

# **Searching for the “mythical unicorn”- the missing link between boards of directors and organisational effectiveness**

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## **Attestation of Authorship**

"I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning".



**D. P Mowbray**

**14.10.2011**

**Date**

## **Dedication**

This work is dedicated to my wife Jane and children, Ashleigh and Mitchell who have been extremely patient, understanding and supportive as I took what at times appeared to be an endless journey. They have endured the highs and lows of my journey often-in silence - sometimes not. I am eternally grateful for their love and support, without which I could not have finished.

To mum who sadly passed away before I could complete this work, I am grateful in more ways than I can possibly express. Her love, kindness and belief in me, gave me the strength and self-belief needed to undertake this journey.

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Thank you Coral and Geoff, I will be eternally grateful for your guidance, I would not have achieved what I did without you.

### **ETHICS APPROVAL**

Ethical approval of this project was granted by the Auckland University of Technology Ethics Committee (AUTC), February 2010, Reference Number: 09/268, and renewed as required.

## **Abstract**

The performance of boards and their ability to influence organisational performance is a question that has long vexed researchers. There is general agreement that understanding how boards influence organisational performance is important. The accepted view is that a poor performing organisation has a poor performing board and conversely a high-performing organisation has a high-performing board.

Research investigating links between Boards and organisational performance has generally focused on single theoretical approaches (e.g. agency theory, or stewardship theory, etc), while ignoring the complex relationships and interactions that exist and occur between the board and the organisation's executive. This focus while being informative and opening avenues of research has failed to substantiate a connection between any one theory of the role of the board, or of corporate governance, and improved organisational performance.

In general, the extant research has studied how boards influence organisational performance by identifying either single or multiple components of a board's function, behaviour or structure, e.g. composition, size or CEO/chair duality, etc. and linking these to organisational performance. While causal relationships have been determined, the resulting outcomes, e.g. a stipulated number of independent directors, have not reduced the numbers of high-profile corporate failures (e.g. WorldCom or World Financial Crisis etc) and have failed to mitigate the effects of the Global Financial Crisis.

The fundamental questions have remained unanswered – what do boards that govern high-performing organisations have that the boards which govern poor performing organisations do not, and by what mechanism(s) do boards of high-performing organisations influence organisational performance?

Boards and the directors that constitute them are not homogeneous in their ability to govern high-performing organisations. Indeed, metaphorically speaking, just as the human gene and DNA determines what we will become as a species, the genes

and DNA of a board will determine its capability of governing a high-performing organisation.

Drawing from the literature, the research in this thesis proposes that: 1) multiple genes (constructs), namely, intellectual capital and its components (human capital, social capital, structural capital and cultural capital), knowledge sourcing, team effectiveness and leader-member exchange when analysed, would reveal the DNA (characteristics) that determines the performance (high-performing or poor performing) of the organisation the board governs. 2) That when combined inside a new vehicle (model) called the “Third Team”; these enable boards to influence organisational performance.

Answering these questions has required new approaches to researching boards and their influence on performance. Identifying the “genes” of boards governing high-performing organisations necessitated the identification of high-performing organisations from within the sample. This entailed analysis of financial data covering a 10-year period (1999–2009) for each of the 64 (43 corporate and 21 not-for-profit) organisations involved in the study. The decision to include both corporate and not-for-profit sectors in the one study was purposeful. From a governance perspective, these two sectors are often viewed as being homogenous. An additional outcome desired of this study was to identify if indeed there was a one-size fits-all approach to governance for these sectors. The results show that this is a false assumption. In fact, the two sectors differ in significant ways regarding their needs, with the differences highlighted throughout the results.

The participant groups selected for inclusion in the study were the chairperson, CEO, directors (minimum of 2) and executive staff (minimum of 2). The analysis identified 13 of the total 64 organisations (covering both sector groups) included in the study as high-performing organisations; the remainder were classified as poor performing.

From the constructs, 97 aspects of board characteristics (60 board attributes and 37 executive characteristics) were analysed using fuzzy set qualitative comparative analysis (fsQCA). The analysis detailed the subset relationships between board

characteristics and high-performing organisations for each construct. The resulting causal recipe (mixture of characteristics) was tested for consistency (significance) and coverage (strength) using fsQCA software. Conducting semi-structured interviews with a range of participants from the sample organisations provided supporting qualitative data.

The results confirmed the existence of the third team – consisting of the board *and* the executive – and that the third team is the model through which the board influences the executive, which in turn, influences organisational performance. The results also supported the propositions that a board’s intellectual capital is the means by which it influences organisational performance through the executive, with the constructs of knowledge sourcing, team effectiveness, and leader-member exchange facilitating the board’s influence within the third team.

A third and significant result was identification of three defining characteristics of a high-performing third team: “trust, confidence and synergy”. These three elements are woven into the very fabric of the third team’s characteristics. They are indivisible and inseparable from those characteristics identified in the causal recipes.

The implications of this study for practitioners and researchers are significant and the findings may be generalisable to a wide range of organisations. The results provide insight into the types of characteristics within each of the constructs required by third teams of high-performing organisations, which clearly differ from the characteristics displayed by poor performing third teams. In addition, the results demonstrate that corporate and not-for-profit boards are not homogeneous, suggesting that future research should not treat them as if they require the same models or structures of governance.

The results argue against the widely accepted, unwritten rule, that the CEO is only point of contact the board has with the organisation, finding instead that organisational performance improves when boards take a proactive approach to developing and maintaining good interaction with the wider executive group with the context of the third team.



Finally, and importantly, the identification of the “genes and DNA markers” identified in these results provides a base for a new stream of future research. This future research may verify these results or identify new genes and DNA required by the third team.

## **Chapter 1 – Introduction**

In this era of high profile corporate failings, financial crises and widespread economic uncertainty the identification of what is effective corporate governance and its impact on organisational performance is more critical than ever. Corporate Governance and its impact on organisational performance is analogous to the mythical unicorn – we think we know what it looks like, yet to date there has been no conclusive research which shows that our view is correct.

Given that nearly all organisations have boards, it is acceptable to presume – albeit without conclusive evidence – that boards must/do influence organisational performance (Gillies & Morra, 1997). It is not a large inferential leap therefore, to suggest that high-performing organisations would be characterised by high-performing boards. In the light of inconclusive evidence, the fundamental question at the nexus of most governance research is whether boards influence the performance of organisations, and if so, how?

Using agency theory, resource theory and stewardship theory, amongst others, researchers have looked to components of these theories in the hope of identifying direct links between a board and organisational performance. Based on agency theory, the concept of board composition and its many aspects has been popular as an area for investigation. The resulting research output has resulted in “inferential leaps . . . from input variables such as board composition to output variables such as board performance”(Pettigrew, 1992, p. 177). Yet this and many other attempts at linking boards and organisational performance have been found lacking. Further support is given by Vandewaerde, Voordeckers, Lambrechts and Bammens (2011, p. 403) who suggested that “an overreliance on practical methods (i.e. input – output studies) and theoretical (i.e. agency theory) research fortresses in past research”, meant that little was known about how the governance mechanism actually works. Furthermore, when Dalton, Daily, Ellstrand and Johnson (1998) analysed 159

studies covering a 40 - year period, they found no evidence of a consistent relationship between board composition and organisational performance.

These theories, and in particular agency theory, have received increasing criticism concerning their theoretical assumptions and methodologies, which are seen as remaining too distant from the governance phenomena (Roberts et al., 2005). While these theories continue to provide insight, care must be taken not to act on the recommendations of a single governance research agenda such as agency theory, resource dependency theory and stewardship theory etc (Nicholson & Kiel, 2004). Pye and Pettigrew (2005) suggested there is a need for theoretical pluralism to better understand how boards really work. Daily et al. (2003) agreed, contending that a multi-theoretic approach was essential to recognise the many structures and mechanisms that may enhance board effectiveness and its ultimate impact on organisational performance. For example, while agency theory may conceptually be appropriate for defining the control and monitoring role of the board, it cannot explain the resource, service or strategic roles that boards must play.

It may be the case that boards are never capable of directly affecting an organisation's performance, unless they take an executive role. In this set of circumstances, they would no longer be acting solely as board members, i.e. they are also controlling and monitoring management in the agency sense, advising the Chief Executive Officer (CEO) according to the stewardship view, and providing access to resources from the resource dependency perspective. Rather they would now also be part of the executive, in an operational sense, which may make it difficult to separate the role of governing from that of managing.

The executive members of organisations are often credited with (amongst other things) leading organisations to success or failure. Some CEOs, such as Jack Welch (formerly of General Electric), Steve Jobs (of Apple) and Lee Iacocca (formerly of Chrysler), have become hero celebrities and the equivalent of business "rock stars". Yet the majority of extant and current research within the governance field has

largely bypassed the critical nature of the board-executive link while looking for causal links between the board and organisational performance.

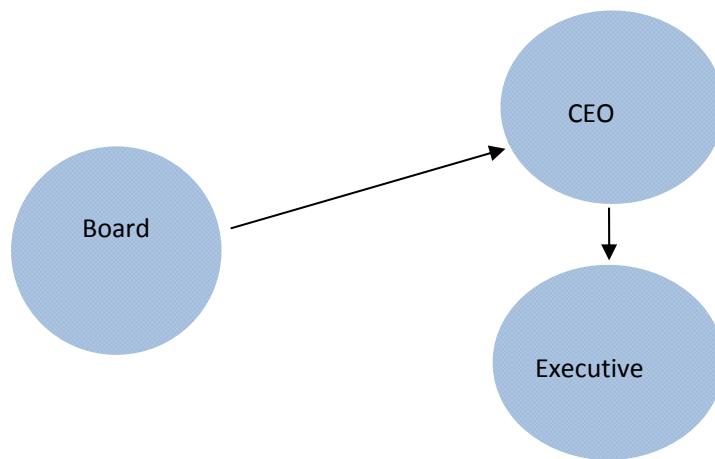
For the purpose of this research the term “executive” includes the CEO and refers to all members of a management team of an organisation that are in regular attendance at board meetings.

Scholars are of the view that the search for a causal link between boards and organisational performance is misguided when it looks for attributes or components of a board that explain how boards impact on organisational performance. Is it necessary then to take a step back from the “inferential leaps” described by Pettigrew (1992) and consider more fundamental questions such as “whose performance can the board impact?” and “what attributes of a board will allow it to carry out effectively its widely accepted roles?”. These roles include controlling and monitoring management (Berle & Means, 1932), advising the CEO (Lorsch & MacIver, 1989), providing access to resources (Pfeffer, 1972; Zald, 1969) and strategising (Nicholson & Kiel, 2004). All of these roles continue to be acknowledged as core functions of a board in the contemporary context.

Researchers (Bhagat & Black, 1999; Baliga et al.; 1996; Rhoades et al., 2000) have found that components of a board such as independent directors, duality of leadership role (CEO and Chair roles combined), policy development, etc. have little bearing on organisational performance. Finegold, Benson and Hecht (2007, p. 865) agreed stating that “for those board characteristics that have been studied there is, at best, weak guidance for policymakers on what governance practices will lead to more effective firm performance.” However, other research (Mackie, 2005; Lieberman & O’Connor 1972) has found that CEOs significantly influence corporate-level performance through corporate strategies. Therefore, it is not unreasonable, to surmise, that while a board may influence an organisation’s performance indirectly (through monitoring, resource allocation, strategy, etc.) the board’s ability to influence the firm’s performance directly is greatest during their interactions with the executive.

There is wide acceptance that a board interacts with the organisation through the CEO (the board's employee), with the CEO influencing the remainder of the executive team. Anecdotal evidence suggests that the level of direct interaction with executives other than the CEO – through executives' attendance at board meetings, strategy planning sessions, etc. – may have a similar level of influence on organisational performance as that attributed to the board's interaction with the CEO. Hoyer and Cuskelly (2003) investigated the power relationship between the board and executive using the five patterns of governance developed by Murray, Bradshaw and Wolpin (1992). They found that ineffective boards were more likely to describe their boards as fragmented or chair-led than as members of effective boards. In a paper discussing the board–executive relationship Golensky (1993) stated that “the interplay of all forces must be considered to reach a full appreciation of the complexity of the board executive relationship.” This view is supported by Fletcher (1992, p. 283) who considered that previous research tended to understate the importance of the executive in making “the board work well.”

Fundamental to this research is the identification of the relational space where the interaction between the executive team (as described earlier) and the board team occurs and the characteristics of the board and executive which influence these interactions. This thesis posits that the interaction that occurs through the relationship between a board and its executive eventually impacts on organisational performance. Figure 1 below depicts this view.



**Figure 1:** The Board influence on the Executive Team

This research adopts the view that the most likely way a board can influence an organisation's performance is through the executive team of the organisation. Rather than seeking a connection between structural components of a board and organisational performance – a concept that like the unicorn is elusive if not impossible to confirm (Johnson, Daily, & Ellstrand, 1996) – a more useful approach is to identify the relational space within which this influence occurs and investigate the characteristics of the board and how these influence executive performance, through which the organisation's performance may be influenced.

Viewed this way, the principal research question for this thesis is subdivided into three separate questions each with a supporting proposition, which when answered sheds light on how a board might influence organisational performance. These three research questions and the three supporting propositions are presented in Chapter 3.

## **1.1 Relational Space - The Third Team**

In what relational space does the board's influence occur? "Partnership" as a term has been associated with boards and executives e.g. Trecker (1971, p. 110) described boards and executives as "...partners in a common task." However, this

description has met with opposition (Golensky, 2003; & Hoye & Cuskelly 2003). Consistent with the agency perspective of the relationship between the board and the executive, Senor (1963, p.19) took exception to the notion saying that “partnership implies equality; this is hardly a relationship of equals!”

Conversely, Drucker (1989, p.91) argued that neither the board nor CEO is “the boss” describing them as collaborators in a “team of equals” (1990, p 10). The use of the term “team” holds more promise as a way of describing the relational space within which the influence of the board occurs. The idea of a team does not imply either superiority or equality: it denotes a group of people who come together to achieve a common or agreed task; in working toward this end it is generally accepted that there is a leader within the team, in this case, the board. The online Merriam-Webster dictionary (2012, June) defines a team as a number of persons associated together in work or activity.

The definition of a team as a group (different divisions, leadership groups, etc.) of people brought together to perform a particular task, whatever that might be within organisational context, is supported in the literature. Langton and Robbins (2007) and Kozlowski and Bell (2003) described teams from an organisational perspective as groups of people brought together for a period (e.g. for meetings) to work towards organisational goals. This description matches the way that boards of directors and the executive come together episodically to work towards the achievement of organisational goals.

In a paper discussing upper echelon (UE) theory, Hambrick (2007, p334) states that “If we want to understand why organisations do the things they do, or why they perform the way they do, we must consider the biases and dispositions of their most powerful actors – their top executives.” This statement does not suggest that the executive team is more powerful than the board but, rather, that the executive team has more influence over the outcomes achieved by the organisation. If this view is accepted, it is also true the most powerful actors (executives) also need the guidance and influence of other contributors (the board) so that they (executives)

can give (achieve) their (organisations) best performance. Conceptualising these contributors as the board, agrees with McIntyre et al.'s (2007) description of the board as a team of individuals who play a role in developing and selecting creative ideas for the advancement of the firm, and is consistent with the stewardship and resource dependency perspectives relating to the role of the board.

The conceptualisations by Langton and Robbins (2007), Hambrick (2007), Drucker (1989, 1990), Golensky (1993) and McIntyre et al. (2007) suggest that if an organisation is to be high-performing (however this is defined) then co-operation and teamwork between the upper echelons, the two top teams – the executive and the board – are necessary for this to be achieved. This cooperation and teamwork can be envisaged as a form of shared leadership which Pearce and Conger (2003, p. 1) defined as, “a dynamic, interactive influence process among individuals in groups [board and executive] for which the objective is to lead one another to the achievement of group and organisational goals or both”. This definition is consistent with Drucker's (1990, p. 10) perception of the board and executive as a “team of equals” and Fletcher (1992, p. 283) (referred to earlier) who said, “... previous research tended to understate the importance of the executive in making “the board work well”. The influence that this combined team environment has on performance is underscored by Vandewaerde et al. (2011) who commented that within the framework of team settings shared leadership had previously been shown to result in performance benefits.

The questions then become which of the two upper echelon teams (board or executive) is the more “upper”? Or, is it that neither upper echelon group (board or executive) is more “upper” than the other in the way they influence organisational performance? This research posits that it is the *combination* of the two upper echelons (teams) – the executive and board – described in this thesis as existing within a relational space defined as the “Third Team” (TT), which is the real upper echelon in an organisation with regard to its influence on organisational performance (see Figure 2). Conceptualised in this way, the idea of the third team aligns with the Drucker's (1990) view of the board–executive relationship (a team of



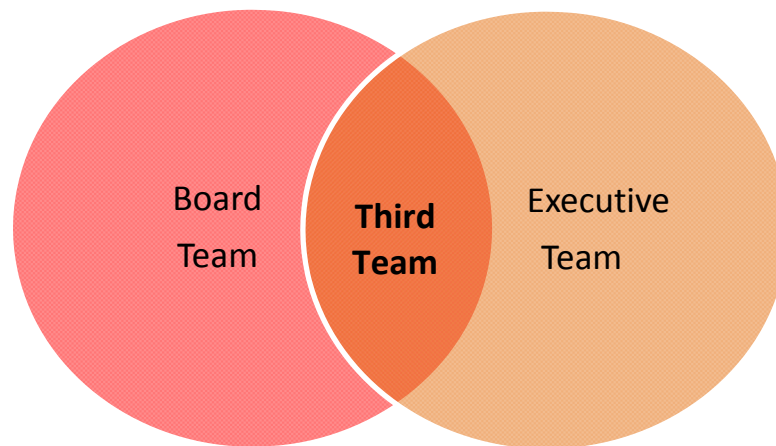
equals) and the notion of shared leadership (Pearce and Conger, 2003 and Vandewaerde et al. 2011). Furthermore, it aligns with Friedrich, Vessey, Schuelke, Ruark and Mumford (2009) who described shared leadership in a team as a dynamic and fluid process of influence in which those with the relevant expertise lead discussion at any given time.

Hambrick's (2007) statement can thus be modified in the following way: to understand why organisations do the things they do, or why they perform the way they do, we must consider the biases and dispositions of their most powerful actors, - the most influential of which is *the* Third Team.

Why is the development of the TT model important? The TT concept describes the relational environment within which the configuration of complementary efforts of the board and executive produces outcomes that are beyond the abilities of the individual teams working alone. This thesis posits the TT, a combination of the board and executive, is the (combined) corporate actor present in all organisations. The third team (as a combination) enables the achievement of organisational objectives that would otherwise either not be achievable by one team acting alone or would be achieved to a lower level.

### **Question 1: "Third Team"**

*Are there three top management teams in an organisation: 1) Board, 2) Executive Team (TMT), and 3) **Third Team** through which a board influences organisational performance?*



**Figure 2:** The Third Team – how Boards influence organisational performance

If the TT model demonstrates how the board-executive's interactions can influence organisational performance, then consideration ought to be given to identifying what aspects of the board-executive relationship impact positively on organisational performance? The mere presence of the TT does not ensure success. All organisations have a TT but clearly not all are successful. Therefore, there must be characteristics within the combined team which influence the eventual performance. This leads to the development of the second and third questions for this research, which are described in the following sections, 1.2 and 1.3, respectively.

## **1.2 Third Team – Intellectual Capital**

Intellectual Capital (IC) is an area of emerging interest, with a range of authors contributing to its understanding (e.g. Bontis, 1999; Keenan & Aggestam, 2001; Nicholson & Kiel, 2004). Intellectual capital draws upon a number of theoretical streams including management and economics. The concept of social capital (a component of IC) originated and was developed in classic twentieth-century works of sociology by Bourdieu (1979), Loury (1977) and Coleman (1988a), whereas intellectual capital as a theoretical concept appeared more recently, being first posited by Stewart in 1991. Intellectual capital is conceptualised in numerous fields:

accountants want to measure it, sociologists want to balance power with it, and psychologists want to develop minds with it, making the field a mosaic of perspectives (Bontis, 1999).

Nicholson and Kiel (2004) defined intellectual capital as the collection of knowledge, information, experience, relationships, routines, procedures, culture that a board can employ to create value (influence performance). These characteristics sit within four principal categories: human, social, structural and cultural capital. These categories have also been variously referred to as knowledge and information, experience and relationships, routines and procedures, and cultural and team capital respectively. The individual elements within these groupings fit together in a pattern of behaviour that then influences the way a board undertakes its roles and in turn influences the TT.

This conceptualisation of the board as a mixture of characteristics that contribute to board effectiveness is of particular interest as it will allow this researcher to move away from the constricting views of a single theoretical perspective (e.g. agency (monitoring and control) or resource (access to outside resources), etc.). Conceptually this will allow the identification of characteristics (e.g. those contained in a boards intellectual capital) that are associated with boards and contained in constructs not associated with agency theory, stewardship theory or resource dependency theory etc. This approach aligns with the calls for multi-theory approaches made by Pye and Pettigrew (2005) and Daily et al. (2003).

The intellectual capital of the directors, both individually and collectively, is a board's major asset: through its use boards and directors can apply their accumulated and collective experience, knowledge, understanding, skills and expertise to the issues facing organisations. Bontis (1998) and others, Pope John Paul II, 1991 *Centesimus Annus*, Nonaka and Takeuchi (1995) have argued that future success in competition will be based less on the strategic allocation of financial and physical resources and more on strategic management and the use of knowledge. John Kenneth Galbraith (Feiwal, 1975) said that intellectual capital is

more than just intellect as pure intellect: it incorporates a degree of intellectual action. It is not therefore just a static intangible: its accumulation is an ideological process, a means to an end.

This research will use the elements of intellectual capital to answer the question “how do boards influence executive performance?” Using the framework of intellectual capital to examine the components of board characteristics may allow greater insight into the mythical unicorn that links boards and organisational performance.

### **Question 2: “Means to an End”**

*Is the board’s intellectual capital (human, social, structural, cultural) the “means” by which the board influences “the end”, that is, the performance of the organisation?*

### **1.3 How the Third Team Interacts**

This research suggests that for the TT to interact and facilitate the exchange of ideas and knowledge, both tacit and explicit (IC), develop organisational goals (Langton & Robbins, 2007), and select creative ideas for the advancement of the firm (McIntyre et al., 2007) requires three useful constructs. These are: Leader-Member Exchange (LMX) – developed by Dansereau et al. (1975); Knowledge Sourcing (KS) – described by Gray and Meister (2004); and Team Effectiveness (TE) – described by Payne et al. (2009). When combined with the boards intellectual in, “a dynamic, interactive influence process among individuals in groups [board and executive] ...” (Pearce and Conger, 2003, p. 1) they may allow the TT to interact and thereby influence organisational performance.

### **Question 3: “How the ‘end’ is achieved”**

*Within the third team, are the constructs of Leader -Member Exchange, Knowledge Sourcing and Team Effectiveness, the mechanisms by which the board influences the “end”?*

A brief outline of constructs, leader-member exchange, knowledge sourcing and team effectiveness follows. A more detailed description of the constructs along with an elaboration on how these may fit within the framework detailed in Figure 3 (Ch 3) and the theoretical underpinnings that support their inclusion are contained in Chapter 3.

### **1.3.1 Leader -Member Exchange (LMX)**

Research that seeks to understand the nexus of interaction between the Leader – Follower construct has conceivably been the most researched within the leadership field. Yet there has been little or no use of LMX in the research of the relationship and interactions that occur between boards and executives. LMX theory has gained a distinguished following of researchers (Graen and Uhl-Bien, 1995; Hoyer, 2006; Northouse, 2001), allowing this research to apply the construct of leader-member exchange to the development of insights into the interpersonal relationships between the board of directors (leader) and executive (follower) of the TT. This insight may thus reveal how the TT relationship can influence the performance of the executive team, which in turn affects the performance of the organisation.

Graen and colleagues (1975) developed early LMX theory which Graen (1976) then extended. Over the last 30 years, a large body of research (Martin et al., 2005; Steiner, 1997; Wayne et al., 1997) has complemented this initial work leading to the form of the theory in use today and upon which this research has drawn. Graen and Uhl-Bien (1995) described LMX as having developed through four stages. To summarise, stage 1 was the discovery of differentiated dyads and stage four involved differentiated dyads being effectively assembled into collectives (TTs), which are aggregates of dyads in the context of this study. This description of the fourth stage of LMX development and research using this approach (Cogliser & Schriesheim, 2000; Boies & Howell, 2006) support the use of LMX in the present study in bringing together the board and executive team – a dyadic relationship – into a collective: the TT.

Graen and Uhl-Bien's (1995) findings support a central tenet of this research: that the interactions (relationships) between the board (leader) and executive (follower) are central to organisational performance. The findings of Northouse (2001) add credibility to the inclusion of the executive staff in this study, who found that these interactions have an impact on attitude, motivation, commitment, loyalty, etc. – all of which are important components of executive performance. While not being the only anchor for organisational performance, it is clear that LMX is an important relational construct that contributes to the executive team's performance. Furthermore, it is well established that the executive team's performance is an antecedent to organisational performance.

### **1.3.2 Team Effectiveness (TE)**

The relationship between boards and TE is a relatively new area of investigation. A few studies (Hermalin & Weisbach, 2003) have sought to understand boards from a team perspective and the influence that these teams have on organisational performance (Forbes & Milliken, 1999). An issue facing researchers in all facets of board behaviour is the ability to gain access to the boardroom to investigate what actually occurs in that setting. While the reticence of directors and boards to allow access is understandable, this constraint means that the researcher usually has to treat the boardroom as a "black box" (C. M. Daily, Dalton, & Cannella Jr, 2003).

Corporate boards have been defined as social structures made up of groups of individuals that each bring a unique set of skills and backgrounds along with their personal interests and agendas that are subject to the political, cognitive, power and personal dynamics that are relevant in any workgroup (Payne, Benson, & Finegold, 2009). Boards have also been defined as a team of individuals, boards play an important role in developing and selecting creative ideas for the advancement of the organisation (McIntyre et al., 2007).

Forbes and Milliken (1999) described the effectiveness of boards (TE) as being dependent on social-psychological processes, particularly those that relate to group

participation and interaction (LMX), the exchange of critical information (KS), and critical discussion (LMX).

In their seminal work on team effectiveness, Payne, Benson, and Finegold, (2009) drew upon the model of team effectiveness developed by Mohrman et al. (1995) which lists five key attributes of high-performing groups. According to their research, high performing groups have:

1. knowledge that is aligned to the organisation's needs
2. Sufficient power to reach decisions.
3. Systems to test and evaluate the CEO
4. Information that is current and comprehensive
5. Incentives and sufficient opportunity and time to complete the required tasks.

The application of this TE model to the study of board effectiveness (Conger, Lawler, & Finegold, 2001) supports its use in this research.

### **1.3.3 Knowledge Sourcing (KS)**

KS is a precise construct that describes the efforts of individuals to find and access knowledge produced by individuals that is not available elsewhere i.e. books, databases, media, etc. The use of the word "knowledge" in the context of this research will mean expertise, opinions, insights and experience (Gray & Meister, 2004).

Individual directors by the very nature of their work absorb and collect expertise, opinions, insights, and experiences from many different social and work environments. This absorbed and collected knowledge adds to a director's already existing knowledge and experience, becoming their explicit and tacit knowledge respectively. This pool of accumulated skill and know-how allows executives of companies to access the directors' (explicit and tacit) knowledge (KS).

There are three distinct types of KS behaviours (Gray & Meister, 2006):

1. Dyadic – this is based on person-to-person communication whereby a single knowledge seeker (executive) accesses the knowledge of a single knowledge provider (director), e.g. the CEO discussing an issue with the Chairman.
2. Published – this involves the codification and storage of knowledge from one knowledge provider, e.g. a paper prepared by a board member for a special project etc.
3. Group – where the exchange of knowledge takes place between multiple seekers and multiple sources, e.g. board meeting, strategic planning meeting or similar.

In all of these cases, the director's personal (tacit) knowledge transfers to the executive who in turn transforms this new knowledge into organisational knowledge that is valuable to the organisation as a whole. This transformation of the sourced knowledge occurs through three methods: adaptation, innovation and replication (Gray & Meister, 2004). These methods are discussed in more detail in the literature review (Chapter 2).

Resource dependence theory supports the use of KS in this research. Resource theory examines boards and their members as conduits through which additional necessary resources – knowledge in this case – can be obtained or accessed for the benefit of the organisation (e.g. Hillman et al., 2000; Pfeffer & Salancik, 1978).

#### **1.4 Motivation for the Research**

The study of boards, directors, their roles, and how they influence an organisation's performance has been a topic of significant discussion, regulation and research for decades (Berle & Means, 1932; Useem, 1993; Van der Walt & Ingley, 2001; Walton, 2009). There have been many high profile failures (WorldCom, Tyco, Enron, 2008 world financial crisis, etc), all of which have led to various calls for action, enquiries and reports (Cadbury, King, Higgs, Greenbury, etc.). One of the first of its kind in the United Kingdom, the Cadbury Report (1992) was commissioned by the UK government as a result of corporate failures, especially those of the Bank of Credit



and Commerce International (BCCI) and Maxwell and general controversies over financial reporting, accountability and director remuneration.

To the outside observer little has changed since the release of the Cadbury report and the subsequent enactment of a vast amount of regulation and law (the Sarbanes -Oxley Act 2002, etc.). Since the inception of these various regulatory measures, little has changed apart from the immense sums of money lost and the number of corporate failures, both of which have increased alarmingly and reached crisis levels worldwide in 2010. These recent failings have resulted in taxpayer-funded bailouts or rescue packages (e.g. TARP, in the U.S. and South Canterbury Finance in New Zealand) for large financial and banking institutions often described as being too big to be allowed to fail.

Generally, stakeholders (in the widest meaning of the term) know little of what takes place in a boardroom, how decisions are made and how or even if a board is able to influence the performance of the organisation it governs. Regulation in all its guises has been tried and found wanting. It would be a pyrrhic victory if regulation were the only way to eliminate the failings in corporate governance. It is the interaction that occur between people (directors and executives) and not regulation alone, that determines the success or failure of the governance process. Boards and organisations are the sum of the people within them and the social, cultural and human interactions that take place between them.

Therefore, it is important to Identify, through insightful research, the characteristics of directors and executives contained within the constructs of intellectual capital, knowledge sourcing, team effectiveness and leader-member exchange. Identifying the separate characteristics that facilitate interactions within the TT model may lead to finding the mythical unicorn – that is, the connection between boards and organisational performance.

## 1.5 Rationale

This research contributes to theory and corporate governance practice in a number of ways including:

- It is multi-theoric (Agency theory, Stewardship theory and Resource dependency theory), which follows the calls of many researches' (C. M. Daily et al., 2003; Pye & Camm, 2003b).
- It defines the "Third Team" (TT) as a new upper echelon and posits that it is through the executive (members of the TT) of the organisation that a board can influence organisational performance.
- It contends that it is through a complex mixture of elements drawn from multiple constructs (intellectual capital, leader-member exchange, team effectiveness and knowledge sourcing) that a board actually influences the executive, which in turn affects organisational performance.
- The use of fuzzy set qualitative analysis (fsQCA) as a method of identifying these "causal recipes."
- It suggests that the CEO is not the only direct point of executive contact for the board or the only executive that they can influence
- It identifies that the corporate and not-for-profit sectors are not homogeneous and in fact require diverse approaches to governing these organisations.

The subsequent development of the causal recipes (a specific term used in the fsQCA method of analysis) that identify the mixture of elements contained in the constructs (IC, LMX, TE and KS) and identified as belonging to the TT of high-performing organisations may allow organisations to use this knowledge to improve their own performance. The resulting theoretical knowledge may also provide meaningful direction for researchers in this field and foster the use of multi-theory studies that use fsQCA as an analytical approach in the study of corporate governance.

## **1.6 Outline of Thesis**

The thesis comprises six further chapters. Chapter 2 provides a review and critique of the relevant literature. It initially discusses the theories associated with corporate governance before detailing the four main theoretical approaches that have guided much of the extant research in corporate governance.

Chapter 3 discusses the theoretical background to the development of the third team (TT) model. The chapter then discusses the theoretical underpinnings for inclusion of the four constructs that support the TT model and develops the conceptual framework for the research, drawing from the literature reviewed in Chapter 2.

Chapter 4 outlines the design of the research, which takes the form of a two-country cross-national study: New Zealand and Australia. The selection process for two sub-populations (corporate and not-for-profit) in the two countries is discussed. The chapter describes the data collection process and instrument development for each of the constructs. Lastly, the rationale for the selection of fsQCA as the data analysis tool is presented and the requirements for satisfaction of the ethical aspects of the research are set out.

Chapter 5 presents the results for each of the constructs in relation to the corporate and not-for-profit organisations in each country.

Chapter 6 discusses the results presented in Chapter 5. The discussion considers the common elements across the sub-groups and discusses the insights that can be drawn from these findings. Finally, Chapter 7 concludes the thesis by summarising the main findings and their implications for theory and practice. This chapter also identifies the limitations of the current study and suggests directions for future research.

## **Chapter 2 – Literature Review**

### **2.1 Introduction**

Chapter 1 identified the research questions that emanated from the principal research question that this research seeks to answer followed by a description of a new model called the “Third Team” (TT). The chapter then briefly described the constructs of intellectual capital, leader-member exchange, knowledge sourcing and team effectiveness. This chapter is divided into three main sections: the first section analyses the main theories in use today in relation to corporate governance and the role of the board in influencing organisational performance. The second section provides the theoretical basis for the development of the third team model; and the third section outlines the theoretical underpinnings for the inclusion of intellectual capital, leader-member exchange, knowledge sourcing and team effectiveness in the conceptual framework for the research.

Modern corporate governance was first put under the microscope of public review with the release of the Cadbury Report (1992) in the United Kingdom.

Commissioned by the Financial Reporting Council and the London Stock Exchange, the report investigated concerns regarding the financial reporting standards and the (in)ability of auditors to stand up to dominant boards. These were highlighted as concerns through cases such as the Bank of Credit and Commerce International (BCCI).

The Cadbury Report’s outcomes catalysed the development of structural remedies and standards, which included prescriptions for board structure and composition e.g. the proportion or number of independent directors. The intention was that independent directors would balance the self-serving nature of executive directors and provide greater transparency in decision-making. This and other standards and remedies were predominately based on the dominant theoretical perspective in corporate governance – agency theory. The desired outcome was improved board performance leading to improved organisational performance. Unfortunately for the “good-governance” advocates, the remedies adopted from the Cadbury and

other subsequent reports have proven to have little bearing on or connection to improved organisational performance, (Baliga, Moyer, & Rao, 1996; Bhagat & Black, 1999; Rhoades, Rechner, & Sundaramurthy, 2000) , as evidenced by the recurring waves of corporate and governance failure, world-wide, to the present time.

To understand the context within which corporate governance research has been framed, it is important to examine the main contributing theories underpinning the field. Such an examination reveals why practitioners need to take care not to act on a single theory in isolation (G. Nicholson & Kiel, 2004) and why a multi-theory approach (C. M. Daily et al., 2003) allows greater understanding of the many structures and mechanisms that may enhance board effectiveness and ultimately a board's influence on organisational performance.

While there are many theoretical streams from a multiplicity of disciplines that contribute to the corporate governance literature, agency theory, stewardship theory, and resource dependency theory are the primary perspectives that have driven research in this field. These theories, and in particular agency theory, have led to the development of the dominant corporate governance models in use today.

## **2.2 Agency Theory**

Agency theory, which derives from the disciplines of economics and law, focuses on two main organisational players (Fama, 1980): the executives (management), who are the agents, and the owners (principal). The role of the board includes acting on behalf of the ownership to ensure that agency costs are minimised, i.e. to minimise or eliminate managerial opportunism and expropriation of shareholders' returns.

The theory suggests that agents are self-serving and generally unwilling to subordinate personal benefit to the greater good of the owners. This theory led to the thinking that the board's primary and/or only role was to develop adequate measures for monitoring the executive, thereby limiting the possible excesses of the agents and consequent expropriation of returns to the principals. Researchers

have described how organisations could align the interests of executives and owners so as to allow the organisation to survive while accounting for the self-interest of the executive/agents (Fama, 1980; Fama & Jensen, 1983; Jensen & Meckling, 1976). Fama and Jensen (1983) described the board as the apex of decision control within organisations, while the executive was in charge of decision management. Their reasoning was that multiple-member boards make collusion between the executive (decision management) and the board (decision control) more difficult.

Two areas dominated research into the link between boards and organisational performance: the duality of the board leadership role and board composition. Duality of board leadership occurs where one individual, the CEO, also takes the role of Chair of the Board. Board composition reflects the numbers and balance of internal (executive) and external (non-executive) directors comprising the board. Policy makers and regulators see non-duality of role and the balance between the executive and non-executive directors as crucial to minimising the apparent conflicts of interest of the executive, described by Fama and Jensen (1983) as the associated “agency costs” arising from the separation of ownership from management.

This view has led policy makers and regulators to develop regulations and standards of best practice that (amongst other criteria) advocate a specified (usually majority) proportion of outside (independent) directors and the separation of the roles of CEO and Chair (Sarbanes-Oxley, 2004; OECD, 1999; Bosch, 1995; Toronto Stock Exchange Committee, 1994; Committee on the Financial Aspects of Corporate Governance, 1992).

Roberts, McNulty and Stiles (2005) stated that a widely held belief existed which holds that independently structured boards (that is, where there is a majority of non-executive directors) would be associated with higher financial performance, and consequently better shareholder returns, because they would hold management more accountable for their decisions and actions. While this belief

may be popular, research by Finkelstein and Mooney (2003) in five organisations that suffered high profile collapses or scandal (Enron, WorldCom, Global Crossing, Quest Communications and Tyco International) found no evidence to support this view. They examined the numbers of non-executive directors (NEDs) as a percentage of the total board and found that four of the five organisations had a proportion of NEDs greater than 70 percent, with the fifth board comprising 64 percent NEDs. Finkelstein and Mooney (2003, p. 102) concluded that the “benefits of board independence seem to be rather illusory.” This was supported by a meta-analysis in which 159 studies covering a 40-year time frame found no evidence of a relationship between board composition and firm financial performance (Dalton, Daily, Ellstrand, & Johnson, 1998).

While less common outside the United States, many organisations continue to combine the roles of CEO and Chair in board leadership. Dalton et al. (1998) likened this to the fox guarding the hen house. Referring again to the research of Finkelstein and Mooney (2003), who examined the issue of leadership duality (combining CEO and Chair roles), they found that in four of the five poorly governed or failed firms in their study the CEO/Chair role was split, while one (Tyco) combined the two roles. Even though four of the five firms complied with governance independence criteria for non-duality, meeting these requirements did not prevent governance and organisational failure.

Conversely, some researchers have suggested that leadership duality is associated with *better* firm performance (Cochran, Wood, & Jones, 1985). Boyd (1995) contended that in certain cases leadership duality may positively impact performance, while in different circumstances it may impact negatively. These conflicting results led Dalton et al. (1998) to conduct a further meta-analysis of 69 studies covering a 40-year period that examined the relationship between leadership duality and firm performance. They found that boards with the CEO/Chair role split did not outperform those with the role combined.

These research and meta-analysis findings, combined with that of Daily et al. (2003), have suggested that using agency theory as the sole model for corporate governance is fraught with inconsistencies and conflicting results, and this has led to calls for a multi-theory approach (Daily et al., 2003).

While the above has relevance for organisations in both the not-for-profit (NFP) and corporate sectors, it should be noted that agency theory remains the predominant model for not-for-profit organisations as well as corporations. The acceptance and influence of the Policy Governance Model developed by Carver (1997) is a reflection of this. The prescriptive nature of this model means that the executive retains control of implementation, acting only within the confines of the appropriate policies defined by the board. This gives the board primary control (Mizruchi, 1983; Walsh & Seward, 1990).

While agreeing that Carver (1997) had made a useful if prescriptive contribution, (Ingles, 1997a) noted that none of Carver's assumptions regarding board practice have been tested empirically. Gill (2001) and Hoye and Cuskelly (2003) found assertions of made by Carver (1997) to be at odds with their own findings. The sharply defined hierarchical structure and defined board-executive relationship of the Carver (1997) model was at odds with their findings. These showed that the Craver (1997) models insistence on a clear distinction between the roles of the board and executive was in reality the subject of ongoing negotiation in regards to such things as leadership and board performance (Hoye & Cuskelly, 2003). Plumptre and Laskin (2003, p. 3) suggested that claims made by Carver regarding the model's universality were "seriously over-inflated" and "worked better in theory than in practice."

These criticisms and the inability of researchers to find consistent causal links between the dominant attributes associated with agency theory and organisational performance resulted in the development of alternative streams of research in corporate governance based on two alternative theories, stewardship theory and resource dependency theory.



### **2.3 Stewardship Theory**

Stewardship theory (Davis, Schoorman, & Donaldson, 1997) provides a contrasting view of the motives of executives to that of agency theory (C. M. Daily et al., 2003). Where agency theorists see executives as self-interested, stewardship theorists recognise that executives' own interests are often aligned with those of the owners (Lane, Cannella, & Lubatkin, 1998). Stewardship theory suggests that the executive has an altruistic interest in seeing the organisation succeed, with this interest extending beyond the tenure of the executive. These aspects of executive behaviour were posited to show that managers were naturally trustworthy (Donaldson & Preston, 1995) and that in seeking to preserve their reputation they would not take any path that disadvantages shareholders.

Davis et al. (1997) stated that executives view this longer-term organisational success as a personal reflection of their own success or failure. This notion suggests that from the executives' perspective and those outside the company, the executive and the company are regarded as one, i.e. the success of one directly reflects the success of the other, or conversely, the failure of one is seen as the failure of the other.

Stewardship theory could complement the agency theory position on leadership duality, reinforcing the opinions of Pfeffer and Salancik (1978); Hambrick and Finkelstein (1987) and Harrison, Torres and Kukalis (1988) who have all argued that leadership duality would be associated with better performance if the announcement of the consolidation of the CEO and Chair roles was positively linked to shareholder returns. However, researchers using meta-analysis have been unable to support any claim of causality linking attributes associated with stewardship theory and organisational performance (C. M. Daily et al., 2003; Rhoades et al., 2000).

### **2.4 Resource Dependency Theory**

Resource dependency theory, as the name suggests, posits that the principal benefit a board brings is its ability to link the organisation with key external

resources. This theory presents boards and their members as conduits through which additional essential resources needed by their organisations can be obtained or accessed (e.g. Hillman, Cannella, & Paetzold, 2000; Pfeffer & Salancik, 1978). There has been no exact definition of a “resource”, although researchers have tended to concentrate on three areas: access to the nation’s business elite (Useem, 1984); easier access to capital (Mizruchi & Stearns, 1988; Stearns & Mizruchi 1993) and access to market intelligence and competitors (Mizruchi, 1996).

Research conducted by Nicholson and Kiel (2007, p. 589) proposed two hypotheses in relation to resource dependency theory and firm performance.

- A) A high level of linkage to the external environment is associated with high access to resources and, consequently, high corporate performance.
- B) A low level of linkage to the external environment is associated with low access to resources, and consequently, low corporate performance.

The results of Nicholson and Kiel’s (2007) case-based study failed to demonstrate a link between the external environment and higher organisational performance. Directors interviewed for the research commented on the importance of linkage to suppliers and improved market prospects from access to the general business population. However, the researchers contended that, as with both agency theory and stewardship theory. The focus on a single aspect of a board’s role through the lens of resource dependence theory and its emphasis on accessing resources in the external environment takes no account of alternative activities undertaken by a board such as strategising and providing advice to the CEO and executive (Lorsch & MacIver, 1989).

When used individually, these theories (i.e. agency theory, resource dependency theory, stewardship theory and institutional theory) paint an incomplete picture of a highly complex phenomenon. Miller-Millesen (2003, p. 522). Therefore, a theoretical model which integrates four theories: agency theory, stewardship theory, institutional theory and resource dependency theory may better describe

the phenomenon. Hoyer and Doherty (2011) identified this model as an integrative theoretical framework that conceptualises links between environmental factors, organisational factors and board behaviour. Hoyer and Doherty (2011) commented that the strength of this approach is that it highlights many board behaviours which can be understood from different theoretical perspectives. The multiple strengths identified by Hoyer and Doherty (2011) led this thesis to adopt a similar multi-theoretical approach, using three of the four identified theories: agency theory, stewardship theory and resource dependency theory. This allowed identification of multiple characteristics from within various environmental, organisational and board behaviour elements similar to those discussed by Hoyer and Doherty (2011).

Hoyer and Doherty (2011) illustrated the influence that organisational environmental variables have on a board and the importance of collective board characteristics in influencing the ability of the board to perform its role. Based on this reasoning, Hoyer and Doherty (2011) developed an integrated model containing four elements: environmental (external), organisational (internal), individual, and board factors that influence a board's performance. These four elements are captured within the constructs used in this research e.g. environmental – external social capital (intellectual capital), organisational – cultural capital, individual – human capital, and board factors – team effectiveness.

## **2.5 Other Approaches**

Alongside the theoretical approaches discussed above, significant research has been conducted into components of boards and the impact of these on organisational performance. Studies by Conyon and Peck (1998), Provan (1980), Kesner (1987), Rechner and Dalton (1991), Herman and Renz (2000), Hermalin and Weisbach (1991), Klein (2002), Yermack (1996) and Conger et al. (2001) amongst others have researched factors such as a board's structure, composition, size, number of independent directors, quantity and type of committee, director competencies, stock ownership and CEO remuneration. These studies sought to determine if there was a discernible relationship between any of these components

of a board and the organisation's performance. As noted by Pettigrew (1992), and more recently by Dalton et al. (1998), the researchers listed above, as well as others, have failed to confirm a direct and consistent relationship between structure, composition and other board components and organisational performance.

This approach to governance research of taking a single facet of a board, i.e. board composition, and trying to determine what, if any, relationship to organisational performance can be derived has resulted in a tendency to over-generalise results across a broad range of organisational and governance types. The environmental context is, in fact, a highly complex mix of interrelated components and relationships, both interpersonal and group-based. The tendency for researchers to generalise their findings across a population, together with the desire for a universal "one size fits all" solution, has been roundly criticised by Pye and Pettigrew (2005) and Pye and Camm (2003b). Furthermore, studies by (Knights & Willmott, 1993; Mintzberg, 1982; Samra-Fredericks, 2000a, 2000b), have suggested that researchers should stop trying to fit the world into abstract categories that are in fact far removed from actual behaviour.

Other studies that have advocated using an organisation's financial performance as a proxy for board performance have also been found wanting. Johnson et al. (1996) highlighted an important issue relating to this type of research, noting that financial measures can be adjusted to take account of economic and industry variables, thus rendering comparisons with organisations that had not taken part in the research meaningless. Taking Johnson et al.'s (1996), view into account while accepting financial performance as a measure, there is no adjustment for economic or industrial variables of the financial data used in this study.

Dramatic business failures such as Enron, WorldCom and Tyco make it clear that a board's effectiveness cannot simply be measured against elements such as conformance with regulation, number of meetings attended, and the depth and breadth of policy. Rather, the true measurement of a board's effectiveness is the

overall performance of the organisation as measured across its many facets, e.g. financial, social, and organisational.

Boards by their nature are social systems. These social systems consist of many variables – personal expectations, protocols, collegiality, etc. Kluckhohn and Strodtbeck (1961) found that relationships between these variables differ across cultures within the organisational context. These variances can be traced to differences in value orientations within different cultures. Hofstede (1980) and Laurent (1983) suggested that these variables were reflected in various aspects of behaviour such as decision-making, participation and teamwork, amongst others.

