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**CAN DIRECTORS IMPACT PERFORMANCE? A CASE BASED TEST OF THREE
THEORIES OF CORPORATE GOVERNANCE**

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Can Directors Impact Performance? A Case Based Test of Three Theories of Corporate Governance

ABSTRACT

We examine hypothesised links between the board of directors and firm performance as predicted by the three predominant theories in corporate governance research, namely agency theory, stewardship theory and resource dependence theory. By employing a pattern matching analysis of seven cases, we are able to examine the hypothesised link between board demography and firm performance expected under each theory. We find that while each theory can explain a particular case, no single theory explains the general pattern of results. We conclude by endorsing recent calls for a more process-orientated approach to both theory and empirical analysis, if we are to understand how boards add value.

Do boards of directors really have any impact on corporate performance? This question is central to the normative assumption that boards should both contribute to, and be held accountable for, firm performance (Drucker, 1999; NACD, 2000). The belief that directors do have an impact on firm performance is reflected in survey research, which indicates institutional investors are willing to pay a premium for “good governance” (Felton, Hudnut and van Heeckeren, 1996: 170; Investor Relations Business, 2000: 1). This assumption is reflected at virtually all levels of the global business system. Institutional investors worldwide expect boards to contribute to firm performance (Black, 1992; Useem 1993), there are repeated calls to overhaul national systems of corporate governance and make boards more accountable, particularly in developing nations (Johnson, Boone, Breach and Friedman, 2000), and there is widespread public criticism of particular boards (Lavelle, 2002) and even of individual directors (Chernoff, 2000).

There has also been an escalation of research interest in corporate governance and the relationship between the board and firm performance over the past fifteen years (e.g. Zahra and Pearce, 1989; Pettigrew, 1992; Johnson, Daily and Ellstrand, 1996; Bhagat and Black, 1999). Given the importance of the subject and the level of research activity, it would seem reasonable to expect that a clear and demonstrable link between the board and corporate performance has been established. Despite a sustained effort, however, researchers have so far failed to identify this link.

The majority of academic research into the board-performance nexus has adopted Pfeffer's (1983) argument that demographic variables provide parsimonious and objective representations of constructs that are otherwise difficult to collect and validate. As a result, the research agenda has concentrated on large-sample, quantitative studies directly examining the relationship between corporate performance and various board attributes such

as board independence (Bhagat and Black, 1999), leadership structure (Fosberg and Nelson, 1999), board size (Eisenberg, Sundgren and Wells, 1998), and the role of the CEO (Finkelstein and Boyd, 1998; Sanders, 2001). In general, these studies report either small (but conflicting) results or no demonstrable link. Lawrence and Stapledon (1999), for example, found only scattered non-robust correlations between various performance measures and the proportion of independent directors, while Hermalin and Weisbach (1991) found no correlation between board composition and firm performance. Recent summary meta-analytic studies have not aided in clarifying these relationships, with Dalton, Daily, Ellstrand, and Johnson, (1998) finding no relationship between board composition and financial performance, while Rhoades, Rechner and Sundaramurthy (2000) found a small positive relationship.

In a related research stream, academics have examined the relationship between board attributes (such as independence) and various corporate activities thought to impact on shareholder wealth. Results are similar to those examining the direct board-performance relationship, producing equivocal findings (Westphal, 1999). For example, studies analysing the relationship between board structure and various activities such as corporate diversification (Hill and Snell, 1988; Baysinger and Hoskisson, 1990), CEO compensation (Fosberg, 1999), the use of long-term incentive plans (Zajac and Westphal, 1994), the adoption of takeover defences such as poison pills (Brickley, Coles and Terry, 1994; Coles and Hesterly, 2000) or paying of green mail (Kosnik, 1987), and the commission of illegal acts (Kesner, Victor and Lamont, 1986) have produced negative findings, or been unable to identify any correlation at all. In short, there is a long line of research that provides little consensus as to the effect of the board of directors on the performance of the corporation both directly or through corporate activities thought to affect shareholder wealth (Johnson, Daily and Ellstrand, 1996; Coles, McWilliams and Sen, 2001).

More recently, research efforts aimed at examining the processes by which boards carry out their roles, rather than impacts on corporate behaviour or performance directly, have met with more promising results. For instance, Westphal (1999) reported that social ties between the board and CEO typically enhanced the likelihood of independent directors providing advice and counsel to the CEO. In studies with colleagues he also reported that a board's engagement in the strategic decision-making process encourages interlocking directorates (Gulati and Westphal, 1999) and that the strategic context of social network ties between directors, rather than number of interlocks, is an important influence on corporate governance (Carpenter and Westphal, 2001).

In studies investigating the board's involvement in strategy, Golden and Zajac (2001) found that, in the governance of hospitals, board processes and demography significantly affect strategic change. Similarly, Westphal and Fredrickson (2001) found that, while the prior experience of new CEOs predicts corporate strategic change, this might mask the process by which an experienced board can influence strategy development.

A third board role relates to a director providing access to resources such as information (Baysinger and Zardhoohi, 1986). When investigating a board's access to information, Haunschild and Beckman (1998) found the process by which boards gain information about acquisitions varies according to whether the information is derived from a personal or impersonal source.

While these studies contribute significantly to our understanding of how board attributes contribute to board roles, none of them has as yet attempted to link board attributes with corporate performance. By reviewing both the traditional board-performance and more recent board-behaviour studies it becomes apparent that it is necessary to understand the processes that link the board of directors to corporate performance, rather than looking for a parsimonious relationship, (such as simple correlation) between the two (Pettigrew, 1992; Forbes and Milliken

1999). Our objective, therefore, is to build upon the recent literature and attempt to unravel the processes that link board attributes to firm performance and in so doing make two contributions to the research agenda. First, we aim to examine the entire process predicted to link boards to corporate performance by investigating the three theoretical paradigms that dominate corporate governance research, namely agency theory (Jensen and Meckling, 1976; Fama and Jensen, 1983; Eisenhardt, 1989a), stewardship theory (Donaldson, 1990; Donaldson and Davis, 1991; 1994) and resource dependence theory (Zald, 1969; Pfeffer, 1972; 1973; Pfeffer and Salancik, 1978). Second, our methodology allows us to move beyond traditional samples that have concentrated on the top tiers of the for-profit business community and respond to Forbes and Milliken's (1999) call for a greater understanding of the differences between the boards of for-profit companies and boards that work under different ownership structures. In short, we aim to employ a qualitative methodology to shed new light onto the entire board-performance nexus across a variety of corporate structures.

THEORIES OF CORPORATE GOVERNANCE AND PATTERN DEVELOPMENT

Agency theory, stewardship and resource dependence theories have undoubtedly assisted us to understand the role that directors may play in contributing to the performance of the organisations they govern. The operationalisation of these theories, however, has tended to focus on specific demographic variables in isolation making "inferential leaps...from input variables such as board composition to output variables such as board performance" (Pettigrew, 1992: 171). Agency theorists, for example, concentrate on the link(s) between board independence or leadership structure and various operationalisations of firm performance (Jensen and Meckling, 1976; Fama and Jensen, 1983). Conversely, stewardship theory focuses on the proportion of insiders on the board to investigate links with corporate performance (Donaldson, 1990; Donaldson and Davis, 1991). Finally, resource dependence theory analyses the relationship

between director interlocks and various aspects of firm performance or behaviour (Pfeffer and Salancik, 1978).

The difficulty with empirical tests of the prevailing theories that focus on specific input and output variables is that they fail to engage the “superior explanatory power of studies that incorporate the study of process constructs” (Forbes and Milliken, 1999: 490). Therefore, a first step in addressing this limitation is to identify the processes predicted by the three predominant corporate governance theories, instead of “ignoring away the messy concepts and the soft issues, of studying the outcomes but not the processes, and of nomothetically treating firms as black boxes” (Parkhe, 1993: 246). Our objective in the following three sections is to draw on the key concepts of each theory to develop an expected pattern of data to compare against our fieldwork.

Agency Theory

Agency theory is concerned with aligning the interests of owners and managers (Jensen and Meckling, 1976; Stano, 1976; Fama, 1980; Fama and Jensen, 1983) and is based on the premise that there is an inherent conflict between the interests of a firm’s owners and its management (Fama and Jensen, 1983). The recognition of this conflict is documented as far back as Adam Smith (1776), but its salience was not realised until the expansion of capitalism in the late 1800s and early 1900s led to a widespread separation of the ownership and control functions of the firm (Berle and Means, 1932). This meant that managers now possessed superior knowledge and expertise to the firm’s owners and were therefore in a position to pursue self-interested action at the expense of shareholders. Jensen and Meckling (1976), who argued that agency costs are an inevitable part of the management/ownership relationship, formalised this hypothesis into a mathematical model.

