	.28**	1								
4	Board size	5.89	7.29	.01	.03	.04	1							
5	Chair CEO separation	1.91	.29	-.03	.05	-.21*	.1	1						
6	Chair tenure	46.95	50.57	.15	.21*	.52**	.05	-.04	1					
7	Healthcare industry	.18	.38	-.19*	-.05	.11	-.11	-.04	.17*	1				
8	Materials industry	.30	.46	-.31**	.01	-.04	.01	-.17*	-.07	-.31**	1			
9	CEO tenure	44.33	38.78	.15	.1	.46**	-.01	-.21*	.32***	-.00	.01	1		
10	Chair CEO co-tenure	29.54	43.87	.08	.12	.34**	-.03	.01	.57**	.10	.17*	.33***	1	
11	Inside director ratio	.29	.19	-.08	-.28**	-.06	-.25**	-.07	-.06	-.10	-.10	.08	.03	1
12	Strategic performance	4.82	1.27	.33**	.12	.08	-.04	-.07	.09	-.23**	.00	.23**	.18*	.25**
13	Financial performance	4.13	2.09	.25**	-.09	-.01	-.13+	.19*	-.06	-.21*	-.27**	.17*	-.02	.26**
14	Average ROA 2009-2010	20.56	409.38	.27*	.17+	.12	.12	-.13	.36**	-.26*	-.05	.28*	.18+	.08

	Variable	12	13	14
12	Strategic performance	1		
13	Financial performance	.46**	1	
14	Average ROA 2009-2010	.40**	.22*	1

+ p < .1, *p < .05, **p < .01, *** p < .001 (one-tailed)

Table 4: Regression results CEO tenure, chair CEO co-tenure, the insider ratio and strategic performance

	Model 1 Strategic performance B (s.e.)	Model 2 Strategic performance B (s.e.)	Model 3 Strategic performance B (s.e.)	Model 4 Strategic performance B (s.e.)
<i>Controls</i>				
Constant	5.01 (.19)***	4.94 (.19)***	4.98 (.18)***	4.82 (.12)***
Log of number of employees	.13 (.15)	.18 (.15)	.21 (.14)	
Log of years listed ASX	.17 (.34)	.37 (.33)	.16 (.33)	
Board of director average tenure	.00 (.01)	-.00 (.01)	-.00 (.01)	
Board of director average size	-.01 (.02)	.00 (.02)	.00 (.02)	
Chair and CEO separation	-.36 (.47)	-.25 (.46)	-.30 (.44)	
Chair tenure	.00 (.00)	.00 (.00)	-.00 (.00)	
Materials industry	-.13 (.32)	-.05 (.34)	-.09 (.32)	
Healthcare industry	-.85 (.37)*	-.62 (.37)	-.64 (.36)+	
<i>Independent Variables</i>				
CEO tenure		.01 (.00)	.01 (.00)*	.01 (.00)*
Chair CEO co-tenure		.00 (.00)	.01 (.00)+	.01 (.00)
<i>Moderator Variable</i>		1.76 (.73)*	1.03 (.75)	1.08 (.65)+
<i>Insider ratio</i>				
<i>Moderator Term</i>				
Chair CEO co-tenure x Inside director ratio			-.05 (.02)**	-.04(.02)*
R ²	.32	.46	.52	.17
F	1.33	2.14*	2.72**	4.97
Adjusted R ²	.03	.11	.17	.14
df	8, 92	11, 89	12, 88	4, 96

+ p < .1, *p < .05, **p < .01, *** p < .001

Table 5: Regression results CEO tenure, chair CEO co-tenure, the insider ratio and financial performance

	Model 1 Financial performance B (s.e.)	Model 2 Financial performance B (s.e.)	Model 3 Financial performance B (s.e.)	Model 4 Financial performance B (s.e.)
<i>Controls</i>				
Constant	4.83 (.28)***	4.71 (.29)***	4.76 (.28)***	4.14 (.20)***
Log of number of employees	.24 (.22)	.31 (.23)	.35 (.22)	
Log of years listed ASX	-.85 (.51)	-.62 (.51)	-.91 (.51)+	
Board of director average tenure	.01 (.01)	.00 (.01)	-.00 (.01)	
Board of director average size	-.05 (.03)+	-.04 (.03)	-.04 (.03)	
Chair and CEO separation	1.24 (.71)+	1.51 (.71)*	1.45 (.69)*	
Chair tenure	-.00 (.00)	-.00 (.01)	-.01 (.01)	
Materials industry	-1.34 (.49)**	-1.16 (.52)*	-1.21 (.50)*	
Healthcare industry	-1.66 (.56)**	-1.32 (.58)*	-1.35 (.56)*	
<i>Independent Variables</i>				
CEO tenure		.01 (.01)*	.02 (.01)**	.01 (.01)*
Chair CEO co-tenure		.00 (.01)	.01 (.01)	-.00 (.01)
<i>Moderator Variable</i>				
Insider ratio		1.89 (1.13)+	.87 (1.17)	2.37 (1.11)*
<i>Moderator Term</i>				
Chair CEO co-tenure x Inside director ratio			-.07 (.03)*	-.04 (.03)
R ²	.49	.55	.59	.12
F	3.61**	3.55***	3.93***	3.28*
Adjusted R ²	.17	.22	.26	.08
df	8, 92	11, 89	12, 88	4, 96