The social environments that boards inhabit are important as they help to determine the components of a board's composition, behaviour, decision-making processes and eventual effectiveness. The recognition that boards operate within social systems has led to studies that view the governance environment through the lens of social capital-based research (Pye, 2004). A board's social capital, both internal and external, forms an important component of intellectual capital and is described by Nahapiet and Ghoshal (1998, p. 243) as: the sum of the actual and potential resources embedded within, available through and derived from the network of relationships possessed by the individual or social unit [e.g. a board] equals the social capital, and thus comprises both the network and assets that may be mobilised through and for that network. Supporting this view of social capital as a networked construct, Lin (1982) described social capital as resources embedded in social networks, while Portes (1998) advocated focusing on social relations and networks in analysing social capital.

Pye (2004) argued that researchers tend to think of boards and directors as homogeneous groups but clearly they are not. In particular, relationships among board members are complex and densely interwoven nets that over time can develop holes or break. Drawing on resource dependency theory and the construct of social capital suggests that board relationships and networks may be an important key to organisational performance.

The effect of these relationships and their influence on the board, combined with the board's influence on organisational performance, was discussed by Herman and Tuliapana (1985). They found that executive directors are often centrally involved in decisions about who to include on the board, training new board members and setting expectations. Even though these executives are employees of the board (directly or indirectly) who can be hired and fired, it is this duality of role that accounts for the subtle interpersonal and political dynamics that often characterise board–executive relations and which may influence organisational performance.

In extending the views of Herman and Tuliapana, this thesis posits that within these complex and densely interwoven sets of relationships, the executives are the overlooked members of the group that influences organisational performance. In accessing and using the social capital (a component of IC) of the board, the executive also forms an important part of this group (team). Therefore, it is reasonable to think of the combined effects of these relationships at the apex of the organisation as being not two separate but a single combined source of (controlling and strategic) influence on organisational performance. These can, following Pye's (2004) reasoning, not only aid but also destroy the network of relationships that make up the board–executive team (TT).

## **2.6 Summary**

Research seeking to understand the relationship between these multiple components of a board and its effectiveness will require different approaches from the single element approaches that have predominated in the past. Daily et al., (2003) described corporate governance research as being at a crossroad and that in order for researchers to provide insights that may unlock the potential of boards to influence organisational performance, the development of alternative theories and alternative models is needed. The authors also identified the need for researchers to overcome their empirical dogmatism, i.e. researchers' tendencies to embrace a single research paradigm that fits a narrow conceptualisation to the exclusion of alternative explanations of board and organisational performance.

The next chapter sets out the conceptual framework for the study, based on the literature reviewed in this chapter. A set of theoretical propositions are developed as a focus for addressing the research questions presented in Chapter 1.

## **Chapter 3 – New Team Model**

The previous chapter gave an overview of three theories that have underpinned corporate governance research to date. This was followed by a discussion outlining criticisms of a single theory approach to researching this complex subject. The chapter concluded by highlighting the call by scholars for researchers to overcome their empirical dogmatism and adopt a multi theoretic approach to governance research. This chapter is divided into two main sections: the first section discusses the development of the third team model, first introduced in Chapter 1 and developed further from the literature reviewed in Chapter 2; the second section outlines the theoretical underpinnings for the inclusion of intellectual capital, leader-member exchange, knowledge-sourcing and team effectiveness. The chapter closes with the development of conceptual framework (Figure 3).

### **3.1 The Third Team (TT)**

A generally accepted understanding of a team, and its purpose, is a group of people brought together to perform a particular task, whatever that might be (Kozlowski & Bell, 2003). This understanding is reflected in the use of the word in everyday language e.g. team of, builders, doctors, specialists, engineers etc. From an organisational perspective, Langton and Robbins (2007) described teams as groups of people brought together for a period of time (e.g. meetings) to work towards organisational goals. This description encapsulates the way that boards of directors and the executive meet episodically to work towards organisational goals.

In discussing upper echelon (UE) theory, Hambrick (2007) suggested that if we wish to understand why organisations do what they do we must firstly understand their most powerful actors – their top executives. Nevertheless, it cannot be forgotten that powerful actors (executives) still need the influence of others – often termed the production team (board) – to enable the actors to deliver their best performance. Conceptualising this production team as the board agrees with McIntyre et al.'s (2007) description of the board as a team of individuals that plays a role in developing and selecting creative ideas for the advancement of the firm. A number of studies have positioned executive teams at the apex of power in



organisations. This body of research has defined executive teams as top management teams (TMTs) and has investigated their impact on organisational performance across a range of conceptualisations (Finkelstein & Hambrick, 1990; Mizruchi, 1983; Pfeffer, 1983;). Both of these theoretical streams have made a distinction between the board and the executive as separate groups.

Recent work by Carpenter, Geletkanycz and Sanders (2004) noted that the most pivotal actors outside the immediate definition of top management teams or upper echelons were the boards of directors. In highlighting the importance of the board, Finkelstein and Hambrick (1996) developed the “supra-TMT,” which aggregated the TMT and board into one team.

Contrasting this view of the supra-TMT Carpenter, Geletkanycz and Sanders (2004) noted that the supra-TMT is challenged both theoretically and empirically for two principal reasons: first, Fama (1980) described the board and directors as having competing and possibly divided goals and agendas; and second, Jensen and Zajac (2004) provided evidence of inconsistency in results when competing definitions (TMT vs supra-TMT) were analysed. These criticisms and the ambiguity that exists regarding how best to measure the aggregate group have led to the conclusion that it is important to aggregate or disaggregate along appropriate positions rather than focusing on the aggregate whole.

Nevertheless, Carpenter, Geletkanycz and Sanders (2004) supported the idea that a broader more flexible approach to the question of who at the apex of a firm impacts on organisational performance is needed, noting that researchers should not focus exclusively on internal firm management. This view aligns with Pettigrew (1992, p. 178) who asserted that “rather than assuming titles and positions as indicators of involvement, the first task... is to identify which players are involved and why”.

Describing the board—executive teams that combine at board meetings as a single team at first seems at odds with the normally accepted view of a team. After all,

they meet episodically, some as little as three times per year and between meetings the separate teams (board and executive) may have little to do with each other, or, in the directors' case, with the organisation. They do however share commonalities with decision-making teams (Forbes & Milliken, 1999; Sonnenfeld J, 2002).

Payne et al. (2009) defined a board as “a social system of three or more people which is embedded in an organisation (context) whose members perceive themselves as such and are perceived as members by others (identity) and who collaborate on a common task [being teamwork]” (Hoegl & Gemuenden, 2001, p. 436).

Accepting the definition above as describing the board as a team undertaking teamwork, where does the executive fit as part of this team? Executive members are present in most cases for all board meetings: they prepare and present papers, take part in conversations and discussions on strategy and overall organisational direction and the myriad of other aspects of organisational performance, as well as enacting or implementing the decisions made in the boardroom by the collective members of the board and executive group. There is significant research that conceptualises the executive within the context of a team (Alexiev, Jansen, VandenBosch, & Volberda, 2010; Carpenter, Geletkanycz, & Sanders, 2004; C M Daily & Schwenk, 1996; Hambrick, 2007; Hambrick & D'Aveni, 1992).

Given the broad agreement with the concept that there are two distinct teams – board and executive – and that these two teams meet with each other to exchange views and information, discuss, develop and agree actions for the organisation, then what is this collective group if not a team? To conceptualise the board and executive teams as separate, each with their own individual goals and aspirations would be incorrect, as they work collaboratively towards a single organisational goal.

Using the term coalition may perhaps describe the executive–board team more effectively. However, the accepted definition of a coalition (Oxford) are groups that

come together for a specific task while retaining their separate identities, culture and goals. For example, in a political coalition, two parties join to form a government but retain their separate manifestos, directions, etc., while agreeing on key concessions so that each party has particular aspects of their policy enacted. This coalition can at any time disband and continue on divergent paths, may never work together again, and often attacks publicly and privately the skills and abilities of the other. This hardly describes the conceived or accepted view of the (effective) board–executive relationship. Even a dysfunctional executive–board coalition would not fit the description of a coalition because if they do disband one or other of the independent groups (board or executive) will no longer be functional within the organisation.

The description of a team that was used in this research to develop the TT model was derived from Kozlowski and Bell's (2003) conceptualisation of a team. This conceptualisation describes a team as a configuration of complementary efforts that produces outcomes that are beyond the abilities of individuals working alone. The researchers further refined their definition of teams as:

[C]ollectives who exist to perform organizationally relevant tasks, share one or more common goals, interact socially, exhibit task interdependencies, maintain and manage boundaries, and are embedded in an organizational context that sets boundaries, constrains the team, and influences exchanges with other units in the broader entity. (p.334)

When combined with Payne et al's (2009) definition the two views provide the description and conceptualisation of the TT within an organisation (Figure 3). While the TT model may not fit current theoretical models or suit the dominant approaches currently used, this research has responded to Jackson (1992) and Pettigrew (1992) who called for tailoring the unit of analysis to the specific research question asked. Following this approach the TT model as the unit of analysis for research on how a board impacts organisational performance is in practice a deliberate, structured and legal entity at the nexus of power within an organisation

and the environment in which it operates. On this basis the third team can therefore be incorporated into research that examines how boards impact organisational performance.

Reflecting on the above, this research posited that when they are separated the board and executive teams are less powerful than when they are combined into what this research terms the third team. The creation of the third team enables the human, social, cultural and structural capitals – collectively defined as the board's intellectual capital (G. Nicholson & Kiel, 2004) – to be fully utilised by the executive through the mechanisms of KS, TE and LMX, leading to enhanced organisational performance.

**Proposition 1: “Third Team”**

*There are three top management teams in an organisation – Board, Executive Team (TMT), and the Third Team, through which organisational performance is influenced.*

### **3.2 Theoretical Underpinning**

The preceding discussion outlined the theoretical background and reasoning that led to the development of the TT model. The following sections describe the theoretical underpinnings for the inclusion of intellectual capital, leader-member exchange, knowledge sourcing and team effectiveness as the constructs by which the board's influence is actioned.

#### **3.2.1 Intellectual Capital (IC)**

In Chapter 1, intellectual capital was highlighted as a concept of emerging interest to governance and management researchers (e.g. Bontis, 1999; Keenan & Aggestam, 2001; G Nicholson & Kiel, 2003). Nicholson and Kiel (2004) posited that for a board to be effective in carrying out its four roles of controlling the organisation, providing advice, strategising and providing access to resources, a mix of attributes which are collectively defined as the board's intellectual capital is

required. As noted above, the four core groupings comprising intellectual capital are human, social, structural and cultural capitals (Figure 3).

These groupings are also referred to under the names of knowledge and information; experience and relationships; routines and procedures; and cultural.

When combined the individual characteristics create a pattern of behaviour.

Following this reasoning, this pattern then influences the way the board undertakes its roles, which in turn influences the executive and finally organisational performance.

#### 3.2.1.1 Human Capital (HC)

HC consists of the innate and learned abilities, expertise and knowledge of an individual director. HC is important as a source of innovation and strategic renewal. Good practice guides have suggested that the mix of directors' skills within a board is significant. In agreeing with this statement, it must be remembered that director capabilities can only be a starting point, as action shapes relationships with others which are dynamic rather than additive. A board, like any team, is capable of being either greater or lesser than the sum of its parts (Nicholson & Kiel, 2003).

#### 3.2.1.2 Social Capital (SC)

SC is the mix of implicit and tangible resources that are available through the various social relationships of individual directors' and the board as a group. As SC is both an individual and group construct, this means that the environments in which SC is used, developed and built upon are both internal and external. Pye (2004) acknowledged that SC is built by two parties; however, it only takes one to destroy it. This need not be one of the original two parties but could be either an internal or an external third party. The board and executive team acting collectively thus plays an important role in defining, building and maintaining the social capital within the third team. SC within a board is finely balanced as boards only work episodically, with the average board spending less than two weeks per year together (Monks & Minow, 1995).

#### 3.2.1.3 Structural Capital (STC)

STC is the mix of explicit, implicit and codified knowledge (routines, policies, etc.) that resides within a board. A degree of formal structure has been proven to have a positive effect on communication and sharing of information (Smith, Smith, Olian, Sims, O'Bannon & Scully, 1994). Supporting this view, Gabrielsson and Winlund (2000) found that one of the most critical board processes involved the flow of information within the board itself.

#### 3.2.1.4 Cultural Capital (CC)

CC consists of both implicit and tangible aspects of a board's ethos. These normally manifest themselves within the norms, values and rules of individual members, as well as the board as a whole. Effort norms for example are a group construct that refers to the shared belief of the board regarding the work effort required of each individual. Effort by its very nature is an individual construct (Forbes & Milliken, 1999). Board norms, including effort norms, often exert a strong influence on a director's behaviour (Feldman, 1984); this is particularly true within boards that are interdependent (Wageman, 1995).

#### **Proposition 2: "Means to an End"**

*The application of the board's intellectual capital (human, social, structural, cultural) is the contribution ("means") by which the board influences "the end", that is, the performance of the organisation.*

### **3.3 Executives' Impact on Performance**

Directly aligning board performance with organisational performance is naive, as a good board and executive will probably deliver good results. A poor board and good executive could still deliver good results whereas a good board and poor executive will in the short term deliver poor results – until the board takes action (Nicholson & Kiel, 2003). This highlights the notion that it is through the executive that the board is able to influence organisational performance. It also reinforces the importance of the TT construct and its influence on performance.

That executives affect organisational performance has long been understood (Figure 3). Theorists such as Barnard (1938) and practitioners like Drucker (1954) and Collins (2001) argued that the executive has an important impact on organisational performance and survival. Researchers such as (Schein, 1992; Selznick, 1957; Woodward, 1965) have variously argued that executive teams affect organisational performance through establishing the organisation's culture, values, course and action in the face of change. Still others have argued that executive influence is limited by environmental and legitimacy constraints, which restrain choice (DiMaggio & Powell, 1983; Hannan & Freeman, 1989). From her research, Mackey (2005) suggests that conclusions on the limited effect on performance may have been premature. Mackey's (2005) study found that almost 30% of organisational performance was attributable to the executive, and in particular the CEO.

This finding with regard to the impact of the executive and in particular the CEO on organisational performance is supported by other studies (Crossland & Hambrick, 2007; Wasserman, Nohria, & Anand, 2001), which have found impacts ranging from just under five percent to almost 15%. With the above clearly showing that the executive affects organisational performance, it is interesting to contemplate why there has been a persistent desire to find direct causal links between the board and organisational performance, when research clearly shows that this is not the case. This interest has persisted even though researchers such as (Dalton et al., 1998; Pettigrew, 1992) have found no consistent evidence or relationships linking boards directly with organisational performance.

On this basis a central tenet of this research is that it is the link between the board and executive within the context of the third team that allows the board to influence organisational performance (Figure 3). Also highlighted is the need to understand the influence that the board's intellectual capital (human, social, cultural and structural capitals) has on the effectiveness of the executive, which in turn directly affects organisational performance.

An important aspect of a board's ability to influence the performance of an organisation is the time lag between the decision process of the third team and execution by the executive. The successful operationalisation of a decision and the time lag is governed by the level of interaction and congruence between the board and executive. As Nadler and Tushman (1980) indentified, it is not what the components are but the level of interaction within a board that is critical.

Nadler and Tushman (1980) observed that it is not finding the "best way" to govern that is critical – it is identifying what the effective combination of components are that leads to congruence. This observation aligns with Forbes and Milliken's (1999) view of boards as intact social systems that perform one or more tasks within an organisational context. Their definition supports the view that board effectiveness may depend on the behavioural dynamics of the board and how the web of interpersonal group relations is developed in a company context (Sundaramurthy & Lewis, 2003).

Pye (2004) argued that understanding these complexities and their impact will allow greater understanding and definition of, the behavioural aspects that influence boards' effectiveness. This will in turn lead to greater understanding of how boards influence executive and organisational performance, the rationale being that understanding allows the researcher to reflect accurately the complex interrelated external and internal environments within which boards and the executive (TT).

### **3.4 Leader-Member Exchange (LMX)**

The concept behind the TT construct was that the TT influences organisational performance by allowing exchanges of knowledge (tacit and explicit) and the development of partnerships and relationships between members of the TT. Significant research supporting the concept of knowledge exchange and partnership development as a team-based behaviour has been conducted (Cole, Schaninger, & Harris, 2002; Coleman, 1988; Graen & Uhl-Bien, 1991b; Seers, 1989; Wayne, Shore, & Liden, 1997).



The decision to use LMX theory as a framework for grounding this research resulted from a comparison of the LMX and Team-Member Exchange (TMX) (Seers, 1989) perspectives. The two theories are similar in that they both assess reciprocity between team members. They differ in that TMX measures reciprocity between a member and their peer group within a team environment whereas LMX measures reciprocity and patterns of relationship quality within the leadership structure, taking into consideration the criticality of relationships for task performance, as well as the effects of relationships on each other and the organisation (Graen & Uhl-Bien, 1991).

Seers (1989) described TMX theory as measuring the employee's relationship to that group of peers with which he or she identifies as a member. In contrast, Graen and Uhl-Bien (1991) described LMX theory as referring to the effective leadership processes that occur when leaders (e.g. a board) and followers (e.g. the executive) develop mature relationships (partnerships) and gain from the many benefits that these bring, such as the exchange of knowledge.

Research that seeks to understand the nexus of interaction between the board and executive is conceivably the most represented within the leadership field (Blair & Stout, 1999; B K Boyd, Haynes, & Zona, 2010; Hsueh-Liang, 2008; McIntyre et al., 2007; Payne et al., 2009). However, research grounded in LMX theory has concentrated on teams developed below the board level of an organization. An extensive search of the literature revealed no research that has used LMX or TMX theories as a framework to examine the exchanges and partnership developments between a board and the executive.

Heracleous (1999), among others, has described the board as being at the apex of the organisation. This description, as well as an array of regulations (such as the New Zealand Stock Exchange (NZX) and the Australian Stock Exchange (ASX) listing rules) and statutes (the Australian Companies Act, 2006; the New Zealand Companies Act, 1993; the Sarbanes-Oxley Act, 2002), clearly identify the board as the leader responsible for the performance of the organisation.

These statutes, regulations along with the description of Heracleous (1999) support the selection of LMX theory as a framework that allows measurement of the effects of leadership processes and the relationship quality of the board and executive. Leader-member exchange theory also considers the criticality of these processes and relationships for task performance as well as their interactional effects, all of which influence the performance of the organisation.

LMX theory was initially developed by Graen et al. (1975) and extended by Graen (1976). In the 30 years following the initial development of the theory a large body of research has developed (Martin, Thomas, Charles, Epitropaki, & McNamara, 2005; Steiner, 1997b; Wayne et al., 1997) and complemented this initial work, leading to the form of the theory in use today.

LMX theory has gained a distinguished following of researchers (Graen & Uhl-Bien, 1995; Hoyer, 2006; Northouse, 2001) which has provided the basis for this research to seek insights into the interpersonal relationship between the board and executive of the TT. Such insights may reveal the influence of the TT relationship on the performance of the executive team, which in turn affects the performance of the organisation.

Graen and Uhl-Bien (1995) described LMX theory as having developed through four stages. Stage 1 involved the discovery of differentiated dyads; Stage 2 investigated the characteristics and relationships and the implications; Stage 3 described the dyadic partnership building; and Stage 4 described the aggregation of the differentiated dyads being effectively assembled into collectives (TTs). Research underpinning the description of the fourth stage of LMX development (Graen & Uhl-Bien, 1995), combined with research using this approach (Boies & Howell, 2006; Coglisier & Schriesheim, 2000) supports the use of LMX theory in seeking to understand the relationships within the TT and their influence on organisational performance.

Graen and Uhl-Bien's (1995) research found that the interactions (relationships) between the leaders (board) and members (executive) are central to organisational performance. Research by Northouse (2001) supports these findings concluding that positive (high LMX) relationships had the effect of improving the attitude, motivation, commitment, loyalty, etc., of the members.

Using social exchange theory, Cole et al. (2002) described the exchange concept as one that can be viewed dyadically or systematically, and as supporting individualistic or collectivist goals. Exchanges can be based on reciprocity or calculations of instrumentality. Further support for the collectivist approach was provided by Graen and Scandura (1987), who suggested that leader-member exchanges should be viewed as systems of interdependent dyadic relationships. These relationships were not limited to generally accepted formal leader–follower concepts but were inclusive of relationships among peers, teammates and, importantly for this research, across organisational levels and organisations. The outcomes from these relationships form the central core of LMX theory including, effective leadership processes. These occur when boards and executives develop mature leadership relationships (or partnerships) gaining access to the benefits these relationships bring (Graen & Uhl-Bien, 1995).

While based on the leadership model developed by Bass (1990), there was initially ambiguity about how LMX relationships should be described – as either transactional or transformational in nature. Transactional relationships refer primarily to material exchange, e.g. payment of wages for satisfactory completion of a job. However, exchanges can also be social exchanges or exchanges of psychological benefits, e.g. approval, trust, support (Graen & Uhl-Bien, 1995).

In clarifying the use of LMX in future research, Graen and Uhl-Bien (1995) conceptualised LMX as being both transactional and transformational: the interaction begins as a transactional social exchange and evolves into a transformational social exchange. These exchanges begin with individuals who are strangers, who then engage in testing processes through social transactions. The

transactions between them may progress through the acquaintance stage, identified by greater social exchange, and some will develop into partnerships. These partnerships experience the transformation from a focus on self-interest to a focus on the larger interest.

These social interactions were classified in two ways:

1. Relationships that transitioned into partnerships characterised by close relationships were classified as having high leader-member exchange.
2. Exchanges that did not progress past the acquaintance stage and were characterised by use of formal authority were classified as having low leader-member exchange.

Linden and Graen (1980) found that these exchange types – stranger (stage 1), acquaintance (stage 2) and partnership (stage 3) – evolve quickly through the stages and tend to remain stable over time. This suggests that once established, a high quality LMX relationship has long-term benefits for the organisation. Conversely, a low quality LMX relationship would have negative implications for the performance of the organisation, the primary causes of which are the length of time it takes to change from a low quality LMX relationship to a high quality one, and the difficulties involved in such a change.

Supporting this notion, Graen and Uhl-Bien (1995, p. 229) found that “higher quality LMX relationships have very positive outcomes for leaders, followers, work units and the organization in general”. Steiner (1997a) and others showed that high LMX exchanges are related to reduced employee turnover as well as greater employee performance and productivity (Keller & Dansereau, 1995). Northouse (2001, p. 115) also found that high LMX exchanges produced “less employee turnover”, as well as “more positive performance evaluations, higher frequency of promotions, greater organizational commitment, more desirable work assignments, better job attitudes, more attention and support from the leader, greater participation, and faster career progress” – all of which are acknowledged (Linden & Graen, 1980; Wayne et

al., 1997) antecedents to improved performance. These researchers also found that low LMX exchanges were negatively correlated to all the above factors.

The findings from studies by Graen and Uhl-Bien (1995), Northouse (2001) and others have indicated support for one of the mix of constructs that may be implicated in organisational performance. That being, high LMX relationships and interactions between the board and executive lead to knowledge (tacit and explicit) sharing (sourcing), subsequently resulting in higher performance in work units and the organisation in general.

### **3.5 Knowledge Sourcing (KS)**

The preceding discussion of LMX theory centred on the relationships and partnerships that form between the board and the executive and showed that there are benefits to be gained from these relationships (Graen & Uhl-Bien, 1995). The relationship between the board and the executive can be especially beneficial for the executive, who gain access to the explicit and tacit knowledge held by the board and individual directors. This study adopts the notion that strong leader-member exchange is an antecedent to the use of knowledge sourcing (Gray & Meister, 2004). This construct measures the extent to which individual (executive) members (of the TT) access the individual or collective expertise, experience, insights and opinions of the other (board) members.

Knowledge management research, which seeks to understand how organisations could better manage their internal and external knowledge resource, provided the basis for the development of Gray and Meister's (2004) knowledge sourcing construct. The knowledge management literature is interested in managing knowledge in its various forms (e.g. electronic, written, oral) but does not offer a testable model to explain how knowledge is accessed by the individual. Gray and Meister's (2004) knowledge sourcing construct rectified this shortcoming and provided the means by which researches could gain insights into and focus on how an individual accesses the expertise, experience, insights and opinions of others.

Research into how knowledge is accessed so that learning may occur has used different terms to define KS, such as advice-seeking (Alexiev et al., 2010) and group learning (London & Sessa, 2007). For the purpose of this study the various terms and their definitions are grouped within the construct of knowledge sourcing.

Knowledge sourcing has been described as a ubiquitous phenomenon because senior executives have a tendency to rely more on oral and personal information sources than they do on written and impersonal ones such as reports and management information systems (Alexiev et al., 2010; S. L. Brown & Eisenhardt, 1997; McDonald & Westphal, 2003).

The difference between simply obtaining facts and gaining knowledge is critical. The former relates to information freely available from many sources (e.g. books, reports, web, etc.), whereas the latter is based on an individual's tacit and explicit knowledge gained from their professional expertise and experiences and, in its particular form, is only available from that individual. A key outcome of KS is allowing executive members of the TT to access expertise, experience, insights and opinions from external sources (e.g. the directors). This advice can lead the executive to make choices that may guide organisational action and behaviour away from entrenched patterns and routines (Alexiev et al., 2010; Druckman, 2001).

Gray and Meister (2004) described KS as a precise construct that describes an individual's intentional efforts to search out and access expertise, experiences, insights and opinions produced by individuals and thus not available elsewhere. This description fits with the concepts outlined in resource dependency theory, which suggest that one of a board's key functions is to give executives access to resources (knowledge) they may not otherwise have. In this way, knowledge sourcing can be seen as a significant contributing factor to the continued growth and development of the individual executive members of the TT, both personally and professionally.

There are three generally accepted groupings of communication between people: one to one, one to many, and many to many. Gray and Meister (2005) related these groupings to KS behaviour, classifying them as:

- Dyadic: based on a person-to-person communication, a single knowledge provider to single knowledge seeker.
- Published: involves the codification and storage of knowledge from a single knowledge provider – available to many.
- Group: where knowledge is exchanged between multiple knowledge seekers (executive) and multiple sources (e.g. directors) in an open venue (e.g. a board meeting).

Group knowledge sourcing behaviour is especially relevant in the TT context of this study. Discussing KS in an organisational context, Hansen (1999) has said that top management teams (referred to hereafter as the Third Team) have a higher capacity to assimilate and incorporate highly specialised and tacit information from their internal advisers into their decision making. The TT's ability to access and assimilate specialised and tacit knowledge allows the group to handle unexpected situations, cope with emergencies, manage interactions across group boundaries, and solve problems creatively (Pulakos, Dorsey, & Mueller-Hanson, 2005).

While having access to the collective knowledge bank contained within the TT is important, the application of the knowledge gained, to solving organisational issues or improving performance, determines the worth of the knowledge. In this regard, Gray and Meister (2004) defined the extent to which individuals' cognitive structures have improved over time as an important indicator of the learning outcomes. They categorised three distinct types of instrumental cognitive change mechanisms used by individuals to apply the knowledge as: replication, adaptation and innovation.

Replication is the propagation of existing cognitive structures or, more simply, taking a new learning and applying it directly within your own sphere of control and

operation. This results in value creation from not having to re-create the knowledge that already exists (Gray & Meister, 2004). Adaptation refers to the evolutionary development that occurs when prior knowledge is altered in some way to make it more applicable to the firm and its environment (Weick & Quinn, 1999). Innovation refers to a radical or substantial change to the extent that no increase in efficiency or redesign could have the same impact (Tushman & Anderson, 1986).

Replication, adaptation and innovation are not mutually exclusive – they can in fact merge and occur concurrently. A TT can be automatically reactive (replication) in meeting immediate urgent needs; purposively proactive (adaptation) in adding new behaviours, skills and knowledge; and re-creative (innovation) in identifying and adopting new processes or skills that are not required as a result of existing pressures (London & Sessa, 2007).

Knowledge and information have been positively associated with organisational performance (Conger et al., 2001; Mohrman, Cohen, & Mohrman, 1995; Payne et al., 2009), and specifically in relation to board effectiveness (C. M. Daily et al., 2003; Hermalin & Weisbach, 2003). Understanding how the executive access knowledge and information from the directors of the TT may thus be an important antecedent to improved organisational performance.

### **3.6 Team Effectiveness (TE)**

Having established that the board could be conceptualised as a team, it is important to understand what, if any, impact team effectiveness within the board might have on the overall performance of the TT. Various studies (Daily et al., 2003; Hermalin & Weisbach, 2003) have investigated boards from a group perspective, as well as the impact that group effectiveness has on performance.

Forbes and Milliken (1999, p. 492) defined the board's group effectiveness as its ability to carry out its control and service tasks, describing these as "classic task and maintenance criteria identified in many past models of group effectiveness" (team effectiveness). These notions of a board's group effectiveness were combined with



a model for measuring the effectiveness of teams charged with complex tasks (Conger et al., 2001; Mohrman et al., 1995). Payne et al., (2009) asserted that there were five key attributes – knowledge, information, power, opportunity, time and incentives – of highly effective teams. The findings of this research confirmed that these factors were applicable to board effectiveness (TE) and that effective boards contribute positively to the financial performance of the organisation (Figure 3).

As a separate team that forms half of the TT, the board and its effectiveness across a range of aspects including collaboration (e.g. KS) (Sundaramurthy & Lewis, 2003) influences organisational performance (Payne et al., 2009). Given the difficulty of measuring the effectiveness of a team from an internal perspective (Leblanc & Gillies, 2005), this research follows the suggestion of Payne et al. (2009) in treating TE as a mediator of the board's attributes–performance relationship. In doing so, this research was aware that boards do not play a part in the implementation of decisions or day-to-day operations, meaning they are unable to directly impact organisational performance, and that therefore any implied causal link to organisational performance is questionable.

Therefore, rather than investigating TE as the mediator of the board–firm performance relationship, this research investigated TE as the mediator of the board–executive performance relationship, within the environment of the TT. This research posited that it is only within the TT environment that a board's effectiveness – or lack of it – can influence the executive, who in turn affect organisational performance.

**Proposition 3: “How the ‘end’ is achieved”**

*The board's interaction with the executive is through the Third Team in which the constructs of Leader -Member Exchange, Knowledge Sourcing and Team Effectiveness facilitate the board's influence upon organisational performance.*

### 3.7 Research Questions and Propositions

Shown below are the three research questions and the three related propositions which have been drawn from these questions.

#### Question – 1

Are there three top management teams in an organisation: 1) Board, 2) Executive Team (TMT), and 3) **Third Team** through which a board influences organisational performance?

#### Proposition – 1

There are three top management teams in an organisation – Board, Executive Team (TMT), and the Third Team, through which organisational performance is influenced.

#### Question – 2

Is the board's intellectual capital (human, social, structural, cultural) the "means" by which the board influences "the end", that is, the performance of the organisation?

#### Proposition – 2

The application of the board's intellectual capital (human, social, structural, cultural) is the contribution ("means") by which the board influences "the end", that is, the performance of the organisation.

#### Question – 3

Within the third team, are the constructs of Leader -Member Exchange, Knowledge Sourcing and Team Effectiveness, the mechanisms by which the board influences the "end"?

#### Proposition – 3

The board's interaction with the executive is through the Third Team in which the constructs of Leader - Member Exchange, Knowledge Sourcing and Team Effectiveness facilitate the board's influence upon organisational performance.

**Figure 3: Questions and Propositions**

This chapter has presented theoretical support for the inclusion of each of the constructs used in this study. Three propositions have also been developed that reflect the three research questions posed in Chapter 1. Figure 3 shows how the components (TT, intellectual capital, leader-member exchange, knowledge sourcing and team effectiveness) contained in the three propositions interact. Chapter 4 presents the rationale for the research methods used in this study.

## Third Team

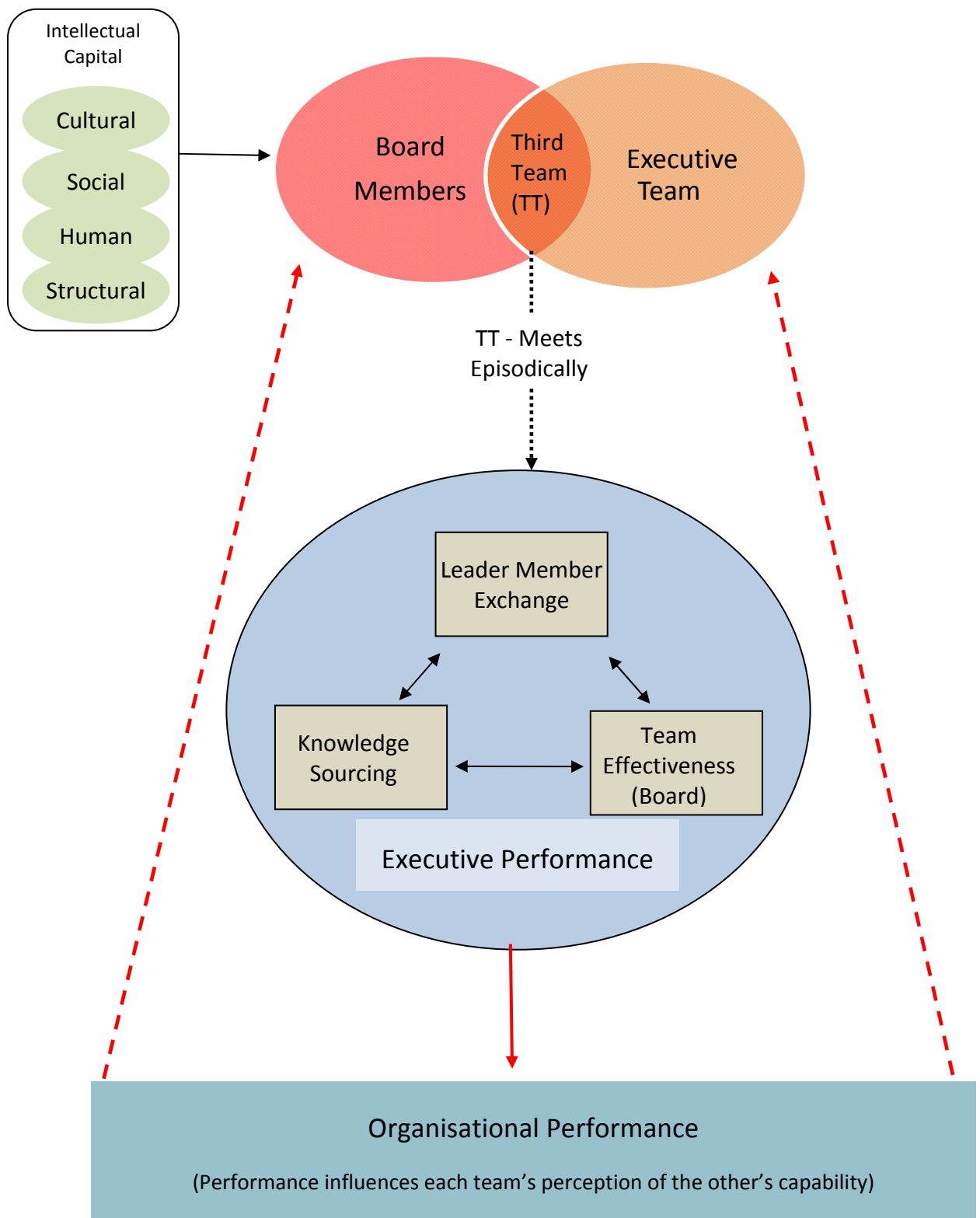


Figure 4: Conceptual Framework

## **Chapter 4 – Research Methodology**

Chapter 2 discussed the extant theoretical research on corporate governance. In particular, the chapter discussed three dominant theories (agency theory, stewardship theory, and resource dependency theory) that have guided research in this field to date. Chapter 3 introduced a new model in this thesis named the “Third Team” (TT). The TT enables the research to reflect more closely the context in which boards interact with the executive. The final section of Chapter 3 developed the conceptual framework for the study, describing the theoretical underpinnings and reasoning for the selection of the supporting constructs (IC, LMX, KS and TE) that facilitate the interaction and access to knowledge that occurs within the TT.

This chapter begins by highlighting some of the issues with the dominant research methods used in governance research before discussing the rationale for selecting the research approach used in the study. Following this critique and comparison, the selection process for the research populations is described, including the selection method used to determine the final research sample. Development of the survey instruments and the interview guidelines are described before concluding the chapter with a discussion of fuzzy set qualitative comparative analysis (fsQCA), used to analyse the data.

### **4.1 Selection of Research Methods**

Extant studies such as those by Conyon and Peck (1998), Kesner (1987), Provan (1980), Rechner and Dalton (1991) and Yermack (1996) have attempted to link components of board structure or process to organisational performance using either a qualitative or quantitative approach, but none has produced conclusive evidence of a direct and consistent relationship, as noted by Dalton et al. (1998). Heracleous (2001) suggested that the influence of boards on organisational behaviour is too complex to be able to find significant relationships in narrow studies of board attributes. Pye and Pettigrew (2005) and Daily et al. (2003) concur and have called for a multi-theoretical approach to the study of governance.

In deciding on the methods this research would follow, comments by Howe (1988) and Clarke and Yaros (1988) were especially salient. Howe argued that no incompatibility existed between quantitative and qualitative and the researchers should forge ahead with “what works.” Clarke and Yaros (1988) contended that combining research methods can be useful in some areas of research where the complexity of the phenomena under study deserves a multi-theoretical approach, as suggested by (Daily et al. 2003; Heracleous, 2001; Pye & Pettigrew, 2005). Daily et al., (2003) opined that researchers’ tendency to embrace a single research paradigm and to apply it to a narrow conceptualisation at the exclusion of others leads to empirical dogmatism. Selecting a mixed-method approach for this research acknowledges the calls of these researchers for research that is both capable of understanding the complexity of corporate governance and able to avoid the trap of empirical dogmatism.

Two research paradigms dominate corporate governance research. Studies using the qualitative or quantitative paradigms, e.g. Boyd (1995), Kang, Cheng and Gray (2007) and others, have tended to focus on one or other of the dominant theories (agency theory, stewardship theory or resource dependency theory), while examining single attributes of a board. These and other studies have sought to link an attribute of the board (e.g. composition) to organisational performance via quantitative measures (e.g. returns on investment, Tobin’s Q). In adopting a quantitative approach researchers often perceive the truth as being separate from the researcher and awaiting discovery, whereas research conducted using a qualitative lens is more concerned with reality as experienced by people, and the truth as arising from the interactions between researcher and subject (Phillips, 1988b). These two research cultures, “one professing the superiority of ‘deep, rich observational’ [qualitative] data and the other the virtues of ‘hard, generalisable’ . . . [quantitative] data” (Sieber, 1973, p. 1335), have, individually, proven inadequate in defining how boards influence organisational performance.

In addition to the arguments by Dalton et al. (2003), Heracleous (2001), Pye and Pettigrew (2005), Howe (1988) and Clarke and Yaros (1988), the philosophy of

pragmatism played a key role in the selection of the research paradigm for this study. This philosophy suggests that researchers use an approach (or mixture of approaches) that suits the real-world situation under investigation. The real world of the board, directors and executive is considered to be too complex for a single research paradigm (C. M. Daily et al., 2003; Pye & Pettigrew, 2005), hence the decision to select a mixed-method research approach.

It is a basic tenet of mixed-method research that the researcher should mindfully create a research design that seeks to answer the research question effectively (R. B. Johnson & Onwuegbuzie, 2004). Combining both the qualitative and quantitative methods retains their individual strengths: a commitment to rigor and conscientiousness, and to critique in the research process (Reichardt & Rallis, 1994). When combined, each method is both separate and interconnected, forming a link that promotes greater understanding of the research topic (R. B. Johnson & Onwuegbuzie, 2004). Johnson and Onwuegbuzie (2004) describe two major subgroups of mixed-method research: mixed-model (mixing qualitative and quantitative approaches within or across the *stages* of the research process) and mixed-method (the inclusion of a quantitative *phase* and a qualitative *phase* in an overall research study).

Selecting the mixed-method approach for this research permits the corroboration of data obtained via qualitative or quantitative methods. If the data provided conflicting results, knowledge gathered with the mixed-method approach allowed reflection and further development of interpretations and conclusions. The strengths of the mixed-method approach, outlined above, provided greater confidence in the findings. Onwuegbuzie and Leech (2004b ) argued that in many cases the goal of mixing research paradigms is not to search for corroboration but rather to expand the researcher's understanding of the phenomenon. This is particularly true for this research as it sought not to corroborate known data but rather to develop a new understanding of the board's influence on the executive staff's performance within a single study.

#### **4.1.1 Benefits of Mixed Method Research**

Examples of these benefits in action include Zamanou and Glaser's (1994) longitudinal study of the culture in governmental organisations and Stiles's (2001) study of the impact of a board on strategy. The principal finding from Stiles's (2001) research was that multiple perspectives are required in order to understand the nature of board activity. This provides further support for adopting of a mixed-method research approach for this research. A further example of research that was better informed by a multi-theoretical approach is that of Wajcman and Martin (2002), which used a questionnaire followed by semi-structured interviews to investigate career orientations and attitudes of management. Initial results from the quantitative questionnaire showed no difference between male and female managers; however when analysis of the qualitative interviews was completed, a significant difference was identified. These conflicting results highlight the insights gained by using the mixed-method research approach.

Johnson and Onwuegbuzie (2004, p. 17) described mixed-method research as the "third wave" or third research movement. This method legitimises the use of multiple approaches in answering research questions, rather than restricting or constraining researchers' choices, i.e. it rejects dogmatism. The method is expansive and creative rather than limiting, as demonstrated in the preceding discussion of corporate governance research.

A mixed-method approach removes conflict between positivists' and interpretivists' positions on research rigor by offering a logical and practical alternative. The logic of inquiry in mixed-method research allows "induction (or discovery of patterns), deduction (testing of theories and hypotheses), and abduction (uncovering and relying on the best of a set of explanations for understanding one's results)" (R. B. Johnson & Onwuegbuzie, 2004, p. 17).

#### **4.1.2 Data Collection Method**

In keeping with fundamental principles of mixed-method research, this research collected data using different strategies, approaches and methods, enabling the

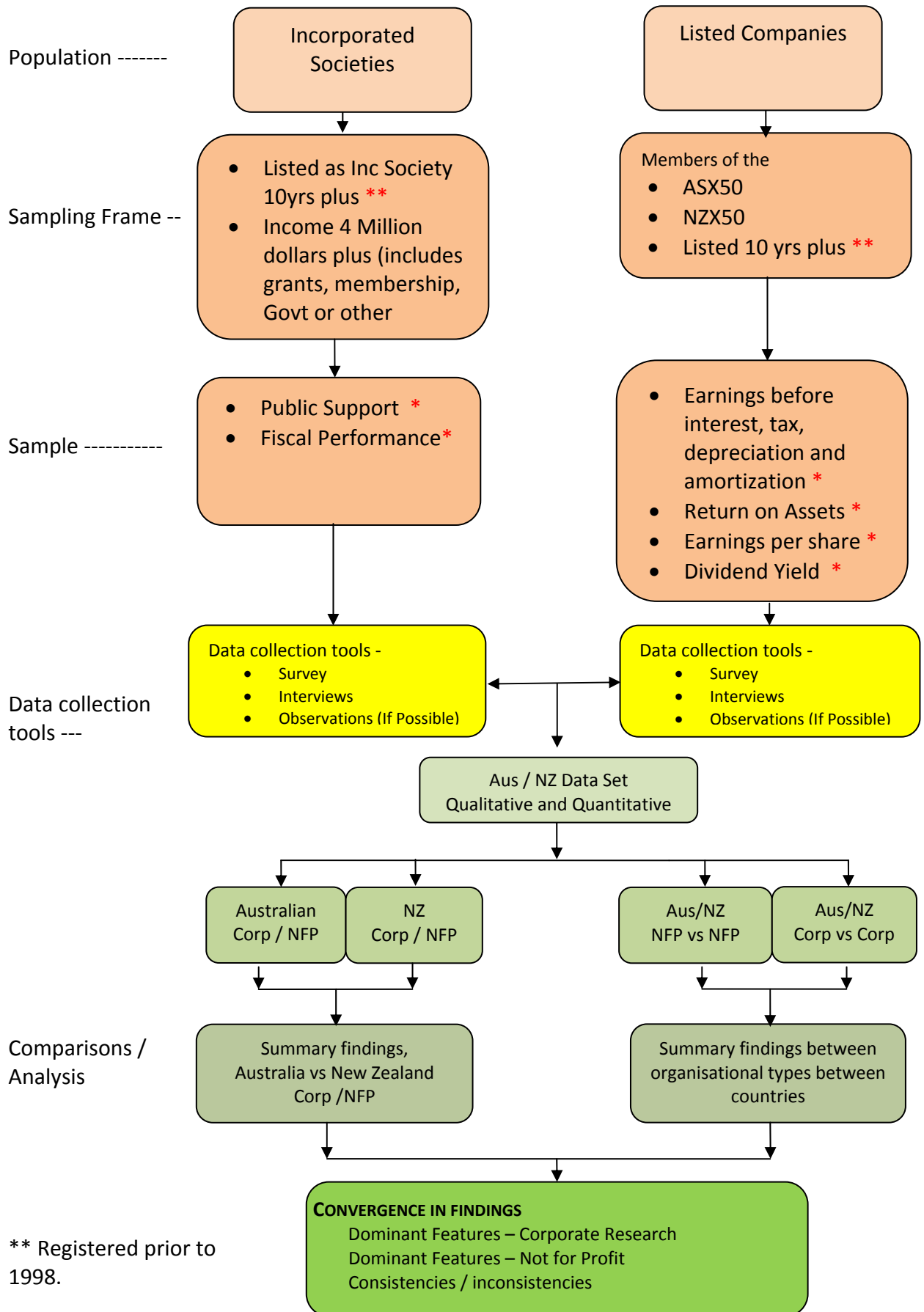


resulting mixture or combination to have complementary strengths and non-overlapping weaknesses (R. B. Johnson & Turner, 2003). The methods of data collection used were, surveys supported by semi-structured interviews. The rationale for choosing these two methods for data collection focused on a number of aspects. Surveys provide excellent quantifiable data for use in fsQCA, however, they do not provide the insights and depth of understanding that an interview brings. Interviews also enhance the substantive knowledge of the researcher through access to the tacit knowledge of those interviewed. The researcher's increased tacit knowledge informed the use of fsQCA.

Collecting and analysing the surveys informed the development of the semi structured interview questions. The amalgamation of these two sets of data added to the substantive knowledge of the researcher allowing for a refined calibration of the fuzzy sets that were used in the analysis. Using mixed-method to answer the research question ensured that the choices for data collection were not constrained by theoretical dogmatism but were inclusive while remaining complementary.

The structure adopted by Wajcman and Martin (2002) was adopted for this research. First, surveys were distributed electronically to all participants; the surveys were followed by semi-structured interviews with a range of participants from each of the groups involved in the surveys, including board chairs, directors, CEOs and executives from the high-performing (HP) and poor-performing (poor performing) groups in both the not-for-profit (NFP) and corporate sectors.

The selection and sampling process is displayed in Figure 4, which defines the populations and filters applied in the initial selection process. Before showing the measures applied to determine which organisations would be described as high-performing or poor performing. Before moving onto show, tools used to collect the data. Finally, it gives a brief overview of the analysis structure that would be used in analysis of the data.



**Figure 5:** The complete research lifecycle

## 4.2 Cross-National Study

This research studied New Zealand (NZ) and Australian (AU) corporate and not-for-profit organisations. This research distinguishes itself from other similar research because it is simultaneously dual-country and dual-sector. Figure 4 outlines the research lifecycle from the initial population selection through to outlining the proposed analysis structure.

Multiple factors led to this research consisting of both dual-country and dual-sector analysis. These factors include the growing homogenisation of governance standards, practices and processes that is occurring internationally. This is evident between European Union (EU) countries and to a lesser degree between the EU and the USA. Within the Asia Pacific region, the increasingly close business relationship between NZ and AU ultimately influences the expected standards of governance within each of the countries.