The agency dilemma has been elaborated in a string of key articles (e.g. Fama, 1980; Fama and Jensen, 1983; Eisenhardt, 1989a), which identify that management self-interest can be

detected in clear and tangible benefits such as perquisites (large offices, flying first class, etc.) and in less easily identified motivations such as the pursuit of growth at the expense of profit (Stano, 1976). The clear implication for corporate governance is that adequate monitoring mechanisms need to be established to protect shareholders from management's conflict of interest – the so-called “agency costs” of modern capitalism (Fama and Jensen, 1983).

The impact of agency theory on corporate governance research can be observed in the predominance of studies that examine two key questions, namely, how the composition of boards of directors affects firm performance (e.g. Barnhart and Rosenstein, 1998; Wagner, Stimpert and Fubara, 1998) and how the leadership structure of the company (i.e., the duality of the CEO/chairman role) affects corporate performance (e.g. Dalton *et al.*, 1998). As previously outlined, the findings from these studies have been contradictory. Studies of outsider ratios and firm performance, for example, have produced findings ranging from positive correlations (Pearce and Zahra, 1992), to negative (Beatty and Zajac, 1994), to no significant correlation at all (Buchholz and Ribbens, 1994). In summary, extensive research in the area has shown any relationship between composition and/or leadership structure and firm performance to be “inconsistent and conflicting” (Rhoades *et al.*, 2000: 77). Moreover, as research interest has increased, there has been “a growing diversity of results” (Kakabadse *et al.*, 2001: 24).

As to the mechanism by which a board is expected to impact on corporate performance, agency theory suggests that a greater proportion of outside/independent directors - recognising that these two terms are not identical - will be able to monitor any self-interested actions by managers. As a result of the monitoring, there will be less opportunity for managers to pursue self-interest at the expense of owners (lower agency costs) and so shareholders will enjoy greater returns (or increased profits). The agency model is widely accepted in the business community, as can be seen by the widespread adoption of normative guidelines emphasising the need for

independent directors to monitor the activities of the board (Bosch, 1995; NACD, 1996). If agency theory holds, therefore, we would expect to find the following patterns:

Pattern 1(a): *High levels of outsiders on the board are associated with high monitoring of management, which is associated with low agency costs and consequently high corporate performance.*

Alternatively, agency theory suggests that if management interests dominate the board, there will be little opportunity for monitoring of their activities. As a result, we would expect there to be a link between the reduced monitoring and a rise in agency costs. These agency costs (both direct perquisites and indirect agency costs such as unprofitable growth) would result in reduced corporate profits. Hence, we would also anticipate finding that:

Pattern 1(b): *Low levels of outsiders on the board are associated with low monitoring of management, which is associated with high agency costs and low corporate performance.*

Stewardship Theory

In contrast to agency theory, stewardship theory posits that managers are essentially trustworthy individuals and so are good stewards of the resources entrusted to them (Donaldson, 1990; Donaldson and Davis, 1991; 1994). Since inside (or executive) directors spend their working lives in the company they govern, they understand the businesses better than outside directors and so can make superior decisions (Donaldson, 1990; Donaldson and Davis, 1991; 1994). As a result, proponents of stewardship theory contend that superior corporate performance will be linked to a majority of inside directors as they naturally work to maximise profit for shareholders. In the well-known language of motivation (McGregor, 1960), stewardship theory plays a “Theory Y” view of managers to agency’s “Theory X” perspective,

arguing that an overemphasis on monitoring is unnecessary for the board to impact on corporate performance.

Stewardship theory is based on two premises; namely, that managers are naturally trustworthy (Donaldson, 1990; Donaldson and Preston, 1995) and/or that agency costs will be minimised as a matter of course, as senior executives are unlikely to disadvantage shareholders for fear of jeopardising their reputations (Donaldson and Davis, 1994). Further, even if agency costs are a significant concern to a company and monitoring is necessary, stewardship theorists also hypothesise that outside or independent directors will lack the knowledge, time and resources to monitor management effectively (Donaldson and Davis, 1994).

As with agency theory, however, there is no clear empirical evidence to support any claim that a preponderance of inside directors provides superior corporate performance. Since stewardship theory is a mirror of agency theory, it is worth reiterating that the overwhelming evidence both from individual studies (e.g. Kesner *et al.*, 1986; Daily and Dalton, 1992a; 1992b; 1993;) and meta analyses (Dalton *et al.*, 1998; Dalton, Daily, Johnson and Ellstrand, 1999; Rhoades *et al.*, 2000) fails to establish any clear relationship between board composition and/or leadership structure and corporate performance or behaviours.

The processes that link the board of directors to superior firm performance are not made explicit in the stewardship literature, although making superior decisions (that in turn positively affect corporate performance) is regarded as a key issue (Baysinger and Hoskisson, 1990). Access to information and the ability to take a long-term view are seen as key aspects of the decision-making process (Donaldson and Davis, 1994). For example, studies have examined the superior amount and quality of information possessed by inside directors (Baysinger and Hoskisson, 1990), the apparent relationship between investing in the long-term (R&D spending) and inside directors (Baysinger, Kosnik and Turk, 1991) and a more balanced approach to CEO

compensation taken by inside directors (Boyd, 1994). The implication from these findings is that, because inside directors know the company intimately, they have superior access to information and are therefore able to make more informed decisions. If stewardship theory holds, we would expect to find that:

Pattern 2(a): *High levels of inside directorships are associated with high access to information, which leads to high quality decision making and, consequently, high corporate performance.*

Alternatively, we would expect that if there were few inside directors on the board, the board would not be in a position to fully understand the company. It would only have access to information provided by management and would lack the contextual nature to make more informed decisions. Similarly, outside directors would not have the same access to informal knowledge sources within the firm. As a result, decisions made by a board dominated by outsiders would be of a lower quality and this would in turn lead to low firm performance. Therefore, we would expect the following pattern:

Pattern 2(b): *Low levels of inside directorships are associated with low access to information, which leads to poor quality decision making and, consequently, poor corporate performance.*

Resource Dependence Theory

The third major theory of corporate governance is that of resource dependence, which maintains that the board is an essential link between the firm and the essential resources that it needs to maximise performance (Pfeffer, 1973; Pfeffer and Salancik, 1978). Since resource dependence theory draws from both the sociology and management disciplines (Pettigrew, 1992), there is no universally accepted definition of what is an important resource. Sociologists have tended to concentrate on three distinct types of links, namely the links that a board provides to a

nation's business elite (Useem, 1984), access to capital (Mizruchi and Stearns, 1988; Stearns and Mizruchi, 1993) or links to competitors (Mizruchi, 1992; 1996). In each instance, the researchers make credible arguments that the resource in question is a key determinant of success.

Management scholars have tended to take a more generic approach, following the resource-based view (RBV) of the firm (Barney, 1991; Wernerfelt, 1984). Researchers such as Hillman, Canella, and Paetzold, (2000) and Palmer and Barber (2001) view the board as a potentially important resource for the corporation, especially in its links with the external environment. In major reviews of the board-performance literature, the ability of the board to link into significant resources is seen as one of its key roles (Zahra and Pearce, 1989; Korac-Kakabadse, Kakabadse and Kourim, 2001).

While the board's ability to access key resources is seen as important, the exact nature of the resources is variable. The value of a particular resource is seen as contextual, depending on the urgency of the need. Specific resources that have been studied because of their perceived value to the firm include information (Baysinger and Zardkoohi, 1986), finance or capital (Burt, 1983; Mizruchi and Stearns, 1988), links to key suppliers (Banerji and Sambharya, 1996), customers (Frooman, 1999) and other significant stakeholders (Freeman and Evan, 1990).

Despite the fact that the value of a specific resource will change with the context of the firm, there is a clear theoretical argument that a board with a high level of links to the external environment will provide a company with a high level of access to various resources, including those listed above. Thus, if resource dependence theory holds, we would expect to find the following related patterns:

Pattern 3(a): *A high level of links to the external environment is associated with high access to resources and, consequently, high corporate performance.*

Alternatively, we would expect that if a board has few links to the external environment, the firm's access to key resources would be severely limited. This would in turn result in low corporate performance and so we would expect to find the following pattern:

Pattern 3(b): *A low level of links to the external environment is associated with low access to resources, and consequently, low corporate performance.*

The three processes by which boards are expected to impact on corporate performance as predicted by each theory of corporate governance are provided in figure 1.