+ p < .1, *p < .05, **p < .01, *** p < .001

Figure 1 Hypothesis 3 interaction term plot for the dependent variable strategic performance

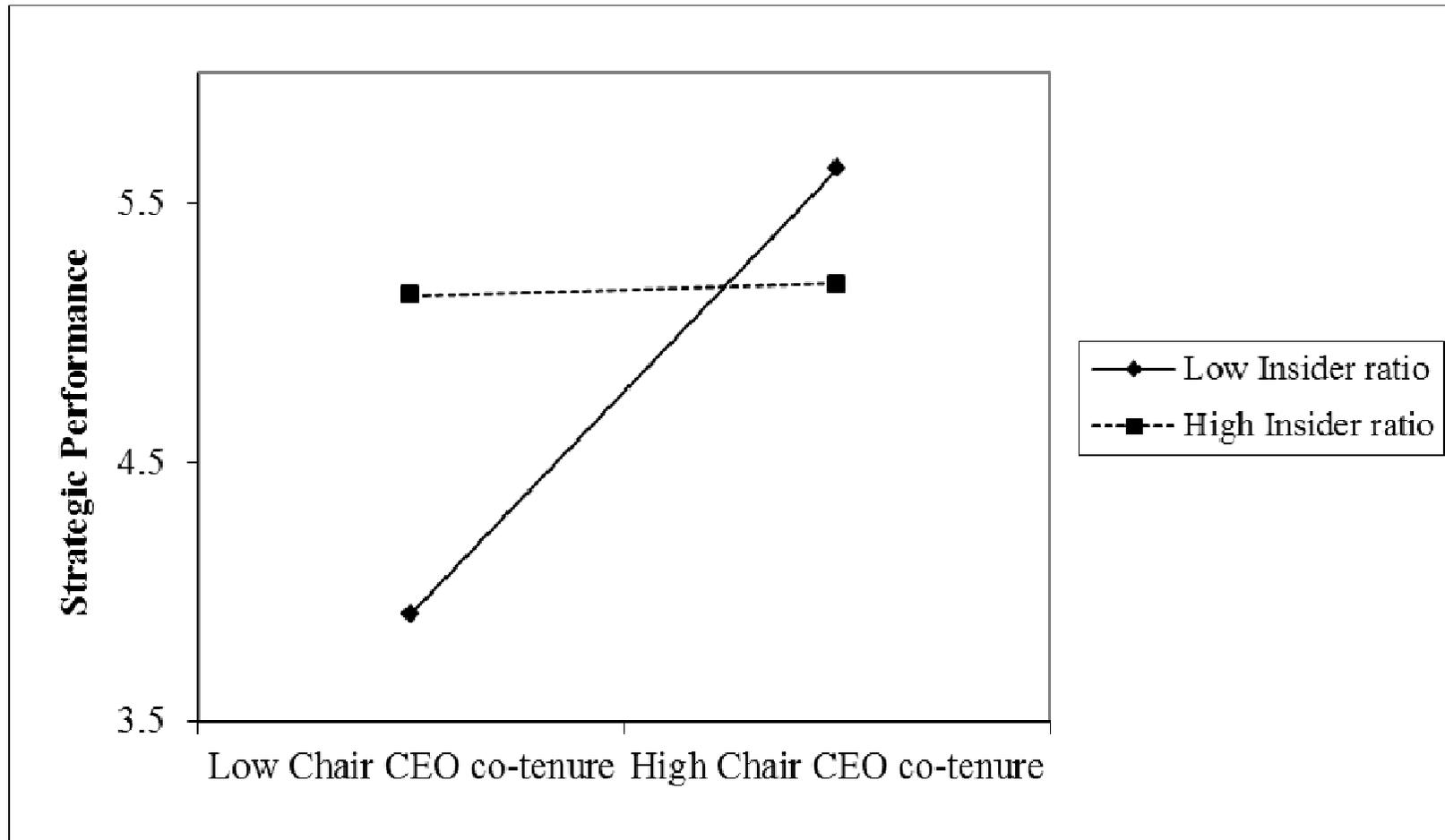
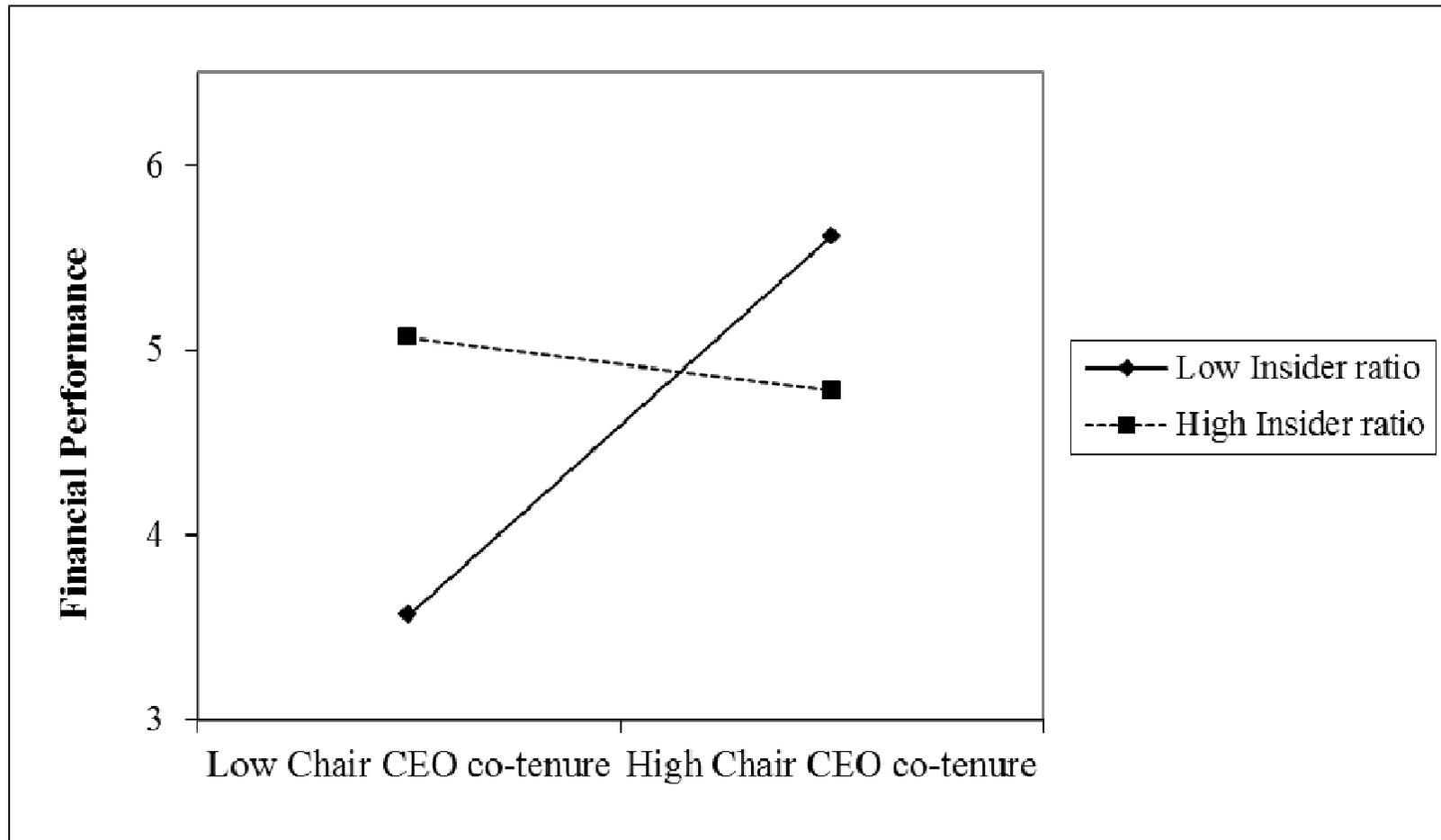


Figure 2 Hypothesis 3 interaction term plot for the dependent variable financial performance



Appendix

Survey

Demographic Information: Industry, Year This Organization Listed on the Australian Stock Exchange, Number of Employees

Governance Information: Chairman years/months in present position, Board of director size, Board of director member average years/months on this board, Number of executive directors on the board, Is the current Chairman and CEO the same person: Yes/No (please circle), CEO years/months in present position, CEO years/months in this organization

Organization Performance: While answering the following questions, please relate to the situation in your company over the last three years. Relative to your competitors with a rating of 1 = Very Poor to 7 = Excellent, how has your company performed with respect to:
Achieving: Sales growth? Customer satisfaction? Customer retention? Financial performance:
Return on equity? Return on assets? Return on sales?