Two factors led to the decision to include the not-for-profit sector in this research:

1. The continuing adaptation of corporate governance standards, practices and processes for use in the not-for-profit sector.
2. The not-for-profit sector is a significant contributor to the wealth (financial and social) of countries while also being a significant recipient of funding from government. Therefore, the effective governance of not-for-profit organisations is of great interest and importance to both the organisations and governments.

It could be argued that homogenisation of the governance environment may have made the results of a single-country research project generalisable; however, some components of the research do not generalise well across countries. Principally, boards contain social capital, a component of the board's intellectual capital. Social capital consists of many variables – personal expectations, protocols, collegiality, etc. Relationships between these variables differ across cultures, meaning that the

impact of the board's intellectual capital on the executives' performance may vary within the results.

Kluckhohn and Strodtbeck (1961) traced these variances to differences in value orientations within the different cultures. They are reflected in aspects of behaviour such as decision-making, participation and teamwork, amongst others (Hofstede, 1980; Laurent, 1983). Researching these complexities allowed greater understanding and definition of the behavioural aspects of boards in both countries and in both sectors.

While the NZ and AU cultures are similar, there are sufficient differences in values and business practices to warrant comparing them, especially as the corporate governance regulatory regimes still differ to some extent. Another contributing factor is the growth occurring in the numbers of NZ directors on boards of overseas companies, especially in AU (and vice versa), and the exposure NZ boards have to the international governance environment and its variables via overseas subsidiaries. When combined with the number of NZ companies that have directors resident overseas, these factors suggest that to ignore the combined impact of cultural differences and differences in governance practices and standards would be to ignore a significant component of many New Zealand and Australian boards.

The willingness of international commentators, investors and governments to measure organisational governance standards, practices, processes and performance against similar organisations reinforced the decision to make this research internationally focused. The internationality of the research ensured the findings have greater relevancy, are generalisable, and are able to withstand scrutiny.

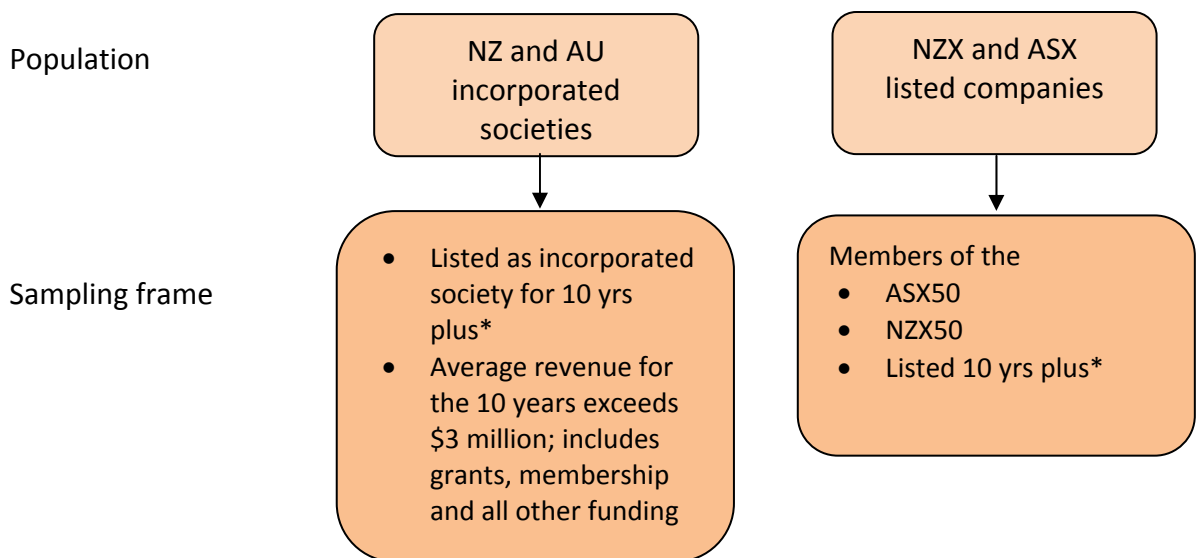
### **4.3 Sample Selection**

The following sections discuss the selection of the research population and are followed by a description of the processes used for data collection and analysis. Figure 4 shows the complete process from the selection of the initial populations

through to the final analysis structure; the component parts are presented separately within the respective sections of this discussion.

The initial research population was drawn from organisations registered as incorporated societies within the relevant government register (NZ or AU) and corporate organisations who were members of the New Zealand Stock Exchange (NZX) or the Australian Stock Exchange (ASX) Top 50 index (Figure 5). One organisation had dual membership in the NZ and AU corporate populations; this organisation was only included in its home country population to avoid duplication. This selection process resulted in two groups of organisations (not-for-profit and corporate) in each of the countries.

The research used both financial and non-financial measures to identify those NZ and AU corporate and not-for-profit population members to participate in the research. Figure 3 shows the process and filters used to determine the initial sample frame.



\* Registered prior to 1999.

**Figure 6:** Criteria for selection of the sample frame

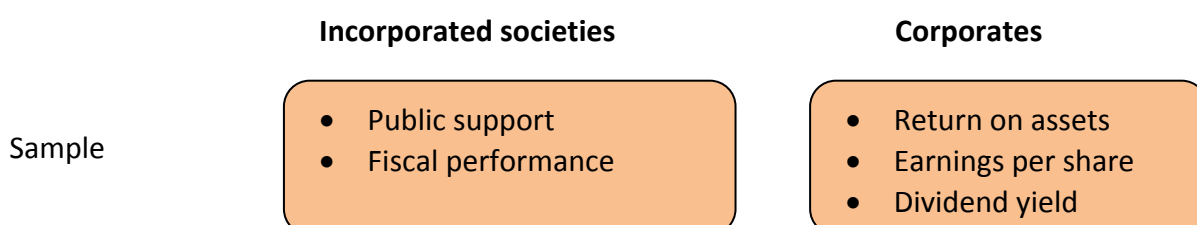
The sample frame (Figure 5) required not-for-profit organisations to be registered as incorporated societies for a minimum of 10 years with an average annual revenue exceeding \$3 million in the local (NZ or AU) currency. Revenue for the not-for-profit sectors was defined as including all forms of income (e.g. membership fees, government grants, sponsorships). Corporate organisations needed to be members of the relevant NZX50 or ASX50 index for a minimum of 10 years. The commencement date for registration of both population groups was no later than December 1998, with continuous membership throughout December 2009. Development of the not-for-profit and corporate samples was completed separately to enable development of causal recipes that were unique to each sector and country. This allowed the identification of consistencies and inconsistencies between the recipes of sectors and countries.

Using the NZX50 and ASX50 indices and the minimum average revenue figure for not-for-profits ensured the organisations were of sufficient structural size to have the personnel (directors, CEO and executives) required to participate in the survey. Both sets of organisations are required by law to provide financial data in a standardised form, which enabled the formation of a set of average financial performance results from their yearly financial results. The method of selection for both groups ensured that a mix of representations from various industry and not-for-profit sectors were included, adding credibility to the overall sample and findings.

Using a minimum 10-year time frame for registration as an incorporated society or being listed on the NZX50 and ASX50 indices ensured financial results were not impacted by “one-hit-wonders” or dramatic market shifts (e.g. the share price fluctuations of Fletchers after news of the acquisition of Crane was announced in 2011). The 10-year period also transcended the life cycle of the average CEO, thereby mitigating the influence of one-off actions by CEOs (e.g. selling a subsidiary). These combined aspects ensured organisations identified as HP were so because of a sustained and defensible period of financial performance – not because of one-off events or chance. In the context of this research, organisations

*not* identified as high-performing (HP) are for the remainder of this research described as poor performing (poor performing).

Figure 6 shows the criteria for selection of organisations as HP.



**Figure 7:** Criteria for selection of the sample

A two-stage process identified HP organisations. First, for each key performance indicator (KPI) listed in Figure 4 (return on assets, earnings per share, dividend yield), the average result was calculated for each of the organisations over the 10-year period. This gave a 10-year average for each KPI by organisation. Second, for each KPI the sample group's (e.g. NZ corporate or NZ not-for-profit) average for the 10-year period was calculated. This gave an average result for the group for each KPI, e.g. an average result for NZ corporates for return on assets.

Identification as HP required each organisation in each sector (not-for-profit or corporate) and country to exceed the sector average in each country for each relevant KPI. For example, for an AU not-for-profit to be considered HP it had to achieve a higher average for each of the components that make up the index of public support and fiscal performance (see section 3.6.2 below). For a NZ corporate to be HP it had to exceed the NZ corporate sector average for each of the KPIs shown in Figure 4.

The individual KPIs, their calculation and their relevance are discussed in the following sections. The extensive selection process undertaken gave the researcher confidence that organisations selected as HP in the context of this research did not

include one-hit-wonders or were not selected as such on account of results that occurred through financial manipulation or single-event occurrences (e.g. new product release).

#### **4.4 Performance Measures**

##### **4.4.1 Not for Profit– Incorporated Societies**

The measures (Figure 6) and their means of calculation are shown below. Unless otherwise stated all measures are taken from Ritchie and Kolodinsky (2003).

###### **4.4.1.1 Fiscal Performance**

- Total revenue divided by total expenses (Siciliano, 1996, 1997)
- (Total revenue minus total expenses) divided by total assets
- Total revenue divided by total assets
- (Total revenue minus total expenses) divided by total revenue

###### **4.4.1.2 Index Public Support**

- Total contributions (gifts, grants, and other contributions) divided by total expenses
- Total contributions (gifts, grants, and other contributions) divided by total assets
- Total contributions (gifts, grants, and other contributions) divided by total revenue

###### **4.4.1.3 Justification for Measures Used**

In a synthesis of management and not-for-profit research between 1977 and 1997, Stone, Bigelow and Crittenden (1999, p. 409) concluded that “scant attention” had been paid to performance measurement in general and financial performance measurement in particular of not-for-profit organisations. A study of not-for-profit financial performance measurement using a range of existing financial performance measures suggested that the lack of empirical testing of these measures resulted in a lack of confidence in any single set of measures (Ritchie & Kolodinsky, 2003). The study evaluated 16 financial performance measures derived from literature and key informant interviews with not-for-profit constituencies. After conducting



exploratory factor analysis of university foundation data, the researchers were able to “provide the practitioner with a parsimonious number of financial performance measures enabling relatively easy assessment of three important performance-related dimensions” (Ritchie & Kolodinsky, 2003, p. 376). The three measures are index of public support, fiscal performance, and fundraising efficiency. Support for the use of financial measures as means of determining a board’s influence on organisational performance is provided by Herman and Renz (2008) who found that chief executives and boards regard the financial condition of an organisation as a significant measure of a board’s effectiveness.

Index of public support and fiscal performance, two of the three financial performance measures described by Ritchie and Kolodinsky (2003) and originally developed by Siciliano (1996, 1997) were utilised in this research. The decision to reject fundraising efficiency was based on an investigation that determined the organisations included in the research did not maintain the required records or report data within the available financial documents that would allow this ratio to be calculated. This third ratio would be applicable in some countries (e.g. USA) where there is a statutory (tax or financial reporting) requirement to keep and/or publish data which would make the calculation of the ratio possible.

#### 4.4.1.4 Final Sample Selection

The final research sample included 21 not-for-profit organisations (NZ = 13 and AU = 8). The 21 came from an initial population of 34 not-for-profit organisations. Four organisations from this sample achieved the status of HP status. There were three principal reasons why not-for-profit organisations did not meet the criteria for selection:

1. Organisations did not meet the required 10-year minimum for registration as an incorporated society.
2. The average revenue for organisations in 10-year period did not exceed \$3 million in the local (NZ or AU) currency.
3. Calculating the financial ratios was not possible due to insufficient financial data.

Confidentiality agreements with the organisations involved in this research combined with the limitations imposed through the Ethics Committee approval process, forbid naming the NFP organisations involved in the final research sample. Similarly, it is not possible to name those who were excluded, as the population from which they were drawn is sufficiently small that knowledge of those excluded would lead to identification of those included. However, it is possible to give some general information on the research sample.

The organisations came from two sector groups. The first sector can be classified as charities involved in the social sector of the community. Four of these organisations were included in the research. The second sector is classified as national sporting bodies; these organisations covered a range of Olympic and non-Olympic sporting codes. All of those sporting bodies involved in the research can be considered to represent major/national sports in their own right. This sporting group consisted of 17 organisations.

#### **4.4.2 Corporate**

During interviews, participants commented on the financial KPIs used (Figure 4). Some stated that the use of earnings before interest and tax (EBIT) would be a more appropriate proxy measure of board performance; others suggested a variation on EBIT: earnings before interest, tax, depreciation and amortisation (EBITDA); while still others suggested total shareholder return (TSR) as the best measure.

These comments highlight the difficulty facing research into corporate governance and boards when selecting a financial measure as a proxy for board performance. Whichever financial measure or measures are selected, they are simply proxies and are therefore subject to critique as to their accuracy and relevance, as such, for board performance. The participants' comments highlight the lack of agreement that can exist between directors and the chair as to what would be a good financial measure for board performance. Unlike the executive, the board is not in a position

of direct control and therefore cannot be directly responsible for organisational performance; this thesis argues that the board can however be held indirectly and collectively responsible as a part of the TT.

From the discussion above it is also clear that no single financial measure fits all situations when identifying HP boards. There was consensus among participants that assessment of the board's performance, like that of executive performance, requires a range of performance indicators rather than a single indicator.

The three measures selected for use in the research reflected a mix of internal and external financial KPIs. The data required for their calculation were available across the whole population from publicly available financial reporting documents (e.g. company annual reports).

#### 4.4.2.1 Dividend Yield

Dividend Yield (DY) shows the total a company pays out in dividends each year relative to its share price. In the absence of any capital gains, DY is the return on investment for a stock.

The formula for DY:

$$\frac{\text{Annual dividends per share}}{\text{Price per share}}$$

For investors, this ratio measures the cash flow generated for them from each dollar invested. This ratio is important for investors looking for a minimum level of cash flow from their investment portfolio. DY reflects past performance, not future performance and therefore provides an indication only of possible returns based on historical results.

#### 4.4.2.2 Return on Assets

Return on Assets (ROA) indicates the level of profitability relative to organisational assets. ROA indicates the earnings generated from invested capital (assets). Assets

comprise both debt and equity. ROA gives investors an indication of how effectively the company is converting the money it has to invest into net income. The higher the ROA, the better for investors; this is because the company is earning revenue more efficiently.

The formula for ROA is:

$$\frac{\text{Net income}}{\text{Total assets}}$$

#### 4.4.2.3 Earnings per Share

Earnings per Share (EPS) is generally considered to be a significant variable in determining a share's price and is a component in the calculation of the price-to-earnings valuation ratio.

The formula for EPS is:

$$\frac{\text{Full year profit}}{\text{Shares on issue}}$$

#### 4.4.2.4 Justification for Measures Used

A wide range of studies (Brian K. Boyd, 1995; Dalton et al., 1998; Hermalin & Weisbach, 1991; Hillman & Dalziel, 2003; Rechner & Dalton, 1991) utilise single or multiple financial key performance indicators (KPIs) as proxies for board performance when searching for a causal link between selected board components (e.g. numbers of independent directors and performance). Such causal links have been, at best, difficult to prove, with meta-analysis of data showing no causal link (Dalton et al., 1998). For this research financial KPIs are used but only to identify HP organisations within the sample frame. The three financial measures selected were: return on assets (ROA), earnings per share adjusted (EPSA), and dividend yield (DY).

ROA indicates how well (or poorly) an organisation is generating cash from its asset investments. Shareholders, investors, investment advisers and the business community use EPSA and DY extensively as key indicators of organisational

performance. These measures then become proxies for board performance. Brown, Robinson and Caylor (2004) used EPSA and DY, while Gupta, Krishnamurti and Tourani-Rad (2010) used ROA as a measure of performance in their dual-country research into corporate governance.

No adjustment for economic or industrial variables was undertaken. Johnson, Daily and Ellstrand (1996) support non-adjustment, highlighting it as an important aspect when financial measures are used as proxies of performance. They concluded that where the selected sample transcended industry and economic variations, adjustments to take account of economic or industrial variations would make the use of the data for comparisons inconsistent.

The sample selection and filtering method used to arrive at the final sample frame was similar to that used successfully by Collins (2001). That research sought to understand the attributes that made “good companies great” by investigating companies that had performed quantifiably better over a fixed period. Collins (2001) study filtered the population using financial measures until the desired sample had been identified. This study replicates this process, in that it identified HP organisations via financial KPIs over a fixed time scale (10 years). Using this sample frame, it then identified and investigated the elements contained in the constructs (IC, LMX, KS and TE) that differed between the HP and poor performing organisations.

#### 4.4.2.5 Final Selection

The final research sample included 39 corporations (NZ = 13 and AU = 26). The selected corporations came from an initial population of 100. Within the sample frame of 39, nine corporations qualified as HP. There were two principal reasons why corporate organisations did not meet the criteria for selection:

1. Organisations did not meet the required 10-year minimum for registration on either the NZX50 or ASX50 indexes.
2. Executive and/or board members of the organisation were unable to be contacted.

As with organisations in the not-for-profit sector, confidentiality agreements with the corporate organisations, combined with the limitations imposed through the Ethics Committee approval process for this study, forbid naming the companies involved in the final research sample. Similarly, it is not possible to name those corporations that were excluded, as the population from which they were drawn is sufficiently small (total 100 companies) that knowledge of those excluded would lead to identification of those included. However, it is possible to give some general information on the research sample.

The organisations within the New Zealand and Australian samples comprise the 50 largest stocks by market capitalisation in both countries. The constituent companies represent the largest national and multi-national publicly listed companies in the respective equity markets. The constituents of the index are reviewed quarterly using the previous six months' data to determine their eligibility for inclusion in the respective NZX or ASX top 50 index.

Given the small size of the population (100) from which the sample was drawn; it is also not possible to name the specific industries which the corporate organisations are involved in, as this would lead to their identification. With a total of 43 corporate organisations from a possible 100 making the final research sample it is possible to see that the sample is very representative of a range of sectors. Within the Australian sample the representation included corporates from the industries and materials, resources, consumer and financials sectors (as classified by the ASX), The New Zealand sample was represented across the property, services, investment and goods sectors (as classified by the NZX).

#### **4.5 Participant Selection**

Participants were selected using stratified purposeful sampling method. Four categories of participant were identified: chairs, directors, CEOs and executive staff. Each category has a unique role inside the boardroom and surveying all of them allows the research to identify if their perspectives differ while identifying consistencies and variations in their responses. The purpose of a stratified sample is "to capture major variations rather than to identify a common core, although the

latter may also emerge in the analysis” (Patton, 2002, p. 240). Inclusion of different categories of participants and a variety of people within each category achieves what Rubin and Rubin (2005, p. 67) refer to as a “triangulation of subjects”, which helps to avoid bias (Miles & Huberman, 1994).

The use of multiple supporting constructs (IC, LMX, KS and TE) in this research required the collection and analysis of data from all members of the TT (i.e. chairs, directors, CEOs and executives) in each selected sampling. For example, to measure a board’s TE accurately, a balanced view from each board member was needed. Data from both an internal perspective (chair and directors) and an external perspective (executives) of a board’s TE was therefore required. This enabled corroboration of the data while allowing reflection and development of further interpretations and conclusions where conflicting data occurred.

This balanced (internal plus external) approach was not required for all of the constructs within the research, e.g. intellectual capital and three (social, cultural and structural capital) of its four elements (the fourth being human capital). For these three elements of intellectual capital only the chair and directors were considered able to reflect accurately on and answer questions regarding the social, structural and cultural capital of the board. In contrast, it was important to include executive responses when analysing data on human capital capabilities. As in LMX, this inclusion ensured a balanced holistic view of a board’s human capital capabilities, avoiding a potentially myopic view had only internal data (from the chairs and directors) been collected.

#### **4.5.1 Gaining Access**

##### **4.5.1.1 Not for Profit**

Gaining access to the organisations and the data required was relatively straightforward. The New Zealand organisations were excellent to deal with, from obtaining the data to getting access and information on how to contact the chair and directors for arranging interviews.

In comparison a minority of the Australian organisations did not want to take part in the research, with one refusing to supply financial data because it was confidential to their member organisations. Gaining access to directors was problematic, with some organisations wanting all requests for information and contact with the board and chair to be managed through the CEO or their personal assistant. In these cases, the researcher followed the requested method of contact. However, in such instances the staff acted as gatekeepers, effectively filtering the requests. This resulted in significantly less contact with the targeted participants. In some cases access to the executive was also limited, with one not-for-profit CEO refusing access to the executive of the organisation and stating that the executive staff did not attend board meetings or give presentations on their areas of expertise.

Where the researcher was unable to gain the required access for completion of the survey by the four participant groups, the organisation was excluded from the research. From both countries this applied to only one organisation from NZ.

#### 4.5.1.2 Corporate

Gaining access to the required participants in the corporate sector was extremely difficult. The overly enthusiastic approach taken by personal assistants to their role as gatekeepers created significant issues. Some of the corporations approached refused to participate, citing the executives' lack of time for participation as the reason. One CEO said he was "surveyed out", explaining that as a corporation they had participated in a number of surveys recently regarding corporate governance and it seemed as though they were receiving daily requests. He added that if he or his team participated in every survey/research project for which they received a request to participate, they would have no time left to run the organisation. Unfortunately, for researchers this type of response is not uncommon in a small business community.



The data collection part of the research design brought its own issues, particularly the requirement to include executives (other than the CEO) in the survey. There was reluctance on the part of some CEOs and, in one case, a chairman to allow this. Workload was cited as the reason for non-participation in these cases.

Gaining access to the required participants involved persistence and networking, through which opportunities to explain the research project to the decision-makers was possible. Once agreement to participate was gained from the chair or CEO, access to, and agreement from, other participants was easier to obtain. Where access to the participant groups for completion of the survey was not possible, the organisation was excluded from the research. This applied to one organisation in NZ and five in AU.

Discussion of the development of and theoretical base for the survey instrument used for each construct follows.

#### **4.6 Survey Instrument Development**

The decision to use single-stage Likert scales instead of a two-stage Likert scale, which asks if the respondent agrees with a statement and then asks how strongly or negatively they agree, is supported by Albaum, Rogers, Roster and Yu (2007). The two-stage format is most suitable for those researchers and managers whose major interest is in the extreme position or views. If however the researcher's interest is in overall distributions – as in this study – then the one-stage format is regarded as more appropriate (Albaum et al., 2007).

The questionnaires used a 4-point Likert scale to collect data on the constructs of IC, KS and TE. With the questions and the choice of Likert scale replicating the research from which they were drawn. The questionnaire measuring LMX used a 5-point Likert scale, the reason being that this was the scale used by Graen and Uhl-Bien (1995). Research suggests that both reliability and validity are unaffected by the number of scale points used, with the reliability measures of both test-retest

and internal consistency being independent of the number of scale points (Matell & Jacoby, 1971).

#### **4.6.1 Intellectual Capital (IC)**

The measurement of intellectual capital within organisations is not new, with numerous studies involving this construct having been conducted (Bontis, 1996, 1998, 1999, 2001; Nicholson & Kiel, 2004; Youndt & Snell 2004). Unlike this study, little of the extant empirical research has sought to link the measurement of the board's intellectual capital and its influence on executive performance.

Development of the survey questions that investigated a board's intellectual capital in this research followed Nicholson and Kiel's (2004) descriptions of human capital, social capital, structural capital and cultural capital.

The survey questions (see Appendix 5) used to measure the four components of intellectual capital were previously used in research by Nicholson and Keil (2003) investigating how a board's intellectual capital impacted the roles required of the board. Their questions were relevant to all four components of intellectual capital. Kim and Cannella's (2008) paper on social capital and director selection provided this research with questions that related to the external and internal social capital of directors. The use of both Nicholson and Kiel's (2003) and Kim and Cannella's (2008) questions informed the social capital construct as conceptualised for this study.

#### **4.6.2 Leader-Member Exchange (LMX)**

Graen and Uhl-Bien (1995) discussed at length the relative merits of various measurement systems for, and the dimensionality of, LMX measurement. They concluded that the 7-item LMX (with its central item being "How effective is your working relationship with your leader?") is the most appropriate and recommended measure of LMX. Hoyer (2004) supported the use of this measurement in research examining board-executive relationships. Regarding dimensionality, this research adopted Graen and Uhl-Bien's (1995) three dimensions of LMX: respect, trust and obligation. Hoyer (2004) also used his predecessors' development of LMX as based on characteristics of the working relationship, where these dimensions refer to an

individual's assessment of another individual in terms of their professional capabilities and behaviours.

The development of the measures for LMX has led to the adoption of the 7-item LMX survey instrument using a 5-point Likert scale for this research, as shown in Appendix 5. The same seven items appeared in the surveys sent to the board (leader) and executive (member).

#### **4.6.3 Knowledge Sourcing (KS)**

Development of the survey questions (see Appendix 5) followed Gray and Meister's (2004) research into KS effectiveness. They defined KS as a specific mechanism by which an individual accesses another's knowledge and the means by which this acquired knowledge then influences that individual's performance. Changes in cognitive structures indicate learning from accessing the knowledge of others has occurred. Therefore, the extent of change to an individual's (e.g. executive's) cognitive structures is critical to understanding the level of KS that has occurred. Investigation of these changes uses three distinct types of cognitive action (Gray & Meister, 2004). These cognitive actions are termed *replication* (the recreation of knowledge that already exists), *adaptation* (the evolutionary use of knowledge in new or different ways), and *innovation* (the use of knowledge to transform organisations). The survey instruments used in this research were designed by Gray and Meister (2004) to measure these types of cognitive change using a 4-point Likert scale ranging from strongly disagree—strongly agree.

#### **4.6.4 Team Effectiveness (TE)**

Payne et al. (2009) conceptualised TE as a mediator between the board and the financial performance of an organisation. Of seven hypotheses they tested, the sixth hypothesised that "*Corporations with more effective boards will demonstrate higher levels of financial performance.*" This hypothesis operationalised board effectiveness by asking directors to rate the effectiveness of their board in specific areas. Eleven questions were asked which when averaged into a general effectiveness scale achieved a Cronbach's alpha of 0.88. The researchers found that this hypothesis was supported with a significant relationship between board effectiveness and financial performance.

This research has used these same 11 questions developed by Payne et al. (2009). There was no requirement to rephrase the questions since the wording was appropriate for both sub-groups in the present study. An example of such a question administered to each group is:

- [Board] How would you rate the overall effectiveness of the board?
- [Executive] How would you rate the overall effectiveness of the board?

The significant difference between this research and Payne et al. (2009) is that this research asked identical questions of the board and executive. Including the executive's view of board effectiveness achieves triangulation of the data, thereby helping to avoid bias (Miles & Huberman, 1994; Rubin & Rubin, 2005, p.67) by getting a balanced view of the board's performance from both an external and internal perspective.

#### **4.6.5 Interviews**

The interview method involved qualitative questions to advance the thematic analysis initiated by the survey. The themes that emerged from within the survey for each of the four aspects of intellectual capital, LMX, KS and TE drove the development of the interview questions. This method is supported by Greene et al. (1989), who advocated using the findings from a questionnaire to aid in the development of the interview questions.

The interview questions were semi-structured, with additional questions asked to probe for meaning or to explore new or emerging themes as the interviews progressed. In all cases, the interviewees agreed to the recording of the interviews. Transcription of the interviews for analysis allowed the findings of the interviews to complement those of the surveys. Greene et al. (1989) described this approach as *complementarity*, where the research results obtained from one method are informed by another, thereby increasing validity.

#### **4.7 Data Collection**

Completion of the survey took place online in all but one case (one participant wished to complete the survey while travelling). After receipt of the completed survey from this participant, the answers were entered into the online survey tool Survey Monkey, which was also used for the development and distribution of the survey. This web-based application enables the simultaneous management and development of multiple surveys. This application functionality was critical to this research as there were 16 different survey groups needing survey management. These groups consisted of the not-for-profit and corporate sectors in NZ and AU (four groups in total), with each of these consisting of surveys for the chairs, CEOs, directors and executives.

Questions within the survey were re-written to fit the context of the particular sub-group being surveyed (chairs, directors, CEOs and executives). For example, a question on human capital addressed to different sub-groups of participants asked:

- [CEO and executive] “Would you agree that directors possess industry specific knowledge?”
- [Chair and directors] “Directors possess industry specific knowledge”

This question used a 4-point Likert scale (strongly agree–strongly disagree) to measure responses.

The board survey consisted of three sections:

1. intellectual capital and its four components (human, social, structural and cultural capital).
2. TE (which asked the board to rate its effectiveness from their perspective).
3. LMX (which measured the board’s perceptions of the quality of LMX with the executive).

The CEO and executive survey consisted of four sections:

1. Human capital (HC) (which measured the board’s HC as perceived by the CEO and executives).

2. KS (which asked the executive and CEO what, if any, new knowledge they had replicated, innovated or adapted from their interactions with the board).
3. LMX (which measured the LMX quality from the perspective of the executive and CEO).
4. The executive and CEOs were then asked to rate the effectiveness of the board from their perspective.

The response rates achieved (Table 1) are well above those expected when conducting electronic surveys. A meta-analysis by (Cycyota & Harrison, 2006) of survey response rates from executive populations using mailed surveys (hard copy) found the median response rate was 32%. The meta-analysis showed response rates declined over the 12-year period reviewed. A lineal projection suggested median response rates of 27% in 2010 if the trend continued. The achieved response rate is significantly above this projection.

**Table 1:** The number of invitations sent, total responses and useable responses received, with response rates

		Survey response rates			
		Invitations	Responses	Useable	Response rate
<b>New Zealand</b>	NFP	78	46	44	56.4%
	Corporate	72	38	35	48.6%
<b>Australia</b>	NFP	48	27	27	56.2%
	Corporate	156	35	32	20.5%
<b>Totals</b>		354	146	138	38.98%

Cycyota and Harrison (2006, p.148) cited Mavis and Brocato (1998) who stated that response rates for e-mailed surveys were consistently lower than those for traditionally mailed instruments. A meta-analysis by (Shih & Xitao Fan, 2008) showed response rates for emailed surveys were on average 10% lower than mailed surveys. Therefore, the overall response rate (38.98%) achieved in this research is

significant, adding robustness to the findings discussed in the next chapter. The response rate achieved (Table 1) would have been significantly higher if not for the poor response from the AU corporate sector (20.5%), which lowered the AU country response rate to 28.9%, significantly lower than the NZ figure (52.6%).

#### **4.8 Data Analysis Method (fsQCA)**

This section outlines the rationale for the use of Fuzzy Set Qualitative Comparative Analysis (fsQCA) for this research in preference to other relevant analytical techniques, before discussing the fsQCA method.

This research will use fsQCA as the analytical tool through which the complex interactions between multiple elements contained in the research constructs are identified. Many studies have used methods such as the multiple regression framework or structural equation modelling to identify correlations between the board and organisational performance. Rather than continuing this attempt to find a single causal element that allows a board to influence organisational performance this analysis and the use of fsQCA demonstrates how a mix of multiple elements combine to produce causal recipes which reveal how boards may influence the executive and through them organisational performance.

While the use of fsQCA as an analytical tool within the field of governance is relatively new, several empirical studies in related fields have used the method (Jackson, 2003, 2005). Jackson (2005) credits the use of qualitative comparative analysis (QCA) in discovering “several other interesting findings” in relation to capital markets and their impact on shareholders and labour. Empirical studies within the fields of strategy and management have used fsQCA as the method of analysis (Crilly, 2011; Greckhamer, 2011; Pajunen, 2008). For example, Crilly (2011) used a combination of induction and fsQCA to develop a theory of the conditions which shape subsidiaries’ stakeholder orientations. These and similar studies have utilised fsQCA to develop a fine grained analysis leading to greater insights and understanding of the phenomena being studied. For these reasons, fsQCA is an appropriate analytical tool for this research, to identify individual characteristics

within each of the four constructs. This method of analysis is best suited for identifying one or more causal recipes which may explain how boards influence organisational performance.

The use of fsQCA, which is based on a set-theoretic approach, allowed the identification of causal conditions (elements) that contribute to the outcome under investigation. An element in the context of this research relates to the core theme (trust, experience, knowledge) contained within the individual survey questions for each of the constructs being researched. For example, within the construct of HC the question, *directors possess company specific knowledge and experience*, identifies *company specific* rather than general knowledge and experience as the core theme. This method of analysis is uniquely suited to this research as it develops a configurational understanding of how elements combine (referred to as *causal recipes*) to contribute to an outcome while also being uniquely suited to handling significant levels of causal complexity (Fiss, 2010; Ragin, 2008).

Ragin (2008) identified problems associated with analysis using correlational techniques in identifying and researching explicit connections arguing that because sophisticated methods (e.g. multiple regression analysis, structural equation modelling, etc.) rely on bi-variate correlation as the cornerstone of their empirical analysis, they eschew the study of explicit connections which entails identifying causal elements shared by instances of an outcome.

Contrasting this, fsQCA is grounded in a set-theoretical approach and is ideally suited to the study of the sort of explicit connections this research sought to uncover. Fiss (2007), in his seminal work outlining the benefits of a set-theoretical approach in the study of organisational configurations, argued that the relationships between different variables (elements) were best understood in terms of their set membership. Fiss (2007) explained this with the following example:

A is a member of the set Z (formally:  $A \subseteq Z$ , or A is a subset of Z). For purposes of analyzing organizational configurations, let A be a firm with an efficient production system and Z be the set of firms with high financial



performance. Thus, the statement that firms with an efficient production system tend to exhibit high performance may be restated as such firms form a subset of high-performing firms. (p.1183)

Using the above example and applying it to this research the example would now read:

A is a member of the set Z (formally:  $A \subseteq Z$ , or A is a subset of Z). Let A be a board with a defined causal recipe for human capital and Z be the set of firms judged as being high-performing. Thus, the statement that boards with the identified causal recipe for human capital tend to govern organisations exhibiting high performance may be restated as such boards form a subset of high-performing organisations.

The fsQCA method is especially useful in analysing complex causation, where an outcome may follow from several different combinations of causal elements, i.e. from several different causal recipes (Ragin, 2008). Using fsQCA allowed the research to analyse the separate elements within the constructs of IC, LMX, KS and TE, contained in the survey questions not as independent variables but as “potential collaborators.” The goal of the research was to identify mixes of elements (causal recipes) associated with cases that had the same outcome (HP or poor performing). The key point was not which “ingredient” was the strongest but rather which of the *combinations of ingredients* (i.e. causal recipe) was capable of being necessary and/or sufficient in producing the outcome (Ragin, 2008).

In discussing necessity and sufficiency, Ragin (2008) argued that these conditions are often considered jointly because all combinations of the two – necessity and sufficiency – are meaningful. Accordingly, a cause is reasoned as being both necessary and sufficient if it is the only cause that produces an outcome and it is singular (that is, not a combination of causes). A cause is sufficient but not necessary if it is capable of producing the outcome but is not the only cause with this capability. A cause is necessary but not sufficient if it is capable of producing an

outcome in combination with other causes and appears in all such combinations. Finally, a cause is neither necessary nor sufficient if it appears only in a subset of the combinations of conditions that produce an outcome. In all, there are four categories of causes (formed in fsQCA from cross-tabulation of the presence/absence of sufficiency against the presence/absence of necessity).

The research studied cases with the same identified outcome (HP or poor performing) to identify their causally relevant elements, therefore the resulting analysis concentrated on identifying those causal recipes that fitted the description of necessary. This recognises that an element is capable of producing an outcome in combination (causal recipe) with other elements.

Ragin (2005) explained that fuzzy sets are simultaneously qualitative and quantitative as they incorporate both kinds of distinction in the calibration of the degree of set membership. The use of fuzzy sets allows membership to be scaled, enabling partial (fuzzy) membership. A membership score of 1 shows full membership in a set whereas scores less than one but greater than 0.5 (e.g. 0.8 or 0.9) show strong but not full membership. A score between zero and 0.5 (e.g. 0.1 to 0.4) indicates that an item (or “case”) is more “out of” than “in” the defined set, but is still a member of the set. A zero score indicates full non-membership in the set. Fuzzy sets are therefore a combination of both qualitative and quantitative assessment: 1 and 0 are qualitative assignments (“fully in” and “fully out”, respectively). The 0.5 score is also qualitatively anchored, for it indicates the point of maximum ambiguity (fuzziness) in the assessment of whether a case is more “in” or more “out of” a set.

Fuzzy membership scores address the varying degree to which different cases belong to a set, rather than how cases rank relative to each other on a single dimension of open-ended variation. This allows fuzzy sets to highlight the qualitative measure of membership while allowing varying degrees of membership by viewing them as a continuous variable, calibrated to show degree of membership (on the fully-in/fully-out spectrum) in a defined set. Such calibration is

possible only through the theoretical and/or substantive knowledge of the researcher (Ragin, 2005).

Ragin (2005) explained the importance of substantive knowledge in the following way:

It is a relatively simple matter to identify an interval-scale indicator of country wealth, which in turn provides a simple tool for evaluating the *relative* positions of countries on this dimension. By contrast, it is more challenging to define the set of “rich countries” in a qualitative manner and then specify which countries are fully in this set and which are not. The key difference is that qualitative distinctions are *explicit* and must be grounded in substantive and theoretical knowledge (e.g. life-style indicators), while the *relative* rankings of an interval scale can be pegged simply to scores on a crude indicator of the underlying construct (e.g., GNP per capita as an indicator of country wealth). (p.2)

Using fsQCA required the allocation of a fuzzy-set score for the organisations identified as being high performing. This score was used in the analysis as the outcome variable. It was also necessary to calibrate the Likert scales used in the survey (Table 2). Calibrating the Likert scales required the researcher to identify the relevant points of the likert scale that were either “full in” the set (.95 on Table 2) or “fully out” (zero on Table 2). Fuzzy sets allow the researcher to use continuous measures while also allowing the application of theoretical and substantive knowledge in the creation of the measure (Fiss, 2007).

Calibrating the organisations identified as being high performing (as described in section 4.5 of this chapter) did not require the use of fsQCA to calculate a fuzzy-set score as the organisations that belonged to the set of high-performing organisations had been identified. A fuzzy set score of 0.75 was allocated to all organisations within the set of high-performing organisations. The next step was to calibrate the responses to the survey questions through calibration of the Likert

scales. There were both 4 and 5 point likert scale used within the survey, the fuzzy set scores allocated to the calibrations were:

**Table 2:** Likert Scale Calibration

4 Point Likert Scale					
Likert Scale	1	2	3	4	
Fuzzy Set Calibration	0	.20	.35	.95	
5 Point Likert Scale					
Likert Scale	1	2	3	4	5
Fuzzy Set Calibration	0	.20	.35	.45	.95

Only those replies to questions that gave the strongest response (4 or 5 on the appropriate Likert scale) to questions received a calibrated fuzzy-set score of 0.95, nearly fully in the set. Allocating a fuzzy-set score of 0.95 (nearly fully in) to those answers with the strongest response gave the researcher confidence that the identified causal recipe contained only those elements in which the respondents had the strongest belief.

The tool used to analyse the complex causation and develop causal recipes is called a “truth table” (Ragin, 2008). The truth table allows structured focused comparisons (George, 1979) while ensuring that each possible causal condition listed in the truth table has a substantive outcome associated with each configuration (Ragin, 2008). The truth table and its analysis is incorporated into software developed by Ragin, Drass and Davey (2006). The truth table is a data matrix with  $2^k$  rows, where K is the number of causal elements (survey questions) used in analysis. Each row of the table is associated with a particular combination of elements (causal recipe) with the full table listing all possible combinations. The next step used the algorithm based on Boolean algebra described by Ragin (2008) to reduce the number of truth table rows to more simplified combinations.

The output from the analysed data represents three different solution configurations: complex, parsimonious and intermediate. These solutions detail possible causal combinations of elements from the truth table. Complex solutions are exceedingly intricate because little or no simplification occurs. In contrast, parsimonious solutions can be overly simplistic due to incorporation of many (easy and difficult) counterfactual combinations. The algorithm within fsQCA develops the intermediate solution by distinguishing between the parsimonious and complex solutions based on easy and difficult counterfactuals. Counterfactual analysis is relevant to configurational analysis as even a few elements quickly give large numbers of truth table rows (Fiss, 2010)

The distinction drawn between “easy” and “difficult” counterfactuals assumes that there is a continuum of plausibility, not a rigid dichotomy. At one end are easy counterfactuals where adding a redundant causal element back into a causal recipe known to produce an outcome will still produce the same outcome. At the other end of the continuum are difficult counterfactuals, which attempt to remove an element from a causal recipe displaying the outcome. This assumes the element is redundant and that the reduced causal recipe will still produce the outcome (Ragin & Sonnett, 2004). The placement of the counterfactuals on the continuum is informed by substantive and theoretical knowledge. Citing Tetlock and Belkin (1996), Ragin and Sonnett (2004) stated this helps the researcher decide which elements are important and which irrelevant by giving theoretical and substantive support to the causal recipe.

Ragin (2008) states that using the intermediate solution strikes a balance between parsimony and complexity, based on the substantive and theoretical knowledge of the researchers. This research used the intermediate solution as the basis for analysis for all the results. When the causal recipes for cases displaying the same outcome were identified, fsQCA enabled the measurement of the consistency and coverage of the recipe. These two distinct measures indicate the empirical support for the developed causal recipes that specify the set-theoretical connection. The importance of measuring consistency and coverage is similar to the measurement

of significance and strength in correlational connections. Set-theoretical *consistency*, like significance, displays how closely the cases sharing the causal recipe are to a perfect subset relation. In contrast, set-theoretical *coverage*, like strength, assesses the empirical relevance of the causal recipe (Ragin, (2008).

There are instances when consistency and coverage will work against each other, e.g. achieving a high consistency score may reduce the coverage to the point that the causal recipe's coverage is trivial. For this reason some trade-offs between consistency and coverage were necessary to ensure that the causal recipes did not achieve a high consistency score with a subsequent loss in coverage. Ensuring that assessment of the causal recipe was meaningful in relation to consistency and coverage meant adhering to a protocol which states that set-theoretical consistency must first be established before coverage can be assessed (Ragin, 2008).

#### **4.9 Data Analysis**

Analysis of the data gathered from the interviews used thematic analysis. Data was analysed to identify emergent concepts and/or themes and these were then coded and placed in groups that were associated with the constructs under investigation. This allowed the researcher to arrange the groups of analysed data in a hierarchal order, allowing further in-depth analysis.

An example of this hierarchal order can be demonstrated for the intellectual capital component, social capital. This component contains two subgroups: internal and external social capital, and within each of these two subgroups are other attributes, such as the relationships directors have with the executive staff (internal) and suppliers (external). This hierarchal structure allowed deeper analysis of the impact of the intellectual capital component on executive performance.

Using the mixed-method approach allowed the researcher to fulfil the purpose of this research, which was to examine the board's influence on executive performance using the constructs of IC, LMX, KS and TE. Using mixed-methods

added depth and breadth to the data, which is not normally available when either a qualitative or a quantitative approach is used alone.

An important aspect of research is the need to validate the data gathered from other available sources. Validation of the research findings occurred through:

- triangulation, which corroborates results via different designs and methods;
- complementarity, when results obtained from one method informed another;
- development, via use of survey findings to develop interview questions; and
- expansion, via the use of different data collection methods (surveys, interviews) in different components of the research (Greene et al., 1989).

#### **4.10 Ethics**

The AUT Ethics Committee (AUTEC) gave ethical approval for the research on 24 February 2010. The AUTEC reference number is 09/268. Appendix 7 contains a copy of AUTEC's letter of approval.

#### **4.11 Definitions**

The following is a brief description of the fsQCA terms presented in this chapter.

- **Consistency:** measures the degree to which membership in each causal recipe is a subset of the outcome. Consistency is similar to significance: it signals to the researcher that the identified causal recipe merits closer attention. To be considered significant enough to warrant further investigation a causal recipe had to achieve a consistency measure  $\geq 80\%$ . When consistency scores are  $\leq 75\%$ , maintaining on substantive grounds that a set relation exists, even a rough one becomes increasingly difficult (Ragin, 2008). Kent (2008) agreed with Ragin (2008) suggesting that even scores as high as 0.8 may be considered inconsistent. These findings support this researcher's decision to define measures  $\geq 80\%$  as the minimum standard.

- **Coverage:** measures how much of the outcome is covered (or explained) by each causal recipe. Coverage symbolises strength and indicates the relevance or importance of the causal recipe. To be considered significant enough to warrant further investigation the coverage measure must achieve  $\geq 80\%$ . Generally configurations (causal recipes) should capture at least 75-80% of the cases (Ragin, 2008).
- **Set-theoretic:** the analysis of relationships in a set.
- **Case:** the response from a single respondent belonging to the particular grouping.
  - AU – Australian
  - NZ – New Zealand
  - HP – High-performing
  - C – Corporate
  - NFP – Not for Profit
  - E – Executive Team Member
  - B – Board of Directors

e.g. A HP NFP B – Australian high-performing not-for-profit board.
- **Logical AND (\*):** A “\*” indicates that both factors must be simultaneously present; one factor alone would not produce the outcome.
- **Logical OR (+):** A “+” indicates that elements can be either absent or present – with the resulting causal recipe still able to lead to the outcome.
- **Negation:** Like conventional crisp sets, fuzzy sets can be negated. One can calculate the membership of a case in the negation of fuzzy set A by simply subtracting its membership in set A from 1, as follows:

Fuzzy membership in set not A =  $1 - \text{fuzzy membership in set A}$ .

This can be displayed as  $\sim A_i = 1 - A_i$ , where the subscript “i” indicates the ith case; the set “not A” is represented as  $\sim A$ ; and the symbol “ $\sim$ ” denotes negation. Thus, for example, if the United States has a membership score of .79 in the set of “democratic countries”, it has a score of .21 in the set of “not democratic



countries”. This allows the research to define those elements contained within the constructs that contribute to the causal recipe, by their absence or very weak presence. The identified negated elements are treated as if their absence or negative correlation is a contributing element to the overall causal recipe leading to high performance (HP).

- **Necessary and Sufficient:** The analysis of the results also contains discussion of the applicability of these outcomes to the aspects of sufficiency and necessity as they relate to the causal recipe. The definitions adopted in this research are those used by Ragin (1987):
  - a. To define a causal recipe as “necessary” it *must be present* for a certain outcome to occur.
  - b. To define a causal recipe as “sufficient” it *must by itself produce* a certain outcome.

Analysis of the results will concentrate on identification of “necessary” elements from within the researched constructs (LMX, IC, KS and TE). This supports a core tenet of this research, that through a combination of “necessary” elements a causal recipe may be identified that distinguishes HP organisations from poor performing ones.

#### **4.12 Summary**

This chapter discussed the selection process used to determine the final research sample including a description of the performance measures used in determining the set of organisations that are described as high-performing. The chapter then discussed the development of the survey instrument for each of the constructs before moving on to describe the rationale for choosing fsQCA as the analytical tool. This chapter closed with descriptions of the key definitions used in the results chapter. Chapter 5 will detail the results obtained from the quantitative data that has been analysed using fsQCA and will detail the causal recipes developed for each sector and country as well as the combined countries.

## **Chapter 5 – Research Results**

The previous chapter described the benefits of the mixed-method research and the justification for its use in this research, as well as the selection process used to determine the research sample from the country populations (New Zealand and Australia). The sample selection process was described in detail, including the criteria for selection and the financial measures used to define the two groups' (high-performing and poor performing) organisational performance. Chapter 4 also discussed the method of data collection used and the benefits and application of the tool (fsQCA) used for analysis of the data gathered from the surveys and interviews.