Insert figure 1 about here

METHODOLOGY

Matching the methodology to the research question is central to any research effort (Punch, 1998; May, 1997). We employed a case-based methodology for two reasons. First, the phenomenon linking boards of directors to corporate performance (if it exists) is not well understood. As the preceding theoretical development outlined, the majority of research has concentrated on the input-output link as opposed to the entire process by which a board may impact on corporate performance (Pettigrew, 1992; Forbes and Milliken, 1999). Second, to test the three different theories of corporate governance, the study required investigation of a significant number of variables across the hypothesised models. In short, the nature of the models (complex and evolving) and the objective of the study (understanding a process) called for a methodology that could analyse rich data within specific contexts. This made an in-depth case study methodology a natural choice (Yin, 1993; 1994).

In particular, we followed Yin (1994) and Eisenhardt (1989b) to build an explanatory case study methodology. Rather than following a traditional grounded theory approach to theory

building (see Glasser and Strauss, 1967), we started with the definition of a research question and broad models for investigation (Eisenhardt, 1989b). Such an approach follows Mintzberg's (1979: 585) advice to always begin with a "well-defined focus – to collect specific kinds of data systematically". The models initially defined our focus and led to the patterns that we have outlined in the previous section. This approach allowed shaping of the data collection protocols and selection of cases to reflect the models under investigation (Yin, 1994).

Sample

The aim of this study was to elucidate the board of directors-firm performance link rather than to quantify the level of value added. Accordingly, we were prepared to trade case breadth for depth (Patton, 1987) and employed purposive or theoretical sampling (Eisenhardt, 1989b; Yin, 1989; Patton, 1990). Despite selection of a limited number of cases, it was possible to replicate outcomes across cases in the study and simultaneously extend theoretical insight through extreme situations or polar types (Pettigrew, 1990). In particular, the combination of cases allowed for literal replication of key case features (e.g. insider-dominated boards versus outsider-dominated boards), as well as theoretical replication of case context (e.g. traditional for-profit motives versus not-for-profit motives, listed versus unlisted companies) across a range of industries (e.g. manufacturing, health services, construction).

An overview of the cases selected is contained in table 1, along with a summary of the sampling logic for each case. A key and deliberate strategy we employed with our sampling was to attempt to test various frameworks across a range of organisational types in Australia. Thus, in line with one of our key research aims and in contrast to many empirical corporate governance studies, the sample was not restricted to for-profit organisations.

Insert table 1 about here

Data Collection

Data collection procedures followed a three-phase process. First, after initial discussions with each organisation, interviews with directors and other key personnel were conducted. All interviews followed a semi-structured process, steered by an interview guide designed to prompt the interviewers to probe on the variables of interest to the study (Lofland, 1971). To encourage full and frank disclosure, interviews were not tape-recorded (Yin, 1994), but instead handwritten notes were kept of individual responses. The interview guide for each subsequent case was updated with theoretical issues or themes that emerged in earlier cases.

Semi-structured interviews were used to maximise the flexibility of the interview and allow tailoring of each interview to the individual (Lofland, 1971; Yin, 1994). To minimise potential bias in interrogation and interpretation, two researchers conducted each interview (Miles and Huberman, 1994). After each interview, the two researchers compared notes and agreed the themes that were discussed.

As the interviews proceeded, the second stage of data collection took place. Each organisation was asked to supply the researchers with a number of key documents which included the last two annual reports of the organisation, the last three sets of board papers (including agenda, board minutes and special items of interest to the board) and any other significant documentation identified in the interviews. Other sources of documentary evidence were also consulted at this stage, including newspaper articles, trade publications, academic journals, competitor reports and industry statistics.

The third stage of data collection overlapped the initial data analysis in order to allow empirical evidence to progressively inform the testing of theory (Eisenhardt, 1989b). The archival, documentary and interview data from stages one and two were analysed and presented

to the board of each organisation to ensure that construct validity had been achieved (Yin, 1994). Following Stoecker (1991), this was presented to the boards in the form of a workshop with the researchers taking part as participant-observers. Participant observation has the distinct advantage of allowing access to groups and events that would otherwise be inaccessible to the researcher (Yin, 1994).

In all cases, the problem of potential bias was recognised and two researchers were assigned to each workshop to ensure independent thinking and recording of observations. Further, particular attention was taken that advocacy did not extend to bias. Thus we were able to follow our “moral obligation to focus enough of our attention on the case to inform those who are living it”, while not confusing “advocacy with bias” (Stoecker, 1991: 100). In addition to providing added insight into the data collected, the workshop ensured that construct validity was achieved, as each board was walked through the research findings and given ample room to clarify and amend the data presented.

Analysis

Since we were interested in finding an association between boards and organisational performance, the unit of analysis selected was the board of each organisation rather than individual directors (Beverland, 2000). The methodological choice of presenting the findings to each board meant that extensive case notes were prepared on each organisation in the study. This extensive intra-case analysis often ran to over 50 pages and provided sufficient material for a full-day workshop.

Each case report discussed the key elements of the organisation’s board that were thought to impact on overall corporate performance. The purpose of the workshops was to gain consensus from each board on essential elements of their corporate governance process and detail

the actions they thought appropriate to improve corporate performance through changes at the board level.

To overcome possible bias resulting from the researchers' involvement in board interactions, the data were initially provided to coders who had not been involved in the interview or workshop processes. The coders were provided with a classification system that allowed them to identify the broad models under investigation within the case data. They were instructed to compare the case data supplied against each of the six patterns under investigation.

In order to carry out a cross-case analysis, we employed a pattern-matching logic (Trochim, 1989) that involves comparing the case-based empirical patterns with several alternative theoretical patterns (Yin, 1994) (see also Campbell's (1975) theory comparison method). Thus we established patterns for the three major theories of corporate governance, namely agency theory, stewardship theory and resource dependence theory as detailed earlier. We then compared our coded empirical findings with these patterns to establish whether existing theories of corporate governance adequately explained the cases we studied. Rather than allowing one theory "to win" (Stoecker, 1991: 101), we concentrated on noting the extent to which each theoretical perspective represented the empirical process.

Variables

The use of pattern matching means that there may be no quantitative or statistical criteria on which to judge the pattern. This can result in interpretive discretion on the part of the researcher. Taking this into account, we followed Yin's (1994) advice, and did not postulate subtle patterns, but rather concentrated on case studies likely to lead to "gross matches or mismatches and in which even an 'eyeballing' technique is sufficiently convincing to draw a conclusion" (Yin, 1994: 110). We also limited classification of each variable to high, medium or low in this process.

Testing of the patterns required the operationalisation of ten variables. We used well-established operationalisations such as percentage of board outsiders, percentage of independent directors, percentage of board insiders and ROA (Dalton *et al.*, 1998) wherever possible. We have based our assessment of a director's independence on the Australian Stock Exchange's criteria, which include that the director is not a substantial shareholder of the company or an officer of a substantial shareholder of the company, has not been employed in an executive capacity by the company or another group member, or been a director after ceasing to hold any such employment within the last three years (ASX Corporate Governance Council, 2003: 20).

In some cases, we needed to use several different data points to operationalise a variable. For instance, in the case of corporate performance we triangulated firm financial performance with participant views of corporate performance. This was particularly important because of the differing motivation of the companies we studied, since a standard measure of financial performance would not, in isolation, be a valid measure of performance (for instance, in a not-for-profit organisation). As discussed previously, the other six variables, namely monitoring, agency costs, access to information, quality of decisions, links with environment and access to resources were defined and coded by the research assistants and researchers. Data were then matched to each of these variables using Miles and Huberman's (1994) tabular approach.

RESULTS

To facilitate the interpretation of the data, each of the following tables presents an overview of the expected data patterns for each theory, a summary of the observed pattern for each case (along with examples of the evidence for each rating) and a generalised conclusion as to whether the case "matched" the pattern based on the data. A potential confound of the data in case two occurred when, during the data collection period, the CEO was replaced. Even though data were collected over a two-month period, we were interested in a cross-sectional analysis of the

patterns, not their evolution over time. Therefore, to disentangle this effect the data were analysed for both the first and second CEO. Hence, case two has two sets of results.

Agency theory patterns. Agency theory argues for a preponderance of outside directors to control for management misuse of shareholder funds (Jensen and Meckling, 1976). These outside directors are expected to monitor management actions (Fama and Jensen, 1983) to curtail a growth focus (at the expense of firm profitability) and reduce management perquisites (Jensen and Meckling, 1976; Stano, 1976; Fama and Jensen, 1983).