The sample set of the combined countries used in the study consisted of 64 organisations covering both corporate and not-for-profit sectors (43 corporate and 21 not-for-profits). The corporate population consisted of the Australian Stock Exchange top 50 index and the New Zealand Stock Exchange top 50 index. These were then filtered using a number of measures as described in Chapter 4 (Figure 4). The not-for-profit population were selected based on the ability to having matching organisation in each country e.g. surf lifesaving has an organisational structure that is similar in both New Zealand and Australia.

The participant groups selected for inclusion in the study from each organisation were the chairperson, CEO, directors (minimum of 2) and executive staff (minimum of 2) other than the CEO. The analysis identified 13 of the total 64 organisations (covering both sector groups) included in the study as high-performing organisations; the remainder (41) were classified as poor performing.

Three hundred and fifty four invitations to complete the survey were distributed to selected participants with an overall response rate of 38.98 per cent. The individual response rates are in Table 3 by sector and country. Interviews were conducted with 13 participants from both high-performing and poor performing organisations. The interviews last on average 2 hours. The participants included Chairman, CEO,

directors and executives from both New Zealand and Australia. All but one were conducted in person.

		Survey response rates			
		Invitations	Responses	Useable	Response rate
<b>New Zealand</b>	NFP	78	46	44	56.4%
	Corporate	72	38	35	48.6%
<b>Australia</b>	NFP	48	27	27	56.2%
	Corporate	156	35	32	20.5%
<b>Totals</b>		354	146	138	38.98%

**Table 3: Sample set of survey responses**

This chapter presents the results in terms of verifying the existence of the TT model before discussing the causal recipes developed from the data coding and analysis and, from this categorisation, reports the differences between the high-performing and poor performing causal recipes. Chapter 5 also reviews the findings and considers the patterns of similarity and/or difference emerging from the data in relation to the two countries (AU and NZ), the two sectors (NFP and corporate), and high-performing and poor performing organisations.

This chapter discusses the constructs in the following order:

- a. Third Team (TT)
- b. Human capital (HC)
- c. Structural capital (STC)
- d. Social capital (internal) (SCi)
- e. Social capital (external) (SCe)
- f. Cultural capital (CC)
- g. Leader-member exchange (LMX)
- h. Knowledge sourcing (KS)
- i. Team effectiveness (TE)

The results for each country and sector are presented in the following order for each construct listed above. Each construct begins with the Australian high-performing (HP) not for profit organisations followed by corporate organisations. Following these results are the New Zealand HP not-for-profit and corporate organisations. The results for each construct closes with the combined country results for the not-for-profit and corporate sectors.

## **5.1 The Third Team**

Proposition 1 proposed that when combined the board and executive formed the third team (TT) who met episodically to work towards organisational goals (Langton & Robbins, 2007; Kozlowski & Bell, 2003). This proposition has been supported through the thematic analysis of 23 hours of taped interviews with the chairs, directors and executives of organisations within the high performing and poor performing (as defined in this research) samples. Furthermore, Propositions 2 and 3 proposed that the board's intellectual capital and team effectiveness, combined with the executives' knowledge sourcing and assisted by leader member exchange, facilitated the board's influence on organisational performance via the executive. The findings show that propositions 2 and 3 are supported. Moreover, these findings from the qualitative data are further supported by the fsQCA analysis detailed in section 5.2.

Thirteen interviews were conducted with a selection of chairs, directors and executives from the corporate and NFP sectors. Within this section (5.1) and in the sections contained in Chapters 6 and 7 the quotes attributed to the chairs, directors or executive of organisations are from the transcribed notes of the interviews.

In various ways the interviewees described a high level of relationship building, partnership, collaboration and teamwork between the board and executive teams. When asked for a description of the board-executive relationship, one interviewee from the poor performing sample identified the relationship as a "...partnership; they have their respective roles within that partnership, but they get on as a sort of collective group very well." This quote highlights an important aspect of the how

interviewees saw the relational space (TT) in which the executive and board came together. In the TT they understood that each team (board and executive) had their own respective roles and responsibilities yet when combined they also had TT roles and responsibilities e.g. working collaboratively towards a common goal. The identification of the board and executive as a partnership or collective group (team) was supported by another interviewee who said "...you have the Board, we have the executive team, you might well say that together we're a team ...". Both of these quotations capture the general tenor of the interviews in which interviewees saw the board and executive as a team working collaboratively towards organisational goals. However, the description of the board and executive as a team does not mean that there is no leadership within the TT: the board and executive recognise that the leader of this team is the board. This knowledge was captured in the following statement by one respondent: "...there's a relationship, but there is a distance. But it's the way that those two things are just managed, so that they are neither too close, nor too far away. That's really important ...". Further support for the TT model came from the chair of a high performing organisation within the Australian corporate sample who commented "...and just to the point about are they a third team (conveys a story about board reviews) my point in all, is agreeing with you."

There is general agreement on the part of the interviewees that the board was the leader of the organisation, although there was an acceptance that from a practical point of view the leadership was shared with the executive as they were the agents of action *within* the organisation. Alongside this shared leadership those interviewed were also in general agreement that the board and executive when meeting either formally or informally needed to work collaboratively (as a team) towards the achievement of the organisations goals.

The identification of and support for TT model within the data is further corroborated by the fsQCA analysis, particularly the constructs of leader-member exchange, knowledge sourcing and social capital (internal). Social capital (internal) is aligned with the internal and external ties and relationships within a small

network (TT) (Nicholson & Kiel, 2004). A key outcome of high social capital (internal) is the development of relationships within the TT. The analysis identified a significant level of consistency and coverage in both the high performing and poor performing samples across the complete research sample (corporate and NFP in New Zealand and Australia). For example, the causal recipe for social capital internal (SCi) of the Australian high performing NFP and corporate sector identified a consistency (significance) of 96% and coverage (strength) of 84% (section 5.2.3.1). The poor performing sample achieved consistency of 91% and coverage of 82%. These results indicate that for high performing and poor performing organisations the respective causal recipe of SCi is almost always necessary (Ragin, 2008) for the attainment of the relevant performance (high performance or poor performance). While these scores for consistency and strength are similar, it is the differences between the respective causal recipes of the high performing and poor performing samples that is of importance for this study. For example, SCi9, a characteristic that encourages the use of the board's talents is a defining difference between the recipes of the high performing sample and the poor performing sample of Australian corporates. Simply put, the TT is an environment which facilitates the use of the board's intellectual capital e.g. social capital internal, to influence organisational performance.

While the data both from the interviews and the fsQCA analysis supports the concept of the third team as valid, the next question concerns the influence that this third team has on organisational performance. Analysis of the interviews showed that directors and executives were involved in a level of interaction, decision making and consensus building on issues, strategies and directional decisions impacting on, or likely to affect, the organisation. The level and depth of these interactions was captured in the following quote from the CEO of a high performing organisation "...the CEO, I think these days, is not the person who necessarily makes the decisions, but is the person who facilitates the correct exchanges between management and board." This statement further supports the idea that the TT facilitates the use of the board's intellectual capital to influence organisational performance. In comparison, a director from a poor performing

organisation stated that, "...the CEO does not like the board talking to his executives. He makes sure his executives don't talk to the board... now the performance of that organisation reflects that... [The] organisation is growing only at the rate that that CEO has hours in the day, because he's got his hands on every point in the business."

These contrasting outlooks highlight an important additional finding from this study in relation to the TT: for the interaction, decision making and consensus building on issues to occur, high performing organisations display higher levels of synergy, trust and confidence in each other within the TT. The importance placed on these three elements is highlighted in the following comments from high performing organisations:

"...confidence and trust must come out of values and if you haven't got confidence and trust, you might as well all go home"

and

"Yes I think if you haven't got trust and respect, you're not going to have effectiveness... you're going to struggle to develop a strategy for a company... That lack of trust and respect will get in the way"

and

"...if there's not a high level of communication and I keep coming back to mutual respect, but it's just something that ... and if that's not working, then you can't expect anything else to flow behind it, so I think that's key, yes."

The characteristic of team synergy which is described as the combined power of a group working together which is greater than the total power achieved by each working separately (Oxford, 2012), is an outcome facilitated by the attributes of trust and confidence. These two attributes are contained within characteristics found in the full range of constructs within this research (as discussed in Section 5.2).

The CEO of a poor performing organisation highlighted the influence on performance when there is a lack of synergy, trust and confidence. While discussing

his reluctance to initiate open discussions with his board on matters of importance (e.g. strategy), he stated that “...if you felt there was a level of cohesion within the group and trust, you’d just go bang, here it is, let’s have the discussion.” While discussing the value boards bring to strategy discussion and development, the chair of a poor performing organisation commented that while not disagreeing with the concept that boards and executives work collaboratively, he was of the opinion boards add little value to strategy development. A similar sentiment was captured in the following exchange during the interview when the chair said;

**Chair;**

“As I said, I don’t think Boards add much value. But I think it’s very important. They do add ... like the audit committee ... That is very critical part of the business ... I believe in that 100%. But on specific things, but other than that, Boards really don’t...”

**Researcher;**

“They don’t add value at all?”

**Chair;**

“No”

The level of confidence that exists within the TT is also influenced by the level of belief in the member’s abilities, specifically the board’s (team) effectiveness. The level of congruence between the executive and board regarding the board’s (team) effectiveness, varied between the high performing and poor performing samples. These variations are further evidence of the importance of trust (in the board) and confidence (in their skills and abilities), since higher levels of congruence within this measure are associated with high performing organisations. The fsQCA analysis identified a lower level of congruence between the executive and board of poor performing organisations compared with the executive and board of high performing organisations when asked “How would you rate the overall effectiveness of the board?”



While the executive of high performing and poor performing organisations rated their board's team effectiveness lower than the rating given to this element by the board, the key finding was that the executive of poor performing organisations rated their boards significantly lower overall than the executive of high performing organisations (Figure 8).

How would you rate the overall effectiveness of the board?	HP Executive	PP Executive
Very Effective	66%	47%

Figure 8: Effectiveness Rating

This finding supports the importance of incorporating the executive's opinion into the review of a board's (team) effectiveness. The chair of a high performing organisation said in relation to their recent review which for the first time included executive feedback "...the most powerful influence on that review didn't come from the fellow directors, who'll all look after each other probably. It came from the executives who didn't hold any punches at all."

The thematic analysis also identified general agreement amongst those interviewed that a board's performance was reflected in the organisation's performance. The flavour of comments was captured in this quote "... that's always the criteria, if people ask how do you judge a board, well you've got to judge them by the performance of the organisation at the end of the day. There's no other, for me, there's no other measure that stacks up." This comment supports the use of financial measures as one means of determining the board's relative performance and confirms the importance that executives (and boards) attach to this performance measure, as highlighted earlier.

In discussions with the interviewees they identified interactions between directors and executives that usually occurred in both formal and informal settings – not just formal meetings. It is during both the formal and informal aspects of the TT's

meetings that relationships are built and knowledge sourcing occurs. The following quotes from interviewees capture the general comments regarding knowledge sourcing: 1) "...from what I've seen, it happens when you are informally chatting about something and an idea will just come up and can be ... and something comes out of that and the particular knowledge of the Director turns out to be helpful"; and 2) "Well the answer to you is that a good Executive brings it to the Board. A clever Executive does. Why is he clever? Or she? They're clever because they're tapping the knowledge of the Board, the diversity of opinion of the Board. They're also getting the Board into their way of thinking, as they put it."

Importantly, the findings identified knowledge sourcing as a reciprocal activity between the directors and executive as captured in the following comments "I can't speak for anyone else on the board, but I certainly have. I've certainly taken a lot of the learnings that I've had on the ... board, to the international board" and "But people say quite often [that] the Board [directors] are taking away inputs from the management, from the same discussions... it is an exchange and that's also part of the - I guess ambience of the Board meetings."

The thematic analysis supports the identification of the TT as a useful model through which the constructs of intellectual capital, leader-member exchange, team (board) effectiveness and knowledge sourcing are facilitated. Validation of the third team concept was further confirmed by the causal recipes developed from the data using fsQCA analysis. The causal recipes are detailed in the following section (5.2).

## **5.2 Intellectual Capital**

### **5.2.1 Human Capital (HC)**

The discussion in Chapter 3 details the various aspects of human capital. As a reminder, human capital (HC) is an individual attribute: it synthesises the innate and learned abilities, knowledge and expertise of individual directors. Generally, acquisition of these attributes of human capital is through prior work experience. The results are presented in the following order:

- a. Australian high-performing not-for-profit organisations
- b. Australian high-performing corporate organisations
- c. New Zealand high-performing not-for-profit organisations
- d. New Zealand high-performing corporate organisations
- e. Combined high-performing not-for-profit organisations
- f. Combined high-performing corporate organisations.

#### **5.2.1.1 Australian High-Performing not-for-profit organisations**

The Australian high-performing not-for-profit organisations (Table 3) contained 8 cases (board = 4, executive = 4), which yielded a causal recipe containing the following elements:

- HC2: directors possess industry/sector-specific knowledge.
- HC3: directors possess enough business knowledge and experience to add to the overall effectiveness of the board.
- HC5: directors have the required level of board experience to add value.
- HC7: directors have diverse industry backgrounds.

The numbers that follow the acronym throughout these results refer to the question number in the survey document e.g. HC2 refers to question 2 in the human capital component of the survey. Please refer to Appendix 5 for a complete list of the survey questions. Note that the display of the causal recipes and discussion of the individual elements maintains the order in which the recipes were developed using the fsQCA software. The order does not indicate chronology. The following table sets out the full results for the causal recipe for Australian high-performing not-for-profit organisations. Hereafter, the causal recipes for each construct are contained in Appendix 8 for simplicity in presenting the results in this chapter and are referred to accordingly.

**Table 4 Australian High-Performing not-for-profit organisations**

Case	Desc	hc1	hc2	hc3	hc4	hc5	hc6	hc7	hc8	hc9	OC
1	AUHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
2	AHPNFPB	0.35	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.75
3	AHPNFPB	0.35	0.95	0.35	0.95	0.35	0.35	0.95	0.35	0.95	0.75
4	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
5	AHPNFPE	0.95	0.95	0.95	0.95	0.95	0.35	0.35	0.35	0.35	0.75
6	AHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
7	AHPNFPE	0.20	0.20	0.35	0.35	0.95	0.35	0.95	0.20	0.20	0.75
8	AHPNFPE	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75

To enhance reader comprehension the following legend expands on the abbreviations in the table above:

- AU – Australian
- NZ – New Zealand
- HP – high-performing
- C – Corporate
- NFP – Not for Profit
- E – Executive Team Member
- B – Board of Directors

E.g. A HP NFP B – Australian high-performing not-for-profit board.

The causal recipe for the Australian high-performing not-for profit organisations is:

$$HP = HC2*(HC3+HC5+HC7)$$

$$\text{Consistency} = 0.800000$$

$$\text{Coverage} = 0.827586$$

The presence of HC2 is important for high-performing not-for-profit organisations as it suggests that directors have a background within the not-for-profit sector and are familiar with the structures and functions of the organisations served by their boards.

The poor performing cases (board = 8 and executive team = 10) were analysed to determine the relevant causal recipe. This contained:

- HC1: directors have company-specific knowledge.
- HC2: directors possess industry/sector-specific knowledge.

The causal recipe is:

$$PP = HC1 * HC2$$

$$\text{Consistency} = 0.814815$$

$$\text{Coverage} = 0.833333$$

The high-performing causal recipe emphasised business skills and knowledge (HC3), board level experience (HC5), and diversity in industry backgrounds (HC7) alongside industry/sector-specific knowledge. The poor performing organisations in comparison place emphasis on directors with company/organisation (HC1) and industry/sector-specific (HC2) knowledge. This lack of industry diversity, board level experience, and general business skills is significant for poor performing not-for-profit organisations.

The findings show Australian high-performing not-for-profit organisations require HC2 to be present to achieve the outcome (HP), while HC3, HC5 and HC7 can be individually present or absent and the causal recipe will still achieve the outcome (HP). The consistency (0.80) and coverage (0.82) scores confirm that the causal recipe qualifies as being “almost always necessary” for the outcome of high-performing.

#### **5.2.1.2 Australian High-Performing Corporate**

This sample of the Australian high-performing corporate organisations (Table 4, Appendix 8) contained 9 cases (board = 3, executive team = 6). It included one respondent (case 8) who indicated that they strongly disagreed with HC 1–4, which identified the skill sets and knowledge of the directors and HC 6, which identified if a director was familiar with the organisation’s functions and structures.

For Australian high-performing corporate organisations the variables within the causal recipe were:

- HC3: directors possess business knowledge and experience to add to overall board effectiveness.
- HC5: directors' level of board experience.
- HC7: diversity of industry backgrounds.
- HC9: sufficient trust to make use of directors' capabilities.

The causal recipe Australian high-performing corporate organisation is:

$$HP = HC3 * (HC5 + HC7 + HC9)$$

$$\text{Consistency} = 0.822222$$

$$\text{Coverage} = 0.822222$$

Unlike case 8 in the high-performing Australian corporate sample, the poor performing cases (board = 7, executive = 15) had no individuals displaying the same level of disagreement with the human capital contribution that directors made.

Analysis of the poor performing sample revealed a causal recipe that shared all the elements of the high-performing group, combined with directors having company-specific knowledge and experience (HC1) and making time to understand the overall functions and structures of the organisation (HC6).

The principal difference between the causal recipes is that the poor performing sample's causal recipe has HC1, HC3 and HC7 as required (*logical and \**) elements whereas the high-performing causal recipe only requires HC3 to be present to achieve the outcome. With HC1 and HC7 as required elements, this may reduce the pool of directors available for selection, thereby inhibiting other important attributes.

This causal recipe Australian poor performing corporate organisations is:

$$PP = HC1 * HC3 * HC7 * (HC5 + HC6 + HC9)$$

$$\text{Consistency} = 0.733333$$

$$\text{Coverage} = 0.846154$$

The findings show that Australian high-performing corporations require HC3 to be present to achieve the outcome (HP), while HC5, HC7 and HC9 can be individually present or absent and the causal recipe will still achieve the outcome (high performance). The consistency (0.82) and coverage (0.82) results confirm the causal recipe qualifies as being “almost always necessary” for the outcome of high performance.

#### **5.2.1.3 New Zealand high-performing not-for-profit Organisations**

The New Zealand high-performing not-for-profit sample (Table 5, Appendix 8) contained 12 cases (board = 7 executive team = 5). Analysis identified a causal recipe consisting of:

- HC1: directors possess organisation-specific knowledge
- HC5: directors have the required level of board experience to add value within the board.
- HC3: directors possess enough business knowledge and experience to add to the overall effectiveness of the board.
- HC9: there is sufficient trust on the board to make the most of the directors’ capabilities.

The causal recipe New Zealand high-performing not-for profit organisations is:

$$HP = HC1 * HC5 * (HC3 + HC9)$$

$$\text{Consistency} = 0.865131$$

$$\text{Coverage} = 0.821875$$

Analysis of the poor performing not-for-profit organisation cases (board = 11 executive = 18) revealed a causal recipe of:

- HC1: directors possess organisation-specific knowledge.

- HC3: directors possess enough business knowledge and experience to add to the overall effectiveness of the board.
- HC5: directors have the required level of board experience to add value within the board.

The causal recipe for New Zealand poor performing not-for profit organisations is:

$$PP = HC1+HC3+HC5$$

$$\text{Consistency} = 0.871264$$

$$\text{Coverage} = 0.811563$$

The presence of all but one of the elements from the high-performing causal recipe in the poor performing recipe reinforces the importance of trust (HC9) as an element within the causal recipe of high-performing not-for-profit organisations. This element contributes to the ability of the third team to fully utilise the tacit and explicit knowledge contained in elements HC3 and HC5 in developing high-performing organisations.

The findings show that New Zealand high-performing not-for-profit organisations require HC1 and HC5 to be present to achieve the outcome (HP), while HC3 and HC9 can be individually present or absent and the causal recipe will still achieve the outcome (HP). The consistency (0.82) and coverage (0.82) findings confirm that the causal recipe qualifies as being “almost always necessary” for the outcome of high performance.

#### **5.2.1.4 New Zealand High-Performing Corporate**

The New Zealand high-performing corporate sample shown in Table 6, Appendix 8 contained seven cases (board = 3, executive team = 4). Analysis identified a causal recipe containing:

- HC2: directors possess industry/sector-specific knowledge.
- HC4: directors have functional areas of expertise.



- HC3: directors possess enough business knowledge and experience to add to the overall effectiveness of the board.
- HC5: directors have the required level of board experience to add value within the board.
- HC9: there is sufficient trust on the board to make the most of the director capabilities.

The causal recipe New Zealand high-performing corporate organisations is:

$$HP = HC2 * HC4 * (HC3 + HC5 + HC9)$$

$$\text{Consistency} = 0.923810$$

$$\text{Coverage} = 0.801653$$

Analysis of the poor performing sample cases (board = 11, executive = 18)

developed a causal recipe containing:

- HC3: directors possess enough business knowledge and experience to add to the overall effectiveness of the board.
- HC5: directors have the required level of board experience to add value within the board.
- HC1: directors possess company-specific knowledge and experience.
- HC7: members have diverse industry backgrounds.
- HC8: the culture, policies and procedures of the board make the best use of the group's skills and abilities.

The causal recipe for New Zealand poor performing not-for profit organisations is:

$$PP = HC3 * HC5 * (HC1 + HC7 + HC8)$$

$$\text{Consistency} = 0.822222$$

$$\text{Coverage} = 0.822221$$

The noticeable difference between the two groups is the absence of HC9 from the poor performing causal recipe, indicating an absence of trust within the TT. HC4 is also absent, indicating a lack of functional experience in the poor performing TT.

Combined with HC9, these elements are significant contributors to high performance. The poor performing causal recipe places greater emphasis on HC3, indicating directors' general business knowledge, and HC5, indicating the level of board experience.

The findings show that New Zealand high-performing corporate organisations require HC2 and HC4 to be present to achieve the outcome (HP), while HC3, HC5 and HC9 can be individually present or absent and the causal recipe will still achieve the outcome (HP). The consistency (0.92) and coverage (0.80) findings confirm that the causal recipe qualifies as being "almost always necessary" for the outcome of high performance.

#### **5.2.1.5 Combined New Zealand and Australian High-Performing Not-for-Profit Organisations**

The combined New Zealand and Australian samples of the high-performing not-for-profit organisations (Table 7, Appendix 8) identified 20 cases (board = 10, executive team = 10). Analysis was initially restricted to identifying which, if any, common elements were present. The causal recipes for the combined New Zealand and Australian high-performing not-for-profit organisations are:

Australia high-performing =  $HC2 * (HC3 + HC5 + HC7)$

New Zealand high-performing =  $HC1 * HC5 * (HC3 + HC9)$

The New Zealand and Australian samples share HC3 and HC5 and the elements HC1 and HC2 and are identified as required elements in both. The noticeable absence in the Australian causal recipe is HC9 (trust).

The analysis of the combined sample developed a causal recipe containing:

- HC2: directors possess industry/sector-specific knowledge
- HC3: enough general business knowledge and experience to add to overall effectiveness of the board.
- HC7: members have diverse industry backgrounds.
- HC9: sufficient trust to make the most of director capabilities.

The causal recipe for the combined New Zealand and Australian high-performing not-for-profit organisations is:

$$HP = HC2 * HC3 * (HC7 + HC9)$$

$$\text{Consistency} = 0.813333$$

$$\text{Coverage} = 0.824324$$

The important aspect to note is the constant inclusion of HC2 and HC3. These indicate that directors on boards of not-for-profit organisations require sector-specific knowledge mixed with business knowledge to achieve the balance required for effective governance of high-performing not-for-profit organisations.

The analysis of the combined New Zealand and Australian poor performing cases (board = 19, executive = 28) developed a causal recipe with two notable elements (HC7 and HC9) missing when compared with the high-performing causal recipe.

The poor performing causal recipe for the combined New Zealand and Australian poor performing not-for-profit organisations is:

$$PP = HC1 * (HC2 + HC3 + HC5)$$

$$\text{Consistency} = 0.863830$$

$$\text{Coverage} = 0.813084$$

The absence of HC7 indicates that while there are directors with organisation-specific knowledge (HC1), this element is not balanced by directors who have diverse industry backgrounds. The absence of HC9 is significant as “trust” is present in the causal recipes of high-performing third teams.

The findings show that New Zealand and Australian high-performing not-for-profit organisations require HC2 and HC3 to be present to achieve the outcome (HP), while HC7 and HC9 can be individually present or absent and the causal recipe will still achieve the outcome (HP). The consistency (0.81) and coverage (0.82), while just achieving the threshold (80%) confirm that the causal recipe qualifies as being “almost always necessary” for the outcome of high performance.

#### **5.2.1.6 Combined New Zealand and Australian High-Performing Corporate Organisations**

The New Zealand and Australian corporate sample (Table 8, Appendix 8) which consisted of 16 cases (board = 6 and executive = 10) was initially analysed to identify which, if any, elements were shared by both the New Zealand and Australian companies. The causal recipe for the combined New Zealand and Australian high-performing corporate organisations is:

Australia high-performing =  $HC3 * (HC5 + HC7 + HC9)$

New Zealand high-performing =  $HC2 * HC4 * (HC3 + HC5 + HC9)$

This analysis identified the shared elements as

- HC3: enough general business knowledge and experience to add to over effectiveness of the board.
- HC5: directors have the required level of board experience to add value to the board.
- HC9: there is sufficient trust on the board for the most to be made of a director's capabilities.

Analysis of the high-performing cases identified a causal recipe containing the elements:

- HC3: directors have general business knowledge to add to overall effectiveness.
- HC5: directors have required board level experience.
- HC9: sufficient trust exists to make use of director capabilities.

The Combined New Zealand and Australian high-performing corporate causal recipe is:

$$HP = HC3 * (HC5 + HC9)$$

$$\text{Consistency} = 0.866667$$

$$\text{Coverage} = 0.812500$$

The element described as “sufficient trust exists to make use of director capabilities” (HC9) plays an integral part in the causal recipes developed for the high-performing organisations in both the corporate and not-for-profit sectors across both countries. Its absence from the causal recipes for the poor performing sample is an important finding.

Analysis of the poor performing sample developed a causal recipe with no “logical and” (\*) elements. This is the first causal recipe with only “logical or” (+) elements, meaning that individual elements could be present or absent with the resulting causal recipe still achieving the outcome (poor performing). An absence of “logical and” characteristics is not an indicator of poor performance.

The Combined New Zealand and Australian poor performing corporate causal recipe is:

$$PP = HC1+HC3+HC5+HC7$$

$$\text{Consistency} = 0.847619$$

$$\text{Coverage} = 0.816514$$

The absence of HC9 above reaffirms the importance of “trust” between the members of the TT within high-performing organisations.

The findings show that the New Zealand and Australian high-performing corporate organisations require HC3 be present to achieve the outcome (HP) while HC5 and HC9 can be individually or collectively present or absent and the causal recipe will still achieve the outcome (HP). The consistency (0.86) and coverage (0.81), while just achieving the threshold (80%), confirm that the causal recipe qualifies as being “almost always necessary” for the outcome of high performance.

### **5.2.2 Structural Capital (STC)**

The construct of structural capital (STC) discussed in Chapter 3 centres on the board and its explicit and implicit codified knowledge, e.g. its policies, procedures and routines. Only board members of the participating organisations received the survey document that contained questions on structural capital. This reduced the

population significantly, resulting in the need to combine the not-for-profit and corporate samples for this construct of intellectual capital. For example, the responses (n=3) from board members of Australian high-performing corporate organisations would have been too small to develop a causally relevant recipe, whereas the combination of the corporate and not-for-profit cases (n=7) is large enough to develop such a recipe. Using fsQCA as the analysis approach has been advocated for small-n research designs (5–50 cases) – as in this instance - and is increasingly applied throughout the social sciences (Koenig-Archibugi, 2004; Kogut, MacDuffie, & Ragin, 2004).

With the reduction in sample size the results in this section are presented in the following order:

- a. Australian high-performing not-for-profit and Corporate organisations
- b. New Zealand high-performing not-for-profit and Corporate organisations
- c. Combined high-performing not-for-profit and Corporate organisations

#### **5.2.2.1 Australian High-Performing Not-for-Profit and Corporate Organisations**

The combined Australian not-for-profit and corporate sample (Table 9, Appendix 8) included seven cases (not-for-profit = 4, corporate = 3). Analysis developed a causal recipe combining:

- STC5: the board’s culture builds trust between the board and executive.
- STC2: important information gets withheld from the board. (~)
- STC3: important information gets withheld from the executive. (~)

The Australian high-performing not-for-profit and Corporate causal recipe is:

$$HP = STC5 * (\sim STC2 + \sim STC3)$$

$$\text{Consistency} = 0.897248$$

$$\text{Coverage} = 0.905556$$

It should be noted that the element STC5 has at its core “trust”, which was also evident in the HC causal recipes, reinforcing the idea that “trust” within and between TT groups is essential to high performance. The negation (~) of STC2 and

STC3 is important in the context of the overall trust that exists within the TT. A presence of either of these two elements would have indicated a severe lack of trust between the members of the TT with regard to their belief that each group was being fully informed by the other.

The analysis of the poor performing not-for-profit and corporate sample showed that the poor performing organisations shared the same causal recipe as the high-performing organisations, which is:

$$PP = STC5 * (\sim STC2 + \sim STC3)$$

$$\text{Consistency} = 0.983333$$

$$\text{Coverage} = 0.800000$$

This causal recipe was the only example where the high-performing and poor performing causal recipes were the same. This may have resulted from combining the two different populations (not-for-profit and corporate) but this did not occur with combining the other constructs of IC (social capital and cultural capital are discussed in Sections 5.1.3 and 5.1.5 respectively).

This culture of trust is evidenced in both the high-performing and poor performing samples by the strong disagreement associated with the elements STC2 and STC3. The presence of STC5 is at odds with the absence of “trust” (HC9) in HC causal recipes for poor performing organisations and this anomaly deserves further investigation that is discussed in Chapter 7.

The findings show that the combined high-performing not-for-profit and corporate organisations require STC5 to be present to achieve the outcome (HP) while  $\sim STC2$  and  $\sim STC3$  can be individually present or absent and the causal recipe will still achieve the outcome (HP). The consistency (0.89) and coverage (0.90) confirm that the causal recipe qualifies as being “almost always necessary” for the outcome of high performance.

### 5.2.2.2 New Zealand High-Performing Not-for-Profit and Corporate Organisations

The combined New Zealand high-performing not-for-profit and corporate sample (Table 10, Appendix 8) consisted of 10 cases (not-for-profit = 7, corporate = 3).

Analysis developed a causal recipe combining:

- STC5: board's culture builds trust between the board and executive as key elements.
- STC1: board's policies and procedures build trust in the boardroom.
- STC2: important information is withheld from the board. (~)
- STC3: important information is withheld from the executive. (~)

The negation of STC2 and STC3 indicates that the level of trust between the members that they are receiving all relevant information is important (STC5). The addition of STC1 in the New Zealand causal recipe indicates that the development of trust is partially attributable to the development and use of board policy and procedures. The New Zealand high-performing not-for-profit and Corporate causal recipe is:

$$HP = STC5 * STC1 * (\sim STC2 + \sim STC3)$$

$$\text{Consistency} = 0.997348$$

$$\text{Coverage} = 0.800000$$

Analysis of the poor performing not-for-profit and corporate cases (not-for-profit = 12, corporate = 7) identified a causal recipe consisting of:

- STC4: structured induction process in place for new directors
- STC5: board's culture builds trust between the board and executive
- STC6: board's culture builds trust between the board and external organisations
- STC2: important information gets withheld from the board (~)
- STC3: important information gets withheld from the executive (~)



As the calculation shows, this recipe for the New Zealand poor performing not-for-profit and corporate shares only the element STC5 with the high-performing sample.

$$PP = STC4+STC5+STC6+(\sim STC2+\sim STC3)$$

$$\text{Coverage} = 0.790503$$

$$\text{Consistency} = 0.992982$$

The poor performing sample's causal recipe does not include STC1. This does not signify a major difference but it does constitute a difference in focus between the sample groups, with the poor performing sample focusing on developing relationships with external organisations (STC6) and ensuring their induction processes work (STC4). The more significant difference between the causal recipes is the requirement in the high-performing causal recipe for the elements STC1 and STC5 to be present (logical and, \*) compared with the poor performing causal recipe where STC5 may or may not be present (logical or, +). The presence of policies and procedures engenders an element of trust when viewed externally and reinforces earlier comments that "trust" is a significant element in high-performing not-for-profit and corporate TTs.

The findings show that the combined high-performing not-for-profit and corporate organisations require STC1 and STC5 to be present to achieve the outcome (HP) while  $\sim STC2$  and  $\sim STC3$  can be individually present or absent and the causal recipe will still achieve the outcome (HP). The consistency (0.99) and coverage (0.80), while just achieving the threshold (80%), confirm that the causal recipe qualifies as being "almost always necessary" for the outcome of high performance.

### **5.2.2.3 Combined New Zealand and Australian High-Performing Not-For-Profit and Corporate Organisations**

The combined New Zealand and Australian sample (Table 11, Appendix 8) contained seventeen cases (not-for-profit = 11, corporate = 6) in. An initial analysis of the causal recipes developed for New Zealand and Australian was applied to

determine if any elements were shared. This combined New Zealand and Australian high-performing – not-for-profit and corporate causal recipe is shown as:

$$\text{New Zealand high-performing} = \text{STC5} * \text{STC1} * (\sim \text{STC2} + \sim \text{STC3})$$

$$\text{Australia high-performing} = \text{STC5} * (\sim \text{STC2} + \sim \text{STC3})$$

The analysis confirmed the earlier findings of the individual New Zealand and Australian causal recipes, that STC5 and the negation of  $\sim \text{STC2}$  and  $\sim \text{STC3}$  are shared elements in the causal recipes for HP.

Analysis of the combined New Zealand and Australian sample found that the key elements (STC5,  $\sim \text{STC2}$  and  $\sim \text{STC3}$ ) were present. The inclusion of STC1 reinforces the construct of “trust” within the TT as a significant contributor to high-performing, as shown below:

$$\text{HP} = \text{STC1} * \text{STC5} * (\sim \text{STC2} + \sim \text{STC3})$$

$$\text{Consistency} = 0.936105$$

$$\text{Coverage} = 0.859364$$

Analysis of the New Zealand and Australian poor performing cases (not-for-profit = 21, corporate = 14) developed a causal recipe containing:

- STC4: structured induction process in place
- STC5: board’s culture builds trust
- STC6: board’s culture builds trust with external organisations
- STC2: important information gets withheld from the board ( $\sim$ )
- STC3: important information gets withheld from the executive ( $\sim$ )

The Combined New Zealand and Australian poor performing – not-for-profit and corporate causal recipe is:

$$\text{PP} = \text{STC4} + \text{STC5} + \text{STC6} + (\sim \text{STC2} + \sim \text{STC3})$$

$$\text{Consistency} = 0.988571$$

$$\text{Coverage} = 0.794793$$

The elements STC4, STC5 and STC6 are substitutable within the poor performing causal recipe, meaning that their presence or absence has no effect on the outcome (poor performing), whereas for the high-performing causal recipe the elements STC1 and STC5 are required, meaning that these elements must both be present to achieve the outcome (HP).

The findings of the combined sample support the individual New Zealand and Australian causal recipes. The presence of STC1 and STC5 is required along with the negation of  $\sim$ STC2 and  $\sim$ STC3 to achieve high performance. The consistency (0.93) and coverage (0.85) confirm that the causal recipe qualifies as being “almost always necessary” for the outcome of high performance.

### **5.2.3 Social Capital: Internal (SCi)**

The discussion in Chapter 3 detailed how social capital – internal (SCi) centres on individual director’s implicit and tangible resources, these being available by virtue of relevant internal social relationships, e.g. networks of contacts, relationships (professional and social). Only board members of participating organisations participated in this section of the survey.

Combining the responses from the not-for-profit and corporate high-performing organisations was necessary for the analysis of SCi. As with the STC results above, the sample size was too small for each sector to be analysed separately.

The results are presented in the following order:

- a. Australian high-performing not-for-profit and corporate organisations
- b. New Zealand high-performing not-for-profit and corporate organisations
- c. Combined high-performing not-for-profit and corporate organisations

#### **5.2.3.1 Australian High-Performing Not-for-Profit and Corporate Organisations**

The Australian high-performing not-for-profit and corporate sample (Table 12,

Appendix 8) shows the seven cases (not-for-profit = 4, corporate = 3) included.

Analysis developed a causal recipe for the Australian high-performing not-for-profit and corporate organisations that included:

- SCi5: board’s culture builds trust in the boardroom

- SCi9: third team relationships encourage the use of the board's talents by management
- SCi8: decisions of the board are mostly settled by votes (~)

The expectation was to find the negated SCi8 in the causal recipes, with the interviews highlighting the desire on the part of the chairperson and directors to reach consensus decisions. Inclusion of SCi9 (board/executive relationships encourage the use of the board's talents by the executive) in the high-performing causal recipe is important because this element is an antecedent for Knowledge Sourcing, which is analysed later in this chapter. The causal recipe for SCi in the combined Australian high-performing not-for-profit/corporate samples is:

$$HP = (SCi5 * SCi9) + \sim SCi8$$

$$\text{Consistency} = 0.961905$$

$$\text{Coverage} = 0.841667$$

Analysis of the Australian poor performing organisations (not-for-profit = 9, corporate = 6) developed a causal recipe that shared two elements with the high-performing causal recipe: SCi5 and ~SCi8, as shown below:

$$PP = SCi2 + SCi5 + SCi6 + \sim SCi8$$

$$\text{Consistency} = 0.911111$$

$$\text{Coverage} = 0.820000$$

The unique elements in the poor performing causal recipe are SCi2 and SCi6. It is the absence of SCi9 which is most significant. SCi9 and the construct (Knowledge Sourcing) of which it forms a part are important in the development of the executives' ability to adapt and replicate the knowledge sourced from the board to enhance the performance of the organisation. Discussion regarding this element is included in Chapter 6.

The findings show that the combined high-performing not-for-profit and corporate organisations require SCi5 and SCi9 be present to achieve the outcome (HP) while ~SCi8 can be present or absent and the causal recipe will still achieve the outcome

(HP). The consistency (0.96) and coverage (0.84) results confirm that the causal recipe qualifies as being “almost always necessary” for the outcome of high performance.

### **5.2.3.2 New Zealand High-Performing Not-for-Profit and Corporate Organisations**

The combined New Zealand high-performing not-for-profit and corporate sample for Social Capital (Internal) (Table 13, Appendix 8) shows the 10 cases (not-for-profit = 7, corporate = 3) included. Analysis developed a causal recipe containing:

- SCi1: outside directors have a good working relationship with the CEO
- SCi4: directors are aware of other directors’ areas of expertise
- SCi5: board’s culture builds trust in the boardroom.
- SCi8: decisions of the board are mostly settled by votes (~)

The negation of SCi8 reaffirms earlier findings that elements SCi5, SCi4 and SCi1 must be present before SCi8 can occur, as is shown by the following calculation for the New Zealand high-performing Not-for-Profit and Corporate organisations:

$$HP = SCi1 * SCi4 * SCi5 * \sim SCi8$$

$$\text{Consistency} = 1.000000$$

$$\text{Coverage} = 0.810753$$

The number of poor performing New Zealand cases was 18 (not-for-profit = 11, corporate = 7). Analysis developed a causal recipe for New Zealand poor performing Not-for-Profit and Corporate organisations consisting of:

- SCi1: outside directors have a good working relationship with the CEO.
- SCi5: board’s culture builds trust in the boardroom.

Comparing this causal recipe with the high-performing recipe, two elements, SCi4 and ~SCi8 identified in the high-performing causal recipe are absent from this recipe. The missing elements are directors being aware of each other’s areas of expertise and decision-making being consensus driven rather than by votes.

The combined New Zealand poor performing Not-for-Profit and Corporate causal recipe is:

$$PP = SCi1 + SCi5$$

$$\text{Consistency} = 0.881481$$

$$\text{Coverage} = 0.809524$$

Exclusion from the recipe of  $\sim SCi8$  is the most relevant observation as this indicates boards that are more likely to settle decisions through a formal voting process rather than the practice of consensus. This suggests a level of unease with the decision process that possibly indicates a level of mistrust amongst the poor performing TT. Compounding this state is the absence of  $STi4$ , indicating that the directors in the poor performing sample TT are not as aware of each other's skill sets as are directors in the high-performing sample's TT.

The findings show that high-performing not-for-profit and corporate organisations require  $SCi1$ ,  $SCi4$  and  $SCi5$  to be present to achieve the outcome (HP), while  $SCi8$  can be present or absent and the causal recipe will still achieve the outcome (HP). The consistency (1.00) and coverage (0.81) confirm that the causal recipe qualifies as being "almost always necessary" for the outcome of high performance.

### **5.2.3.3 Combined New Zealand and Australian High-Performing Not-For-Profit and Corporate Organisations**

The combined New Zealand and Australian high-performing not-for-profit and corporate sample relating to the Social Capital (Internal) construct (Table 14, Appendix 8) consisted of 17 cases (not-for-profit = 11, corporate = 6) in. Analysis initially reviewed the causal recipes of the individual countries to determine which elements were shared, as follows:

$$\text{Australia high-performing} = SCi5 + SCi9 + \sim SCi8$$

$$\text{New Zealand high-performing} = SCi1 * SCi4 * SCi5 * \sim SCi8$$

The results revealed that the combined New Zealand and Australian high-performing not-for-profit and corporate causal recipes share only one element: SCi5 (“board’s culture builds trust in the boardroom”):

$$HP = (SCi1 * SCi5 * SCi9) + \sim SCi8$$

$$\text{Consistency} = 0.981524$$

$$\text{Coverage} = 0.804487$$

Importantly, in the combined causal recipe what were “logical or” elements in the Australian high-performing recipe have become “logical and” elements in the combined recipe. This finding reinforces the importance that high-performing boards place on elements SCi1 and SCi5. Both of these elements are antecedents for SCi9, which, as stated above, is important for knowledge sourcing to occur.

Analysis of the combined poor performing cases (not-for-profit = 20, corporate = 13) developed a causal recipe consisting of:

- SCi4: directors are aware of other directors expertise
- SCi5: board’s culture builds trust
- SCi1: outside directors have a good working relationship with CEO
- SCi6: board’s policies, procedures build trust between TT groups
- SCi8: decisions of the board are mostly settled by votes (~)

The combined New Zealand and Australian poor performing not-for-profit and corporate causal recipe is:

$$PP = SCi4 * SCi5 * (SCi1 + SCi6 + \sim SCi8)$$

$$\text{Consistency} = 0.923232$$

$$\text{Coverage} = 0.817531$$

The absence of SCi9 combined with SCi1 being a “logical or” element is the important difference between the poor performing and high-performing causal recipes.

The findings show that high-performing not-for-profit and corporate organisations require SCi1, SCi5 and SCi9 to be present to achieve the outcome (HP), while SCi8 can be present or absent and the causal recipe will still achieve the outcome (HP). The consistency (0.98) and coverage (0.80) confirms that the causal recipe qualifies as being “almost always necessary” for the outcome of high performance.

#### **5.2.4 Social Capital: External (SCe)**

Social capital – external (SCe) encapsulates the individual director’s implicit and tangible set of resources available by virtue of their relevant external social relationships, e.g. networks of contacts, relationships (professional and social). A detailed discussion of the construct is contained in Chapter 3. Combining the SCe responses for not-for-profit and corporate organisations was required for the same reasons described for STC and SCi above.

The results are presented in the following order:

- a. Australian high-performing not-for-profit and corporate organisations
- b. New Zealand high-performing not-for-profit and corporate organisations
- c. Combined high performing not-for-profit and corporate organisations

##### **5.2.4.1 Australian High-Performing Not-for-Profit and Corporate**

The Australian high-performing not-for-profit and corporate sample (Table 15, Appendix 8) consisted of seven cases (not-for-profit = 4, corporate = 3) in. Analysis developed a causal recipe for Australian high-performing not-for-profit and corporate organisations consisting of:

- SCe5: policies, procedures and culture build trust between the board and external organisations
- SCe6: policies, procedures and culture of the board build trust between the board and executive
- SCe7: directors know how to put their contacts to work for the organisations

It is worth noting that two of the three elements (SCe5, SCe6) in this causal recipe are centred on the policies, procedures and cultures, which build “trust”. Trust



within and between the members of the third team is a reoccurring theme throughout the causal recipes. This reoccurrence reinforces the importance placed on the concept of trust as a core element in high-performing organisations. SCe7 is relevant because it signifies that directors are enabling the organisation to benefit from access to their outside contacts. The Australian high-performing not-for-profit and corporate causal recipe is:

$$HP = SCe5 * (SCe6 + SCe7)$$

$$\text{Consistency} = 0.885714$$

$$\text{Coverage} = 0.958763$$

Analysis of the poor performing cases (not-for-profit = 10, corporate = 8) identified a causal recipe consisting of:

- SCe5: policies, procedures and culture build trust between the board and external organisations
- SCe6: policies, procedures and culture of the board build trust between the board and executive

The Australian poor performing not-for-profit and corporate causal recipe is:

$$PP = SCe5 * SCe6$$

$$\text{Consistency} = 0.911111$$

$$\text{Coverage} = 0.911111$$

The element that is present in the high-performing causal recipe but missing from the poor performing sample above (SCe7), is important because this indicates that high-performing boards make greater use of the directors' outside contacts (as predicted in resource dependency theory) to enhance the performance of the organisations. In contrast, the poor performing organisations are not utilising these important resources to the same extent.

The findings show that high-performing not-for-profit and corporate organisations require SCe5 to be present to achieve the outcome (HP), while SCe6 and SCe7 can be present or absent and the causal recipe will still achieve the outcome (HP). The

consistency (0.88) and coverage (0.95) confirms that the causal recipe qualifies as being “almost always necessary” for the outcome of high performance.

#### **5.2.4.2 New Zealand High- Performing Not-for-Profit and Corporate Organisations**

The nine cases (not-for-profit = 5, corporate = 4) included in the New Zealand high-performing not-for-profit and corporate sample are shown in Table 16, Appendix 8. Analysis developed a causal recipe consisting of:

- SCe5: policies, procedures and culture build trust between the board and external organisations
- SCe6: policies, procedures and culture of the board build trust between board and executive

This causal recipe differs slightly from the Australian causal recipe, which included SCe7:

$$HP = SCe5 * SCe6$$

$$\text{Consistency} = 0.896296$$

$$\text{Coverage} = 0.97984$$

The causal recipe developed from analysis of the poor performing New Zealand not-for-profit and Corporate (not-for-profit = 12 and corporate = 7) contained the elements:

- SCe6: policies, procedures and culture of the board build trust between the board and executive
- SCe7: directors know how to put their contacts to work for the organisations

The poor performing New Zealand not-for-profit and Corporate causal recipe contains SCe7 instead of SCe5:

$$PP = SCe6 * SCe7$$

$$\text{Consistency} = 0.817544$$

$$\text{Coverage} = 0.966805$$

The absence of SCe5 may explain the difference between the high-performing and poor performing samples. Trust is facilitated by a strong culture combined with well-developed policies and procedures of the board; if these elements are missing, a director may be less inclined to utilise their contacts for the benefit of the organisation.

The findings show that high-performing not-for-profit and corporate organisations require SCe5 and SCe6 be present to achieve the outcome (HP). There were no “logical or” elements present in the recipe. The consistency (0.89) and coverage (0.97) confirms that the causal recipe qualifies as being “almost always necessary” for the outcome of high performance.

#### **5.2.4.3 Combined New Zealand and Australian High-Performing Not-for-Profit and Corporate Organisations**

For the construct Social Capital (External), Table 17, Appendix 8 shows the cases (not-for-profit = 10, corporate = 6) in the combined New Zealand and Australian high performing not-for-profit and corporate sample. Analysis started with a review of the individual causal recipes to determine if any commonalities existed, thus:

$$\text{Australia high performing} = SCe5 * (SCe6 + SCe7)$$

$$\text{New Zealand high performing} = SCe5 * SCe6$$

SCe5 and SCe6 were shared by both recipes, the difference being that in the causal recipe for the New Zealand sample both elements (SCe5 and SCe6) were required (logical and), whereas in the Australian causal recipe only SCe5 was a required element.

The analysis developed a combined New Zealand and Australian high performing Not-for-Profit and Corporate causal recipe containing:

- SCe5: policies, procedures and culture build trust between the board and external organisations.
- SCe6: policies, procedures and culture of the board build trust between board and executive.
- SCe7: directors know how to put their contacts to work for the organisations.

The Combined New Zealand and Australian high performing Not-for-Profit and Corporate causal recipe is:

$$HP = SCe5 * (SCe6 + SCe7)$$

$$\text{Consistency} = 0.908333$$

$$\text{Coverage} = 0.915966$$

This combined causal recipe is consistent with the individual recipes for the New Zealand and Australian samples of high performing organisations and reinforces the importance of policies, procedures and culture in building trust (SCe5) before full use of directors' external contacts (SCe7) is possible to enhance the performance of the organisation.

The Combined New Zealand and Australian Not-for-Profit and Corporate poor performing organisations totalled 37 cases. Analysis revealed a causal recipe with the elements:

- SCe5: policies, procedures and culture build trust between the board and external organisations
- SCe6: policies, procedures and culture of the board build trust between board and executive

The Combined New Zealand and Australian Not-for-Profit and Corporate poor performing causal recipe is:

$$PP = SCe5 * SCe6$$

$$\text{Consistency} = 0.839640$$

$$\text{Coverage} = 0.935743$$

The SCe7 component of the high performing causal recipe is absent from the poor performing causal recipe. This reinforces earlier results highlighting the importance of SCe7 for maximising the value that external directors bring to an organisation.

The findings show that the combined New Zealand and Australian high performing sample of not-for-profit and corporate organisations require SCe5 to be present to achieve the outcome (HP) while SCe6 and SCe7 can be present or absent and the causal recipe will still achieve the outcome (HP). The consistency (0.90) and coverage (0.91) confirms that the causal recipe qualifies as being “almost always necessary” for the outcome of high performance.

### **5.2.5 Cultural Capital (CC)**

As defined in Chapter 3, cultural capital (CC) is a construct that centres on the individual director’s implicit and tangible set of resources available by identification with the boards sanctioned values, norms and rules, e.g. honesty. Only board members of the participating organisations received the survey document that contained questions on cultural capital.

Combining the high-performing not-for-profit and corporate responses was necessary for the analysis of structural capital, as it was also for the STC, SCi and SCe constructs presented in the sections above. The results are presented in the following order:

- a. Australian high-performing not-for-profit and Corporate organisations
- b. New Zealand high-performing not-for-profit and Corporate organisations
- c. Combined high-performing not-for-profit and Corporate organisations

#### 5.2.5.1 Australian High-Performing Not-For-Profit and Corporate Organisations

The Australian high-performing not-for-profit and corporate sample (Table 18, Appendix 8) shows the seven cases (not-for-profit = 4, corporate = 3) included in the analysis. Analysis developed a causal recipe for Australian high-performing not-for-profit and corporate organisations with the following elements:

- CC3: directors participate actively during meetings
- CC4: directors are fully prepared for meetings
- CC6: when a new director joins the board assistance is given and a mentor is assigned to aide assimilation

As shown below, this causal recipe falls just below the standard at which Ragin (2008) suggests a set-theoretic relationship can be substantiated (75% consistency). Ragin (2008) suggests that when the consistency of a causal recipe falls below 75% it is difficult to maintain on substantive grounds that a set relation exists, even a very rough one.

$$HP = (CC3 * CC4) + CC6$$

$$\text{Consistency} = 0.742857$$

$$\text{Coverage} = 0.829787$$

Even though the causal recipe for high-performing organisations failed to meet the research standards for consistency (80%), it misses the cut-off point (75%) suggested by Ragin (2008) by a very small percentage. The coverage is nevertheless significant enough to allow determination of any possible differences between the high-performing recipe and that of the poor performing organisations.

Analysis of the poor performing organisations cases (not-for-profit = 8, corporate = 6) developed a causal recipe for Australian not-for-profit and Corporate organisations containing:

- CC9: individual board members have shared values, norms and beliefs
- CC10: these shared, values, norms and beliefs match the companies
- CC5: board explicitly discusses organisational values

Like the high-performing causal recipe, this recipe also failed to reach the required research standard for consistency (80%): The Australian poor performing not-for-profit and corporate organisations' causal recipe is:

$$PP = (CC9 * CC10) + CC5$$

$$\text{Consistency} = 0.733333$$

$$\text{Coverage} = 0.846154$$

The high-performing organisations place importance on directors' preparation (CC4) and participation in meetings (CC3), alongside support for new directors (CC6). In contrast, the poor performing organisations emphasise values, norms and beliefs (CC9), explicitly discussing these values (CC5), and sharing these (CC10) with the organisation. This result represents a significant difference in focus between the high-performing and poor performing organisations.

The findings show that the combined sample of Australian high-performing not-for-profit and corporate organisations require CC3 and CC4 to be present to achieve the outcome (HP) while CC6 can be present or absent and the causal recipe will still achieve the outcome (HP). While recognising that the consistency (0.74) and coverage (0.82) measures do not qualify the causal recipe as being "almost always necessary", the differences between the high-performing and poor performing recipes are still significant enough to warrant their inclusion in the final analysis.

#### **5.2.5.2 New Zealand High-Performing Not-For-Profit and Corporate Organisations**

The combined New Zealand NP not-for-profit and corporate sample (Table 19, Appendix 8) included 10 cases (not-for-profit = 7, corporate = 3). Analysis developed a causal recipe with the following elements:

- CC5: board explicitly discusses organisational values
- CC1: culture, policies and procedures match societal expectations
- CC2: directors research relevant issues before meetings
- CC3: directors actively participate in meetings
- CC4: directors are fully prepared for meetings

This result indicates that a director's preparation for and participation in meetings is considered to be important. Combined with this finding is the importance placed on directors explicitly discussing organisational values and that, when agreed, these values match society's expectations. The causal recipe for the combined sample of New Zealand high-performing not-for-profit and corporate organisations is shown as:

$$HP = CC5*(CC1+CC2+CC3+CC4)$$

$$\text{Consistency} = 0.893333$$

$$\text{Coverage} = 0.807229$$

There were 17 cases (not-for-profit = 11, corporate = 6) in the poor performing organisations' sample. The analysis developed a causal recipe consisting of:

- CC1: culture, policies and procedures match societal expectations
- CC2: director research relevant issues before meetings
- CC3: directors actively participate in meetings
- CC4: directors are fully prepared for meetings
- CC8: board's values, norms and beliefs affect a director's willingness to use their capabilities

The causal recipe for the combined sample of New Zealand poor performing not-for-profit and Corporate organisations is:

$$PP = CC1*CC2*(CC3+CC4+CC8)$$

$$\text{Consistency} = 0.874510$$

$$\text{Coverage} = 0.810909$$

The poor performing organisations agreed that a board's values, norms and beliefs affect a director's willingness to use their capabilities (CC8), yet these same organisations do not place emphasis on explicitly discussing these aspects of a board's culture (CC5).

The absence of CC5 from the poor performing causal recipe and its inclusion in the high-performing recipe may explain some of the difference in performance. The



discussion and eventual agreement on organisational values by the board is an important step in directors aligning their own values with those of the organisation, which allows full commitment of their capabilities to the organisation.

The findings show that the New Zealand high-performing not-for-profit and corporate organisations require CC5 be present to achieve the outcome (HP) while CC1, CC2, CC3 and CC4 can be present or absent and the causal recipe will still achieve the outcome (HP). The consistency (0.89) and coverage (0.80) qualifies the causal recipe as being “almost always necessary.”

#### **5.2.5.3 Combined New Zealand and Australian High-Performing Not-For-Profit and Corporate Organisations**

The combined New Zealand and Australian not-for-profit and corporate sample (Table 20, Appendix 8) shows the 17 cases (not-for-profit = 11, corporate = 6) included. Analysis initially determined the similarities between the causal recipes, remembering that the combined Australian causal recipe (79%) fell just below the standard (80%) of consistency required by this research.

Australia high-performing =  $(CC3 * CC4) + CC6$

New Zealand high-performing =  $CC5 * (CC1 + CC2 + CC3 + CC4)$

The common elements were CC3 and CC4, with the importance placed on these two elements differing between the two countries. The Australian recipe showed these two elements as “logical and” whereas the New Zealand recipe showed them as “logical or.”

Analysis of the data identified a causal recipe containing the following elements:

- CC1: culture, policies and procedures match societal expectations
- CC2: directors research relevant issues before meetings
- CC3: directors actively participate in meetings
- CC4: directors are fully prepared for meetings
- CC5: board explicitly discusses organisational values
- CC6: when a new director joins, assistance is given to aide assimilation.

The causal recipe for the combined sample of New Zealand and Australian high-performing not-for-profit and corporate organisations is:

$$HP = CC2 * CC4 * (CC1 + CC3 + CC5 + CC6)$$

$$\text{Consistency} = 0.831373$$

$$\text{Coverage} = 0.815385$$

The causal recipe demonstrates the importance of directors fully engaging with other third team members and with the overall organisation. This engagement occurs through research (CC2) and preparation (CC4) before meetings and full participation (CC3) in the meetings, combined with directors explicitly discussing organisational values (CC5), while ensuring organisational policies, procedures, and culture match societal expectations (CC1). New directors have these elements embedded through the induction process, which may include assistance (mentoring) to aid a new director's assimilation (CC6).

Analysis of the poor performing cases (not-for-profit = 19, corporate = 12) for the combined New Zealand and Australian not-for-profit and corporate organisations developed the following causal recipe:

$$PP = (CC1 + CC5) + (CC2 + CC3 + CC4) + (CC9 + CC10)$$

$$\text{Consistency} = 0.793548$$

$$\text{Coverage} = 0.829214$$

Bracketing the elements highlights those with similar outcomes e.g. CC2, CC3 and CC4 all relate to board meeting behaviour. Organisational values are explicitly discussed (CC1 and CC5) with the policies, procedures and culture of the organisation as matching societal expectations. The elements CC2, CC3 and CC4 indicate directors' preparation and participation in meetings. The elements CC9 and CC10 indicate that individual director's values, norms and beliefs match the companies.

The significant difference between the poor performing and high-performing causal recipes is the absence of CC6; this element highlights the importance of the induction process in the assimilation of a new director through the assigning of a

mentor (current director). The proper and efficient assimilation of a new director into the TT may ensure that the performance of the TT is not affected negatively by the inexperience of that director on the board.

The complicated appearance of these causal recipes (high-performing and poor performing) may be due to the differences in the cultural expectations that exist between New Zealand and Australian organisations, which makes the development of a relevant causal recipe difficult.

Kluckhohn and Strodtbeck (1961), Hofstede (1980) and Laurent (1983) have all noted that cultural differences manifest themselves in various ways including participation and team work. These results verify the complexity that exists when directors are active in different cultural environments.

The findings show that the combined Australian high-performing not-for-profit and corporate organisations require CC2 and CC4 to be present to achieve the outcome (HP) while CC1, CC3, CC5 and CC6 can be present or absent and the causal recipe will still achieve the outcome (HP). The consistency (0.83) and coverage (0.81) measures qualify the causal recipe as being “almost always necessary.”

### **5.3 Leader Member Exchange (LMX)**

The theoretical basis for leader-member exchange (LMX) is social exchange theory which was discussed in Chapter 3. Leader-member exchange posits that an interpersonal relationship develops between supervisors (board) and subordinates (executive team). This relationship requires social exchange to occur, that is, each party sees the others offering as valuable. This means that the higher the tangible and intangible value of the exchanged commodities, the higher the level of the LMX relationship.

The results are presented in the following order:

- a. Australian high-performing not-for-profit organisations
- b. Australian high-performing corporate organisations

- c. New Zealand high-performing not-for-profit organisations
- d. New Zealand high-performing corporate organisations
- e. Combined high-performing not-for-profit organisations
- f. Combined high-performing corporate organisations

### **5.3.1 Australian High-Performing Not-for-Profit**

The seven cases (board = 3, executive = 4) included in the analysis are shown in Table 21, Appendix 8. The number of cases may appear small but it should be remembered that only 20 not-for-profit organisations qualified for participation and of these only four (New Zealand = 2, Australian = 2) met or exceeded the measurement standards required to qualify as high-performing.

Using fuzzy-set software, a 5-point Likert scale measured the strength of responses throughout the LMX section of the board and executive surveys. The analysis developed the following causal recipe. The Australian high-performing not-for-profit causal recipe is:

$$\begin{aligned} \text{HP} &= \text{LMX5} * \text{LMX6} \\ \text{Consistency} &= 0.977737 \\ \text{Coverage} &= 0.966973 \end{aligned}$$

The element LMX5 identifies the level of confidence each group within the third team has in the other by asking if they would defend/justify each group's decisions if the other were not present to do so. The element LMX6 identified how the executive and board would characterise their working relationship, a key determinate in the performance of the third team.

This result shows that not only is "trust" a key element in achieving high leader-member exchange but that how each group (board and executive) within third team perceives the working relationship is also critical.

Analysis of the sample for the Australian Poor Performing not-For-profit organisations revealed a causal recipe consisting of:

- LMX1: board communicates to the executive how satisfied or not they are with the executives' performance
- LMX5: I have enough confidence in my team that I would defend/justify their decision if they were not present
- LMX3: identifies how well each respective group understands the job problems and needs of the other

The poor performing Australian not-for-profit causal recipe is:

$$PP = LMX1*(LMX3+LMX5)$$

$$\text{Consistency} = 0.911111$$

$$\text{Coverage} = 0.938931$$

The noticeable difference between causal recipes for the two samples is that the high-performing sample includes LMX6, which describes the strength of the existing working relationship between the third team members. This element is absent from the poor performing causal recipe, suggesting that poor performing organisations' third teams do not believe that they have effective working relationships. Also noticeable is that even though LMX5 is present it is a "logical or" (+) element, indicating that either LMX5 or LMX3 alone (or both) would lead to the outcome. The results show that Australian high-performing not-for-profit organisations believe that both LMX5 and LMX6 are necessary and must be simultaneously present to achieve the outcome (HP). One without the other will not achieve the desired result. The consistency (0.97) and coverage (0.96) from analysis of the findings confirm that the high-performing causal recipe qualifies as being "almost always necessary" for the outcome.

### **5.3.2 Australian High- Performing Corporate Organisations**

The analysis of the Australian corporate sector using the ASX50 index identified 30 organisations that fitted the initial criteria, of which six organisations were identified as achieving high performance. Table 22, Appendix 8 displays the nine cases from within these six organisations (board = 3, executive = 6) included in the sample.

Analysis determined that the causal recipe for high-performing Australian corporations consisted of:

- LMX1: board communicates to the executive how satisfied or not they are with the executives' performance
- LMX3: understanding each respective groups' roles, board and executive
- LMX5: I have enough confidence in my team that I would defend/justify their decision if they were not present
- LMX7: the executive team communicates directly or indirectly with the board regarding its beliefs or concerns about the board

The result for the Australian high-performing corporate organisations is displayed as follows:

$$HP = LMX1*(LMX3+LMX5+LMX7)$$

$$\text{Consistency} = 1.000000$$

$$\text{Coverage} = 0.849057$$

Analysis of the poor performing sample developed a causal recipe containing:

- LMX3: understanding each respective groups job problems and needs
- LMX4: regardless of the formal authority of the board would the board use their power to help solve problems in your work
- LMX5: I have enough confidence in my team that I would defend/justify their decision if they were not present

The poor performing Australian Corporate organisations' causal recipe is:

$$PP = LMX3*(LMX4+LMX5)$$

$$\text{Consistency} = 1.000000$$

$$\text{Coverage} = 0.903614$$

The difference between the high-performing and poor performing organisations appears to be the level of direct engagement that the high-performing TTs' executive members have with the board members. This is corroborated through the presence of LMX1 and LMX7 in the high-performing causal recipe – both these

elements describe the level of direct communication between the members of the TT regarding concerns or expressions of satisfaction with the other's work. These same interactions do not occur with the poor performing sample, shown by the absence of both of these elements.

The findings show that Australian high-performing corporate organisations believe that it is critical for executives to have a clear understanding of where they stand with the board in relation to their performance (LMX1). This understanding must be present to achieve the outcome (HP), whereas the elements LMX3, LMX5 and LMX7 are interchangeable, or can all be present in combination with LMX1 to achieve the outcome. The consistency (1.0) and coverage (0.85) from analysis of the findings confirm that the causal recipe qualifies as being "almost always necessary" for the outcome of high performance.

### **5.3.3 New Zealand High-Performing Not-For-Profit Organisations**

Thirteen organisations were included in the research sample and of these two were identified as high-performing. Table 23, Appendix 8 displays the 13 cases (board = 7 and executive team = 6) included in the analysis of New Zealand high-performing not-for-profit organisations.

Analysis identified a causal recipe containing:

- LMX6: characterises the working relationship between the two groups of the TT
- LMX5: I have enough confidence in my team that I would defend/justify their decision if they were not present
- LMX7: the executive team communicates directly or indirectly with the board regarding its beliefs or concerns about the board

The New Zealand high-performing not-for-profit organisations' causal recipe is displayed below as:

$$HP = LMX6 * (LMX5 + LMX7)$$

$$\text{Consistency} = 0.943590$$

Coverage = 0.876190

The poor performing sample consisted of 30 cases (board = 12, executive = 18). The causal recipe developed included:

- LMX5: I have enough confidence in my team that I would defend/justify their decision if they were not present.
- LMX7: the executive team communicates directly or indirectly with the board, regarding its beliefs or concerns about the board.

This poor performing New Zealand not-for-profit organisations' causal recipe is:

PP = LMX5+LMX7

Consistency = 0.857778

Coverage = 0.923445

The element that characterises a strong working relationship (LMX6) is absent from the poor performing causal recipe. This absence reinforces the importance that TT members of high-performing organisations place on having a strong working relationship with each other. It is worth noting that LMX6 is a required (*Logical and - \**) element in both the New Zealand and Australian high-performing not-for-profit causal recipes.

The findings show that high-performing New Zealand not-for-profit organisations believe that LMX6 must be present to achieve the outcome (HP), whereas the elements LMX5 and LMX7 are interchangeable, or can all be present in combination with LMX6 to achieve the outcome (HP). The consistency (0.94) and coverage (0.87) results confirm that the causal recipe qualifies as being “almost always necessary” for the outcome of high performance.

#### **5.3.4 New Zealand High-Performing Corporate Organisations**

From the analysis of the NXZ50 population 14 cases qualified for the final sample of cases in the New Zealand high-performing corporate sector among which there



were six cases (board = 3, executive = 3) (see Table 24, Appendix 8) drawn from three organisations that qualified as high-performing.

Analysis identified a causal recipe for New Zealand high-performing corporations containing:

- LMX2: understanding the respective TT members' job problems and needs
- LMX6: characterises the working relationship within the TT between the two groups
- LMX1: board communicates to the executive how satisfied or not they are with the executives' performance

The New Zealand high-performing Corporate organisations' causal recipe is:

$$HP = (LMX2 * LMX6) + LMX1$$

$$\text{Consistency} = 0.911111$$

$$\text{Coverage} = 0.872340$$

In this calculation LMX2 and LMX6 are "logical and" (\*) elements meaning that they must be present to achieve the outcome. However LMX1 is a "logical or" element meaning that while this element can be present it is not essential for the causal recipe to achieve the outcome.

The poor performing sample consisted of 19 cases (board = 6, executive = 13).

Analysis identified a causal recipe containing:

- LMX1: executive know how satisfied the board is with their performance
- LMX5: I have enough confidence in my team that I would defend/justify their decision if they were not present
- LMX4: regardless of the formal authority of the board would the board use their power to help solve problems in your work
- LMX7: the executive team communicates directly or indirectly with the board regarding its beliefs or concerns about the board

The poor performing New Zealand Corporate organisations' causal recipe is:

$$PP = LMX1 * LMX5 * (LMX4 + LMX7)$$

$$\text{Consistency} = 0.943860$$

$$\text{Coverage} = 0.905724$$

The high-performing and poor performing samples recognise the importance of LMX1, which highlights how well the board communicates its satisfaction or dissatisfaction with the executive's performance. The findings show that high-performing New Zealand corporate organisations believe that LMX2 (TT members understand the job problems and needs) and LMX6 (characterizes the TT's working relationship) must be present to achieve the outcome (HP). However, LMX1, may be present or absent, with the resulting recipe still able to achieve the outcome (HP). The consistency (0.91) and coverage (0.87) results confirm that the causal recipe qualifies as being "almost always necessary" for the outcome of high performance.

### **5.3.5 Combined New Zealand and Australian Corporate Organisations**

The 15 cases (board = 6, executive = 9) in Table 25, Appendix 8 derives from the of the combined New Zealand and Australian high-performing corporate organisations. One Australian respondent (case 8, LMX4–7) was discontented with the exchanges occurring between the TT. This discontent was based on:

- the belief that the board would not help them to solve issues
- the respondent lacking confidence in the board's decision making capability
- the working relationship being very ineffective
- the executive team rarely communicating with the board (directly or indirectly) regarding their confidence in or concerns about the board

This exception is further discussed in the Chapter 6 (6.2.3), with regard to the elements contributing to the third teams and hence organisational performance. Analysis of the combined high-performing corporate sample was conducted to ascertain whether or not the causal recipes of the two countries shared common

elements. The only shared element was LMX1. The causal recipe for the combined New Zealand and Australian corporate sample is:

Australia high-performing =  $LMX1 * (LMX3 + LMX5 + LMX7)$

New Zealand high-performing =  $(LMX2 * LMX6) + LMX1$

The data set analysis developed a combined New Zealand and Australian corporate causal recipe containing:

HP =  $(LMX1 * LMX2 * LMX5) + LMX3$

Consistency = 0.911111

Coverage = 0.953488

- LMX1: executive know how satisfied the board is with their performance
- LMX2: understand the respective TT members' job problems and needs
- LMX5: I have enough confidence in my team that I would defend/justify their decision if they were not present
- LMX3: how well does the board/executive understand the other's job problems and needs

The element, LMX1, relates to the level of open communication that occurs between the team members over the performance of, and board's belief in, the executive team. The element, LMX2, indicates the level of understanding the respective groups (board and executive) within the TT have of each other's role. The element, LMX5, highlights the level of confidence each of the TT groups (board and executive) have in each other.

The findings of the combined high-performing New Zealand and Australian organisations show that LMX1, LMX2 and LMX5 must be present to achieve the outcome (HP). The consistency (0.91) and coverage (0.95) in the findings confirm that the causal recipe qualifies as being "almost always necessary" for the outcome of high performance.

### 5.3.6 Combined New Zealand and Australian High-Performing Not-for-Profit Organisations

The 19 cases (board = 10, executive = 9) shown in Table 26, Appendix 8, were used to analyse the combined high-performing not-for-profit sample. The 5-point Likert scale used to measure the elements ranged from “rarely” to “very often.” The New Zealand and Australian causal recipes were reviewed to determine if any elements were common to both sets. The comparison between the Australian and New Zealand high-performing not-for-profit organisations showed that the two sets of recipes shared the elements LMX5 and LMX6.

The combined New Zealand and Australian high-performing not-for-profit organisations’ causal recipe is:

Australia high-performing =  $LMX5 * 6$

New Zealand high-performing =  $LMX6 * (LMX5 + LMX7)$

The analysis of the data identified the causal recipe containing the elements:

- LMX5: I have enough confidence in my team that I would defend/justify their decision if they were not present
- LMX6: respondents’ characterised their working relationship with the board / executive as very effective

The combined New Zealand and Australian high-performing not-for-profit organisations’ causal recipe is:

$HP = LMX5 + LMX6$

Consistency = 0.963333

Coverage = 0.905956

The elements contained in the causal recipe for high-performing not-for-profit organisations in New Zealand and Australia indicate the importance of the confidence that is required by each of the TT groups in the other’s decision-making capabilities. The element, LMX5, supported by LMX6, describes the working relationship that exists between these groups of the TT as being very effective.

The findings from the combined New Zealand and Australian high-performing not-for-profit organisations showed that LMX5 and LMX6 must be present to achieve the outcome (HP). The consistency (0.96) and coverage (0.90) findings confirm that the causal recipe qualifies as being “almost always necessary” for the outcome of high performance.

#### **5.4 Knowledge Sourcing (KS)**

As discussed in Chapter 3, Gray and Meister (2006) described knowledge sourcing as fundamentally a communication behaviour with three distinct forms:

1. dyadic – based on person to person communication
2. published – the ability to access codified knowledge
3. group – knowledge is sought and exchanged in an open venue among multiple persons

The questions on knowledge sourcing applied exclusively to the executive members of the TT and were focused on the three outcomes that knowledge sourcing leads to innovation, replication and adaptation of the knowledge accessed. These outcomes are said to lead to an improvement in performance of the executive and eventually the organisation (Gray & Meister, 2004).

Combining executive responses was necessary to achieve a sample size suitable for analysis. The explanation and reasoning for this is the same as that already given for the STC, SCi, SCe and CC constructs in the sections above. The results are presented in the following order:

- a. Australian high-performing not-for-profit and corporate organisations
- b. New Zealand high-performing not-for-profit and corporate organisations
- c. Combined high-performing not-for-profit and corporate organisations

##### **5.4.1 Australian High-Performing Not-for-Profit and Corporate Organisations**

Analysis of the Australian high-performing not-for-profit and corporate samples (Table 27, Appendix 8) identified 10 cases (not-for-profit = 4, corporate = 6). Two

cases (3 and 9) displayed a very negative opinion of the benefit gained from access to the tacit and explicit knowledge of the directors. This clearly indicates that these two respondents placed no value of the tacit or explicit knowledge of the directors. This result is discussed further in Chapter 6, with regard to third team and organisational performance.

The analysis developed a causal recipe containing:

- KS1: through interactions with the board, I have gained new insights to fulfil my role
- KS2: through interactions with the board, I have learned new and proven methods that have increased my ability to perform my role
- KS10: through my interactions with the board, I have thought of different ways that I can improve my organisation's performance, as the core elements

The Australian high-performing Not-for-Profit and Corporate organisations' causal recipe is:

$$HP = KS1 + KS2 + KS10$$

$$\text{Consistency} = 0.633333$$

$$\text{Coverage} = 0.855856$$

The causal recipe, while achieving the research standards for coverage, failed to achieve the required level of consistency (strength). The results of this analysis showed that the causal recipe *did not* qualify as a "necessary" element for the outcome of high-performing. This analysis has therefore failed to determine that a set-theoretic relationship, even a very rough one, exists (Ragin, 2008).

Analysis of the poor performing organisations cases (not-for-profit = 6, corporate = 13) revealed that, as in the sample of high-performing organisations, some of the executives gained no value from their ability to access the tacit and explicit knowledge of directors.

The poor performing Australian not-for-profit and corporate organisations' causal recipe included:

- KS4: based on interactions I have revised my knowledge to account of what I have gained
- KS7: interactions with the board have increased and updated my work knowledge
- KS9: through interactions with the board I have thought of different ways my role could be improved
- KS10: through these interactions I have thought of different ways I can improve the organisation, as the core elements

This causal recipe achieved the minimum coverage but failed to achieve the minimum standards for consistency. Therefore, no set-theoretic relationship could be determined from this analysis: The Australian poor performing not-for-profit and corporate causal recipe is:

$$PP = KS4 + KS7 + KS9 + KS10$$

$$\text{Consistency} = 0.614035$$

$$\text{Coverage} = 0.879397$$

Notwithstanding the inability to confirm a set-theoretic relationship within the analysis, it is worth noting the significant differences between the causal recipes.

For high-performing organisations, the element KS1 suggests that the executives are willing to adjust their view on their roles and ways in which to improve performance. The element, KS2, indicates an ability to learn new methods and skills from directors, and KS10 indicates that executives are willing to adapt, innovate or replicate the knowledge in ways designed to improve the organisation's performance.

This compares with executives of poor performing organisations who focus on role improvement (KS9), increasing and updating work related knowledge (KS7), and revising one's current work related knowledge (KS4). Within the poor performing

causal recipe, the elements KS4 and KS7 are internally focused while KS9 is simply about how to improve the executives' own role. This executive self-interest is reflective of the discussion (Chapter 2) concerning aspects of agency theory.

#### **5.4.2 New Zealand High-Performing Not-For-Profit and Corporate Organisations**

The New Zealand high-performing not-for-profit corporate sample (Table 28, Appendix 8) contained eight cases (not-for-profit = 5, corporate = 3). Like the Australian high-performing not-for-profit sample, a number of respondents disagreed with the concept that directors add value through the executives' access to the explicit and tacit knowledge of directors. This result is discussed more fully in the next chapter.

The causal recipe developed from the analysis contained the elements:

- KS1: based on interactions with the board I have gained new insights into ways in which to fulfil my role
- KS2: through my interactions with the board I have learned new and proven methods that have increased my ability to perform my role
- KS9: through my interactions with the board I have thought of different ways my role could be improved
- KS10: through my interactions with the board, I have thought of different ways that I can improve my organisations performance

The New Zealand high-performing not-for-profit and corporate organisations' causal recipe is:

$$HP = KS1 * KS2 * (KS9 + KS10)$$

$$\text{Consistency} = 0.666667$$

$$\text{Coverage} = 0.869565$$

The analysis confirms that while achieving the minimum standards for coverage (80%), the causal recipe failed to meet the standards for consistency.



Analysis of the cases of poor performing organisations (not-for-profit = 16, corporate = 18) developed a causal recipe containing the elements:

- KS4: based on my knowledge I have revised my knowledge to account of what I have gained
- KS5: based on my interactions I have adapted my working knowledge to take account of knowledge gained
- KS7: my interactions with the board have increased and updated my work knowledge
- KS10: through my interactions I have thought of different ways I can improve the organisation as the core elements

The New Zealand poor performing not-for-profit and corporate organisations' causal recipe is:

$$PP = KS4 + KS5 + KS7 + KS10$$

$$\text{Consistency} = 0.560784$$

$$\text{Coverage} = 0.922581$$

Like the high-performing sample, this causal recipe achieved the minimum coverage but failed to achieve the minimum standards for consistency. Even though the consistency (strength) of the set-theoretic relationship is low, it is interesting to note the differences between the high-performing and poor performing samples. The New Zealand high-performing and poor performing causal recipes display similarities to the Australian causal recipes. The TT executive members of the high-performing sample place greater importance on the value they have received from role clarification (KC1), learning new methods that have improved role performance (KS2), role development (KS9), and how these can be aligned to improve organisational performance (KS10).

In contrast, the TT executive members of the poor performing organisations determined the value received from the directors as primarily the new knowledge

gained (KS4), adaptation of this knowledge into their own working knowledge (KS5, KS7) and then how they could apply this to the organisation's performance (KS10).

KS2 is the key difference between both countries' high-performing and poor performing samples. This suggests that while increased knowledge is important, learning new and proven methods that increase abilities, combined with application of the knowledge to increase organisational performance, are important in the achievement of high performance.

### **5.4.3 Combined New Zealand and Australian High-Performing Not-for-Profit and Corporate Organisations**

The combined New Zealand Australian high-performing not-for-profit and corporate sample (Table 29, Appendix 8) consisted of 17 cases (not-for-profit = 9, corporate = 8). Analysis reinforces comments from respondents in interviews that boards offered little of either tacit or explicit knowledge from which executive members could learn.

The initial analysis of the combined sample focused on identifying the common elements in the New Zealand and Australian causal recipes. The only shared element was KS2. The causal recipe for this combined sample analysing the construct of knowledge sourcing is:

Australia high-performing =  $KS2 + KS10$

New Zealand high-performing =  $KS1 * KS2 * (KS9 + KS10)$

The analysis developed a combined New Zealand and Australian high-performing not-for-profit and corporate causal recipe containing the elements:

- KS1: interactions with the board have given new insights into ways to fulfil my role
- KS2: through my interactions with the board I have learned new and proven methods that have increased my ability to perform my role
- KS3: through interactions with the board I have learned new and proven strategies that increased my ability to perform

- KS10: through my interactions with the board I have thought of different ways I can improve the organisation

The combined New Zealand and Australian high-performing not-for-profit and corporate organisations' causal recipe is:

$$HP = KS2 * KS10 * (KS1 + KS3)$$

$$\text{Consistency} = 0.647059$$

$$\text{Coverage} = 0.854922$$

Like the individual country high-performing organisations' samples, this causal recipe achieved the minimum coverage but failed to achieve the minimum standards for consistency. Therefore, no set-theoretic relationship could be determined from this analysis.

It is worth noting that none of the elements KS1, KS2 and KS3, are represented in either of the poor performing samples' causal recipes, indicating that they constitute a significant difference in how the TT executive members perceive the value of, and access, directors' tacit and explicit knowledge according to the construct of knowledge sourcing.

To reiterate earlier comments, none of the causal recipes within the construct of KS achieved the standards of consistency (80%) required in this research. Therefore, defending the existence of any set-theoretic relationship (even a rough one) based on the analysis is difficult (Ragin, 2008). These findings are discussed in detail in the next chapter.

## 5.5 Team Effectiveness (TE)

As discussed in Chapter 3, the survey questions used to measure the construct of Team Effectiveness have been used previously in research by Payne, Benson and Finegold (2009). The survey questions relating to this construct included (Q.1) "How would you rate the overall effectiveness of the board?" This question was excluded from the fsQCA analysis because it asks for an opinion on the overall effectiveness

of the board rather than measuring a specific element, e.g. director preparation, strategy development and deployment. Presentation of the results for Q1 is therefore included in this section, separately from those comprising the causal recipes.

All TT members completed this section of the survey document. This achieved a balanced view of the rating of board effectiveness by having both external (directors') and internal (executives') responses. A 4-point Likert scale (1 = strongly disagree – 4 = strongly agree) was used for all elements within the team effectiveness component of the survey. The results are presented in the following order:

- a. Australian high-performing not-for-profit organisations
- b. Australian high-performing corporate organisations
- c. New Zealand high-performing not-for-profit organisations
- d. New Zealand high-performing corporate organisations
- e. Combined high-performing not-for-profit organisations
- f. Combined high-performing corporate organisations

#### **5.5.1 Australian High-Performing Not-For-Profit Organisations**

The high-performing not-for-profit cases (executive = 4, directors = 4) are shown in Table 30, Appendix 8. Analysis identified a causal recipe containing:

- TE10: effective in forming networks with strategic partners
- TE11: effective in enhancing government relations
- TE7: effective at planning for top management succession

The causal recipe achieved the minimum standards for coverage but did not achieve the minimum standards for consistency, as shown below. Therefore, it failed to determine that a set-theoretic relationship exists.

The Australian high-performing not-for-profit causal recipe is:

$$HP = (TE10 * TE11) + TE7$$

Consistency = 0.600000

Coverage = 0.900000

Analysis of the poor performing sample cases (board = 8, executive = 10) developed a causal recipe contained a single element:

- TE11: effective at enhancing government relations

The Australian poor performing not-for-profit organisations' causal recipe is:

PP = TE11

Consistency = 0.751852

Coverage = 0.835391

The causal recipe meets the minimum standards for substantiating a rough set-theoretic relationship.

Comparing the high-performing and poor performing causal recipes highlights two elements that the high-performing recipe does not share with the poor performing recipe: TE10 and TE7. While a set-theoretic relationship is not established, it is important to note that the elements of succession planning (TE7) and developing external strategic relationships (TE10) are key roles that boards of high-performing not-for-profit organisations fulfil. The fact that these elements are missing from the poor performing sample may indicate the importance of these elements to the achievement of high performance.

Question 1 of the section on team effectiveness asked "How would you rate the overall effectiveness of the board?" The respondents (8 cases) from the high-performing sample (100%) indicated that their board was "effective." The interesting aspect of the responses is that no respondent gave a rating of either "ineffective or "very ineffective." This indicates an overall agreement that their boards are perceived as effective in what they do.

Comparatively, the poor performing sample (18 cases) indicated that 66% rated their boards as "effective" and 22% indicated that their board was "very effective",

with 12% rating their board as “ineffective.” While some respondents from poor performing organisations rated their boards as ineffective, *none* of the high-performing boards did, indicating a generally higher level of satisfaction with the effectiveness of their boards.

### 5.5.2 Australian High Performing Corporate Organisations

The high-performing corporate sample (Table 31, Appendix 8) identified eight cases (board = 2, executive = 6). Analysis showed that two respondents (4 and 7) had a very low opinion of the effectiveness of their respective boards. Respondent 7 in particular was completely dissatisfied with the effectiveness of the board across the full range of aspects including leadership, succession planning and managing a crisis. This result is discussed in more detail in the next chapter. Analysis developed a causal recipe containing the elements:

- TE2: board provides leadership
- TE3: effective in shaping long-term strategy
- TE7: effective in planning for top management succession
- TE9: effective in bolstering the company’s image in the community

This causal recipe does meet the standards of coverage; however it fails to meet the standards for consistency, as shown below. This analysis has therefore failed to determine that a set-theoretic relationship exists.

The Australian high-performing corporate organisations’ causal recipe is:

$$HP = TE2+TE3+TE7+TE9$$

$$\text{Consistency} = 0.741667$$

$$\text{Coverage} = 0.816514$$

Analysis of the Australian Corporate poor performing organisations (board = 6, executive = 12) developed a causal recipe containing the elements:

- TE6: effective in managing during a crisis
- TE8: effective in balancing interests of different stakeholders
- TE11: effective at enhancing government relations

The causal recipe meets the minimum standards of coverage but fails to meet the specified minimum for consistency, also shown below. The consistency measure does, however, meet Ragin's (2008) minimum standards for justifying a set-theoretic relationship. The Australian poor performing corporate organisations' causal recipe is:

$$PP = TE6 + TE8 + TE11$$

$$\text{Consistency} = 0.751852$$

$$\text{Coverage} = 0.835391$$

Differences between the causal recipes are substantial. High-performing corporate third teams focus on strength in leadership (TE2), effective long-term strategy (TE3), management succession planning (TE7), and enhancing the company image (TE9), which appears to result in superior performance. In contrast, the poor performing boards focus on strength in balancing the different stakeholders' needs (TE8), enhancing the corporation's relationships with government (TE11), and managing crises well (TE6).

Responses from the poor performing sample to Question 1 ("How would you rate the overall effectiveness of the board?") found that 39% gave their board a rating of "very effective" and 61% indicated that their board was "effective."

Comparatively, 76% of the high-performing sample rated the boards as "effective" and 12% indicated that the board was "very effective", with 12% rating the board as "ineffective."

It is important to note that the ineffective rating is a consequence of the rating given by the participant in case 7 (Table 31, Appendix 8). The level of dissatisfaction shown by this case participant suggests that other issues are at play within the environment, that impact on the board's effectiveness.

### **5.5.3 New Zealand High-Performing Not-For-Profit Organisations**

The New Zealand not-for-profit sample (Table 32, Appendix 8) shows the cases (board = 7, executive = 6) identified from the analysis. One respondent (case 2)

rated their board as ineffective in all but three measures (leadership, managing during a crisis, and enhancing government relations). This result is discussed further in the next chapter. Analysis developed a causal recipe containing the elements:

- TE2: board provides leadership
- TE5: effective in anticipating threats to the company survival
- TE6: board is effective in managing during a crisis
- TE10: building networks with strategic partners
- TE11: enhancing government relations

Support for the presence of TE10 and TE11 comes from their presence in the Australian high performing not-for-profit sample. These two elements are important for developing strategic relationships and maintaining good relationships with government. Both are important to the high performing not-for-profit sector's long-term financial viability. The New Zealand high performing not-for-profit organisations' causal recipe is:

$$HP = TE2+TE5+TE6+TE10+TE11$$

$$\text{Consistency} = 0.835897$$

$$\text{Coverage} = 0.819095$$

This causal recipe achieved the minimum standards for consistency and coverage. This is important not just because it substantiates the set-theoretic relationship, but also because it confirms the importance for high performing not-for-profit organisations of developing strategic networks (TE10) and enhancing governmental relationships (TE11). Analysis of the poor performing New Zealand not-for-profit cases (board = 10, corporate = 15) identified a causal recipe including:

- TE2: board provides leadership
- TE9: effective in bolstering the company's image in the community
- TE10: building networks with strategic partners
- TE5: effective in anticipating threat to company survival
- TE11: enhancing government relations



The New Zealand poor performing not-for-profit organisations' causal recipe is:

$$PP = TE2 * TE9 * TE10 * (TE5 + TE11)$$

$$\text{Consistency} = 0.722667$$

$$\text{Coverage} = 0.849530$$

The presence of TE10 and TE11 within the poor performing sample indicates that even for the poor performing organisations in this study the presence of these elements is a clear indication of their importance to not-for-profit organisations. There is only one element contained in the high performing causal recipe that is not replicated in the poor performing recipe: TE6 ("board is effective in managing during a crisis"). While important during times of crisis, it would be difficult to substantiate a case that this element represented the key difference in performance between high performing and poor performing.

The findings show that the combined New Zealand high performing not-for-profit and corporate organisations' causal recipe containing TE2, TE5, TE6, TE10, TE11 can be individually present or absent and the causal recipe will still achieve the outcome (HP). The consistency (0.83) and coverage (0.81) qualifies the causal recipe as being "almost always necessary."

In answering Question 1 ("How would you rate the overall effectiveness of the board"?), the respondents (25 cases) from the poor performing sample indicated that 20% rated their board as "very effective", 76% indicated that their board was "effective" and 4% indicated that their board was "ineffective." Comparatively, 38% of the high performing organisations indicated that their board was "very effective", and 54% rated their board as "effective", with 8% rating their board as "ineffective."

#### **5.5.4 New Zealand High-Performing Corporate Organisations**

The New Zealand high-performing corporate sample (Table 33, Appendix 8) consisted of six cases (board = 3, executive = 3). As with the previously analysed

populations, one respondent (case 3) had a consistently negative view of the board's effectiveness. Analysis developed a New Zealand high-performing corporate causal recipe containing the element:

- TE4: effective in monitoring strategy implementation

The New Zealand high-performing corporate organisations' causal recipe is:

HP = TE4

Consistency = 0.822222

Coverage = 0.820000

Analysis of the poor performing New Zealand Corporate cases (board = 7, executive = 18) identified a causal recipe containing the elements:

- TE2: the board provides leadership
- TE6: effective at managing during a crisis

The New Zealand poor performing corporate organisations' causal recipe is:

PP = TE2+TE6

Consistency = 0.757333

Coverage = 0.835294

The difference between the high-performing and poor performing causal recipes is significant – the omission from the poor performing recipe is that of TE4 (“board is effective at monitoring strategy implementation”). With TE4 being the only element in the high-performing causal recipe its importance cannot be overstated.

Reviewing the poor performing recipe, the element TE6 (“effective at managing crisis”) may identify poor performing organisations as applying greater effort in dealing with crises than in implementing strategies formulated to grow the organisation.

The findings show that the combined New Zealand high-performing corporate organisations require TE4 be present to achieve the outcome (HP). The consistency

(0.82) and coverage (0.82) qualifies the causal recipe as being “almost always necessary.”

Analysis of the poor performing cases’ responses to Question 1 (“How would you rate the overall effectiveness of the board?”) found that 47.5% rated their board as “very effective”, 47.5% as “effective” and 5% as “ineffective.” The analysis found that in the poor performing sample 71% of board respondents, compared with 28% of executive respondents, felt that their board was “very effective.” The bias exhibited by board respondents toward rating their own effectiveness strongly supports the decision to survey both groups of the third team for this component of the research.

Of the high-performing organisation cases (third team), 66% rated the board as “very effective” and 34% gave a rating of “effective.” However, when comparing the separate groups of the third team (board and executive) the disparity is highlighted between the ratings given by the board and executive regarding the board’s effectiveness. Among the executives 66% rated the board “effective” while 34% rated them as “very effective.” Comparatively, 100% of the board participants rated themselves as “very effective.”

While not critical, it is noteworthy that boards generally have a significantly higher opinion of their effectiveness than do their executives. This is important knowledge for organisations conducting board reviews as it highlights the need to substantiate the board’s view of their own performance with the perceptions of other groups.

#### **5.5.5 Combined High-Performing Corporate Organisations**

Analysis of the combined New Zealand and Australian corporate cases (see Table 34, Appendix 8) commenced with identification of the common elements in the causal recipes. There were no shared elements in the causal recipes for the two countries. The elements in the combined high-performing corporate causal recipe are:

Australia high-performing = TE2+TE5+TE6+TE10+TE11

New Zealand high-performing = TE4

Analysis of the combined sample identified a causal recipe containing the elements:

- TE2: board provides leadership
- TE3: effective in shaping long-term strategy
- TE4: effective in monitoring strategy implementation
- TE7: succession planning
- TE9: effective in bolstering the company's image in the community

For the combined high-performing corporate sample the causal recipe is:

$$HP = TE3 * TE9 * (TE2 + TE4 + TE7)$$

$$\text{Consistency} = 0.776190$$

$$\text{Coverage} = 0.819095$$

While failing to meet the standards of this research for consistency (80%), the result is still significant as its consistency ratio is above that which Ragin (2008) suggests is suitable for substantiating a set-theoretic relationship. This causal recipe identifies high-performing boards as providing leadership (TE2) and they are effective at shaping long-term strategy (TE3). These results are supported by TE4 ("monitoring of strategy implementation"). Importantly, high-performing organisations are effective at planning for top management succession (TE7) and bolstering the image of the company in the community (TE9).

Analysis of the poor performing cases (board = 13, executive = 30) developed a causal recipe containing the elements:

- TE2: board provides leadership
- TE6: board is effective in managing a crisis
- TE8: board balances the interests of different stakeholders
- TE11: effective in enhancing government relations

The combined poor performing corporate organisations' causal recipe is:

$$PP = TE2+TE6+TE8+TE11$$

$$\text{Consistency} = 0.759690$$

$$\text{Coverage} = 0.836177$$

Three critical elements from the high-performing sample for the team effectiveness construct are absent from the poor performing organisations' causal recipe: TE3, TE4 and TE7. The boards of both the high-performing and poor performing organisations provide leadership; however, it is clear from these results that superior long-term strategy development capability combined with monitoring of strategy implementation, as well as succession planning, supplement the high-performing boards' leadership skills.

The findings show that the New Zealand high-performing not-for-profit and corporate organisations require TE3 and TE9 to be present to achieve the outcome (HP), while TE2, TE4 and TE7 can be present or absent and the causal recipe will still achieve the outcome (HP). The consistency measure (0.77) fails to meet the research's standard (80%) but it does meet the standard of necessity discussed by Ragin (2008).

#### **5.5.6 Combined New Zealand and Australian High-Performing Not-For-Profit Organisations**

The combined New Zealand and Australian high-performing not-for-profit sample (Table 35, Appendix 8) consisted of 21 cases (board = 11, executive = 10). The following common elements were identified:

- TE10: effective in building strategic networks with partners
- TE11: effective in enhancing government relations as common elements

The combined New Zealand and Australian high-performing not-for-profit organisations' causal recipes are:

$$\text{Australia high-performing} = (TE10*TE11)+TE7$$

$$\text{New Zealand high-performing} = TE2+TE5+TE6+TE10+TE11$$

Analysis of the combined cases identified a causal recipe containing the elements:

- TE10: effective at building networks with strategic partners
- TE11: effective at enhancing government relations
- TE2: board provides leadership
- TE5: effective in anticipating threats
- TE6: effective in managing a crisis
- TE7: effective at succession planning

Thus the combined New Zealand and Australian high-performing not-for-profit organisations' causal recipe is:

$$HP = TE10 * TE11 * (TE2 + TE5 + TE6 + TE7)$$

$$\text{Consistency} = 0.720635$$

$$\text{Coverage} = 0.864407$$

This finding highlights the importance of the boards' ability in developing networks with strategic partners and enhancing government relations (TE10 and TE11). The ability to enhance government relations would be especially critical, as government is the major funder of these organisations. Combining elements TE2 and TE5–7 helps in achieving high performance.