A first point to note is that in using a more stringent test of director independence such as that of the ASX Corporate Governance Council (2003), rather than the less strict outside director categorisation, the director classification variable changes markedly for four of the seven cases. Indeed three of the companies have a high proportion of outside directors and only a low proportion of independent directors. A fourth company had a high proportion of outside directors, but only a medium proportion of independent directors.

As table 2A shows, only two of the cases we studied followed a predicted agency theory pattern. Case four had a pattern of an insider-dominated board leading to a lack of monitoring and increased agency costs with poor performance. In contrast, outsiders dominated all other boards. Of these organisations, case six followed the predicted pattern 1A. While not recorded in the summary tables, there were significant proportions of owners or owner nominees sitting on the boards in cases two, three, five and seven and an owner representative sat on the board of case one. In cases one and two, we found significant evidence of agency costs and a general lack of monitoring even though a preponderance of outsiders sat on these boards. This was an unanticipated result, especially as these organisations were responsible for budgets in the hundreds of millions of dollars.

Insert table 2A about here

Cases two, three and five demonstrate partial matches. Case two demonstrated that agency costs could decline with a different management team, irrespective of the monitoring of the board. In this case the same board presided over two management teams, each with different levels of agency costs. In case three, the company in question was under significant financial stress during the study. This case demonstrated that in the absence of fraud, a lack of resources due to poor performance is likely to provide little scope for agency costs to develop, irrespective of the board's monitoring. Case five showed that, even with reasonable monitoring of the organisation, agency costs could develop. In particular, in this case the board perceived that there were intangible agency costs. The key intangible in case five related to a perceived deficiency in the work ethic displayed by senior management, which could not reasonably be monitored.

Insert table 2B about here

In contrast, when the stricter definition of independence is used for board composition, three of the organisations conform to the patterns predicted by agency theory as shown in Table 2B. Cases four and six had the same classification of the board composition under both the outside and independence criteria. However, case one, while having a high proportion of outside directors, had only a low proportion of independent directors. With this change in board classification the case changes from no match to a match with pattern 1b – low independence associated with low monitoring, high agency costs and low performance. The situation in case two also changes, as agency theory now provides a partial explanation of performance prior to the CEO change, but does not present an explanation after the CEO change.

Table 2C provides a summary of the agency theory findings using both the definitions of outside and independent directors. A first observation is that there can be a decided difference in the classification of board composition depending on whether the definition of outsider or independent is used. For case three, this difference in definition is extreme, all the board are outsiders, but none is independent. In case two the change is almost as dramatic. A second observation is that this change in definition can lead to different conclusions, in some cases, concerning the prevalence of agency effects. For case one, the low proportion of independents, as distinct from outsiders, offers an explanation as to why the high agency costs and low performance may have occurred, as several of the directors had had a long-term and high emotional involvement with the organisation, leading them to identify strongly with management's plans for growth and diversification. In summary, agency theory does appear to provide a partial explanation, in some circumstances, of the board-performance link.

Insert table 2C about here

Stewardship theory patterns. From a stewardship perspective, we would expect to see significantly different patterns emerge. More particularly, we would expect to see that a high proportion of inside directors would lead to greater access to information, superior decision making and therefore higher firm performance (Donaldson, 1990; Donaldson and Davis, 1991).

As table 3 reveals, only two cases we examined conformed to the expected patterns. Importantly, the insider-dominated board (case 4) did follow a segment of the pattern (high insider-proportion and high access to information), but this did not translate into quality decision making and improved corporate performance. In point of fact, this organisation was the worst performing of the seven cases.

With the two exceptions (cases one and seven), there was no linkage between a low level of inside directors and low access to information in any case. Highlighting this point, in case two the same board was confronted with improved levels of information after a change in the senior management of the organisation. This did appear to have a positive impact on the quality of decisions that the board made and consequent performance of the company, leading to a partial match with one of the anticipated patterns. It is, however, hard to disentangle (in this case) the relationship between board decisions and corporate performance given that there was a simultaneous change in management (i.e., we cannot disentangle the impact of the change of management on performance as opposed to the effect of board decisions on performance). Interestingly, the change in management highlighted that stewardship theory's proposed linkage between insiders on the board and access to information is not necessarily an essential relationship because, although no more insiders were appointed to the board, the information flow improved markedly.

In case five, there was a partial match since the board appeared to have good access to information, made quality decisions, and there was a resulting high level of corporate performance. This pattern matched three of the four predicted variable linkages. However, it appeared to run against the stewardship argument that there is necessarily a need for a large proportion of insiders on the board to ensure access to information, quality of decisions, and corporate performance and so could only be considered a partial match.

Insert table 3 about here

For cases one and seven, which record a match to pattern 2b and consequently support the pattern predicted by stewardship theory, it is difficult, given the information uncovered in the case research, to support the claim that high access to information, quality decision making and

subsequent strong performance would have occurred had there been a greater number of insiders on the board. As noted above, both organisations, while high on outside directors were moderate to low on independent directors. In both cases several of the outside directors had long and in-depth experience with the organisations, approaching the level of understanding expected of inside directors. However, this knowledge base and a high level of involvement were not sufficient to provide either access to information or quality of decision making to improve performance in the short term. In short, it appears that stewardship theory, like agency theory, offers us a partial glimpse of the board-performance relationship rather than a complete picture of the board-performance nexus.

Resource dependence theory patterns. The final theory for pattern matching analysis is that of resource dependence, which proposes that the board plays a crucial role in linking the organisation to necessary resources (Zald, 1969; Pfeffer, 1972; 1973; Pfeffer and Salancik, 1978). Thus, it is expected that boards that have significant links to fundamentally important constituencies and/or resources will contribute significantly to firm performance (Zald, 1969; Pfeffer, 1972; 1973; Pfeffer and Salancik, 1978).

As table 4 highlights, the test of the resource dependence patterns revealed no consistency across the cases. There was no match in cases one, two, four, five and six, while the only match to a pattern was provided by case three where directors had few external linkages, provided very little (if any) resources to the company and the organisation was under considerable financial strain. Interestingly, case five, while not strong enough to provide a pattern match, did show several links to two key stakeholder groups. Although these could not be considered high-level linkages, those that did exist provided access to information that assisted that organisation to perform well.

Case seven provides a partial match to pattern 3a, which associates low links with the environment and low access to resources with poor performance. Five of the eight directors are farmers who have strong links with other farmer suppliers. However, they have few links with either the general environment or key customers. Fieldwork established that much of the attention of the organisation had been focused on farmer supplier issues, to the detriment of more general business issues, which in turn was one cause of the organisation's low performance. This could be argued to be a situation where some links to the environment had lead to a misdirection of governance and corporate effort, while a lack of other links had lead to the outcomes predicted by resource dependence theory.

A key limitation to this particular analysis is that the research team needed to conceptualise the key resources of each case for classification purposes, leading to concern over potential bias. However, both researchers and coders agreed the final classification system, thus minimising the chance of bias. Further, as indicated earlier, participants reviewed the results to improve construct validity.

Insert table 4 about here

Synopsis of hypothesised patterns. Overall the data revealed mixed findings when compared to the hypothesised patterns developed from existing theories. There was no clear pattern supporting any one of the predominant theories. In fact, each of the three competing theories resulted in a clear match with at least one of the cases studied. As indicated in table 5, cases four and six exhibited behaviours which we expect from agency theory. Cases one and seven exhibit the pattern expected from stewardship theory. Similarly, case three revealed a pattern consistent with resource dependence theory. In addition, there were partial pattern matches with the theories across the cases. Interestingly, case two did not appear to match any of

the predominant theories of corporate governance and case five partially matched two of the expected patterns. Finally, case one shows patterns which are both consistent with agency theory, if using the proportion of independent directors to represent the external focus of the board and stewardship theory – a result not unexpected, as one theory is in many respects the obverse of the other. Yet, as shown in cases four and six, the existence of an agency theory pattern does not necessarily produce the obverse pattern to support stewardship given the different intervening variables expected under the two theories. In summary, our research indicated that each of the three theories that dominate the corporate governance literature held in specific cases, but that none of the theories could account for the general pattern of results across all, or even a majority, of cases.

Insert table 5 about here

DISCUSSION

The objective of our research was to extend current understanding of the processes, constructs, and relationships linking the board of directors to firm performance. In particular, we wanted to move beyond the conceptual boxes of traditional inquiry (Daft and Lewin, 1996) by “reaching into areas of ambiguity ... rather than examining relationships among traditional variables” (Parkhe, 1993: 229). This study is intended as a direct response to the calls for a more process-oriented approach to governance research (Pettigrew, 1992; Forbes and Milliken, 1999).