Analysis of the poor performing cases (board = 18, executive = 25) identified a causal recipe containing the elements:

- TE2: board provides leadership
- TE5: effective at anticipating threats to organisational survival
- TE8: balancing interests of different stakeholders
- TE10: effective at building networks with strategic partners
- TE11: effective at enhancing government relations

The combined New Zealand and Australian poor performing not-for-profit organisations' causal recipe is:

$$PP = TE2 + TE5 + TE8 + TE10 + TE11$$

Consistency = 0.772093

Coverage = 0.832776

Comparing the high-performing and poor performing organisations' causal recipes identifies TE6 and TE7 as the unique elements in the high-performing causal recipe.

When consolidating the responses across the two countries to give a unified view, thereby enabling development of a single causal recipe, there are unique elements in each of the countries that may influence the results. As outlined in the literature review (Chapter 2) and the results for the cultural capital construct, cultural differences may influence perceptions, work habits and other aspects that this research has sought to measure.

The uniqueness of, and differences between, the two countries and sectors (e.g. culture) supports the core tenet of this research: that a mix of elements from the constructs: LMX, IC, KS and TE, be present to enable an organisation to be high-performing. Comparing the high-performing recipes with those of poor performing organisations identifies numerous shared elements. The difference between a high-performing and poor performing causal recipe is often only one element. The causal recipes of the New Zealand and Australian high-performing corporate and not-for-profit sectors presented in this chapter are replicated in Appendices 1, 2, 3 and 4 as tables for each country and sector. These tables show the construct and unique characteristics each causal recipe is constructed of. The next chapter discusses the results presented above and compares these with the conceptual framework developed from the literature reviewed in Chapter 2 and presented in Chapter 3.

## Chapter 6 – Discussion

Chapter 5 presented the findings from the thematic analysis of the interviews which identified the model of the TT as a useful representation of how the board influences organisational performance. This finding was further supported from the developed causal recipes identified through fsQCA analysis. Chapter 5 then presented key differences between the high-performing and poor performing organisations' causal recipes identified through the analysis of data using fsQCA. This chapter begins by briefly presenting the three theoretical propositions which the data sought to examine, followed by a summary of the results and a discussion of the key aspects of the findings.

### 6.1 Introduction

The research developed three propositions that sought to identify how boards influence organisational performance. The first of these propositions contrasts with the accepted view that there is an upper echelon (the board) and a top management team (the executive) within an organisation. This thesis posits that there is in fact only *one* team at the apex of the organisation, referred to in this research as the “Third Team.”

#### *Proposition 1*

Put simply, this proposition states that when the board and executive come together (formally and/or socially) they create the third team, which sits at the apex of the organisation fulfilling the organisation's control function. It is through this function that the board is able to influence the executive's performance, thereby influencing organisational performance. This proposition contrasts with traditional approaches that refer to an upper echelon (the board) and a top management team (the executive) within an organisation.



### *Proposition 2*

The second proposition outlines the means by which the board is able to influence the executive's performance. The research proposes that the main contributor to this influence is a board's collective intellectual capital. The board's collective intellectual capital consists of human, social (both internal and external), structural and cultural capital. The research posits that the application of the intellectual capital is the means by which the board influences the executive and, via the executive, organisational performance.

### *Proposition 3*

The third proposition posits that for a board to maximise its influence (via the TT) on the executive through use of its intellectual capital, the presence of three behavioural constructs are required to be present. There would need to be high levels of *leader-member exchange*, a construct focused on the levels of cohesiveness and teamwork within the third team (between the board and executive). High levels of leader-member exchange are a pre-cursor for *knowledge sourcing* by the executive; that is, accessing and utilising the tacit and explicit knowledge of the combined board and individual directors. Lastly, the board as a component of the third team would need high levels of *team effectiveness*, which is measured both internally (the board's view) and externally (the executive's view). These three constructs: intellectual capital, leader-member exchange and knowledge sourcing, as well as the use of a combined internal and external view of the board's effectiveness, are contributions from this study to the extant body of knowledge.

## **6.2 Discussion of the Constructs**

This section discusses in more depth the implications arising from the results presented in Chapter 5.

### **6.2.1 Third Team**

Conceptualising of the directors and executive as a third team (a combination of the board and executive teams) which sits at the top of the organisational structure above all other conceptualisations (e.g. top management teams (TMT) or upper

echelons (UE) is an important contribution to the field of governance research (Figure 7). The conceptual elements that allowed the development of the third team model for the research were derived from discussions and interviews conducted with executives and directors in the corporate and not-for-profit sectors. In these discussions and interviews directors and executives described a level of interaction, decision making and consensus building on the issues, strategies and direction impacting on, or likely to affect, the organisation. Previous research has not investigated this level of collaboration between the board and executive. Moreover, according to Fama (1980) – and as stated in Chapter 3 – such interaction should not have occurred. Because, according to Fama (1980) the board and directors have competing and possibly divided goals and agendas (e.g. an agency view suggests that an executive interested in driving up short term profit to secure their bonuses, while the board is more concerned with long-term sustainable growth).

According to the participants, interactions in the third team usually occurred in both formal and informal settings – not just formal meetings. In these settings, the discussion within the third team includes the strategic direction or issues (current and / or future) that may influence the organisation. As an example, directors highlighted their use of interactions that take place with the executive team as a means to identify possible succession candidates for senior management positions. Other interactions involved directors in using their specific specialist skills to assist executive staff on strategically important projects. There were some organisations where this interaction was not the norm. Lack of interaction was in some cases driven by the CEO, with one CEO commenting that their executive did not need to meet with the board to discuss such issues as that was their (CEO's) role.

The description by Kozlowski and Bell (2003, p.334) description of a team as a configuration of complementary efforts that produces an outcome that is beyond the capabilities of the individuals working alone was supported by comments of the participants during the interview stage of the research. In supporting the conceptualisation of the third team, the chairman of a corporate organisation said,

“...we do have teams within teams: you have the board, we have the executive team - you might well say that together we are a team.”

Other interviewees from high-performing organisations (as defined by this research) referred to “teamwork”, “collaboration” and “shared goals” in describing how the board and executive worked together. These terms fit the refined conceptualisation of a team as described by Kozlowski and Bell (2003) and discussed in Chapter 3.

The principal contention in this thesis in relation to the third team – that it is through the third team that boards influence executives – supports the additional argument that the construct of knowledge sourcing plays an important role in this influence. The analysis using fsQCA supported the importance of knowledge sourcing within the mix of characteristics of high-performing organisations. The additional data collected during the semi-structured interviews with both board and executive members of the third team confirmed the fsQCA analysis regarding this construct. Demonstrating this are the comments of third team members from both high-performing and poor performing organisations.

The CEO of a high-performing organisation captured the general tenet of such comments when commenting on the level of interaction that occurs within such a third teams. The CEO stated “If executives within the organisation can have one-on-one dialogue with directors, socially or in structured environments, it gives directors an opportunity of course to have an impact on the executive...”

The chairman of another high-performing organisation identified an important element in any successful team – teamwork – when he said, “...it’s how well they are going to get to know each other and *work together* that is important.” An example of how, in ‘work[ing] together’ the third team enables the board to influence the performance of the organisation was seen in the area of strategy development and assessment. In discussing how the board and executive worked together on an issue and decided the strategic approach to take, a director stated,

“...there are also those discussions you’ll have where, *have you considered this and that approach*, giving them [the executive] the benefit of your experience in other areas and going, *well we found this worked quite well*” [emphasis added].

This contrasts sharply with the comments of the chairman of a poor performing corporate organisation (as defined in this research) who said when discussing the value boards bring to strategically based decisions: “...even to think they’re going to add a lot of value in strategy, I just don’t think it’s realistic.” This diversity of opinion (which was clearly associated with and marked by organisational performance) offers insight into why the first organisation is high performing and the second is not. These contrasting views of the way the board and executive members of the third team might work cohesively together highlights a key difference between the third teams of high-performing and poor performing organisations.

The comments above describe a level of teamwork combined with trust and confidence in the human capital of the board, which underpins the interactions between the directors and executive of a high-performing organisation within the context of a formal board meeting. Importantly, these comments support the construct of the third team and its importance in allowing boards to influence organisational performance through the executive. They also confirm Kozlowski and Bell (2003, p. 334) in their definition of a team as a group of “collectives who exist to perform organizationally relevant tasks [that] influences exchanges with other units (executives) in the broader entity.”

As a construct supported by both theory and the findings of this research, the third team concept conveys a key idea in identifying the role that a board can play in influencing the executive and through them organisational performance. How the board achieves this is examined by considering the constructs of intellectual capital (IC) and its component parts (human, social, structural and cultural capital), as well as leader-member exchange (LMX), knowledge sourcing (KS), and team effectiveness (TE). The *combination of the causal recipes* identified from each the above constructs contributes to the effectiveness of the third team. One construct

on its own is not sufficient to provide the means of influence. The combination of identified characteristics from each of the constructs is required to support the third team. The findings based on the results of the fuzzy set analysis relating to these four constructs are discussed in the following sections.

## **6.2.2 Intellectual Capital (IC)**

The intellectual capital theory of the board (Nicholson & Kiel, 2003) is the overarching theory in this research for the constructs of human capital, structural capital, social capital (both internal and external), and cultural capital. Various researchers have used the notions of intellectual capital and its four sub-constructs in relation to boards and individual directors, within both corporate and not-for-profit governance research (e.g. Bontis, 1999; Keenan & Aggestam, 2001; Nicholson & Kiel, 2003, 2004; van der Walt & Ingley, 2003).

### **6.2.2.1 Human Capital (HC)**

In the context of this research, human capital (HC) is an asset that each individual director (Figure 7) brings to the organisation. This characteristic is a synthesis of the innate and learned knowledge of the individuals; its acquisition is generally through prior work experience (Castanias & Helfat, 2001). Highlighting the importance of this element was the analysis of the causal recipes of both New Zealand and Australian high-performing not-for-profit organisations (Appendix 2 and 4). The analysis identified two characteristics as being important to the samples in both these countries. These characteristics were that directors have high levels of *general* business knowledge and experience enabling them to add to *overall effectiveness*, and that directors have levels of *board-level experience* that allow them to add value within the board and the third team.

There was one significant difference between the New Zealand and Australian causal recipes. For the New Zealand sample “sufficient trust to make use of director capabilities” was identified as a characteristic in their recipe, which was not identified in the Australian sample. While interesting in isolation, this finding does not point to a lack of trust within Australian Boards, because this seeming lack of trust identified in human capital causal recipe is balanced by a characteristic

identified in the causal recipe of internal social capital. The characteristic is that, “board / executive (third team) relationships encourage the use of the boards’ talents”

This example serves to highlight an important contention of this research that it is the combination of characteristics found in the combined constructs, and not a single construct or characteristic in isolation, that enables boards to influence organisational performance. The example also highlights some characteristics (e.g. trust) as spanning the constructs.

Analysis of the Australian high-performing not-for-profit organisations identified the same director characteristics identified in the combined New Zealand and Australian analysis for this sub-sample. These director characteristics were industry-specific knowledge (e.g. knowledge about the directors’ specific sector such as a sport, charity or social service), as well as enough business (corporate) knowledge and experience to add to the effectiveness of the board, combined with previous board-level experience. Boards whose directors had diverse industry backgrounds displayed these individual characteristics.

The combination of human capital characteristics identified in the causal recipe of high-performing organisations (Appendices 1 to 4) confirms the importance of innate and learned *knowledge* acquired by directors, through their business and board level experience, combined with their sector specific knowledge. This combined external business and sector specific knowledge provides the knowledge that executives can access through the third team environment.

The identification of diversity of industry experience in this research as a characteristic of boards of high-performing organisations is significant. It indicates the necessity for organisations undertaking director recruitment to ensure that applicants have this required external experience. An outcome of having this experience available to the executive is that it enables the executive to draw on and

use, via knowledge sourcing (KS), the widest possible store of collective board knowledge.

The emphasis on external business knowledge as an important facilitator of board effectiveness among Australian high-performing not-for-profit organisations contrasts sharply with that among the Australian poor performing not-for-profit organisations. The poor performing organisations identified sector- and organisation-specific knowledge and experience as the core characteristics required of a director. This indicates a propensity for directors in poor performing organisations to have a narrow knowledge and experience base on which to draw. The propensity for directors of poor performing organisations to have limited external business knowledge or experience in turn limits the skills and experience the third team can draw upon, unlike the third team of high-performing organisations who draw upon a wealth of innate and learned knowledge gained from the diversity contributed from the directors industry and business backgrounds.

New Zealand high-performing not-for-profit organisations (Appendix 4) in the sample identified *company*-specific knowledge and board-level experience (the latter allowing directors to add value to the third team) as the most important characteristics of human capital. Supporting characteristics included directors having enough general business knowledge and experience to add value to the third team and the presence of enough *trust* to allow the utilisation of directors' capabilities. Absent from the poor performing sample's causal recipe was *trust*. This absence of "sufficient trust to make use of the boards capabilities" is consistent with earlier comments and quotes from interviewees in this chapter regarding trust and its importance in the development of the third team.

In Australian corporate organisations (Appendix 1), the differences between the high-performing and poor performing organisations were unclear. In this comparison, several of the same characteristics for human capital appeared in both the high-performing and poor performing samples. The characteristic identified in

the causal recipe as being necessary for high-performing organisations was that directors needed general business experience to add to overall effectiveness. The other characteristics identified as being important were board level experience, diversity in backgrounds and, importantly, sufficient trust to make use of the director's capabilities.

On the other hand, the third teams of Australian poor performing organisations included the same characteristics in their causal recipes for human capital as the third teams of high-performing organisations. However, two further characteristics were included: "directors possessing company specific knowledge and experience", as well as "an understanding of overall organisational functions and structures." A director possessing company specific knowledge and experience is the most important distinguishing characteristic between the high and poor performing samples. It indicates that directors in the third team of high-performing organisations have diverse industry backgrounds and wide experience on which the third team can draw. However, their counterparts in poor performing organisations have a narrower field of experience focused on company specific experience. This narrow focus limits the depth and breadth of knowledge available to the third teams of poor performing organisations.

The apparent reliance of third teams in poor performing organisations on their directors' company specific knowledge may indicate an unwillingness to trust the view of the executive. This lends support to the earlier finding that a lack of trust is a feature of third teams within poor performing organisations. This contrasts with directors of high-performing organisations, where the lack of specific emphasis on company specific knowledge as a requirement of directors indicates a willingness to rely on the organisations executive for the third teams' internal perspective while looking to the board to add value from its collective breadth of external experience and knowledge.

These higher levels of trust in their directors' capabilities identified within the construct of human capital aligns with characteristics identified in the causal recipes



found of leader-member exchange and internal social capital e.g. board-executive relationships encourage the use of the board talents. These additional characteristics from within the other constructs were absent from the causal recipes of poor performing samples third team.

Discussing with interview participants where individual directors would gain the level of experience needed. Participants believed that for board-level experience, top 50 indexed corporations were not the place for new directors to learn their skills. This raises an interesting issue: if this is a generally held view across all publically listed companies, where do directors acquire the governance skills needed by top organisations? Finally, and importantly, trust was a key characteristic of human capital in facilitating access to the use of the director's capabilities, specifically its ability to facilitate access to the use of the director's capabilities by the third team.

While displaying two of the same characteristics – “general business knowledge and experience” combined with “board level experience” – for the New Zealand high-performing corporate sample (Appendix 3) industry-specific and functional knowledge (e.g. marketing, export or sales, etc.) were also seen as important. However, both countries shared one important additional characteristic: a high level of *trust* to make the most of directors' capabilities, which needs to be present among members of the third team.

The characteristic of trust is entwined within a number of the causal recipes identified for human capital in high-performing organisations. Supporting the identification of this characteristic as a key element in the causal recipe for human capital and its overall importance is its appearance in the causal recipes of several other constructs e.g. internal and external social capital and structural capital, within both the corporate and not-for-profit organisations. The fsQCA analysis facilitated the Identification of “trust” as a key element of human capital in the characteristics of third teams among high-performing organisations (e.g. in response to the rated response to the statement in the survey questionnaire:

“sufficient trust exists on the board for the most to be made of directors capabilities”). Supporting the importance of *trust* as a key characteristic of human capital was a comment by the chairman of a high-performing organisation, “You’ve just got to have it [trust]. It’s critical really. And I can’t believe that you won’t [sic] get high-performing organisations without it. You just have to [have trust].”

The following sections in this discussion deal with the constructs of structural capital (STC), social capital (both internal (SCi) and external (SCe)), and cultural capital (CC). The survey components that dealt with these individual constructs were included in questionnaires sent to the directors and chairmen of the research sample. The executive sample did not receive these sections in their surveys. As noted in the previous chapter, this reduced the sample size of each sector making them too small to be analysed individually, leading to the decision to amalgamate the high-performing corporate and not-for-profit samples within each country into a single sample for analysis.

#### **6.2.2.2 Structural Capital (STC)**

Structural capital (STC) is a support mechanism for communication between the members of the third team. It is a mix of the explicit and codified knowledge (e.g. policies, routines, etc.), that resides within the third team. Structure assists with communication and information sharing (Smith, Smith, Olian, Sims, & Scully, 1994).

Analysis revealed that the structural capital of high-performing corporate and not-for-profit organisations (Appendix 1, 2, 3 and 4) in the New Zealand and Australian samples shared the same significant characteristic within their causal recipes for this construct. The identified characteristic was that of the board’s culture: the norms values and rules of the board, which builds *trust* within and between the third team. Two aspects of the third teams culture identified the importance of *trust* within the New Zealand sample: the policies and procedures of the board build trust within the third team, and by the belief that neither the board nor executive withheld important information from the other party. The New Zealand sample also highlighted a further characteristic that was absent from the Australian

sample: “the policies and procedures of the board build trust in the board room. “ These three characteristics identify high levels of trust as important within the New Zealand high-performing not-for-profit sample. In comparison, the Australian high-performing not-for-profit sample did not identify the characteristic that “the policies and procedures of the board build trust in the boardroom.” Further to the suggestion above this absence does not necessarily indicate less trust, it may possibly reflect a less policy-driven approach to governance in these organisations, with an assumption that trust is given.

Structural capital links to, and is closely reliant upon, the construct of cultural capital. Cultural capital consists of the individual board-members work ethics, morals and motivations. These individual characteristics are the basis on which the board builds its collective culture. These individual member attitudes align with, and are sanctioned by the board as well as adopted as its norms, values and rules. This aspect of the boards structural capital referred to as the “board culture” is the amalgamation of the norms values and beliefs defined as cultural capital. Organisations in the sample whose directors were strongly associated with high work effort, particularly as it influences meeting preparation, participation and prior research for board meetings – all characteristics of cultural capital – were strongly represented by the structural capital characteristic that *culture* builds trust between third team members. Boards with these attributes are defined as having a strong culture.

#### **6.2.2.3 Social Capital: Internal (SCi)**

Internal social capital (SCi) is constructed from the characteristics associated with an individual director’s implicit and tangible resources and is available to them through their work and social networks (Gabby & Leenders, 1999; Nicholson & Kiel, 2004). In particular, this research identifies internal social capital as being a director’s ties / relationships with the other directors and executives. These relationships are generally small dense networks that are mainly firm specific, which are influenced by the relationships that board members generate between themselves, individually and collectively, with the executive. Describing a board as

having a good culture reflects the level of internal social capital apparent within the third team.

The principal outcome resulting from strong internal social capital is the development of trust, collaboration and the enhancement of teamwork. Analysis of the high-performing corporate and not-for-profit boards in the New Zealand and Australian samples (Appendices 1, 2, 3 and 4) confirmed the importance of internal social capital and its influence on the culture of the board. Both countries identified and shared the belief that their *culture*, as it relates to the internal social capital of the board, is a pivotal characteristic in developing *trust* and *synergy* among the board members of the third team.

Two characteristics were evident in both countries causal recipes that align with this finding that the boards' culture builds trust in the boardroom. This confirms earlier comments (Section 6.2.2.2) contained in the discussion on structural capital regarding the importance of cultural capital to high performance. The second characteristic is that consensus decision making characterises teams that have strong internal social capital. This was identified from the characteristic that "most decisions of the board are settled by consensus rather than votes.

Individual country analysis showed a board culture that builds trust was an important precursor for the Australian high-performing corporate and not-for-profit sample in the development of board/executive relationships. These relationships allowed for, and encouraged the use of, the board's talents - their human capital. The interdependence between the human capital characteristic (i.e. knowledge) and the internal social capital characteristic inherent within the statement that "board executive relationships encourage the use of the board talents" is an important finding. This finding reaffirms the importance of the combined causal recipe in identifying the characteristics that contribute to high-performing third teams. Furthermore, the outcomes shown in the causal recipes for this construct aligned with the consistent theme that emerged in the interview conversations,

that the executive members of the third teams of high-performing organisations maximise the use of the directors' combined or individual talents.

As discussed in relation to structural capital, the New Zealand high-performing corporate and not-for-profit sectors identified culture as a precursor to the development of internal social capital characteristics. Specifically, in the New Zealand sample these characteristics were developed by directors into strong working relationship with the CEO, while also developing awareness of other directors' capabilities and areas of expertise. Development of a strong synergy between the members of the third team and knowledge of directors' expertise allows the board and third team to maximise the value they get by leveraging that expertise. Identifying areas of expertise on the board is an important prerequisite in decisions affecting selection of possible candidates to replace directors.

For the New Zealand and Australian boards the identification of directors expertise / talents combined with a culture of trust is a significant precursor in allowing executives to access this expertise through the construct of knowledge sourcing. From this access, executives can adapt, innovate and / or replicate the acquired knowledge for the benefit of the organisations. This reaffirms the importance of including knowledge sourcing in this research (refer section 6.3.4).

While the poor performing organisations in both countries shared the majority of the internal social capital characteristics, two were notably absent. These characteristics within the poor performing organisations centred on the ability of the third team to maximise the use of the directors' areas of expertise. In both the Australia and New Zealand samples the first missing characteristic was the lack of synergy between third team members. In the New Zealand sample, the directors in the poor performing organisations identified a lack of awareness of each other's areas of expertise. In Addition, decisions of the board were mostly settled by votes, indicating a level of conflict and distrust within the New Zealand poor performing sample. For the Australian sample, the characteristic of encouragement by the board-executive relationships in the use of the board's talents was missing. This

absence indicates low levels of internal social capital, leading to less collaboration and teamwork and underdeveloped trust.

#### **6.2.2.4 Social Capital: External (SCe)**

The benefits that directors with high external social capital bring to an organisation include the ability to facilitate boundary spanning between their organisation and others within their external social network. This is particularly important within the not-for-profit sector where the contacts directors have can add significant value to their organisations ability to access external resources, e.g. for the majority of not-for-profit organisations accessing sponsorship funding is often the result of personal contacts that directors are able to use to facilitate sponsorship agreements. The use of external networks most evident in the not-for-profit sector, where directors use their external corporate networks to add value through their contacts or to access professionals to undertake pro-bono work (calling in a favour). When discussing how their board added real value, a director of a high-performing not-for-profit organisation said, "...broadening the networks, opening doors and making relationships stronger with external organisations." This is not to say that corporate organisations do not benefit from directors external contacts. This clearly is the case, when for example corporate organisations are seeking directors to fill a post and incumbent directors will use their external networks to facilitate (shoulder tap) a replacement candidate. It is to say, though, that not-for-profit organisations tend to be even more reliant on good social networks because of their dependence on external funding as their main source of revenue.

Two characteristics were identified in the causal recipes for external social capital for both the corporate and not-for-profit sectors in both the New Zealand and Australian samples (Appendices 1 to 4). These characteristics were that the board's policies procedures and cultures built *trust* between the board and external organisations and these same policies procedures and culture build *trust* between the board and executive.

A difficulty faced by the third team in maintaining its social capital is the episodic nature of their meetings. It is apparent that some third teams spending in total, less than two working weeks together every year. Therefore, maintaining strong social capital and combating negative influences is dependent on the cultural capital of the third team. Cultural capital (refer section 6.4.5) is the individual's work ethic morals and motivations combined with the implicit and tangible resources sanctioned by the dominant group (i.e. third team). The cultural capital of the third team is resident in individual directors yet is reflected in the third team's norms, values and rules.

The causal recipes for the social capital of high-performing organisations clearly associated having a strong *culture* with the social capital characteristics of their boards. In turn, this influences the performance of the third team.

#### **6.2.2.5 Cultural Capital (CC)**

Effort norms, which are an element of cultural capital, are resident in the individual – effort after all comes from the individual. Yet it is also a group construct in that it reflects the shared beliefs of the board in respect of the amount of work effort required of each individual. The Australian high-performing corporate and not-for-profit boards identified the importance of directors fully preparing for and then actively participating in meetings as a characteristic that fitted their belief relating to effort norms.

Feldman (1984) stated that effort norms, which are a subset of board norms, often exert a strong influence on director behaviour. This influence and inculcation of the board norms into a new director should start at their induction. Comments by the participants in the interviews identified induction for new directors was important and as a key characteristic of board culture in high-performing organisations. The expectation was that the inductions include the boards' expectations specifically regarding the board's desired effort norms. However, the analysis showed that in Australia only the high-performing corporate and not-for-profit organisations had inductions as part of their causal recipe for cultural capital. While all the boards of

the Australian organisations in the sample may discuss their organisational and individual norms, values and beliefs, the high-performing organisations among them took the discussion and transferred it into action via the induction process.

The New Zealand high-performing corporate and not-for-profit organisations (Appendices 3 and 4) concurred with their Australian equivalents (Appendix 1 and 2) regarding the characteristics (effort norms) expected of the individual and board. These characteristics were that individual directors would research and be fully prepared prior to meetings and actively participate in them.

However, from the causal recipes the New Zealand high performing corporate and not-for profit organisations two additional characteristics were evident. The evidence highlighted an expectation that the board's of the high-performing organisations discussed the organisational values and believed that the policies, procedures and culture would match societal expectations and the boards' agreed organisational values. This was significantly absent from the causal recipe for the Australian high-performing corporate and not-for profit organisations. The fact that these expectations did not appear in the Australian causal recipe may reflect a different cultural approach in the way that New Zealand organisations are expected to relate to societal expectations (e.g. The Treaty of Waitangi).

### **6.2.3 Leader-Member Exchange (LMX)**

This thesis introduces to the corporate governance research for the first time the construct of leader-member exchange, in applying the concept to the interactions that occur between the board and executive (Figure 7). The basic tenet of leader-member exchange is that interpersonal relationships develop against the background of the formal organisation.

These relationships can manifest themselves in many ways. A majority of interviewees from within both high-performing and poor performing organisations in both sectors discussed the importance of strong working relationships (referred to as *synergy* hereafter) and feeling of confidence among members of the third



team. Highlighting these characteristics (confidence and synergy) as important, a director of a high-performing organisation said, “..without that confidence and synergy it’s very difficult for an executive to have those open discussions and share with the board...”

The analysis highlighted the significance of both confidence and synergy as defining characteristics of leader-member exchange within the third team. The analysis identified confidence and synergy as the only two characteristics in the causal recipe for Australian high-performing not-for-profit organisations. The recipe identified both confidence and synergy as being jointly required, meaning that the recipe would not work if one element was absent. These findings aligned with the comments made by interviewees from high-performing organisations.

The Australian high-performing not-for-profit organisations’ results contrasted with the causal recipe for poor performing organisations in this sector. Poor performing organisations did not have strong working relationships (synergy) as one of their elements. Confidence was present in the causal recipe for poor performing organisations but only as a “logical or” (+) element, meaning that it can be absent and the recipe will still be valid. Highlighting this contrast, the CEO of an Australian poor performing not-for-profit organisation said, “I’d hesitate to say there was synergy. In fact, there would be some things that I would not want to raise with the board as a whole.”

The New Zealand high-performing not-for-profit organisations (Appendix 4), like their Australian counterparts (Appendix 2), also determined that synergy and confidence were key characteristics and both were present in their causal recipe. The concurrence of these two characteristics reflects a Trans-Tasman alignment regarding the leader-member exchange characteristics of a high-performing board should exhibit within the leader-member exchange construct. However, as well as these two characteristics, the New Zealand high-performing not-for-profit organisations also included communication between the executive and board members as an element in their recipe. This manifested itself as the executive’s

ability to communicate directly/indirectly with the board about their beliefs or concerns regarding the board's performance.

The causal recipes for the New Zealand and Australian not-for-profit organisations both contain the characteristics of confidence and synergy. The replication of these two core characteristics in the high-performing organisations of both countries coupled with supporting comments from the interviews highlights key differences between the high-performing and poor performing not-for-profit organisations. When the characteristics of synergy and confidence are absent the natural conflict surrounding organisational priorities and the possible approaches to addressing them that occurs between the professional (i.e. executive) and volunteer (i.e. board members) of the organisation is exacerbated. This manifests itself in a lack of cohesiveness between the two groups in the third team. A response given by the CEO of a poor performing organisation when asked how a lack of synergy influences the executive in their willingness to take new ideas to the board confirms this. The CEO stated "... there is a known predisposition from board members...so you go into a debate, disappointingly I think, knowing what the reaction is going to be...you probably find ways to ensure you get the right outcome within the board meeting." The same CEO went on to say, "Whereas, if you felt there was a level of cohesion within the group and trust, you'd just go bang, here it is, let's have a discussion."

A recurring pattern that became evident when each of the constructs' causal recipes were analysed was the contrast in some of the findings in relation to the high performing not-for profit and corporate sectors within the two countries. This contrast differs from the widely held view that the same model of corporate governance is applicable to both the not-for profit sector and corporate sectors, with minor modifications for the not-for profit organisations. The present research shows significant variation in the causal recipes of each sector across all of the constructs examined, reaffirming the view of researchers (e.g. Pye & Pettigrew, 2005; Pye & Camm 2003b) that a "one size fits all" approach to modelling corporate governance is limited. This issue is discussed further in this chapter in section 6.3.

The difference between the corporate and not-for-profit sectors is highlighted in the results for the Australian high-performing organisations in the corporate sector, where communication between the board and executive of the third team was identified as a key element in their causal recipe. This manifested itself in two forms: 1) communication by the board of its satisfaction (or dissatisfaction) with executive performance; and, 2) the executive's ability and willingness to communicate directly or indirectly with the board over their beliefs or concerns regarding board performance. Affirming the importance of such communication, the chairman of a high-performing organisation said, "A culture of openness, of camaraderie, of 'you can speak without fear', of sharing information, of a common goal, is very good."

Such an environment is possible only when open communication is combined with confidence and trust. These characteristics of confidence and trust align with the norms, values and rules that are associated with internal social capital and cultural capital (refer to sections 6.2.2.3 and 6.2.2.5). Supporting the strong emphasis on communication between the third team members was a similar high level of confidence within the third team regarding each group's capabilities, similar to that of the not-for-profit sector. This level of direct and open communication within the high-performing corporate organisation was in contrast to that of the poor performing organisations where these characteristics were absent from the causal recipe.

Comparing the emphasis on communication within the Australian high-performing corporate causal recipe (Appendix 2), the New Zealand high-performing corporate organisations (Appendix 3) placed their emphasis on synergy, each group within the understanding the other's task problems and needs, as well as communication. Communicating to the executive regarding the board's level of satisfaction with executive performance was how this element manifested itself in the New Zealand context. Communication and synergy are thus key characteristics common to both the Australian and New Zealand causal recipes for corporate sector samples.

While discussing the relevance of the board's and executive's understanding of the other's roles and responsibilities. The chair of a high-performing corporate organisation affirmed the importance of this characteristic when he said, "there is a clear understanding of the role of the board and role of management, if you get those things blurred, well then it tends to break down confidence and trust."

The findings within the New Zealand and Australian high-performing corporate sectors support the idea that the characteristics of communication and confidence both result from the synergy among the members of the third team. The virtuous circle formed by communication, synergy and confidence is the key difference between the high-performing and poor performing organisations in both countries, indicating these characteristics of the third team as vital to organisational success.

#### **6.2.4 Knowledge Sourcing (KS)**

This section discusses the findings in relation to the construct of knowledge sourcing, which describes an individual's intentional efforts to search out and access expertise, experiences, insights and opinions. The study posited that knowledge sourcing was an important characteristic of the *executive* members of the third team (Figure 7) and only the executives of organisations received the questions that related to this construct. As with the previous constructs, the samples for corporate and not-for-profit organisations in each country were combined so that a sample of sufficient size could be analysed.

The concept of knowledge sourcing resonates with resource dependency theory. Researchers suggest that according to this view, boards and their members are conduits through which the organisation (executives) can access essential resources (knowledge) (e.g. Hillman et al., 2000; Pfeffer & Salancik, 1978). This view was reflected in the results of the analysis for both the New Zealand and Australian high-performing organisations (corporate and not-for-profit). The executive members of the third team in both the New Zealand and Australian high-performing corporate and not-for-profit organisations identified two core characteristics as outcomes of their ability to access and source the knowledge of

directors. These characteristics were that, based on their interactions with the board executives gained 1) new insights into ways to fulfil their roles, and, 2) learned new and proven ways that have increased their ability to perform their role. Through knowledge sourcing, the executives gained new insights into ways of fulfilling their role within the organisation. This newly sourced knowledge relates not only to pure information, but also prompts the executive for action. These prompts for action create a tangible change in the performance of the executives in high-performing organisations.

The second, but equally important characteristic identified by both sets of executives was that they had learned from this transfer of knowledge new proven methods that increased their ability to perform their roles. The key points of this characteristic are that they are proven methods. This implies executive reliance on the expertise of the director(s) from whom the knowledge was sourced.

Alternatively, the executive may have verified the veracity of the new method in some other way. Through their roles, the executive transform this new knowledge into action via adaptation, innovation and /or replication allowing the executive to improve the performance of the organisation.

This analysis aligns with the findings of Gray and Meister (2004) that Aadaptation, Innovation and Replication (AIR) are the three outcomes (cognitive changes) of knowledge sourcing. Discussions with interviewees confirmed the importance of the role that knowledge sourcing from the directors played within the third team. A comment by the chair of a high-performing corporate organisation reinforced the importance to executives in accessing the knowledge of the directors when he said, "...board members who are particularly experienced in acquisitions, well then you would certainly expect them to have some contribution during that development of and execution of an acquisition..." The "contribution" spoken of by this chair referred to the use of the board members' knowledge and experience by the executive. This and similar comments from among the interviewees confirmed the importance of knowledge sourcing within high-performing organisations.

The characteristics of AIR contained in the causal recipe of knowledge sourcing are not the only components required to improve organisational performance. They do however form an important part of the overall causal recipe that allows third teams to govern, effectively, high-performing organisations.

### **6.2.5 Team Effectiveness (TE)**

Team Effectiveness is recognised as a mediator of the board's attributes and / or performance relationship (Payne et al., 2009). In the context of this research, team effectiveness is the mediator of the board-executive performance relationship rather than the generally accepted board-firm performance relationship (Figure 7). There are difficulties with measuring the effectiveness of the board team using only an internal perspective (Leblanc & Gillies, 2005). Therefore, this research investigated team effectiveness from the view of both the board and executive members of the third team. This approach gives the research a perspective not only on how the board rated their own performance but also on how it was rated by the executive.

The first question asked in the survey measured how the members of the third team rated the overall effectiveness of the board. Discussion of the analysis covers the results of each of the sectors and countries, since the individual samples were sufficiently large to enable separate analysis. The construct of team effectiveness has its genesis within the other constructs used in this research, which will become evident in the discussions that follow. The constructs underpinning team effectiveness are leader-member exchange, human capital and social capital (both internal and external).

The third teams of high-performing Australian not-for-profit organisations identified three characteristics of highly effective teams. Boards of these organisations are highly effective at: 1) building networks with strategically important partners; 2) enhancing government relations; and 3) planning, specifically in relation to board and executive succession planning (executive and

board). These characteristics originate in the causal recipes of the other constructs for these high-performing organisations.

For example, the ability to build networks with strategic partners would be severely limited if not impossible. That is, unless there were high levels of synergy (from leader-member exchange) between the board and executive members combined with, a board culture that builds trust between the third team and external organisations (social capital-external).

The responses to the question on board effectiveness showed that 100% (8 cases) of the third teams of Australian high-performing not-for-profit organisations agreed that their boards were effective. This indicates a generally higher level of satisfaction with the high-performing boards as opposed to the poor performing sample, whose board were rated as being both ineffective and highly effective.

The boards of the Australian high-performing corporate organisations shared the characteristic of being highly effective at succession planning (executive and board) with the not-for-profit sector. This was the only shared characteristic. However, this agreement between the corporate and not-for-profit organisations on the importance placed on succession planning highlights the finding that even though there are significant differences in the causal recipes of the corporate and not-for-profit sectors, some characteristics are common. Succession planning is one of those characteristics.

The third teams of high-performing corporates identified three other characteristics (synergy, trust and confidence) that have their genesis in the other constructs. Strong leadership was an important characteristic of high-performing boards. This manifested itself in the ability of the board to help shape long-term strategies. A significant attribute of being a strong leader is communication, especially between members of a team who meet episodically. A commitment to open communication was evident within the construct of leader–member exchange. This commitment was identified in two characteristics of the third team’s causal recipe. The ability of

the board to communicate its satisfaction or dissatisfaction over executive performance combined coupled with the executive's ability to communicate its belief in or concerns about the board.

The significant finding on the question of overall effectiveness was not that 76% of high-performing third teams rated their board as effective but rather that only 39% of poor performing organisations third teams rated their boards as highly effective. The remaining 61% rated their boards as effective. This overestimation by the third teams of poor performing organisations highlights an important flaw in self-assessment, which is often a core aspect of a board review. Unless there are quantifiable measures individuals are likely to overestimate their own performance.

Those in the New Zealand high-performing not-for-profit sector also identified two of the characteristics identified by the Australian high-performing not-for-profit organisations. These were the board's ability to develop networks with strategically important partners and its ability to enhance relationships with government agencies. This latter characteristic is very important for not-for-profit organisations as the government, in one form or another, is the largest funder of these organisations. Other characteristics identified among the New Zealand not-for-profit organisations were the board's ability to provide strong leadership and their ability to manage during a crisis, with the former being recognised as a precursor for the latter.

A supporting characteristic that helps determine how an organisation responds to crisis is the tacit knowledge held by the directors, which is gained from their general business knowledge and experience in combination with their previous board-level experience. Both of these characteristics are present in the causal recipe for human capital. The final characteristic relating to team effectiveness was that of anticipation of threats to the organisation. This attribute relies also on a characteristic of both human capital and social capital: that either group (board or executive) within the third team does not withhold information. This finding adds



further support to the idea that team effectiveness has its genesis in the other identified constructs.

Answers to the question on overall effectiveness showed that 38% of cases in the New Zealand high-performing not-for-profit sample (13 cases) rated their board as “very effective” while a further 54% rated it as “effective.” Within the poor performing sample, (25 cases) 96% rated their boards as being either “effective” (76%) or “very effective” (20%). This shows that on average the poor performing organisations’ third teams rated their boards more highly than the high-performing third teams.

Further analysis of the individual (i.e. director vs executive) rating of effectiveness in both the New Zealand and Australian samples showed that organisations’ board members consistently rated their effectiveness significantly higher than that of the executive. This was particularly evident in the poor performing sample. In the poor performing New Zealand corporate sample 71% of the boards rated themselves either “effective” or “very effective” whereas only 28% of executives rated their boards similarly. This contrasts with the high-performing sample, where 100% of the executives rated their board as either “effective” (66%) or “very effective” (34%) and 100% of the board rated themselves as “very effective.”

The poor performing board’s apparent hubris regarding their effectiveness highlights some significant issues. How does the attitude of the board affect its ability to make reasoned judgements and what is the flow-on effect for organisational performance? This finding calls into question the validity of internal (i.e. director only) board reviews of effectiveness if the board overestimates their effectiveness to the extent that the results suggest. This tendency by boards to over-rate their performance needs therefore to be factored into governance reviews that deal with board effectiveness and include a component that canvasses the views of the executive members who are in regular contact with the board. Clearly, the willingness of directors to substantially overestimate their effectiveness needs moderating by a counter-balancing external view from the executive.

The New Zealand high-performing corporate organisations causal recipe identified only one characteristic as being necessary. This characteristic is the ability of the board to monitor effectively the implementation of strategy. Interview data from among the respondents suggests that this characteristic encompasses a significant undertaking by the directors and can help with important operational strategies. An example of this was the following comment regarding directors and the part they play in strategic development:

“...one of the things is strategy and I think when you look at it, if you are looking at boards that perform well, you will see that they have significant impact in helping management, the board has to approve strategy... with respect to major acquisitions, clearly it is the right and expectation the CEO will develop strategy and lead the committed in a significant acquisition for the company. But the board’s got to understand to be committed to it and support it and generally will add value in terms of shaping it (strategy) and even down to the tactics sometimes of being able to bring home a deal”

From the preceding discussion of the various constructs, it is clear that the characteristics of the third team play a significant part in the ability of the board to influence organisational performance. From the findings, enough differences between the high-performing and poor performing samples were identified to suggest that the missing characteristics within the poor performing sample contributed to their lower level of performance. Having discussed the results for the country and sector groups separately, the following section reviews the similarities and differences in the results between the corporate and not-for-profit sectors in each country.

### **6.3 Convergence in findings from Corporate and Not for Profit**

For too long there has been a predilection for some researchers of governance in the not-for-profit sector to adopt a “one size fits all” approach towards governance models and structures, relying heavily on or replicating the structures and models developed for the corporate sector. The criticism by Pye and Pettigrew (2005), Pye

and Camm (2003b) of the “one size fits all” is supported by the results of this research.

The analysis finds that for high-performing not-for-profit organisations in both Australia and New Zealand, the characteristics identified as core for their performance within the constructs of human capital, leader-member exchange and team effectiveness do not mirror those of the corporate sector. The divergence with regard to what are the important characteristics for each sector is significant enough to suggest that further research or practice that seeks to develop or modify models or standards of governance for the not-for-profit sector is required. These modifications should start from the premise that not-for-profit governance differs from the corporate sector in significant and important ways. Among specific examples of the type of differences found when comparing the causal recipes were: 1) the not-for-profit sector relies on directors building networks with strategic partners, whereas the corporate sector does not; and 2) Directors in not-for-profit organisations require industry knowledge where corporates prefer a director have general business knowledge and experience e.g. not specifically to their organisations.

Importantly for the not-for-profit sector, high-performing boards in this sample recognised the importance of succession planning for the continued performance of the organisation, whereas, boards in poor performing not-for-profit organisations do not. Succession planning within the not-for-profit sector is recognised as an issue for continued performance. The causal recipe for the Australian high-performing corporate and not-for-profit sectors (Appendix 1 and 2) contain the characteristics of strong succession planning for both management and the board. Comparatively the causal recipe for the New Zealand high-performing (Appendix 3 and 4) made no reference to succession planning for either the board or management. In the case of the New Zealand sample the results reinforce the earlier comments (section 6.2.5) that succession planning is an important issue for not-for-profit organisations to address.

The comparison between the corporate and not-for-profit sectors' causal recipes across all eight constructs, combined with the specific comments from interviewees included in the preceding discussion, confirms that research and practice should not treat the not-for-profit sector as a mirror of the corporate sector. The findings from this research show that organisations in the not-for-profit sector require different characteristics to be present within their third teams for high performance, than those for a high-performing corporate organisation. These findings support those of several researchers (Knights & Willmott, 1993; Mintzberg, 1982; Samra-Fredericks, 2000a, 2000b). Who have suggested that researchers should stop trying to fit the world - in this case the not-for-profit sector, into categories (such as those applicable to the corporate sector) that do not match reality.

#### **6.4 Discussion Summary**

The chapter first discussed the proposition that that there is only one team at the apex of the organisation, the third team. The findings of the study strongly support this proposition and are aligned with the theoretical perspective who sits at the top of an organisation as discussed in Chapter 3. The findings show that the third team is the construct within which the board is able to influence the executive and, through them, organisational performance.

The second proposition suggested that intellectual capital and its four sub-constructs: human capital, cultural capital, internal and external social capital and structural capital are the means by which the board influences the executive. The findings confirmed the validity of this proposition. The causal recipes presented in Chapter 5 identified significant differences between the characteristics of high-performing and poor performing organisations across all the sub-constructs of intellectual capital. The qualitative data gathered during the interviews was also consistent with these causal recipes. Drawing together the evidence from the data and the relevant literature from Chapter 3 lends strong support to the proposition that intellectual capital is the means by which the board is able to influence the executive and through them organisational performance.

The final proposition discussed in this Chapter posits that the constructs of leader-member exchange, knowledge sourcing and team effectiveness (board only) facilitate the use of the boards intellectual capital in influencing the executive. The causal recipes for these constructs are consistent with those of intellectual capital in confirming that they play a significant role in facilitating the boards' influence of the executive. The participant interviews give further support to findings as does the theoretical positions discussed in depth in Chapter 3. The findings emphasised the importance of the boundary spanning influence of trust, synergy and confidence adding weight to the notion that no one causal recipe of any given construct or theory on its own is sufficient to allow a board to influence the executive and thereby organisational performance. It is the combination and uniqueness of each causal recipe (no two being the same) as demonstrated by the array of key attributes and behaviours within the third team that enables the board and executive to influence the organisation's performance (Figures 8).

The final chapter draws upon this discussion to form conclusions from this research and to consider the implications of the findings for theory and practice.

## Chapter 7 Conclusions

This final chapter returns to the questions posed in Chapter 1 and draws together the analyses and discussion in the preceding chapters discussing these in relation to their implications for practice and the contribution of the research to theory. Finally, the chapter discusses the limitations of the research and directions for future research.

### 7.1 Overview of the Research

The review, critique and analysis of previous literature and research in Chapters 1 and 2 identified a gap that existed within currently available knowledge as to how the board of an organisation influences organisational performance. The result was the development of the research question:

What is the missing link between boards of directors and organisational effectiveness?

This study posed three specific questions in relation how a board can influence organisational performance through the executive. The three questions addressed in this study were:

#### **Question 1:**

*Are there three top management teams in an organisation: 1) Board, 2) Executive Team (TMT), and 3) **Third Team** through which a board influences organisational performance?*

#### **Question 2:**

*Is the board's intellectual capital (human, social, structural, cultural) the "means" by which the board influences "the end", that is, the performance of the organisation?*

#### **Question 3:**

*Within the third team, are the constructs of Leader -Member Exchange, Knowledge Sourcing and Team Effectiveness, the mechanisms by which the board influences the "end"?*

A review of the corporate governance literature in relation to these research questions led to the development of three theoretical propositions using a set of constructs that formed the basis of a conceptual model for the study (Figure 7). The theoretical framework of this study draws together aspects of agency theory, stewardship theory and the resource-based view of the firm. Aspects of these three theories align with the constructs used in this research: intellectual capital, leader-member exchange, knowledge sourcing and team (board) effectiveness.

A mixed method approach was used to understand how boards influence organisational performance. Using a mixed methods approach allowed the use of rich data and hard generalisable data to corroborate the findings. This mix responded to calls by Pye and Pettigrew (2005), Heracleous (2001) and others for corporate governance research to take a fresh approach to researching governance practices, rather than single method studies investigating single attributes of boards and governance, which have yielded inconclusive results.

This research also adopted a dual-country (New Zealand and Australia) and dual-sector (corporate and not-for-profit) approach in determining the research sample. New Zealand and Australia were selected because of their long history of co-operation in business. Directors are often simultaneously on the boards of, or work in, organisations in both countries and the regulatory, business and not-for-profit environments are similar. The decision to examine both the corporate and not-for-profit sectors in the one study using the same constructs enabled the research to determine if these different sectors were as homogeneous in their approaches to governance and practice as common wisdom has tended to assume. This dual-country and dual-sector approach provided an opportunity for comparison between sectors both within and across the two countries.

The selection of the organisations that would form the research sample from within each sector required different approaches. Selection of the corporate and not-for-profit organisations used a two-step process to filter the population: 1) corporate organisations needed to be listed on the ASX or NZX top 50 indices; and 2) they had

to have been listed on that index for more than 10 continuous years (the close-off date was December 2009).

Not-for-profit organisations were required: 1) to be affiliated to their international federation; and 2) they had to have been registered as an incorporated society for more than 10 continuous years (the close-off date was December 2009).

Once selected, the financial data for the corporate and NFP organisations for the relevant period were collected and analysed. The analysis used a range of financial measures tailored to each sector (corporate and not-for-profit) as detailed in Section 4.5, Chapter 4. With these financial statistics, the research was able to separate the organisations into high-performing and poor-performing groups for analysis. Within each organisation, the targeted participants consisted of the board chairman, two other directors, the CEO/managing director and two senior executives within the organisation.

Two methods of data collection were utilised for the research. The first stage involved the use of electronically administered surveys to all participants. Three hundred and fifty four invitations were sent to the selected participants in the combined sectors. The response rate achieved for the survey was close to 40 percent. The second stage involved semi-structured interviews conducted with selected members holding one of the four organisational positions (board chair, director, CEO, executive). The interview data informed the analysis obtained from the survey data.

The analysis of the survey data used fuzzy set qualitative comparative analysis, which allowed identification of the complex interactions between the multiple characteristics contained within each of the four constructs: intellectual capital, leader-member exchange, knowledge sourcing and team effectiveness. These complex interactions were analysed using fsQCA software and developed into causal recipes. These causal recipes detailed the mix of characteristics within each construct that have a set relationship with the outcome (e.g. high-performing organisations).



## **7.2 Conclusions from the Main Findings**

As indicated by the research question, this study aimed to gain insight into how boards influence organisational performance. Derived from the literature, the study developed and confirmed the model of the third team, which provides the context in which the board interacts with the executive. The study posited that the store of director's intellectual capital provides the means whereby organisational performance is influenced and that leader-member exchange, knowledge sourcing and team effectiveness are the key characteristics that facilitate the interactions among the members of the third team in achieving that performance.

Chapter 5 detailed the mix of characteristics (causal recipes) developed from the analysis of the data using fuzzy set qualitative comparative analysis. These causal recipes detailed the characteristics of high-performing third teams within each construct, which were discussed in Chapter 6 in conjunction with the data gathered from the semi-structured interviews. Chapter 6 also discussed and compared the results in relation to the corporate and not for profit sectors and the two countries. What the findings emphasis is the mix of characteristics required for high performance

Agency theory was highlighted in the literature review as a dominant framework in corporate governance. Its focus is on how the owners (i.e. principal) can minimise agency costs, i.e. to minimise or eliminate managerial opportunism and expropriation of shareholders' returns, by controlling the executives (management), who are the agents. The focus on control, central to the agency perspective, is not reflected in the causal recipes (refer Appendix 1, 2, 3 and 4) of the corporate or not-for-profit sectors in either New Zealand or Australian high-performing organisations.

The results from the fsQCA analysis and subsequent discussion identified synergy, trust and confidence as the most important attributes of the third teams of high-performing organisations. These three attributes of high-performing boards are a

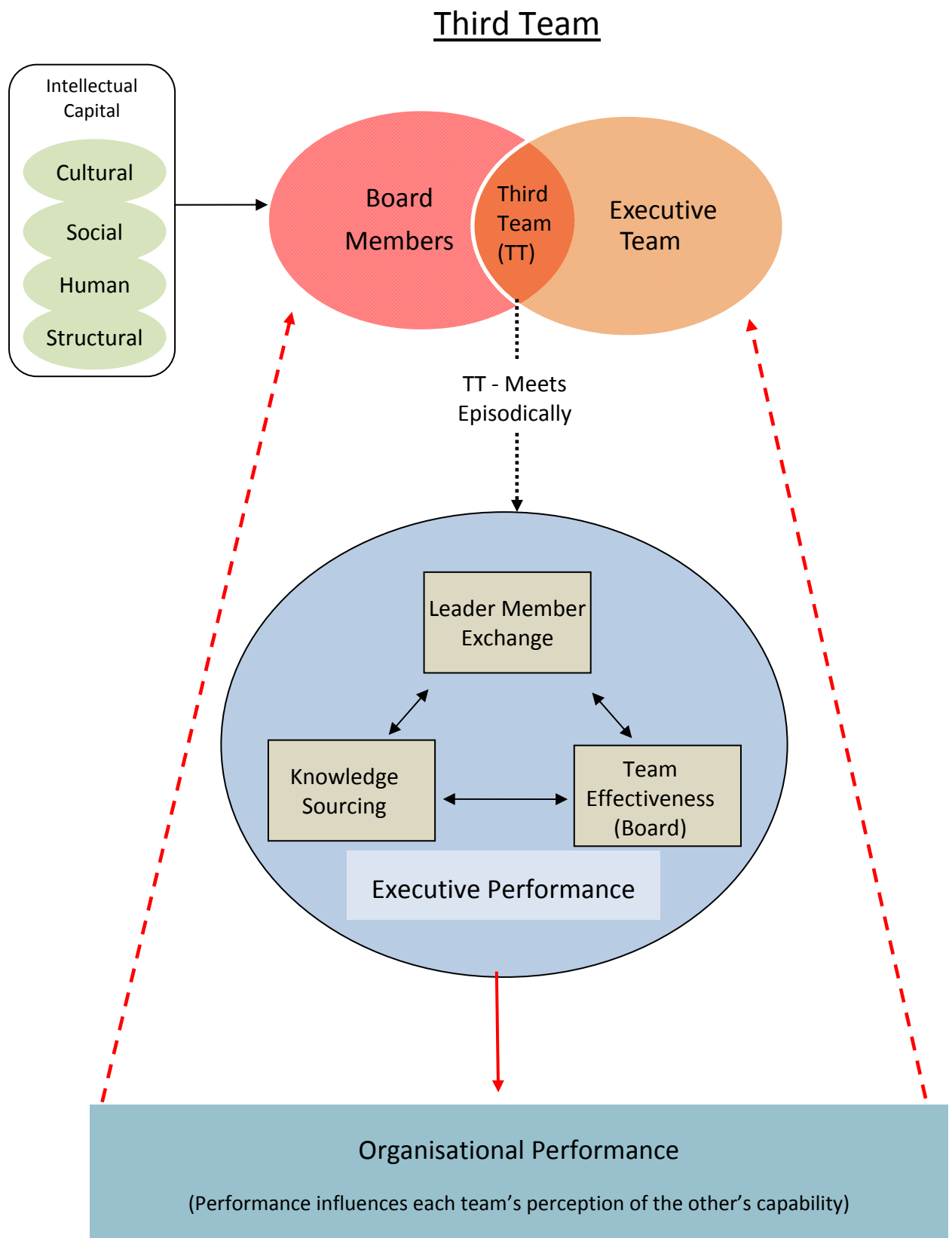
synthesis of all the characteristics from within the causal recipes of each construct. The attributes of synergy, trust and confidence combined with the individual characteristics in each causal recipe of each construct do not relate to a single theory. They are the antithesis of the individual theories, agency theory, stewardship theory and resource dependency theory. Synergy, trust and confidence combined with the individual characteristics of the causal recipes embody aspects of these main theories of governance.

These three characteristics confirmed that directors of high-performing third teams in both the corporate and not-for-profit sectors see themselves as stewards of the organisation. That both executives and directors see their professional success as tied to the success of the organisation supports the stewardship perspective on corporate governance as well as the concept of the third team, in relation to a common view among third-team members of their duty to the organisation they serve.

The construct of the third-team (Figure 8) is an important addition to corporate governance theory because it provides theory with a new construct within which to conceptualise the interaction that occurs between the board and the executive. As outlined in Chapter 2 stewardship theory suggests that the executives are altruistic, i.e. they are interested in seeing the organisation succeed. The theory suggests that this interest extends beyond their tenure. Davis et al. (1997) stated that executives view this longer-term organisational success as a personal reflection of their own success or failure. This notion suggests that from the executives' perspective and those outside the company, the executive and the company are regarded as one, i.e. the success of one directly reflects the success of the other, or conversely, the failure of one is seen as the failure of the other. Resource dependency theory is similarly supported by inclusion of the third-team. Resources in the form of human capital (particularly elements of social capital and intellectual capital) are a key component of the value the directors bring to the third team. These resources are transferred through knowledge sourcing by the executive who in turn adapt, innovate and / or replicate this knowledge for the benefit of the organisation.

The results of the present research found that the executives are not the only third-team members who subscribe to the notion that, from an external perspective, they are linked intrinsically to the organisation. The directors in the sample also shared the view that their professional success is linked essentially to the organisation on whose board they serve. This was evident in the high performing corporate and not for profit organisations in both New Zealand and Australia. The characteristics identified within the construct of team (board) effectiveness highlighted the directors' belief that their roles included bolstering the company image in the community, building networks with strategic partners and enhancing government relations. All these aspects of a director's role require putting at risk their standing in the community, which would be unlikely if they did not feel a strong degree of stewardship duty (stewardship theory) towards the organisation.

Figure 7 shows the conceptualisation of the third-team and how it influences organisational performance.



**Figure 9: Original Conceptual Framework**

The study now revisits the propositions and the sub-questions posed at the beginning of the study by drawing together the main conclusions from the research findings presented and discussed in the preceding chapters and in the preceding section of this chapter, specifically in relation to each proposition.

### **7.2.1 The Third Team**

The first proposition examined whether there was a new model that defined the top leadership team within an organisation, which for this research has been termed the “Third Team.” The conceptualisation of the third team was that this configuration formed the nexus of interaction between the board and executive and was therefore the mechanism through which the board influenced the executive and through them organisational performance, leading to the development of the first proposition:

#### **Proposition 1:**

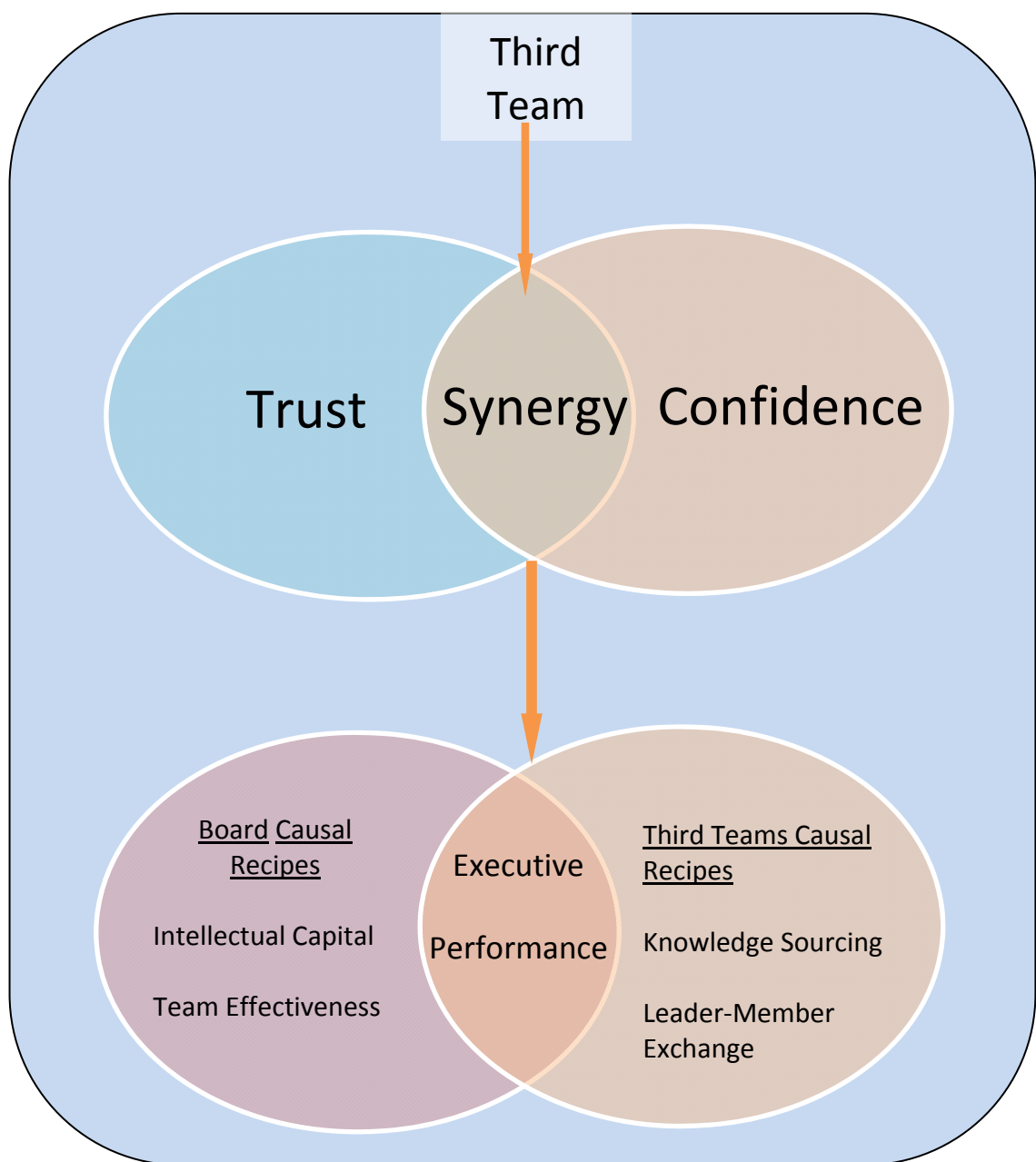
*There are three top management teams in an organisation – Board, Executive Team (TMT), and the Third Team, through which organisational performance is influenced.*

The study showed that there was strong support for the model of the third team. This finding is consistent with literature that supports the idea of board/executive collaboration as a team (Kozlowski & Bell, 2003; Langton & Robbins, 2007; Payne et al., 2009). The finding suggests that organisational performance is enhanced when the board has a wider influence and greater interaction with senior executives other than only the CEO. The finding also suggests that the board has a responsibility to ensure that it does interact with the executive (as defined in this research) and not just the CEO. It is through this interaction that the board impacts on the performance of the executive and, through them, on the performance of the organisation.

The development of a strong third team (board and executive) provides two principal benefits. First, it enables the board to develop a deeper understanding of the issues assumptions and thinking used by the executive in their decision-making,

and is thus better placed to guide and oversee executive actions. Second, the executive members gain better access to the individual directors' tacit and explicit knowledge, enhancing their ability to adapt, innovate or replicate the knowledge gained, to the benefit of the organisation.

Three characteristics identified as fundamental to the success of the high-performing third teams that spanned all of the constructs in the study were "trust", "confidence" and "synergy" (refer Figure 8). Figure 8 shows these as overlapping because they are seen as inseparable from each other, one without the other will not lead to successful organisational performance.



**Figure 10: Model for High Performance**

These characteristics are fundamental to the high-performing third team. The analysis indicated that they are not substitutable: one cannot be present without the other, for the achievement of high performance. Each of these characteristics is present in the separate constructs in this study, either separately or jointly, e.g. trust is a key component in human capital, social capital (internal and external), while confidence is represented in structural capital and team effectiveness.

The identification of these three defining characteristics: trust, confidence and synergy, further supports the two-part premise of this study regarding high performance: 1) that more than one construct (intellectual capital, leader-member exchange, knowledge sourcing and team effectiveness) is involved, and 2) more than one characteristic (e.g. board experience) is necessary to enable the third team to influence, positively, organisational performance. Identification of these three characteristics as essential elements aligns with a central argument of the research: that it is this *combination of constructs and characteristics* (Figure8) that enables a board to influence organisational performance through the third team. The support provided for the proposition in relation to the third team thus answers the first research question posed in Section 7.2 above: there is a third team and it is through the third team that a board influences organisational performance.

### **7.2.2 Intellectual Capital**

Intellectual capital is an overarching concept that incorporates the constructs of human, social, structural and cultural capital. From the literature, the following proposition was constructed:

#### **Proposition 2:**

*The application of the board's intellectual capital (human, social, structural, cultural) is the contribution ("means") by which the board influences "the end", that is, the performance of the organisation.*

Directors' intellectual capital, captured within the four constructs (human, social, structural and cultural capital) is what determines whether an individual director will make a worthwhile contribution to the third team. Intellectual capital (refer

Figure 8) is displayed as a board-only (left hand side) construct. The study concluded that a particular mix (causal recipe) of characteristics (refer Appendices 1 - 4) present within the four constructs is what separates the board members of high-performing third teams from those of poor performing third teams.

The study shows that achieving the right balance in characteristics is critical to the ability of the directors within the third team to influence the executive who, in turn, influence organisational performance. The study further concludes that overall there is a very limited number of similarities between the causal recipes of characteristics identified for high-performing organisations compared with poor performing organisations. The lack of similarity between the high-performing and poor performing organisations causal recipes emphasises the premise expressed in the proposition that a board's intellectual capital is the "means" by which the board influences the "end", that is, organisational performance.

Identification of the characteristics within the four separate constructs that form intellectual capital is critical to understanding the means by which a board influences organisational performance. However, the identification of the characteristics within the mechanisms (leader-member exchange, knowledge sourcing and team effectiveness) through which the board's influence occurs is equally important. This allows understanding and explanation of the differences in performance between high-performing and poor performing organisations (as defined in this research).

### **7.2.3 Mechanisms Influencing Performance**

The identification of the model of the "third-team" addressed the first research question which asked how boards influence organisational performances (Figure 8). The findings also identified strong support for the second research question, identifying a mix of characteristics comprising intellectual capital that provides the "means" by which the board influences organisational performance through the mechanism of the third team. The characteristics contained within the constructs of leader-member exchange, knowledge sourcing and (board) team effectiveness that



facilitate the use of the directors' intellectual capital in influencing the executive members of the third team, were identified from the literature and led to the following proposition:

**Proposition 3:**

*The board's interaction with the executive is through the Third Team in which the constructs of Leader -Member Exchange, Knowledge Sourcing and Team Effectiveness facilitate the board's influence upon organisational performance.*

The question and associated proposition required each of the three constructs to be examined separately. This enabled the study to identify the individual characteristics within each construct that facilitate the board's influence on the executive.

Shown in Figure 8, leader-member exchange and knowledge sourcing which are located on the right hand side of the overlapping circles, are third team constructs, whereas team effectiveness (board) is on the left hand side as this is a board-only construct along with the board's intellectual capital. The overlapping component shows that the mix of characteristics within each of the constructs influences executive performance.

The results provide strong support for the proposition that leader-member exchange, knowledge sourcing and team effectiveness jointly facilitate the board in influencing the "end", which is organisational performance.

In particular, the results provide sound evidence in support of the proposition that leader-member exchange is important in sustaining and developing the knowledge sourcing activities of adaptation, innovation and / or replication by the executive. The results also firmly establish knowledge sourcing as important in facilitating the exchange and transfer of ideas and knowledge within the third team. This characteristic of executive behaviour is equally as important as leader-member exchange, even though it relies on the latter to facilitate the learning that results

from knowledge sourcing. One without the other does not allow the necessary flow and interaction identified as essential to high-performing third teams.

The effectiveness of the board as a team within the third team is also critical to the facilitation process that these three constructs enable e.g. the cohesion and planning ability of the board, specifically as it relates to succession planning for both the board and executive, which is a critical characteristic in high-performing boards. It is important to note that this interdependence between the constructs is a significant finding. No one construct on its own (see Figure 8) is strong enough to facilitate a board's influence on organisational performance. It takes the combined strengths of each characteristic within the causal recipes of the different constructs to achieve the outcome.

The strong support within the findings for all three of the propositions relates also to both corporate and not-for-profit organisations. The findings of the study clearly identify that there is a significant difference between a corporate third team and that of a not-for-profit third team. In the New Zealand context, corporate characteristics included strategy implementation (team effectiveness), third team members' understanding of the respective team's roles and responsibilities (within the third team), and the board's communication of its level of satisfaction or dissatisfaction to the executive (leader-member exchange). These characteristics are notably absent from the not-for-profit recipe. For the Australian high-performing organisations the characteristics included reliance on directors having general business knowledge and experience (human capital), and a concentration on leadership and strategy (team effectiveness), which were absent from the poor performing organisations' causal recipes. The implications for both practice and theory are significant. The results indicate that the two sectors (corporate and not-for-profit) are not homogeneous and therefore research and practice should not treat them as if they were.

### **7.3 Contribution to Theory**

The previous section drew conclusions from the study in relation to each of the research questions and from these conclusions provided support for each of the associated propositions. The following sections highlight the implications of this study for theory and practice.

#### **7.3.1 Contribution to Main Theories**

Empirical studies have generally focused on one of the three dominant theoretical paradigms (agency theory, stewardship theory and resource dependency theory) as a basis for explaining how a board can influence organisational performance. The main contribution to theory from this study is the understanding and conceptualisation of the team that sits at the “apex of power” in an organisation. This new model contradicts the dominant (agency theory) view that these teams are mutually exclusive and somewhat adversarial.

The conceptualisation of a team from Kozlowski and Bell’s (2003, p. 334) definition identifies the team as a configuration of complementary efforts, producing outcomes beyond the abilities of the individuals. This study adds a new model labelled the third team, as a means of describing the hitherto unacknowledged ‘real’ team sitting at the apex of an organisation.

This model gives a new form to the two separately conceptualised teams (board and executive) that have previously dominated governance research. The third-team model recognises that as a team the board and executive meet episodically to combine efforts synergistically, to produce an outcome that is beyond the capabilities of the individual team (board or executive) or member, thereby fitting the conceptualisation of a team described by Kozlowski and Bell (2003).

The conceptualisation of the team at the apex of the organisation as a blend of what was conceived as two separate teams is important, as it is through this third team that the board influences organisational performance. This influence is exercised through the interaction that occurs between the members (directors and

executive) of the third team by means of the identified constructs of leader-member exchange and knowledge sourcing. Executives then use this newly acquired knowledge by adapting, innovating and / or replicating it for the benefit of the organisation.

Considerable evidence exists from both practitioners and researchers (Barnard, 1938; Drucker, 1954; Collins, 2001; Schein, 1992; Selznick, 1957; Woodward, 1965) that the executive directly influences organisational performance. Nadler and Tushman (1980) identified the level of interaction within the board as important in developing patterns of relationships both between and within groups (board and executive). However, Sundaramurthy and Lewis (2003) suggest that board effectiveness may depend on how interpersonal relationships develop between the board and executive as a team.

Resource dependency theory posits that the key benefit of a board is the access the executive gain to the individual and collective resources (tacit, explicit knowledge, contacts etc) of the directors. The third team is the vehicle by which this interaction occurs, while the mechanisms of leader-member exchange and knowledge sourcing enable the exchange of resources to occur from the directors to the executive.

Confirmation of the third team construct in the present study allows a deeper understanding of how a board influences organisational performance whilst also reflecting the reality of the world in which boards work. The model provides a board with the context in which to gain a deeper understanding of the issues, assumptions and thinking of the executive in their decision-making. This supports the agency theory perspective by allowing the board to be better placed to guide and oversee executive actions.

Finally, the finding that both executives and directors see their professional success as linked to the success of the organisation supports the stewardship perspective on corporate governance as well as the concept of the third team, in relation to a

shared view among third-team members of their fiduciary duty to the organisation they serve.

### **7.3.2 Third Team Model**

The introduction of the third team construct and the rationale for it within the literature strongly supports the results of this study. The results of this study show that the third team is a valid model for understanding the working relationship between the board and executive. The third team model has added a new theoretical dimension to the conceptualisation of board and corporate governance research, as well as coalitions of teams combined for specific tasks. In particular, the third team model conceptualises newly formed teams as being comprised of an amalgamation of two teams rather than individuals. Importantly the third team model recognises that each team within the newly formed third team retains its unique team culture and history.

### **7.3.3 Facilitating Influencers**

Within the wider theoretical environment, the results have confirmed that to investigate team performance by reviewing one construct in isolation is to miss the opportunity to gain a greater understanding of how multiple constructs interact to influence organisational performance. The findings show that researching performance in terms of a single construct (e.g. intellectual capital, leader-member exchange or some other theoretical construct) with the expectation that it alone is a precursor to team performance, is inadequate for explaining how boards influence organisational performance. This study shows that, while it is possible to research a team and their performances using a single construct e.g. leader-member exchange, single constructs comprise only one of a possible number of collaborating elements in the team's ability to perform.

While research streams that have investigated separately the individual constructs of intellectual capital, leader-member exchange, knowledge sourcing and team effectiveness which currently exist in parallel with little cross-fertilisation in the

literature, this research has integrated all four constructs within a collective framework, thereby allowing a greater depth of understanding of the board's role.

#### **7.3.4 Methodological Contribution**

The use of fsQCA as the analysis tool is a useful methodological addition to the field of corporate governance research. Use of the method in this study has allowed the development of causal recipes that view the constructs not as individual concepts - an either/or choice - but as collaborators in a combination that may help explain why some organisations perform better than others do. Further, the use of fsQCA allowed a fine-grained analysis of the individual characteristics and constructs, capable of differentiating between the two countries and sectors with regard to the extent and type of distinguishing characteristics. For example, high LMX is important in high-performing organisations but not all the elements within LMX are equal and they were found to differ between the countries as well as the sectors. This indicates that simply attributing high LMX to high-performing organisations misses the subtle differences evident in countries and sectors as well as between high-performing and poor performing organisations. The use of fsQCA, and from it the development of causal recipes, facilitates a better understanding of the complexities that are involved in understanding how a board influences organisational performance.

### **7.4 Implications for Practice**

#### **7.4.1 Implications for Organisations**

The findings suggest that the third team is a model that is relevant within the corporate and not-for-profit sectors and that it should therefore influence board decisions in relation to how, and when, executive members of the organisation participate in the third team environment. Further to this, the findings show that the assumption that the CEO is the only employee / executive with whom the board should have direct contact (as implied in agency theory), is to fail to utilise the board and its intellectual capital as a strategic resource (as argued from the resource based perspective). Recognition of the role of both board and executive as a combined third team that adds value to the organisation has implications for the

approach to, and questions asked during, director selection and board review processes.

#### **7.4.2 Implications for Boards**

The implications for board reviews are significant, given that the boards of poor performing organisations consistently overestimated their effectiveness. The disparity in how boards and executives in poor performing organisations in the study viewed the board's effectiveness indicates a potential for board incompetence to impact negatively on performance. By comparison, the results concerning the view held by both boards and executives in high-performing organisations about their board's effectiveness suggest that agreement between them on this point is more likely to be consistent.

A secondary implication involves succession planning for both directors and executives. The findings show that developing high levels of synergy, trust and confidence within the third team were important to organisational success. The results provide strong evidence showing that organisations whose boards take a proactive approach to including the executive within the third-team environment outperform those that do not. The culture of the board was found to be an important contributor to these levels of synergy, trust and confidence within the third team. These findings highlight the importance of the executive and director interactions in both formal and informal settings.

The third area of importance from these findings is confirmation of the mix of characteristics identified in each of the causal recipes for each sector (refer Appendices 1-4) that facilitates a boards influence on organisational performance. The findings show that while directors' skill sets are important, the synergy, trust and confidence displayed within the third-team are also key prerequisites for success.

These findings have significant implications for the practice of governance in both corporate and not-for-profit organisations. They argue against the unwritten rule

that the board has only one employee and only one point of contact with the operational side of the organisation – that is, the CEO.

These findings should also be of interest to shareholders and major stakeholders. For these groups, the results address the concern regarding how to identify boards that will add value and influence positively organisational performance. If a board does not work inclusively and collaboratively with the executive in the third team, their chances of influencing organisational performance and creating shareholder and stakeholder value are diminished.

### **7.4.3 Implications for Executive Search Firms**

Combining these implications for the board (7.4.2) with those of the organisation (7.4.1) indicates that executive search firms will also benefit from these results. The results show, for example, that within each sector (corporate and not-for-profit) the social and cultural characteristics of the board and the individual directors influence the ability of the third team to use the human capital (innate and learned abilities, expertise and knowledge) of the directors.

These results signal indicate to professionals who assist boards in director recruitment and board appraisals that paying more attention to understanding and identifying the traits a director requires for effective assimilation into the third team may help boards become more effective. Before recruitment begins, the current board's particular characteristics in relation to its intellectual capital, leader-member exchange, knowledge sourcing and team effectiveness need to be identified.

As discussed earlier this process should include the executive as they form the key link between the board and organisational performance. The identification of the required competencies on the board assists in the development of the board as a whole and contributes to a more meaningful recruitment and board development plan. In this way, the competencies needed to fill board positions and enhance



board effectiveness can be more closely aligned with the organisation's changing strategic circumstances.

#### **7.4.4 Implications for Policy**

The identification of key differences between the corporate and not-for-profit causal recipes is a further important finding of this research. In comparing across the two sectors and countries, the differing characteristics and/or their respective emphases have significant implications for practitioners, regulators and government. The finding with regard to the differences between the corporate and non-profit sectors indicates that a one "one-size-fits-all" approach to regulation does not account for the uniqueness of the different sectors.

Specific examples of these differences include, the not-for profit's sector's reliance on the ability of directors to build networks with strategic partners whereas corporate organisations prefer their directors to bolster their community image. Diversity in the causal recipe for human capital provided the clearest indication that the two sectors are not homogeneous. The not-for-profit sector organisations in the sample preferred directors with industry-specific knowledge (of the specific sport / charity) where corporate organisations preferred their directors to have a wider general business knowledge.

The implications for regulators are that when developing policy the corporate and not-for-profit sectors should be treated separately. For example, in seeking to improve reporting standards for the not-for-profit sector. The reporting requirements should not merely emulate those of the corporate sector but take into account the specific characteristics such as this research has identified.

#### **7.4.5 Implications for Executives**

For the CEOs of the organisations analysed in this research, the findings show that their senior executives and, through them, organisational performance, benefit from interaction with and exposure to the store of knowledge held within the board. Knowledge sourcing is an important aspect of high-performing organisations

but it needs to be combined with other key characteristics (e.g. collaboration, trust) before it can influence the executive and impact on organisational performance. For a CEO or board this means that restricting executive access to the board and vice versa is counterproductive, as is underscored by the differences between the high-performing and poor performing organisations in the study.

While the implications for theory and practice from the study are many, the research was designed to focus on a defined set of parameters in relation to examining the link between the board and organisational performance. This means that there are other theoretical lenses, conceptualisations and methodological approaches that could be used to shed further light on this interaction, or provide a different or wider view of the linkage and how it might influence organisational performance. The limitations of the present study are discussed in the following section.

## **7.5 Research Limitations**

### **7.5.1 Generalisability**

While the research was expansive with its inclusion of both the corporate and not-for-profit sectors, limiting the corporate sample to only those within either the NZX or ASX top 50 indices may limit the generalisability of the results to the wider business community. However, in general, the regulations and expectations required of top 50 companies are the same as those expected of all listed companies and the overarching expectation of stakeholders for improved performance does not diminish because a company is outside the NZX or ASX top 50 index. A method that may mitigate this limitation for future research would be to widen the sample to include a more diverse cross-section of the business community. Nevertheless, even with limiting the corporate sample to the NZX and ASX 50 indices a degree of generalisability to the wider corporate sector can be applied with reasonable confidence.

Generalisability in the not-for-profit sector may also be a limiting factor due to the diversity of organisations covered. The concerns with regard to the limitations of

the research would be less than for those of the corporate sector, because the majority of the not-for-profit sample comprised national sports organisations. A method to mitigate this limitation would be too narrow the sample to, for example, only those organisations whose athletes attended Olympic Games. Nevertheless, even with this identified limitation a degree of generalisability to the wider not-for-profit sector can also be applied with reasonable confidence.

### **7.5.2 Survey Instrument**

The collection of data for fsQCA analysis was conducted using a self-administered survey. This was distributed via a website through which the participants logged in to complete the survey. Aside from ensuring that the surveys were completed in full, there were no other controls on how the respondents responded to or interpreted the questions. This may have resulted in the survey results being influenced by factors that were unaccounted for in this study.

Combining the samples of cultural capital, internal and external social capital and structural capital because of the numbers of cases required for fsQCA analysis. This may have limited the fine-grained analysis otherwise available for those constructs. Methods that may overcome this limitation could include taking a less stringent approach to the qualification criteria for high-performing cases, or substantially increasing the size of the research sample to ensure that the number of cases achieving qualification as high-performing meets the requirement for fsQCA analysis of each sample individually. The primary drawback to the combining of samples was that the recipes developed were applicable only to the combined corporate and not-for-profit sectors, rather than for each sector individually. However, the analysis identified a significant difference between the causal recipes of the high-performing and poor performing causal recipes. Determining the difference between the causal recipes of high-performing and poor performing organisations was the primary aim of the research. Therefore, while the samples were combined for analysis, this combination has not detracted from the overall focus of the research.

### **7.5.3 Measures**

A significant amount of research (Brian K. Boyd, 1995; Dalton et al., 1998; Hermalin & Weisbach, 1991; Hillman & Dalziel, 2003; Rechner & Dalton, 1991) has used financial measures as proxies for board performance. From this literature a number of measures may be used in conjunction with or in replacement of those used in this research to develop a more robust model for defining high performance. This may be especially relevant in the corporate sector where there is a range of other financial measures that could be used. Such measures might include earnings before interest, tax, depreciation, and amortisation (EBITDA) or total shareholder returns (TSR). Nevertheless, even with limiting the corporate sample to the NZX and ASX Top 50 indices and applying the identified measures. A degree of generalisability to the wider corporate sector can be applied from the results.

### **7.6 Directions for Future Research**

While this study has cast some light on the complexities of how boards influence organisational performance, there are areas where further research would enhance the understanding of the board, its interactions with the executive and its influence on organisational performance. Future research could seek to identify ways that allow researchers to be “embedded” in an organisation’s board, just as reporters are embedded in military units, to better reflect and understand the issues and problems in this context and how they are dealt with.

Additional research into the various characteristics that influence team performance and how they may or may not be relevant to the third team would also add value to our understanding of board/ executive interaction. The third team model offers researchers a way of conceptualising the upper echelons of organisations as a collective rather than a hierarchy within a hierarchy and, as such, the model recognises their synergistic strength. Fuzzy set qualitative analysis has proven valuable method in bringing to this research a depth of understanding of the mix of characteristics that facilitate the achievement of this synergy. Examples of future research initiatives employing fuzzy set qualitative analysis could include:

- Using the constructs from this study to research governance (corporate and not-for-profit) failures. This may help not only to pinpoint key factors associated with organisational corporate failure in order to understand and address them, but also to confirm the key constructs essential to corporate success. A better understanding of the characteristics of organisational failure may also enable a deeper understanding of the requirements for organisational success
- Replicating the design and method used in this study in research on mid-tier corporates from the New Zealand and / or Australian stock exchanges, as a comparison with the findings from the top 50 companies. This would enable a comparison to be made between the findings, leading to identification of the core characteristics shared by all these organisations
- Research that further investigates the constructs of synergy, trust and confidence in order to better understand their importance for, and influence on, the third team
- Using the four constructs (leader-member exchange, intellectual capital, knowledge sourcing and team effectiveness) either together or separately to research commonalities or variances in distribution of the characteristics identified within this study within the three separate teams (board, executive and third team) that make up the upper echelon of an organisation.

## **7.7 Concluding Comments**

A review of relevant literature highlighted uncertainty with regard to the question of how boards influence the performance of the organisation they govern. A conceptual framework was derived from this literature as a basis for addressing this question. As part of the framework for the study, three theoretical propositions were developed, relating to the constructs of the third team, team member relations (leader-member exchange), knowledge management (knowledge

sourcing) and team effectiveness. Based on the literature, these constructs were theorised as key means by which the board influences organisational performance through the executive. The four constructs were examined in this study using data gathered from both the corporate and not-for-profit sectors in New Zealand and Australia.

The study provided strong evidence for the concept of the third team capable of describing the team that is formed when the board and executive meet, as well as being the vehicle through which the board is able to exert influence over the executive. The study also showed that there was a key difference between the causal recipes (mix of characteristics) of high-performing corporate and not-for-profit organisations when comparing these causal recipes with those of poor performing organisations. Further, the results showed significant differences between the New Zealand causal recipes within both sectors when compared with the same sectors in the Australian sample.

Another significant finding from within the causal recipes of high-performing organisations was that the third teams all exhibited three defining characteristics: synergy, trust and confidence. These characteristics help define and allow the other characteristics within the causal recipes to collaborate in facilitating a board's influence over the executive who in turn influence organisational performance.

The ability for a board to influence the performance of the organisation they govern ultimately depends not on one single characteristic but on a complex mix involving multiple characteristics and multiple constructs. Importantly, in response to the research question posed at the beginning of this thesis, the study has identified that it is not just a mixture of constructs, but *specific characteristics from within each construct that combine* to become the accepted behaviours that are important in facilitating the board's ability to influence organisational performance. This has led to the understanding that it is the *board and executives combined* whose behavioural governance influences organisational performance.

## References

- Albaum, G., Rogers, R. D., Roster, C., & Yu, J. H. (2007). Simple rating scale formats: Exploring extreme response. *International Journal of Market Research*, 49(5).
- Alexiev, A. S., Jansen, J. J. P., VandenBosch, F. A. J., & Volberda, H. W. (2010). Top management team advice seeking and exploratory innovation: The moderating role of TMT heterogeneity. *Journal of Management Studies*(Published Online: 29 Jan 2010).
- Baliga, B. R., Moyer, N. C., & Rao, R. S. (1996). CEO duality and firm performance: Whats the fuss? *Strategic Management Journal*, 17, 41-53.
- Barnard, C. (1938). *The functions of the executive*. Cambridge MA: Harvard University Press.
- Bass, B. M. (1990). *Bass & Stogdill's handbook of leadership*. New York: Free Press.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New York: Commerce Clearing house.
- Bhagat, S., & Black, B. (1999). The uncertain relationship between board composition and firm performance. *Business Lawyer*, 54(3), 921.
- Blair, M. M., & Stout, L. A. (1999). A team production theory of corporate law. *Virginia Law Review*, 85(2), 247-328.
- Bontis, N. (1999). Managing organizational knowledge by diagnosing intellectual capital: Framing and advancing the state of the field. *Int. J. Technology Management*, 18(5,6,7,8), 443-462.
- Boyd, B. K. (1995). CEO duality and firm performance: A contingency model. *Strategic Management Journal*, 16(4), 301-312.
- Boyd, B. K., Haynes, K. T., & Zona, F. (2010). Dimensions of CEO-board relations. *Journal of Management Studies*, Published Online: (15 Apr 2010).
- Brown, L. D., Robinson, J. M., & Caylor, M. L. (2004). *Corporate governance and firm performance*. Georgia State University.
- Brown, S. L., & Eisenhardt, K. M. (1997). The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations. *Administrative Science Quarterly*, 42.

- Carpenter, M. A., Geletkanycz, M. A., & Sanders, W. G. (2004). Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition. *Journal of Management*, 30(6), 749-778.
- Carver, J. (1997). *Boards that Make a Difference: A new design for leadership in nonprofit and public organizations* (Vol. 2nd edn). New York: Jossey-Bass, John Wiley.
- Clarke, P. N., & Yaros, P. S. (1988). Research blenders: Commentary and response. *Nursing Science Quarterly*, 1, 147-149.
- Cochran, P. L., Wood, R. A., & Jones, T. B. (1985). The composition of boards of directors and incidence of golden parachutes. *Academy of Management Journal*, 28(3), 664-671.
- Cole, M. S., Schaninger, W. S., & Harris, S. G. (2002). The workplace social exchange Network. *Group & Organization Management*, 27(1), 142-167.  
doi:10.1177/1059601102027001008
- Coleman, J. S. (1988). Social capital in the creation of human capital. *Am. J. Sociol*, 94, S95-121.
- Collins, J. C. (2001). *Good to Great: Why some companies make the leap and others don't*. New York: Harper Collins Publishers.
- Conger, J. A., Lawler, E. E., & Finegold, D. L. (2001). *Corporate Boards: New strategies for adding value at the top*. San Francisco: Jossey-Bass.
- Canyon, M. J., & Peck, S. I. (1998). Board size and corporate performance: evidence from European countries. *The European Journal of Finan*, 4(3), 291-304.
- Crilly, D. (2011). Predicting stakeholder orientation in the multinational enterprise: A mid-range theory. *Journal of International Business Studies*, 42, 694-717.
- Crossland, C., & Hambrick, D. C. (2007). How national systems differ in their constraints on corporate executives: a study of CEO effects in three countries. *Strategic Management Journal* 28(8), 767-789.
- Cycyota, C. S., & Harrison, D. A. (2006). What (Not) to expect when surveying executives. *Organizational Research Methods*, 9(2), 133-160.  
doi:10.1177/1094428105280770
- Daily, C. M., Dalton, D. R., & Cannella Jr, A. A. (2003). Corporate governance: decades of dialogue and data. *Academy of Management Review*, 28(3), 371-382.



- Daily, C. M., & Schwenk, C. (1996). Chief executive officers, top management teams, and boards of directors: Congruent or countervailing forces? *Journal of Management*, 22(2), 185-208.
- Dalton, D. R., Daily, C. M., Ellstrand, A. E., & Johnson, J. L. (1998). Meta-analytic reviews of board composition leadership structure and financial performance. *Strategic Management Journal*, 19(3), 269-290.
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, 22, 20-47.
- DiMaggio, P. J., & Powell, W. (1983). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, 147-160.
- Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: concepts, evidence, and implications. *Academy of Management Review*, 20, 65-91.
- Drucker, P. (1954). *The principles of management*. New York: Harper Collins Publishers.
- Druckman, J. N. (2001). Using credible advice to overcome framing effects. *Journal of Law, Economics, and Organization*, 17(1), 62-82. doi:10.1093/jleo/17.1.62
- Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, 88, 288-307.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26, 301-325.
- Feldman, D. (1984). The development and enforcement of group norms. *Academy of Management Review*, 9, 47-53.
- Finegold D, Bensen G, & Hecht D. (2007). Corporate boards and company performance: Review of research in light of recent reforms. *Corporate Boards and Company Performance*, 15(5), 865-875.
- Finkelstein, S., & Mooney, A. C. (2003). Not the usual suspects: How to use board process to make boards better. *Academy of Management Executive*, 17(2), 101-113.
- Fiss, P. (2007). A set-theoretic approach to organisational configurations. *Academy of Management Review*, 32(4), 1180-1198.

- Fletcher, K. B. (1992). Effective boards: How executive directors define and develop them. *Nonprofit Management and Leadership*, 2(3), 283-293. doi:10.1002/nml.4130020307
- Forbes, D., & Milliken, F. (1999). Cognition and corporate governance: understanding boards of directors as strategic decision-making groups. *Academy of Management Review*, 24(3), 489-505.
- Friedrich, T. L., Vessey, W. B., Schuelke, M. J., Ruark, G. A., & Mumford, M. D. (2009). A framework for understanding collective leadership: The selective utilization of leader and team expertise within networks. *The Leadership Quarterly*, 20(6), 933-958. doi:10.1016/j.leaqua.2009.09.008
- Gabrielsson, J., & Winlund, H. (2000). Boards of directors in small and medium-sized industrial firms: examining the effects of the board's working style on board task performance. *Entrepreneurship & Regional Development*, 12(4), 311-330.
- George, A. (1979). Case studies and theory development: The method of structured, focussed comparison. In P. G. Lauren (Ed.), *In Diplomacy: New approaches in history theory and policy*. New York: Free Press.
- Gill, M. (2001). *Governance do's & don'ts lessons from case studies on twenty Canadian non-profits. Final report*. Ottawa Canada: Institute on Governance.
- Golensky, M. (1993). The board-executive relationship in nonprofit organizations: Partnership or power struggle? *Nonprofit Management and Leadership*, 4(2), 177-191. doi:10.1002/nml.4130040205
- Graen, & Uhl-Bien, M. (1991b). Partnership-making applies equally well to teammate-sponsor teammate-competence network, and teammate relations. *Journal of Management Systems*, 3(3), 49-54.
- Graen, G. (1976). Role making processes in complex organisations. In M. D. Dunnette (Ed.), *Handbook of industrial and organisational psychology* (pp. 1201-1245). Chicago: Rand-McNally.
- Graen, G., & Cashman, J., & J. Hunt & L. Larson. (1975). *A role-making model of leadership in formal organisations: A developmental approach* [Leadership frontiers]. Kent: Kent State University.
- Graen, G., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219-247.

- Graen, G. B., & Scandura, T. A. (1987). Toward a psychology of dyadic organizing. In L. L. Cummings & B. M. Shaw (Eds.), *Research in organisational behaviour* (Vol. 9, pp. 175-208). Greenwich CT: JAI Press.
- Gray, P. H., & Meister, D. B. (2004). Knowledge sourcing effectiveness. *Management Science*, 50(6), 821-834.
- Gray, P. H., & Meister, D. B. (2006). Knowledge sourcing methods. *Information and Management*, 43(2), 142-156.
- Greckhamer, T. (2011). Cross-cultural differences in compensation level and inequality across occupations: A set-theoretic analysis. *Organization Studies*, 32(1), 85-115. doi:10.1177/0170840610380806
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation design. *Educational Evaluation and Policy Analysis*, 11(3), 255-274.
- Gupta, K., Krishnamurti, V., & Tourani-Rad, A. (2010). *Is corporate governance relevant during the financial crisis? Cross-country evidence*. Finance. AUT University. Auckland.
- Hambrick, D. C. (2007). Upper echelons theory: an update. *Academy of Management Review*, 32(2), 334-343.
- Hambrick, D. C., & D'Aveni, R. A. (1992). Top team deterioration as part of the downward spiral of large corporate bankruptcies. *Management Science*, 38(10).
- Hambrick, D. C., & Finkelstein, S. (1987). Managerial discretion: a bridge between polar views of organizational outcomes. *In Research in Organizational Behavior*, 9, 369-406.
- Hannan, M. T., & Freeman, J. H. (1989). *Organizational ecology*. Cambridge, MA: Harvard University Press.
- Hansen, M. T. (1999). The Search-Transfer Problem: The role of weak ties in sharing knowledge across organization subunits. *Administrative Science Quarterly*, 44.
- Harrison, J. R., Torres, D. L., & Kukalis, S. (1988). The changing of the guard: turnover and structural change in the top-management positions. *Administrative Science Quarterly*, 33(2), 211-232.
- Heracleous, L. (1999). The board of directors as leaders of the organisation. *Corporate Governance: An International Review*, 7(3), 256-265. doi:10.1111/1467-8683.00157

- Heracleous, L. (2001, July ). *What is the impact of corporate governance on organisational performance?* Presented at the meeting of the 3rd International Conference on Corporate Governance and Direction, Henley Management College.
- Hermalin, B. E., & Weisbach, M. S. (1991). The effects of board composition and direct Incentives on firm performance. *Financial Management*, 20, 101-112.
- Hermalin, B. E., & Weisbach, M. S. (2003). Boards of directors as an endogenously determined institution: A survey of the economic literature. *Economic Policy Review*, 9(1).
- Herman, R. D., & Renz, D. O. (2000). Board practices of especially effective and less effective local non-profit organisations. *American Review of Public Administration*, 30(2), 146-160
- Herman, R. D., & Renz, D. O. (2008). Advancing nonprofit organizational effectiveness research and theory: Nine theses. *Nonprofit Management and Leadership*, 18(4), 399-415. doi:10.1002/nml.195
- Herman, R. D., & Tulipana, F. P. (1985). Board-staff relations and perceived effectiveness in nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, 14(4), 48-59. doi:10.1177/089976408501400406
- Hillman, A. J., Cannella, A. A., & 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, 235-256.
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3.), 383-396.
- Hoegl, M., & Gemuenden, H. G. (2001). Teamwork quality and the success of innovative projects: A Theoretical Concept and Empirical Evidence. *Organization Science*, 12(4), 435.
- Hofstede, G., &. (1980). *Cultures consequences: International differences in work related values* Beverley Hills, CA Sage.
- Howe, K. R. (1988). Against the quantitative-qualitative incompatibility thesis or dogmas die hard. *Educational Researcher*, 17, 10-16.
- Hoye, R. (2004). Leader-member exchanges and board performance of voluntary sport organizations. *Nonprofit Management & Leadership*, 15(1), 55-70.