While some patterns predicted by the three theories did emerge, of greater significance were the patterns that did not emerge. In the case of agency theory, for example, our findings have failed to identify a positive relationship between a preponderance of outside directors and a reduction in agency costs. For instance, in case two there were clear signs of agency costs, particularly under the first management team. Under traditional agency theory, it would be

expected that this would be consistent with strong management representation on the board (Hermalin and Weisbach, 2000). The facts reveal a diametrically opposite situation. Of the eight board members, all but one were also owners of the firm. This is a clear indication that a preponderance of outside directorships (and even ownership representation) is not a sufficient condition to dispel agency costs.

Another difficulty with empirical tests of agency theory is that they assume a clear and observable relationship between agency costs and firm financial performance (Agrawal and Knoeber, 1996; Coles *et al.*, 2001). As Stano (1976) indicates, agency theory affects the profit maximisation motive of a corporation, not necessarily the absolute profit level. Thus, firms can be highly profitable when agency costs are present. This view is supported by case five where, despite being a highly profitable operation, the board considered significant agency costs were being incurred.

The final concern with agency theory is that, by seeking to establish the monitoring of management as the central role of the board, it discounts the significant impact of other board roles that can improve corporate performance. Johnson *et al.* (1996) point out that there are in fact three roles of the board, monitoring, access to resources and the service or advising role. While many researchers view monitoring as an essential board role (e.g. Zahra and Pearce, 1989; Bainbridge, 1993; Daily and Schwenk, 1996), our results indicate that high monitoring alone is no guarantee of corporate performance. By focusing on the monitoring role, agency theory appears to discount the impact of other board functions, such as advising management and providing access to valuable resources. Lorsch and MacIver (1989: 64-65), for example, highlight that most boards feel their main role is to advise management. Similarly, Higgins and Gulati, (2000) demonstrate that directors may play a major role in providing access to significant resources, such as raising capital. In general, it is evident that agency theory appears to provide

us with a specific narrow element of the board-performance link rather than a holistic view of the entire mechanism at work.

Turning to stewardship theory, we found no clear evidence to support any claim that a preponderance of inside directors leads to superior corporate performance. Although other studies have found significant relationships between inside directors and returns to investors (Kesner, 1987) and firm performance (Vance, 1978), our research supports the overwhelming evidence both from individual studies (e.g. Kesner *et al.*, 1986; Daily and Dalton 1992a; 1992b; 1993) and meta-analyses (Dalton *et al.*, 1998; 1999) that fail to establish any clear relationship between the proportion of inside directors and corporate performance.

In case four, inside directors dominated the organisation that destroyed the greatest amount of shareholder value in absolute terms. Despite a predominance of inside directors with significant access to information, this organisation demonstrated what could only be considered poor performance over a five-year period. Thus, the pattern expected of improved performance resulting from high access to information and better decision making was certainly not evident. Similarly, in case two, we observed a significant turnaround in the fortunes of the organisation with the same board at the helm. This indicates that, under certain conditions, the interaction between the board and management can have a significant impact on performance, with no change in board structure and/or composition.

A key concern with stewardship theory is that it fails to account for those instances where managers do not act as good stewards, as demonstrated in cases four and two. There is ample evidence to suggest that managers can and do exploit their position to the detriment of shareholders (e.g. Burrough and Helyar, 1990). Stewardship theory also ignores other benefits that outside directors can bring to a firm, in particular, the independent advice that directors can offer (Charan, 1998), and the significant role that they can play in facilitating access to much-

needed resources (e.g. Mizruchi, 1992; 1996). It would appear that stewardship theory, like agency theory, offers a glimpse of one aspect of the board-performance relationship as opposed to a holistic view.

In the case of resource dependence theory, our results again failed to confirm the expected relationship between linkages to the external environment and high firm performance. Analysis of cases two and three reveals that high levels of external links are no guarantee of access to resources, even when those links are to people or organisations that could prove advantageous to the firm. Case seven is also of interest as it demonstrates that strong links to one stakeholder group by a majority of board members can lead to a loss of focus on other key stakeholder groups to the detriment of the organisation.

Although our evidence is somewhat equivocal, several cases did demonstrate that boards view their linkages to the external environment as important. In case one, both directors and management commented on the importance of linkages to the government. These data were triangulated with evidence of the organisation's activities that included establishing a board level task force to improve this aspect of board activity. Similarly, in case two, directors commented on the importance of linkages to suppliers, while directors in case four commented that directors with general business linkages could provide the company with improved market prospects. In case three, however, there was no clear evidence of any links that would enable the firm to access much-needed resources.

We contend that, as with agency and stewardship theories, the resource dependence perspective concentrates on a single aspect of a board's role, namely, engaging with the external environment to access critical resources. This view ignores alternative activities of the board such as providing advice (Lorsch and MacIver, 1989; Westphal, 1999), monitoring (Fama, 1980; Bainbridge, 1993; Johnson, *et al.*, 1996) and strategising (Lorsch and MacIver, 1989; Kesner and

Johnson, 1990). Resource dependence theory focuses on investigating a single segment of the corporate governance mechanism to investigate how boards contribute to firm performance.

Implications for theory

There are three key theoretical contributions that can be drawn from our research. First, it has confirmed that the process by which a board impacts on firm performance is necessarily a complex one (Pettigrew, 1992). In fact, it appears that the relationship is substantially more varied and complex than any single governance theory examined is adequate to describe. While the positive match of all theories to at least one case studied demonstrates that each theory can inform our understanding of corporate performance, future model development of board-performance effects will need to avoid simplistic explanations of the processes involved (Forbes and Milliken, 1999). While the links between board inputs (such as board composition and director attributes) and board roles were described over twenty years ago (Mace, 1971; Lorsch and MacIver, 1989), theories to explain them are only now being developed and investigated (Forbes and Milliken, 1999; Westphal, 1999; Golden and Zajac, 2001). It is arguable that the “hard” data sources used so often in past governance research are unlikely to capture the “soft” nature of many of these relationships (Parkhe, 1993). By studying the process variables (Pettigrew, 1992) and investigating what boards do, we may develop a more integrative model of all of the elements discussed in existing theories (Zahra and Pearce, 1989).

Additionally, it may be necessary to examine the contextual nature of board-performance links. If, as Lorsch and MacIver (1989) report, directors are the “firefighters” of an organisation, then it is likely that any board effect on firm performance will be highly dependent on context-specific situations such as stage of organisational life cycle (Johnson, 1997), industry homogeneity and regulation (Palia, 2000), competitive conditions (Carpenter and Westphal, 2001), technology changes (Castanias and Helfat, 2001) and general industry conditions

(Finkelstein and Hambrick, 1996). Our own research supports the view that different contexts have the potential to affect the board-performance link.

Another consideration that arises from our research is that, as Golden and Zajac (2001) highlight, the relationships between the variables themselves may be non-linear. For instance, the pattern hypothesised in stewardship theory calls for a linear relationship between the percentage of insiders on the board and the quality of information with which the board is confronted. Instead, it is feasible the relationship may be log-linear, in that there is decreasing marginal information benefit to each additional insider serving on the board. This complexity may be confounded in the linkage between information and quality of decisions, particularly if there is a groupthink, an effect of having too many inside directors on a board. Unfortunately, our methodology meant that our measures were not sensitive enough to test for these non-linear effects. We would point out, though, that theoretical models must be robust enough to reflect both the complexity of the relationship as well as explain the relationships between the different variables.

The second implication for theory involves an effect for which we did not test explicitly, namely the mediating or moderating effect of management between the board and corporate performance. Our results suggest that the effectiveness of a management team (and how that team interacts with the board) is a fundamental confound in any board-performance relationship. For instance, in case two the same board presided over both medium and high corporate performance. The key change that occurred was at the management level. In particular, management introduced new planning and reporting regimes that allowed the board to improve its decision making significantly. In case seven, while organisational performance was low at the time of the case study, a new CEO had been appointed approximately 12 months prior to the field work. To some extent, some of the poor performance could be attributed to this new CEO

finding and exposing problems that had been hidden by his predecessor. This has led to a “wake up call” to the board which, together with the actions of the new CEO, may reverse the poor performance.

While a strong CEO and management team appear to be essential to superior corporate performance, Daily and Schwenk (1996) point out that, if the role of the board is to monitor and discipline CEOs to ensure that they are acting in the best interests of shareholders, this role may be much more difficult to fulfil in situations where managerial discretion is high. Clearly, the relationship between the board and managerial discretion is a vexed one, and remains relatively unexplored in the academic literature (Finkelstein and Boyd, 1998). Any corporate governance model attempting to link the board to corporate performance will need to explain the role of management in the relationship, or alternatively to control for any management effect.

Finally, an element of our research that was not examined in detail was the measurement of firm performance. The majority of cases we studied considered non-financial outcomes at least as important as the financial outcomes. In case one, for example, fulfilling the organisation’s mission was seen as a key indicator of performance. In case two, member satisfaction was seen as critical to the firm’s success and in case five, maintaining close links with government was seen as an imperative. While our data indicated that there is a close association between financial and non-financial firm performance, the data also confirmed that the financial and non-financial results are not the same, and any misspecification of the dependent variable can have a substantial bearing on any future findings. This point is often neglected in traditional quantitative research studies, but given the growing acceptance of multiple-objective frameworks for corporate management, such as the Balanced Scorecard (Kaplan and Norton, 1992) and triple bottom line reporting (Elkington, 1997), it is something that researchers need to consider.

Implications for Practice

This study has the potential to challenge normative advice on the practice of good governance, particularly in relation to board independence. The current emphasis on the need for independent boards (Boeker, 1992; Zajac and Westphal, 1996) to monitor management may need to be tempered in order to reflect the particular circumstances facing an organisation. Our research has established that monitoring of management to reduce agency costs is only one of the roles that a board should pursue to improve corporate performance. The board will also need to carry out advising (Lorsch and MacIver, 1989; Johnson *et al.*, 1996; Dalton *et al.*, 1999), strategising (Tricker, 1984; Black 1992) and access to resources roles (Stearns and Mizruchi, 1993; Mizruchi and Stearns, 1994). Board composition that focuses solely on independence may lead to a trade-off in these other areas (Westphal, 1999).

Since there does not appear to be a board function or governance mechanism universally applicable to all boards, individual boards need to develop and agree a role set that will contribute to the performance of the organisation. Thus, it is clearly a priority for boards to understand the needs of the organisation and then seek to recruit directors based on those needs. This means that, to source appropriate skills, it may be more appropriate to appoint inside directors in some circumstances, rather than blindly follow normative advice to recruit outside directors (Turnbull, 2001).

Related to the need for a board to match new directors to board requirements is the potential confound of board roles due to the firm's circumstances such as operating environment and life cycle stage (Johnson, 1997). For instance, in a highly regulated industry such as utilities, there would most likely be great benefit in boards that could provide access to the politicians who control the utility's operating environment. It is also likely that as the business operating environment and the firm itself evolves, the role emphasis of the board will also vary. This leads

us to conclude that a board will need to conduct a periodic analysis of its operating environment to ensure that it has the right combination of director skills.

Finally, the board will need to ensure that it is acting to fulfil the wishes of its owners or members. Our research indicates that significant performance deficiencies can occur as a result of the board not fully understanding what a company's owners or members require of it. A clear specification of what constitutes corporate performance is the starting point. In the case of listed for-profit entities, this has been thought of as a relatively simple exercise because business profitability is the key issue. However, the rising interest of investors in ethical investments (Mackenzie and Lewis, 1999) indicates that the profit motive is not the only consideration guiding the actions of investors. Many companies are now attuned to these investor concerns, as demonstrated by the corporate objectives of firms such as The Body Shop (2002) and Ben and Jerry's (2002).

In the case of not-for-profit and government-owned corporations, our research has indicated the importance of an explicit statement of organisational goals and values if the board is to monitor its performance in relation to owner or member expectations. Performance in not-for-profit and government-owned corporations can be measured against such goals as fulfilling the organisation's mission, success in mobilising resources and staff effectiveness (Sawhill and Williamson, 2001).

Limitations

Although this study has advanced our understanding of corporate governance processes, we recognise there are several limitations to our approach. First, while the qualitative methodology employed means that the results themselves provide theoretical generalisation (Yin, 1994) (in that they are evidence that agency, stewardship and resource dependence theories are not universally applicable) and the careful selection of cases ensures replication across many dimensions (e.g.

for-profit motive, outsider dominated boards and high performing/low performing organisations) the number of variables under study meant that some dimensions (e.g. insider-dominated boards) were not replicated. Clearly, for these results to be generalisable, a further quantitative test of the processes in these theories would be helpful.

A second area of concern involves the timing of the measurement of the variables under study. A recent study of papers published in the most prestigious management journals reveals that the majority of researchers fail to specify the timing expected between cause and effect variables (Mitchell and James, 2001). Our study was more robust than a traditional cross-sectional analysis and many longitudinal analyses in that the sequence of variables was specified as part of the study. Since the data were collected over a significant period (3-18 months), it allowed for the sequence of events to be observed and the relatively short time frame (3-18 months) meant that potential confounds of the performance effects could be minimised. We do, however, recognise that the study may have benefited from a tighter specification of the time lags between the variables.

We also recognise that our frame of reference was cross-sectional in that we were looking for evidence of patterns at a particular moment as opposed to observing the changing levels of the variables over time and the relationships between them. This means our study ignored the dynamic nature of the board processes. For instance, it is arguable that in case two there was a rise in agency costs over time under the first manager. This led to the board replacing the CEO and a consequent reduction in agency costs. This kind of real-world dynamic, as illustrated in figure 1, is only possible through the use of longitudinal data, as a snapshot of data will not reveal this dynamic relationship.

Finally, the third key limitation of our study was that the linkage between boards and corporate performance may be due to a context that was not taken into account in this study, for

example, organisation type, industry type or lifecycle stage of the firm (Johnson, 1997; Coles, McWilliams and Sen, 2001). Any one of these factors may impact on the applicability of each the theories under investigation and would require a more careful elaboration of each theory and specification of the expected patterns. For instance, Higgins and Gulati (2000) highlight the importance of the resource dependence perspective to start-up firms. Currently, however, there is little theoretical guidance on these issues.

Implications for future research

While it may be possible to extend research along the existing lines of agency, stewardship and resource dependence theory, our finding that there is no one universal theory applicable to the board-performance relationship indicates that future research into these three models would need to concentrate on isolating the conditions necessary for each particular theory to hold. A more productive research agenda may be to develop theoretical models along different, more integrative lines if we are to develop a holistic view of the board of directors-firm performance link.

Our research also indicates that understanding the intervening variables that influence the board of directors-firm performance relationship is critical to developing a more integrative approach. For example, extending current research beyond the advice-giving role of the board (Westphal, 1999) to examine how the relationship between the board and the CEO impacts the board-performance relationship would appear to be an important area for investigation. Another important question is whether differences in the human capital of boards are related to differences in strategic action and performance (Castanias and Helfat, 2001). Similarly, is there any impact on firm performance if a board exhibits the traits of groupthink? These and many other questions are fertile grounds for enquiry when investigating the board-performance link.

We also join with Pettigrew (1992) and Forbes and Milliken (1999) to encourage research activities that will identify, measure and test for board process. The predominant research methodologies have consistently overlooked process issues and it is only by addressing matters of process that we can hope to demonstrate the board-performance link. A new research stream may follow the current trend to study large-scale data sources with new and innovative methodologies (e.g. Golden and Zajac, 2001), but we would also suggest the use of more qualitative data methodologies (Pettigrew, 1992) to investigate board process.

In conclusion, we believe that this study demonstrates that the case study methodology can provide us with richer forms of data and new tools for analysis to shed light on the complex processes involved in the board-corporate performance relationship. We see this study as an extension of the quantitative research agenda into the board-performance nexus and one that highlights the need to develop a more holistic and complex theory linking the board of directors to corporate performance.

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Figure 1: Processes predicted by three theories of corporate governance and associated expected data patterns

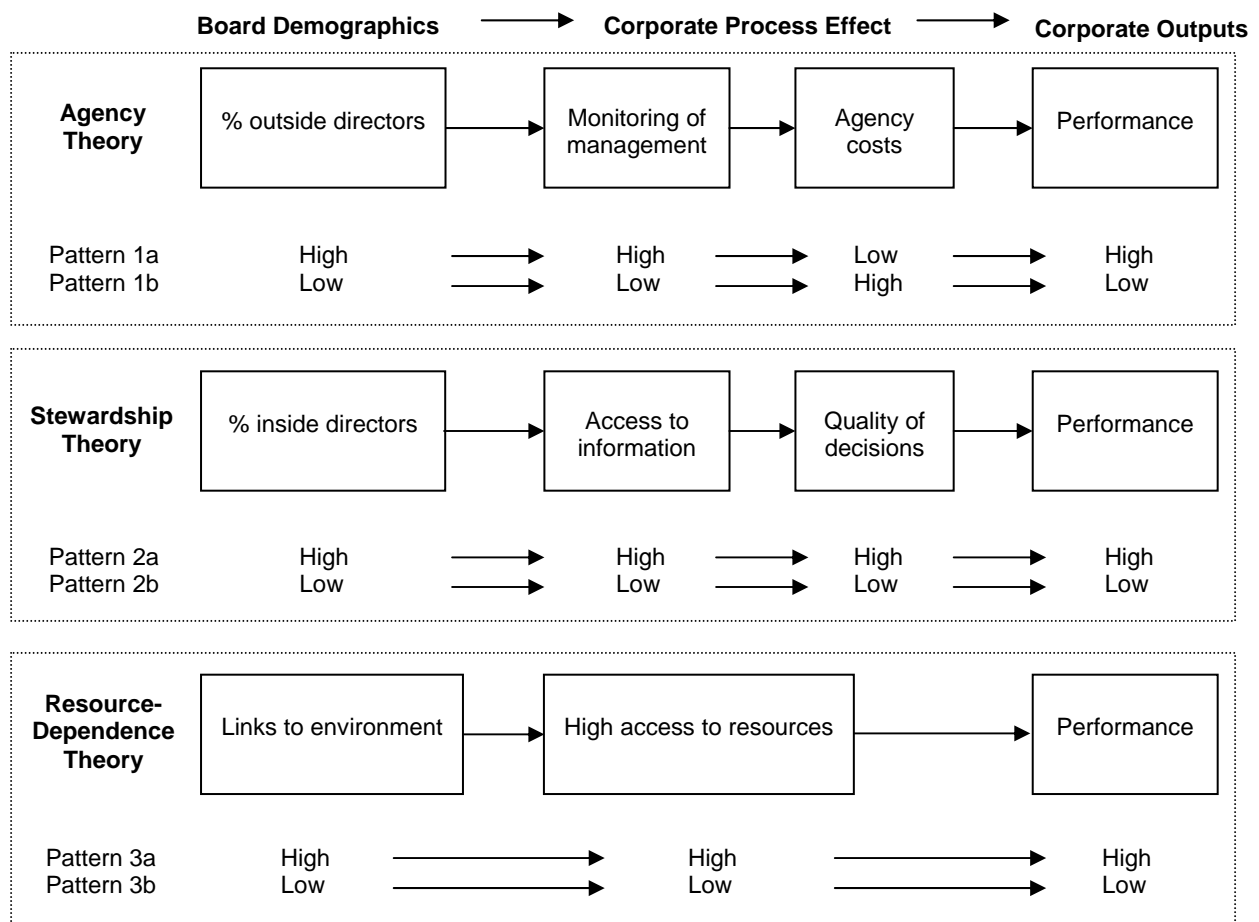


Table 1: Summary of cases studied and sampling logic

Case	Size ^a	% Outsiders	% Independent	Size of board	Motive	Scope	Owner or owner nominee on board	Key sampling logic
1	Medium	90%	30%	10	Not for profit	Regional	10%	<ul style="list-style-type: none"> • Outsider dominated • Moderate gray directors • Not for profit
2	Large	100%	12.5%	8	For profit	National	87.5%	<ul style="list-style-type: none"> • Large size • Outsider dominated • For profit • High ownership representation
3	Small	100%	0%	4	For profit	Regional	50%	<ul style="list-style-type: none"> • Small size • Outsider dominated • For profit
4	Large	25%	12.5%	8	For profit	National	25%	<ul style="list-style-type: none"> • Large size • Low outsiders • For profit
5	Medium	100%	71%	7	Government owned corporation	Regional	43%	<ul style="list-style-type: none"> • Government owned • High outsiders
6	Large	83%	83%	6	For profit	National	0%	<ul style="list-style-type: none"> • Large public company
7	Large	88%	50%	8	Co-operative	Regional	50%	<ul style="list-style-type: none"> • Large size • Co-operative • Outsiders and independents

^a Classification of size was by turnover - small < \$50M
\$50M < medium < \$500M
\$500M < large

Table 2A: Expected and observed data patterns for agency theory with outside directors

Expected Patterns	Proportion Outside Directors	Monitoring of Management	Evidence of Agency Costs	Performance
Pattern 1a	High	High	Low	High
Pattern 1b	Low	Low	High	Low

Case	Outsider % ^a		Monitoring ^b		Agency Costs ^b		Performance		Match
	Rating	Evidence	Rating	Evidence	Rating	Evidence	Rating	Evidence ^{c,d}	
1	High	90%	Low	<ul style="list-style-type: none"> Basic monitoring procedures lacking Poor reporting mechanisms Lack of a consolidated asset and profit position 	High	<ul style="list-style-type: none"> Diversification of services and facilities High growth focus Access to unmonitored budgets 	Low	<ul style="list-style-type: none"> ROA Director/mgmt interviews 	No match
2	High	100%	Low	<ul style="list-style-type: none"> Poor documentation of compliance/ monitoring 	High	<ul style="list-style-type: none"> Diversification of services, industry, geography under previous management 	Med	<ul style="list-style-type: none"> ROA Director/mgmt interviews 	No match
	High	100%	Low	<ul style="list-style-type: none"> Management opinion Poor documentation of compliance/ monitoring 	Low	<ul style="list-style-type: none"> Limited level of perquisites 	High	<ul style="list-style-type: none"> ROA Director/mgmt interviews 	Partial match pattern 1a
3	High	100%	Med	<ul style="list-style-type: none"> Heavy monitoring of certain activities In depth understanding of business Monitoring essential KPIs questionable 	Low	<ul style="list-style-type: none"> Limited resources to divert No evidence 	Low	<ul style="list-style-type: none"> ROA Director/mgmt interviews 	Partial match pattern 1a
4	Low	25%	Low	<ul style="list-style-type: none"> In depth financial figures Little else monitored 	High	<ul style="list-style-type: none"> Large growth in turnover (loss making) Significant perquisites evident 	Low	<ul style="list-style-type: none"> ROA Director/mgmt interviews 	Match pattern 1b
5	High	100%	Med	<ul style="list-style-type: none"> Strong financial controls 	Low	<ul style="list-style-type: none"> Distrust of management 	High	<ul style="list-style-type: none"> ROA^e Director/mgmt interviews 	Partial match pattern 1a
6	High	83%	High	<ul style="list-style-type: none"> Extensive controls Active Risk Committee 	Low	<ul style="list-style-type: none"> No evidence 	High	<ul style="list-style-type: none"> Outperformed total share market Director/mgmt interviews 	Match pattern 1a
7	High	88%	Low	<ul style="list-style-type: none"> Poor financial controls 	Low	<ul style="list-style-type: none"> No evidence 	Low	<ul style="list-style-type: none"> Loss making Director/mgmt interviews 	No match

^aClassification based on: Low < 33%
33% < Medium < 66%
66% < High

^bClassification based on coding – examples of evidence given

^cClassification for ROA based on: Low < 5%
5% < Medium < 12%
12% < High

^dIn all cases the qualitative assessment of firm performance matched the ROA classification

^eBased on Net cash inflow from operating activities/Total assets because government-owned organisation

Table 2B: Expected and observed data patterns for agency theory with independent directors

Expected Patterns	Proportion Independent Directors	Monitoring of Management	Evidence of Agency Costs	Performance
Pattern 1a	High	High	Low	High
Pattern 1b	Low	Low	High	Low

Case	Independence % ^a		Monitoring ^b		Agency Costs ^b		Performance		Match
	Rating	Evidence	Rating	Evidence	Rating	Evidence	Rating	Evidence ^{c,d}	
1	Low	30%	Low	<ul style="list-style-type: none"> Basic monitoring procedures lacking Poor reporting mechanisms Lack of a consolidated asset and profit position 	High	<ul style="list-style-type: none"> Diversification of services and facilities High growth focus Access to unmonitored budgets 	Low	<ul style="list-style-type: none"> ROA Director/mgmt interviews 	Match pattern 1b
2	Low	12.5%	Low	<ul style="list-style-type: none"> Poor documentation of compliance/ monitoring 	High	<ul style="list-style-type: none"> Diversification of services, industry, geography under previous management 	Med	<ul style="list-style-type: none"> ROA Director/mgmt interviews 	Partial match pattern 1b
	Low	12.5%	Low	<ul style="list-style-type: none"> Management opinion Poor documentation of compliance/ monitoring 	Low	<ul style="list-style-type: none"> Limited level of perquisites 	High	<ul style="list-style-type: none"> ROA Director/mgmt interviews 	No match
3	Low	0%	Med	<ul style="list-style-type: none"> Heavy monitoring of certain activities In depth understanding of business Monitoring essential KPIs questionable 	Low	<ul style="list-style-type: none"> Limited resources to divert No evidence 	Low	<ul style="list-style-type: none"> ROA Director/mgmt interviews 	No match
4	Low	12.5%	Low	<ul style="list-style-type: none"> In depth financial figures Little else monitored 	High	<ul style="list-style-type: none"> Large growth in turnover (loss making) Significant perquisites evident 	Low	<ul style="list-style-type: none"> ROA Director/mgmt interviews 	Match pattern 1b
5	High	71%	Med	<ul style="list-style-type: none"> Strong financial controls 	Low	<ul style="list-style-type: none"> Distrust of management 	High	<ul style="list-style-type: none"> ROA^e Director/mgmt interviews 	Partial match pattern 1a
6	High	83%	High	<ul style="list-style-type: none"> Extensive controls Active Risk Committee 	Low	<ul style="list-style-type: none"> No evidence 	High	<ul style="list-style-type: none"> Outperformed total share market Director/mgmt interviews 	Match pattern 1a
7	Med	50%	Low	<ul style="list-style-type: none"> Poor financial controls 	Low	<ul style="list-style-type: none"> No evidence 	Low	<ul style="list-style-type: none"> Loss making Director/mgmt interviews 	No match

^{a-c} Classifications as in Table 2A

Table 2C: Match between expected and observed patterns of agency theory

Case	Outside Directors	Independent Directors
1	○	●
2	○/□	□/○
3	□	○
4	●	●
5	□	□
6	●	●
7	○	○

Legend: ● – High Match; □ - Partial Match; ○ – No Match

Table 3: Expected and observed data patterns for stewardship theory

Expected Patterns	Proportion Inside Directors	Access to Information	Quality of Decision Making	Performance
Pattern 2a	High	High	High	High
Pattern 2b	Low	Low	Low	Low

Case	Insider % ^a		Access to Information ^b		Quality of Decision Making ^b		Performance		Match
	Rating	Evidence	Rating	Evidence	Rating	Evidence	Rating	Evidence ^{c,d}	
1	Low	10%	Low	<ul style="list-style-type: none"> Poorly presented board papers Directors uncomfortable with information 	Low	<ul style="list-style-type: none"> Decisions Limited time to make decisions Directors see decisions now as poor 	Low	<ul style="list-style-type: none"> ROA Director/mgmt interviews 	Match pattern 2b
2	Low	0%	Med	<ul style="list-style-type: none"> Well acquainted with industry Some information not passed in timely manner 	Low	<ul style="list-style-type: none"> Influenced by management direction Long lead time to question management direction 	Med	<ul style="list-style-type: none"> ROA Director/mgmt interviews 	No match
	Low	0%	High	<ul style="list-style-type: none"> Well acquainted with industry Clear and timely supply of information 	Med	<ul style="list-style-type: none"> Major decisions undertaken with positive results Increased undertaking of strategy role 	High	<ul style="list-style-type: none"> ROA Director/mgmt interviews 	Partial match 2a
3	Low	0%	High	<ul style="list-style-type: none"> Well acquainted with business Well acquainted with industry Informal links to information 	Low	<ul style="list-style-type: none"> Evidence of potential legal concerns about decisions Poor performance Major IT project had significant problems Significant differences with management about how to cope with change 	Low	<ul style="list-style-type: none"> ROA Director/mgmt interviews 	No match
4	High	67%	High	<ul style="list-style-type: none"> Executives immersed in the work Significant effort in compiling large volumes of financial data Ability to access information across all organisation 	Low	<ul style="list-style-type: none"> Significant losses for several years Poor processes (e.g. meeting schedules, minutes, agenda, etc) to guide decision making process No evidence of analysis or systems to ensure adequate decisions 	Low	<ul style="list-style-type: none"> ROA Director/mgmt interviews 	No match
5	Low	0%	High	<ul style="list-style-type: none"> Directors keep abreast of trends and issues Board papers could be better quality Board knowledge of topics 	High	<ul style="list-style-type: none"> Effectiveness of investment decisions Do not have a formal process for developing strategy Board-management interface not good 	High	<ul style="list-style-type: none"> ROA^e Director/mgmt interviews 	Partial match 2a
6	Low	17%	High	<ul style="list-style-type: none"> Comprehensive board papers 	High	<ul style="list-style-type: none"> Series of successful acquisitions 	High	<ul style="list-style-type: none"> Outperformed total share market Director/mgmt interviews 	No match
7	Low	12%	Low	<ul style="list-style-type: none"> Poor board papers 	Low	<ul style="list-style-type: none"> Poor decision making Failure to close loss making units 	Low	<ul style="list-style-type: none"> Loss making Director/mgmt interviews 	Match pattern 2b

^aClassification based on: Low < 33%
33% < Medium < 66%
66% < High

^bClassification based on coding – examples of evidence given

^cClassification for ROA based on: Low < 5%
5% < Medium < 12%
12% < High

^dIn all cases the qualitative assessment of firm performance matched the ROA classification

^eBased on Net cash inflow from operating activities/Total assets because government-owned organisation

Table 4: Expected and observed data patterns for resource dependence theory

Expected Patterns	Links with Environment	Access to Resources	Performance
Pattern 3a	Low	Low	Low
Pattern 3b	High	High	High

Case	Links with Environment ^a		Access to Resources ^b		Performance		Match
	Rating	Evidence	Rating	Evidence	Rating	Evidence ^{c,d}	
1	Med	<ul style="list-style-type: none"> • Directors with medical careers • Director who is financial and business consultant • Director involved in property development • Director who was formerly in public service 	Med	<ul style="list-style-type: none"> • Links to medical community • Access to expertise • Links to real estate industry • Links to government bureaucracy 	Low	<ul style="list-style-type: none"> • ROA • Director/mgmt interviews 	No match
2	Med	<ul style="list-style-type: none"> • Directors with long involvement in retailing • Director with legal career • Director who is an accountant • Owners on board 	Low	<ul style="list-style-type: none"> • Links to business community • Access to legal advice • Access to expertise 	Med	<ul style="list-style-type: none"> • ROA • Director/mgmt interviews 	No match
	Med	<ul style="list-style-type: none"> • Directors with long involvement in retailing • Director with legal career • Director who is an accountant • Owners on board 	Low	<ul style="list-style-type: none"> • Links to business community • Access to legal advice • Access to expertise 	High	<ul style="list-style-type: none"> • ROA • Director/mgmt interviews 	No match
3	Low	<ul style="list-style-type: none"> • Director with long involvement with similar organisation • Director with business consultancy • Long involvement with industry 	Low	<ul style="list-style-type: none"> • Potential market for company's product • Access to business advice 	Low	<ul style="list-style-type: none"> • ROA • Director/mgmt interviews 	Match pattern 3a
4	Med	<ul style="list-style-type: none"> • Director head of a government committee and chairman of a major company • Directors who are executives of parent company • Director of an international bank 	Med	<ul style="list-style-type: none"> • Access to government and business • Access to capital • Access to parent company's financial strength and expertise 	Low	<ul style="list-style-type: none"> • ROA • Director/mgmt interviews 	No match
5	Med	<ul style="list-style-type: none"> • 3 members appointed by government 	Med	<ul style="list-style-type: none"> • Key stakeholder for organisational performance was government 	High	<ul style="list-style-type: none"> • ROA^e • Director/mgmt interviews 	No match
6	Med	<ul style="list-style-type: none"> • Directors identified could be better 	Med	<ul style="list-style-type: none"> • Link to government and financial community • Respected by market 	High	<ul style="list-style-type: none"> • Outperformed total share market • Director/mgmt interviews 	No match
7	Low	<ul style="list-style-type: none"> • Directors have few other board positions • Five directors are farmers 	Med	<ul style="list-style-type: none"> • Poor links to customers and capital 	Low	<ul style="list-style-type: none"> • Loss making • Director/mgmt interviews 	Partial match 3a

^aClassification based on: Low < 33%
33% < Medium < 66%
66% < High

^bClassification based on coding – examples of evidence given

^cClassification for ROA based on: Low < 5%
5% < Medium < 12%
12% < High

^dIn all cases the qualitative assessment of firm performance matched the ROA classification

^eBased on Net cash inflow from operating activities/Total assets because government-owned organisation

Table 5: Synopsis of findings – match between expected and observed patterns

Case	Agency Theory		Stewardship Theory	Resource Dependence Theory
	Outsiders	Independents		
1	○	●	●	○
2	○/□	□/○	○/□	○/○
3	□	○	○	●
4	●	●	○	○
5	□	□	□	○
6	●	●	○	○
7	○	○	●	□

Legend: ● – High Match; □ - Partial Match; ○ – No Match