- Hoye, R., & Cuskelly, G. (2003). Board --executive relationships within voluntary sport organisations. *Sport Management Review*, 6(1), 53-74.
- Hoye, R., & Cuskelly, G. (2003). Board power and performance within voluntary sport organisations. *European Sport Management Quarterly*, 3(2), 103-119. doi:10.1080/16184740308721943
- Hoye, R., & Doherty, A. (2011). Non profit sport board performance: a review and dirctions for future research. *Journal of Sport Management*, 25, 272-285.
- Hsueh-Liang, W. (2008). How do board--CEO relationships Influence the performance of new product introduction? Moving from single to interdependent explanations. *Corporate Governance: An International Review*, 16(2), 77-89.
- Ingles, S. (1997a). Roles of the board in amateur sport organisations. *Journal of Sport Management*, 11.
- Jackson, G. (2003). Corporate governance in Germany and Japan: Liberalization pressures and responses. In Y. Kozo & W. Streeck (Eds.), *Corporate governance in Germany and Japan: Liberalization pressures and responses* (pp. 261-305). Ithaca, New York: Cornell University Press.
- Jackson, G. (2005). Employee representation in the board compared: A fuzzysets analysis of corporate governance, unionism and political institutions. *Industrielle Beziehungen*, 12, 1-28.
- Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3(4), 305-360.
- Johnson, J. L., Daily, C. M., & Ellstrand, A. E. (1996). Boards of directors: a review and research agenda. *Journal of Management Studies*, 22(3), 409-438.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(14).
- Johnson, R. B., & Turner, L. A. (2003). *Data collection strategies in mixed methods research*. Thousand Oaks CA: Sage.
- Kang, H., Cheng, M., & Gray, S. J. (2007). Corporate governance and board composition: diversity and independence of Australian boards. *Corporate Governance: An International Review*, 15(2), 194-207.
- Keenan, J., & Aggestam, M. (2001). Corporate governance and intellectual capital: some conceptualisations. *Corporate Governance: An International Review*, 9(4), 259.

- Keller, T., & Dansereau, F. (1995). Leadership and empowerment: A social exchange perspective. *Human Relations*, 48, 127-146.
- Kent, R. A. (2008). *Using fsQCA: A brief guide and workshop for fuzzy-set qualitative comparative analysis*. University of Stirling. Stirling.
- Kesner, I. F. (1987). Directors' stock ownership and organizational performance : an investigation of Fortune 500 companies. *Journal of Management Studies*, 13(3), 499-508.
- Kim, Y., & Cannella, A. A. (2008). Toward a social capital theory of director selection. *Corporate Governance: An International Review*, 16(4), 282-293.  
doi:10.1111/j.1467-8683.2008.00693.x
- Klein, A. (2002). Economic determinants of audit committee independence. *Journal of Law and Economics*, 77(2), 435-452.
- Kluckhohn, F. R., & Strodtbeck, F. L. (1961). Variations in value orientations. In. New York : Harper & Row.
- Knights, D., & Willmott, H. (1993). Conceptualizing leadership processes: A study of senior managers in a financial services company. *Journal of Management Studies*, 29(6), 761-782.
- Koenig-Archibugi, M. (2004). Explaining government preferences for institutional change in EU foreign and security policy. *International Organization*, 58, 137-174.
- Kogut, B., MacDuffie, J. P., & Ragin, C. C. (2004). Prototypes and strategy: Assigning causal credit using fuzzy sets. *European Management Review*, 1, 114-131.
- Kozlowski, S. W. J., & Bell, B. S. (2003). *Work groups and teams in organizations*: John Wiley & Sons, Inc. Retrieved from <http://dx.doi.org/10.1002/0471264385.wei1214>.  
doi:10.1002/0471264385.wei1214
- Lane, P. J., Cannella, A. A., & Lubatkin, M. H. (1998). Agency problems as antecedents to unrelated mergers and diversification: Amihud and Lev reconsidered. *Strategic Management Journal*, 19.
- Langton, N., & Robbins, S. P. (2007). *Organizational behaviour: concepts, controversies, applications*. Toronto: Pearson.
- Laurent, A. (1983). The cultural diversity of western conceptions of management. *International Study of Management and Organization*, 13, 75-96.

- Leblanc, R., & Gillies, J. (2005). *Inside the boardroom: How boards really work and the coming revolution in corporate governance*. Canada: Wiley.
- Linden, R., & Graen, G. B. (1980). Generalizability of the vertical dyad linkage model of leadership. *Academy of Management Journal*, 23, 451-432.
- London, M., & Sessa, N. (2007). How groups learn, continuously. *Human Resource Management*, 46(4), 651-669.
- Lorsch, J. W., & MacIver, E. (1989). *Pawns or potentates: The reality of America's corporate boards*. Boston, MA: Harvard Business School Press.
- Mackey, A. (2005). *How much do CEOs influence firm performance - really?* Ohio State University - Fisher College of Business. Columbus. Retrieved from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=816065](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=816065)
- Martin, R., Thomas, G., Charles, K., Epitropaki, O., & McNamara, R. (2005). The role of leader-member exchanges in mediating the relationship between locus of control and work reactions. *Journal of Occupational & Organizational Psychology*, 78(1), 141-147.
- Matell, M. S., & Jacoby, J. (1971). Is There an optimal number of alternatives for likert scale items? Study I: Reliability and Validity. *Educational and Psychological Measurement*, 31(3), 657-674.  
doi:10.1177/001316447103100307
- Mavis, B. E., & Brocato, J. J. (1998). Postal surveys versus electronic mail surveys. *Evaluation & the Health Professions*, 21(3), 395-408.  
doi:10.1177/016327879802100306
- McDonald, M. L., & Westphal, J. D. (2003). Getting by with the advice of their friends: CEOs' advice networks and firms' strategic responses to poor performance. *Administrative Science Quarterly*, 48.
- McIntyre, M. L., Murphy, S. A., & Mitchell, P. (2007). The top team: examining board composition and firm performance. *Corporate Governance*, 7(5), 547-561.
- Miles, M., & Huberman, A. (1994). *Qualitative data analysis*. Thousand Oaks: Sage Publications.
- Miller-Millesen, J. (2003). Understanding the behavior of nonprofit boards of directors: A theory-based approach. *Nonprofit and Voluntary Sector Quarterly*, 32(4), 521-547.

- Mintzberg, H. (1982). If you're not serving Bill and Barbara, then you're not serving leadership. In J. G. Hunt, U. Sekaran, & C. A. Schriesheim (Eds.), *Leadership: beyond establishment views*. Carbondale: Southern Illinois University press.
- Mizruchi, M. S. (1983). Who controls whom? An examination of the relationship between management and boards of directors in large American corporations. *Academy of Management Review*, 8, 426-435
- Mohrman, S., Cohen, S., & Mohrman, M. A. (1995). *Teams and technology*. MA: Harvard Business School Press.
- Monks, R. A. G., & Minow, N. (1995). *Corporate governance*. Oxford: Blackwell Business.
- Nadler, D., & Tushman, M. L. (1980). A Model for diagnosing organisational behaviour. *Organizational Dynamics*, 9(2), 35-51.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2), 242-266.
- Nicholson, G., & Kiel, G. (2003). *A framework for diagnosing board effectiveness*. Corporate Governance and Board Leadership Conference. Henley Management College, London.
- Nicholson, G., & Kiel, G. (2004). Breakthrough board performance: how to harness your board's intellectual capital[1]. *Corporate Governance An International Review*, 4(1), 5-23.
- Nicholson, G. J., & Kiel, G. C. (2007). Can directors impact performance? A case-based test of three theories of corporate governance. *Corporate Governance An International Review*, 15(4), 585-608.
- Northouse, P. G. (2001). *Leadership theory and practice* (Vol. 2nd ed). Thousand Oaks, Calif: Sage.
- Onwuegbuzie, A. J., & Leech, N. L. (2004b February). *Enhancing the interpretation of significant findings: The role of mixed methods research*. presented at the meeting of the Annual meeting, Eastern Educational Research Association.
- Oxford, D. "coalition". *Oxford Dictionaries*. April 2010: Oxford University Press. Retrieved from <http://oxforddictionaries.com/definition/coalition>. Retrieved from Oxford University Press (<http://oxforddictionaries.com>) database.
- Pajunen, K. (2008). Institutions and inflows of foreign direct investment: A fuzzy-set analysis. *Journal of International Business Studies*, 39, 652-669.



- Patton, M. (2002). *Qualitative research and evaluation methods*. Thousand Oaks: Sage Publications
- Payne, G. T., Benson, G. S., & Finegold, D. L. (2009). Corporate board attributes, team effectiveness and financial performance. *46*, 4(704-731).
- Pearce, C. L., & Conger, J. A. (2003). All those years ago: The historical underpinnings of shared leadership. In C. L. Pearce & J. A. Conger (Eds.), *Shared Leadership: Reframing the hows and the whys of leadership* (pp. 1-18). Thousand Oaks CA: Sage.
- Pettigrew, A. (1992). On studying managerial elites. *Strategic Management Journal*, *13*, 163-182.
- Pfeffer, J., & Salancik, G. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper & Row.
- Phillips, J. R. (1988b). Research blenders. *Nursing Science Quartley*, *1*, 4- 5.
- Plumptre, T., & Laskin, B. (2003). From jeans to jackets: Navigating the transition to more systematic governance in the voluntary sector.
- Provan, K. G. (1980). Board power and organizational effectiveness among human service agencies. *Academy of Management Journal*, *23*, 221-236.
- Pulakos, E. D., Dorsey, D. W., & Mueller-Hanson, R. A. (2005). PDRI's adaptability research program. *The Industrial-Organizational Psychologist*, *431*, 25-32.
- Pye, A. (2004). The importance of context and time for understanding board behavior. *International Studies of Management and Organisation*, *34*(2), 63-89.
- Pye, A., & Camm, G. (2003b). Non-executive directors: Moving beyond the "One-size-fits-all" View. *Journal of General Management*, *28*, 52-70.
- Pye, A., & Pettigrew, A. (2005). Studying board context, process and dynamics: some challenges for the Future. *British Journal of Management, Supplement 1*, *16*, 27-38.
- Ragin, C., &. (2005). *From fuzzy sets to crisp set tables*. Arizona: University of Arizona.
- Ragin, C. (2008). *Redesigning social inquiry: fuzzy sets and beyond*. Chicago:: University of Chicago Press.
- Ragin, C., Drass, K. A., & Davey, S. (2006). *Fuzzy-set/qualitative comparative analysis 2.0*. Department of Sociology, University of Arizona. Tucson, Arizona.

- Ragin, C., & Sonnett, J. (2004). *Between complexity and parsimony: limited diversity, counterfactual cases and comparative analysis*. Wiesbaden: V S Verlag fur Sozialwissenschaften.
- Rechner, P. K., & Dalton, D. R. (1991). CEO duality and organizational performance: a longitudinal analysis. *Strategic Management Journal*, 12(2), 155-160.
- Reichardt, C. S., & Rallis, S. F. (1994). Qualitative and quantitative inquiries are not incompatible: A call for a new partnership. *New Directions for Program Evaluation*, 61, 85-91.
- Rhoades, D. L., Rechner, P. L., & Sundaramurthy, C. (2000). Board composition and financial performance: A meta-analysis of the influence of outside directors. *Journal of Managerial Issues*, 1(XII), 76-91.
- Ritchie, W. J., & Kolodinsky, R. W. (2003). Nonprofit organization financial performance measurement: An evaluation of new and existing financial performance measures. *Nonprofit Management and Leadership*, 13(4), 367-381.
- Roberts, J., McNulty, T., & Stiles, P. (2005). Beyond agency conceptions of the work of the non-executive director: Creating accountability in the boardroom. *British Journal of Management, Supplement 1, Vol. 16*, 5-26.
- Rubin, H., & Rubin, I. (2005). *Qualitative interviewing: The art of hearing data* (Second ed.). Thousand Oaks: Sage Publications.
- Samra-Fredericks, D. (2000a). An analysis of the behavioural dynamics of corporate governance – a talk-based ethnography of a UK manufacturing ‘board-in-action’. *Corporate Governance: An International Review*, 8(4), 16.
- Samra-Fredericks, D. (2000b). Doing ‘boards-in-action’ research — an ethnographic approach for the capture and analysis of directors’ and senior managers’ interactive routines. *Corporate Governance An International Review*, 8(3), 14.
- Schein, E. H. (1992). *Organisational culture and leadership*. San Francisco CA: Jossey-Bass.
- Seers, A. (1989). Team-member exchange quality: A new construct for role-making research. *Organizational behaviour and human decision processes*, 43(1).
- Selznick, P. (1957). *Leadership in administration*. New York: Harper & Row.

- Shih, T.-H., & Xitao Fan. (2008). Comparing Response Rates from Web and Mail Surveys: A Meta-Analysis. *Field Methods*, 20(3), 249-271.  
doi:10.1177/1525822x08317085
- Siciliano, J. I. (1996). The relationship of board member diversity to organizational performance. *Journal of Business Ethics*, 15(12), 1313-1320.
- Siciliano, J. I. (1997). The relationship between formal planning and performance in nonprofit organizations. *Nonprofit Management and Leadership*, 7(4), 387-403.
- Sieber, S. D. (1973). The integration of fieldwork and survey methods. *American Journal of Sociology*, 73, 1335-1359.
- Smith, K. G., Smith, K. A., Olian, J., Sims, H., OBannon, D , & Scully, J. (1994). Top management team demography and process: the role of social integration and communication. *Administrative Science Quarterly*, 39, 412-438.
- Sonnenfeld J, A. (2002). What makes geat boards great. *Harvard Business Review*, 80(9), 106-113.
- Steiner, D. D. (1997a). Attributions in leader-member exchanges: Implications for practice. *European Journal of Work & Organizational Psychology*, 6(1).
- Steiner, D. D. (1997b). Value perceptions in leader-member exchange. *Journal of Social Psychology*, 128, 611-618.
- Stiles, P. (2001). The Impact of the board on strategy: An empirical examination. *Journal of Management Studies*, 38(5), 624-650.
- Stone, M. M., Bigelow, B., & Crittenden, W. (1999). Research on strategic management in nonprofit organizations. *Administration and Society*, 31(3), 378-423.
- Sundaramurthy, C., & Lewis, M. (2003). Control and collaboration: Paradoxes of governance. *Academy of Management Review*, 28, 397-415.
- Tetlock, P. E., & A, B. (Eds.). (1996). *Counterfactual thought experiments in world politics: Logical, methodological, and psychological perspectives*. Princeton, NJ: Princeton.
- Tushman, M. L., & Anderson, P. (1986). Technological discontinuities and organizational environments. *Administrative Science Quarterly*, 31(3), 439-465.
- Useem, M. (1984). *The inner circle: Large corporations and the rise of business political activity in the U.S. and U.K.* New York: Oxford University Press.

- Useem, M. (1993). *Executive defense: Shareholder power and corporate reorganization*. Cambridge, Mass: Harvard University Press.
- Van der Walt, N., & Ingley, C. (2001). Evaluating board effectiveness: The changing context of strategic governance. *Journal of Change Management*, 1(4), 313.
- Vandewaerde, M., Voordeckers, W., Lambrechts, F., & Bammens, Y. (2011). Board team leadership revisited: A conceptual model of shared leadership in the boardroom. *Journal of Business Ethics*, 104(3), 403-420.  
doi:10.1007/s10551-011-0918-6
- Wageman, R. (1995). Interdependence and group effectiveness. *Administrative Science Quarterly*, 40, 145-180.
- Wajcman, J., & Martin, B. (2002). Narratives of Identity in modern management: The corrosion of identity difference? *Sociology*, 36, 985-1002.
- Walsh, J. P., & Seward, L. K. (1990). On the efficiency of internal and external corporate control mechanisms. *Academy of Management Review*, 15, 421-458.
- Walton, W. (2009). Improve board performance: "team" best practices. *Corporate Board*, 30(175), 5-10.
- Wasserman, N., Nohria, N., & Anand, B. N. (2001). *When does leadership matter? The contingent opportunities View of CEO leadership*. Strategy unit working paper no. 02-04; working paper no. 01-063. Harvard Business School. Boston, MA. Retrieved from <http://ssrn.com/abstract=278652>.
- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organisational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40(1).
- Weick, K. E., & Quinn, R. E. (1999). Organizational change and development. *Annual Review*, 50, 361-386.
- Woodward, J. (1965). *Industrial organisations: Theory and practice*. New York: Oxford University Press.
- Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 40(2), 185-211.
- Zamanou, S., & Galser, S. R. (1994). Moving toward participation and Involvement. *Group and Organization Management*, 9(4), 475-502.

## Appendix 1

### Australian High-Performing Corporates Causal Recipe

The following tables show the key characteristics for each construct for high-performing organisations analysed and reviewed in Chapter 5.

HC	CC	SCi	SCe	STC	KS	LMX	TE
HC3* (HC5+HC7+HC9)	<u>(CC3*CC4)+CC6</u>	(SCi5* <u>SCi9</u> )+ ~SCi8	SCe5*(SCe6+ <u>SCe7</u> )	STC5* (~STC2+~STC3)	<u>KS1+KS2</u> +KS10	<u>LMX1*</u> (LMX3+ LMX5+ <u>LMX7</u> )	<u>TE2+TE3+Te7+TE9</u>
Sufficient business knowledge and experience to add to overall effectiveness / board level experience adds value / diverse industry backgrounds to add effectiveness / Sufficient trust to make use of directors capabilities	<b><i>Actively participate and fully prepared for meetings / Induction process includes mentor</i></b>	Board culture builds Trust in boardroom / <b><i>board executive relationships encourage use of the board talents /</i></b> Decisions are made thru consensus not voting	Policies, processes, culture build trust between the board and external orgs / TT member groups / <b><i>Directors know how to use contacts.</i></b>	Culture builds trust between TT member groups / <b><i>policies and procedures build trust in boardroom /</i></b> Important info not withheld from TT member groups.	<b><i>TT exec members learn new proven methods to increase abilities /</i></b> also different ways to improve org performance	<b><i>Board communicates its satisfaction or not to executive /</i></b> TT members understand respective (board - exec) job problems and needs / Enough confidence to defend TT members decisions / <b><i>Exec team communicates with board re belief in or its concerns regarding board team</i></b>	<b><i>Very effective board leadership / shaping long-term strategy / top management succession / Effective in bolstering company image in community.</i></b>

- Red = element that is a *Logical and* component of the recipe, the recipe will not work without this element
- ***Bold and Italics*** = elements in the HP corporate and not-for-profit causal recipe that are different to the poor performing causal recipe

## Appendix 2

### Australian High-Performing Not for Profit Causal Recipe

HC	CC	SCi	SCe	STC	KS	LMX	TE
HC2* <b><u>(HC3+ HC5+HC7)</u></b>	<b><u>(CC3*CC4)+CC6</u></b>	(SCi5* <b><u>SCi9</u></b> )+ ~SCi8	SCe5*(SCe6+ <b><u>SCe7</u></b> )	STC5* (~STC2+~STC3)	<b><u>KS1+KS2</u></b> +KS10	LMX5* <b><u>LMX6</u></b>	<b><u>(TE10*TE11)+TE7</u></b>
Industry Specific knowledge / <b><i>business knowledge, experience to add to effectiveness of board / board level experience /diverse industry backgrounds</i></b>	<b><i>Actively participate / fully prepared for meetings / Induction process includes mentor</i></b>	Board culture builds Trust in boardroom / <b><i>board executive (TT) relationships encourage use of the board talents /</i></b> Decisions are made thru consensus not voting	Policies, processes, and culture build trust between board and external orgs / TT members / <b><i>directors know how to use contacts.</i></b>	Culture builds trust between TT member groups / <b><i>Policies and procedures build trust in boardroom</i></b> / Important info is not withheld from TT members.	<b><i>TT exec members learn new / proven methods to increase abilities to perform role /</i></b> also different ways to improve org performance	Enough confidence to defend TT members decisions if not there / <b><i>Extremely effective working relationship.</i></b>	<b><i>Board builds networks with strategic partners / board enhances government relations / Excellent succession planning,</i></b>

- Red = element that is a *Logical and* component of the recipe, the recipe will not work without this element
- ***Bold and Italics*** = elements in the HP corporate and not-for-profit causal recipe that are different to the poor performing causal recipe

## Appendix 3

### New Zealand High-Performing Corporate Causal Recipe

HC	CC	SCi	SCe	STC	KS	LMX	TE
<b><u>HC2*HC4*</u></b> <b>(HC3+HC5+<u>HC9</u>+) </b>	<b><u>CC5*</u></b> (CC1+CC2+ CC3+CC4)	SCi1* <b><u>SCi4*</u></b> SCi 5*~ <b><u>SCi8</u></b>	<b><u>SCe5*</u></b> SCe6	STC5* <b><u>STC1+</u></b> (~STC2+~STC3)	<b><u>KS1*</u></b> KS2* ( <b><u>KS9</u></b> +KS10)	<b><u>LMX2*</u></b> <b><u>LMX6+</u></b> ( LMX1)	<b><u>TE4</u></b>
Industry specific knowledge / business knowledge - experience adds to effectiveness / <b><i>Directors have functional knowledge / board experience adds value in board/ diverse industry / Sufficient trust on board to use board capabilities</i></b>	<b><i>Board discusses org values / policies, procedures, culture match societal expectations / Directors research issues / participate / fully prepared for meetings</i></b>	Directors have good working relationship with CEO / <b><i>directors are aware of other directors' areas of expertise / boards' culture builds trust in boardroom / Decisions by consensus not votes</i></b>	<b><i>Policies, processes, culture build trust between board external orgs / TT member groups</i></b>	Culture builds trust between TT member groups / <b><i>Policies and procedures build trust in boardroom / Important info not withheld from TT members.</i></b>	<b><i>Based on my interactions gained new insights to fulfil my role / new proven methods increased ability to perform role / thought of different ways to improve my role / different ways to improve org performance</i></b>	TT members understand respective (board / exec) members job problems and needs / <b><i>effective working relationship between TT member groups / Board communicates its satisfaction or not to executive</i></b>	<b><i>Effectively monitors strategy implementation</i></b>

- Red = element that is a *Logical and* component of the recipe, the recipe will not work without this element
- ***Bold and Italics*** = elements in the HP corporate and not-for-profit causal recipe that are different to the poor performing causal recipe

## Appendix 4

### New Zealand High-Performing Not for Profit Causal Recipe

HC	CC	SCi	SCe	STC	KS	LMX	TE
HC1* HC5 *(HC3+ <b>HC9</b> )	<b>CC5*</b> (CC1+CC2+ CC3+CC4)	SCi1* <b>SCi4*</b> SCi 5*~ <b>SCi8</b>	<b>SCe5*</b> SCe6	STC5* <b>STC1+</b> (~STC2+~STC3)	<b>KS1*KS2*(KS9+</b> KS10)	<b>LMX6*</b> (LMX 5+ LMX7)	TE2+TE5+ <b>TE6</b> +TE10+ TE11
Directors have company specific knowledge / required level of board experience to add value / enough business knowledge and experience to add to effectiveness of board / <b>sufficient trust to make use of directors capabilities</b>	<b>Board discusses org values /</b> policies, procedures, culture match societal expectations / Directors research issues / participate / fully prepared for meetings	Directors have good working relationship with CEO / <b>directors are aware of other directors' areas of expertise /</b> boards' culture builds trust in boardroom / <b>Decisions by consensus not votes</b>	<b>Policies, processes, culture build trust between board external orgs /</b> TT member groups	Culture builds trust between TT member groups / <b>Policies and procedures build trust in boardroom /</b> Important info not withheld from TT members.	<b>Based on my interactions gained new insights to fulfil my role /</b> new proven methods increased ability to perform role / <b>thought of different ways to improve my role /</b> different ways to improve org performance	<b>Effective working relationship between TT members /</b> Enough confidence to defend decisions of TT members / Exec TT members communicate concerns re board to the board.	Board provides leadership, anticipates threats / <b>manages crisis effectively /</b> builds networks with strategic partners / enhances government relations

- Red = element that is a *Logical and* component of the recipe, the recipe will not work without this element
- **Bold and Italics** = elements in the HP corporate and not-for-profit causal recipe that are different to the poor performing causal recipe



## Appendix 5

### Survey Questions

#### Leader Member Exchange

1. Does your board communicate with the executive team in terms of it's belief in or its concerns in regards to the executive team

Rarely    Occasionally    Sometimes    Fairly Often    Very Often

2. Do the executive team usually know how satisfied your board is with what they do?

Rarely    Occasionally    Sometimes    Fairly Often    Very Often

3. How well do you understand your executive staff's job problems and needs?

Not at all    Somewhat    Neither/Nor    Quite a Bit    A Great Deal

4. How well does the board understand the executive team's job problems and needs?

Not at All    A Little    Moderately    Mostly    Fully

5. Regardless of how much formal authority the board has built into its position, what are the chances that your board would use their power to help solve problems in the executive teams work?

None    Small    Moderate    High    Very High

6. I have enough confidence in my executive team that I would defend and justify their decision if they were not present to do so?

Strongly  
Disagree    Disagree    Neutral    Agree    Strongly  
Agree

7. How would you characterize your working relationship with your executive team?

Extremely    Worse Than    Better Than    Extremely  
Ineffective    Average    Average    Average    Effective

## **Intellectual Capital**

### **Human Capital**

#### **Directors HC Questions**

1. Directors possess company specific knowledge and experience?
2. Directors possess industry specific knowledge?
3. Directors possess enough business knowledge and experience to add to the overall effectiveness of the board?
4. Directors have functional experience and knowledge e.g. international marketing in an export industry, IT experience for a telecommunications company
5. Directors have the required level of board experience to add value within the board?
6. Directors have taken the time to understand the overall organisational functions and structures?
7. Does the board consist of members with diverse industry backgrounds?
8. The policies, procedures and culture make best use of the board's knowledge, skills and ability as a group?
9. Would you agree that there is sufficient trust on the board for the most to be made of directors' capabilities?

#### **Executive HC Questions**

1. Would you agree that directors possess company specific knowledge and experience?
2. Would you agree that directors possess industry specific knowledge?
3. Would you agree that directors possess enough business knowledge and experience to add to the overall effectiveness of the board?
4. Would you agree that directors have relevant functional experience and knowledge e.g. international marketing in an export industry, IT experience for a telecommunications company
5. Would you agree that directors have the required level of board experience to add value within the board?
6. Would you agree that directors took the time to understand the overall organisational functions and structures?

7. Would you agree that the board consists of members with diverse industry backgrounds?
8. Would you agree that the policies, procedures and culture make best use of the board's knowledge, skills and ability as a group?
9. Would you agree that there is sufficient trust on the board for the most to be made of directors' capabilities?

## **Social Capital**

### **Internal Social Capital**

1. Do you agree that outside directors have good relationships with the CEO?
2. Do you agree that outside directors have good relationships with other executives?
3. Do you agree that directors share beliefs regarding the level of effort each individual is expected to put toward a task?
4. Do you agree that each director aware of other directors' areas of expertise?
5. Do you agree that the board's culture build's trust in the boardroom?
6. Do you agree that policies, procedures and culture build trust in the boardroom between the board and executive?
7. Do you agree that when an issue is discussed the most knowledgeable have the most influence?
8. Do you agree that decisions required of the board are mostly settled by votes?
9. Do you agree that board /executive staff relationships encourage the use of the board's talents by management?

### **External Social Capital**

1. Do you agree that the board needs to appoint a lead outside director? (applies where the Chair and CEO are the same person)
2. Do you agree that the board has members who know important suppliers of the company?
3. Do you agree that the board has members who know important customers of the company?
4. Do you agree that the board has members who know important bank officials in the company's local business community?

5. Do you agree that policies, procedures and culture build trust in the boardroom between the board and external organisations?
6. Do you agree that policies, procedures and culture build trust in the boardroom between the board and the executive?
7. Do you agree that directors understand how they can put their contacts to work for the company?

### **Structural Capital**

1. Do you agree that the board's policies and procedures build trust in the boardroom?
2. Do you agree that important information often gets withheld from the board / executive?
3. Do you agree that there is a structured process in place to assist new directors?
4. Do you agree that the board's culture builds trust between the board and executive?
5. Do you agree that the board's culture builds trust between the board and external organisations?

### **Cultural Capital**

1. Do you agree that policies, procedures, culture match societal expectations?
2. Do you agree that directors research relevant issues before board meetings?
3. Do you agree that all directors actively participate during meetings?
4. Do you agree that directors fully prepared for meetings?
5. Do you agree that the board explicitly discuss organisational values?
6. Do you agree that when a new director joins the Board assistance (mentor, buddy) is given to aide their assimilation?
7. Do you agree that the values, norms and beliefs of the board support the best use of the board's capabilities?
8. Do you agree that the board's values, norms and beliefs affect a director's willingness to use his/her capabilities?
9. Do you agree that the individual board members have shared values, norms, beliefs?
10. Do you agree that these match the executive's values, norms, beliefs?

## **Knowledge Sourcing**

### **Replication**

1. Based on my interactions with the board, I have gained new insights into ways in which to fulfil my role.
2. Based on my interactions with the board, I have learned new and proven methods that have increased my ability to perform my role.
3. Based on my interactions with the board, I have learned new and proven procedures that have increased my ability to perform my role.

### **Adaptation**

- 4) Based on my interactions with the board, I have revised my knowledge to take account of the new knowledge gained.
- 5) Based on my interactions with the board, I have adapted my working knowledge to take account of the knowledge gained.
- 6) Based on my interactions with the board, I have adapted my skills to take account of the skills gained.
- 7) My interactions with the board, have led to an increased and updated work-related knowledge.

### **Innovation**

- 8) Based on my interactions with the board, I have become very innovative in my thinking.
- 9) Through my interactions with the board, I have thought of some revolutionary ways that my role could be improved.
- 10) Through my interactions with the board, I have thought of some revolutionary ways that I can improve the organisations performance.

## **Team Effectiveness**

1. How would you rate the overall effectiveness of the board?
2. Would you agree or disagree that your board provides leadership?
3. How effective is your board in shaping long-term strategy?
4. How effective is your board in monitoring strategy implementation?
5. How effective is your board in anticipating threats to company survival?
6. How effective is your board in managing during a crisis?
7. How effective is your board in planning for top management succession?
8. How effective is your board in balancing interests of different stakeholders?
9. How effective is your board in bolstering the company's image in the community?
10. How effective is your board in building networks with strategic partners?
11. How effective is your board in enhancing government relations?

## Appendix 6

### Ethical approval



## MEMORANDUM

### *Auckland University of Technology Ethics Committee (AUTEC)*

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To: Coral Ingley  
From: **Madeline Banda** Executive Secretary, AUTEC  
Date: 24 February 2010  
Subject: Ethics Application Number 09/268 **Searching for the 'mythical unicorn': the missing link between boards of directors and organisational effectiveness.**

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Dear Coral

Thank you for providing written evidence as requested. I am pleased to advise that it satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC) at their meeting on 9 November 2009 and that I have approved your ethics application. This delegated approval is made in accordance with section 5.3.2.3 of AUTEC's *Applying for Ethics Approval: Guidelines and Procedures* and is subject to endorsement at AUTEC's meeting on 8 March 2010.

Your ethics application is approved for a period of three years until 24 February 2013.

I advise that as part of the ethics approval process, you are required to submit the following to AUTEC:

- A brief annual progress report using form EA2, which is available online through <http://www.aut.ac.nz/research/research-ethics>. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 24 February 2013;
- A brief report on the status of the project using form EA3, which is available online through <http://www.aut.ac.nz/research/research-ethics>. This report is to be submitted either when the approval expires on 24 February 2013 or on completion of the project, whichever comes sooner;

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are reminded that, as applicant, you are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application. Please note that AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to make the arrangements necessary to obtain this. Also, if your research is undertaken within a jurisdiction outside New Zealand, you will need to make the arrangements necessary to meet the legal and ethical requirements that apply within that jurisdiction.

When communicating with us about this application, we ask that you use the application number and study title to enable us to provide you with prompt service. Should you have any further enquiries regarding this matter, you are welcome to contact Charles Grinter, Ethics Coordinator, by email at [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz) or by telephone on 921 9999 at extension 8860.

On behalf of the AUTEC and myself, I wish you success with your research and look forward to reading about it in your reports.

Yours sincerely

Madeline Banda  
Executive Secretary  
Auckland University of Technology Ethics Committee

## Figures

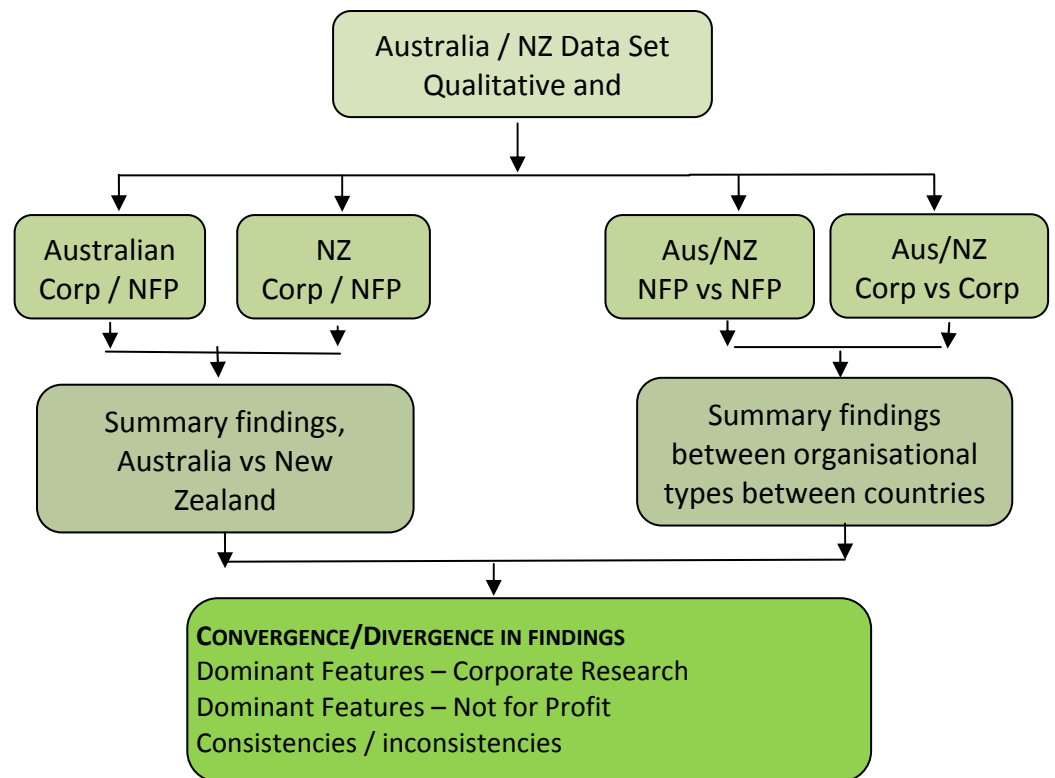


Figure 5 (Process of data analysis)



## Appendix 7

### fsQCA Data Tables

**Table 5: Australian HP Corporate**

Case	case	hc1	hc2	hc3	hc4	hc5	hc6	hc7	hc8	hc9	oc
1	AHPB	0.35	0.35	0.95	0.35	0.95	0.95	0.95	0.35	0.95	0.75
2	AHPB	0.95	0.35	0.95	0.35	0.95	0.95	0.95	0.95	0.95	0.75
3	AHPB	0.35	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.75
4	AHPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
5	AHPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
6	AHPE	0.95	0.35	0.95	0.35	0.95	0.95	0.35	0.35	0.95	0.75
7	AHPE	0.35	0.35	0.95	0.35	0.35	0.95	0.95	0.35	0.35	0.75
8	AHPE	0	0	0	0	0.35	0	0.35	0.35	0.35	0.75
9	AHPE	0.35	0.35	0.35	0.95	0.95	0.35	0.95	0.35	0.95	0.75

**Table 6: New Zealand HP Not-for-Profit**

Case	case	hc1	hc2	hc3	hc4	hc5	hc6	hc7	hc8	hc9	oc
1	NZHPNFPE	0.95	0.35	0.35	0.35	0.95	0.35	0.35	0.35	0.35	0.76
2	NZHPNFPE	0.35	0.2	0.2	0.35	0.2	0.2	0.35	0.2	0.35	0.76
3	NZHPNFPE	0.95	0.95	0.95	0.35	0.95	0.35	0.2	0.95	0.95	0.76
4	NZHPNFPE	0.95	0.35	0.95	0.35	0.95	0.95	0.95	0.2	0	0.76
5	NZHPNFPE	0.95	0.95	0.95	0.35	0.35	0.35	0.95	0.35	0.35	0.76
6	NZHPNFPB	0.2	0.35	0.35	0.2	0.35	0.35	0.35	0.35	0.35	0.76
7	NZHPNFPB	0.95	0.95	0.35	0.35	0.35	0.35	0.95	0.35	0.95	0.76
8	NZHPNFPB	0.95	0.95	0.35	0.95	0.95	0.95	0.2	0.95	0.95	0.76
9	NZHPNFPB	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.76
10	NZHPNFPB	0.35	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.95	0.76
11	NZHPNFPB	0.35	0.35	0.35	0.35	0.35	0.95	0.95	0.95	0.35	0.76
12	NZHPNFPB	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.35	0.95	0.76

**Table 7: New Zealand HP Corporate**

Case	case	hc1	hc2	hc3	hc4	hc5	hc6	hc7	hc8	hc9	oc
1	NZHPE	0.35	0.95	0.95	0.95	0.35	0.35	0.35	0.35	0.35	0.75
2	NZHPE	0.35	0.2	0.95	0.2	0	0.35	0.35	0.2	0.2	0.75
3	NZHPE	0.35	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.75
4	NZHPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
5	NZHPB	0.35	0.35	0.95	0.35	0.95	0.95	0.95	0.35	0.95	0.75
6	NZHPB	0.35	0.95	0	0.35	0.95	0.95	0.35	0.95	0.95	0.75
7	NZHPB	0.35	0.35	0.95	0.95	0.95	0.2	0.95	0.95	0.95	0.75

**Table 8: Combined HP Not-for-Profit**

Case	case	hc1	hc2	hc3	hc4	hc5	hc6	hc7	hc8	hc9	oc
1	NZHPNFPE	0.95	0.35	0.35	0.35	0.95	0.35	0.35	0.35	0.35	0.75
2	NZHPNFPE	0.35	0.2	0.2	0.35	0.2	0.2	0.35	0.2	0.35	0.75
3	NZHPNFPE	0.95	0.95	0.95	0.35	0.95	0.35	0.2	0.95	0.95	0.75
4	NZHPNFPE	0.95	0.35	0.95	0.35	0.95	0.95	0.95	0.2	0	0.75
5	NZHPNFPE	0.95	0.95	0.95	0.35	0.35	0.35	0.95	0.35	0.35	0.75
6	NZHPNFPE	0.2	0.35	0.35	0.2	0.35	0.35	0.35	0.35	0.35	0.75
7	NZHPNFPB	0.95	0.95	0.35	0.35	0.35	0.35	0.95	0.35	0.95	0.75
8	NZHPNFPB	0.95	0.95	0.35	0.95	0.95	0.95	0.2	0.95	0.95	0.75
9	NZHPNFPB	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.75
10	NZHPNFPB	0.35	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.95	0.75
11	NZHPNFPB	0.35	0.35	0.35	0.35	0.35	0.95	0.95	0.95	0.35	0.75
12	NZHPNFPB	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.35	0.95	0.75
13	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
14	AHPNFPB	0.35	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.75
15	AHPNFPB	0.35	0.95	0.35	0.95	0.35	0.35	0.95	0.35	0.95	0.75
16	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
17	AHPNFPE	0.95	0.95	0.95	0.95	0.95	0.35	0.35	0.35	0.35	0.75
18	AHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
19	AHPNFPE	0.2	0.2	0.35	0.35	0.95	0.35	0.95	0.2	0.2	0.75
20	AHPNFPE	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75

**Table 9: Combined HP Corporate**

Case	case	hc1	hc2	hc3	hc4	hc5	hc6	hc7	hc8	hc9	oc
1	AHPB	0.35	0.35	0.95	0.35	0.95	0.95	0.95	0.35	0.95	0.75
2	AHPB	0.95	0.35	0.95	0.35	0.95	0.95	0.95	0.95	0.95	0.75
3	AHPB	0.35	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.75
4	AHPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
5	AHPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
6	AHPE	0.95	0.35	0.95	0.35	0.95	0.95	0.35	0.35	0.95	0.75
7	AHPE	0.35	0.35	0.95	0.35	0.35	0.95	0.95	0.35	0.35	0.75
8	AHPE	0	0	0	0	0.35	0	0.35	0.35	0.35	0.75
9	AHPE	0.35	0.35	0.35	0.95	0.95	0.35	0.95	0.35	0.95	0.75
10	NZHPE	0.35	0.95	0.95	0.95	0.35	0.35	0.35	0.35	0.35	0.75
11	NZHPE	0.35	0.2	0.95	0.2	0	0.35	0.35	0.2	0.2	0.75
12	NZHPE	0.35	0.35	0.95	0.95	0.95	0.2	0.95	0.95	0.95	0.75
13	NZHPE	0.35	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.75
14	NZHPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
15	NZHPB	0.35	0.35	0.95	0.35	0.95	0.95	0.95	0.35	0.95	0.75
16	NZHPB	0.35	0.95	0	0.35	0.95	0.95	0.35	0.95	0.95	0.75

**Table 10: Australian HP Not-for-Profit and Corporate**

Case	case	stc1	stc2	stc3	stc4	stc5	stc6	oc
1	AHPNFPB	0.35	0.35	0.2	0.2	0.2	0.2	0.75
2	AHPNFPB	0.35	0.95	0.95	0.35	0.35	0.35	0.75
3	AHPNFPB	0.35	0.35	0.2	0.35	0.35	0.35	0.75
4	AHPNFPB	0.35	0.2	0.2	0.35	0.35	0.35	0.75
5	AHPC	0.35	0	0.35	0.35	0.95	0.35	0.75
6	AHPC	0.35	0	0	0.95	0.95	0.95	0.75
7	AHPC	0.35	0.35	0.35	0.35	0.35	0.35	0.75

**Table 11: New Zealand HP Not-for-Profit and Corporate**

Case	case	stc1	stc2	stc3	stc4	stc5	stc6	oc
1	NZHPNFPB	0.35	0.25	0.25	0.35	0.35	0.35	0.75
2	NZHPNFPB	0.95	0	0	0.2	0.35	0.95	0.75
3	NZHPNFPB	0.95	0.25	0.25	0.35	0.95	0.95	0.75
4	NZHPNFPB	0.35	0.25	0	0.35	0.35	0.35	0.75
5	NZHPNFPB	0.35	0	0	0.2	0.35	0.35	0.75
6	NZHPNFPB	0.95	0	0.25	0.2	0.35	0.35	0.75
7	NZHPNFPB	0.35	0.25	0.25	0.2	0.35	0.35	0.75
8	NZHPCB	0.35	0	0	0.95	0.95	0.35	0.75
9	NZHPCB	0.35	0	0	0.35	0.95	0.35	0.75
10	NZHPCB	0.95	0.25	0.25	0.2	0.95	0.95	0.75

**Table 12: Combined New Zealand and Australian HP – Not-for-Profit and Corporate**

Case	case	stc1	stc2	stc3	stc4	stc5	stc6	oc
1	NZHPNFPB	0.35	0.25	0.25	0.35	0.35	0.35	0.75
2	NZHPNFPB	0.95	0	0	0.2	0.35	0.95	0.75
3	NZHPNFPB	0.95	0.25	0.25	0.35	0.95	0.95	0.75
4	NZHPNFPB	0.35	0.25	0	0.35	0.35	0.35	0.75
5	NZHPNFPB	0.35	0	0	0.2	0.35	0.35	0.75
6	NZHPNFPB	0.95	0	0.25	0.2	0.35	0.35	0.75
7	NZHPNFPB	0.35	0.25	0.25	0.2	0.35	0.35	0.75
8	NZHPCB	0.35	0	0	0.95	0.95	0.35	0.75
9	NZHPCB	0.35	0	0	0.35	0.95	0.35	0.75
10	NZHPCB	0.95	0.25	0.25	0.2	0.95	0.95	0.75
11	AHPNFPB	0.35	0.35	0.2	0.2	0.2	0.2	0.75
12	AHPNFPB	0.35	0.95	0.95	0.35	0.35	0.35	0.75
13	AHPNFPB	0.35	0.35	0.2	0.35	0.35	0.35	0.75
14	AHPNFPB	0.35	0.2	0.2	0.35	0.35	0.35	0.75
15	AHPC	0.35	0	0.35	0.35	0.95	0.35	0.75
16	AHPC	0.35	0	0	0.95	0.95	0.95	0.75
17	AHPC	0.35	0.35	0.35	0.35	0.35	0.35	0.75

**Table 13: Australian HP Not-for-Profit and Corporate**

Case	case	sci1	sci2	sci3	sci4	sci5	sci6	sci7	sci8	sci9	oc
1	AHPNFPB	0.35	0.35	0.35	0.35	0.2	0.2	0.35	0.2	0.35	0.75
2	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.2	0.95	0.75
3	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
4	AHPNFPB	0.35	0.2	0.2	0.35	0.2	0.2	0.35	0.35	0.35	0.75
5	AHPC	0.95	0.35	0.35	0.95	0.95	0.35	0.35	0.2	0.35	0.75
6	AHPC	0.95	0.35	0.95	0.95	0.95	0.35	0.2	0	0.35	0.75
7	AHPC	0.35	0.35	0.35	0.35	0.95	0.35	0.2	0	0.2	0.75

**Table 14: New Zealand HP Not-for-Profit and Corporate**

Case	case	sci1	sci2	sci3	sci4	sci5	sci6	sci7	sci8	sci9	oc
1	NZHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.2	0.2	0.75
2	NZHPNFPB	0.95	0.95	0.95	0.35	0.35	0.35	0.35	0	0.35	0.75
3	NZHPNFPB	0.95	0.95	0.95	0.95	0.95	0.95	0.35	0.2	0.95	0.75
4	NZHPNFPB	0.35	0.35	0.35	0.95	0.95	0.35	0.35	0.2	0.35	0.75
5	NZHPNFPB	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0	0.35	0.75
6	NZHPNFPB	0.35	0.35	0.35	0.35	0.95	0.95	0.35	0.2	0.35	0.75
7	NZHPNFPB	0.35	0.35	0.95	0.95	0.95	0.35	0.95	0.2	0.35	0.75
8	NZHPCB	0.95	0.35	0.35	0.95	0.95	0.35	0.35	0	0.35	0.75
9	NZHPCB	0.95	0.35	0.35	0.95	0.95	0.35	0.35	0	0.95	0.75
10	NZHPCB	0.95	0.95	0.2	0.35	0.95	0.2	0.95	0	0.95	0.75

**Table 15: Combined New Zealand and Australian HP Not-for-Profit and Corporate**

Case	case	sci1	sci2	sci3	sci4	sci5	sci6	sci7	sci8	sci9	oc
1	AHPNFPB	0.35	0.35	0.35	0.35	0.2	0.2	0.35	0.2	0.35	0.75
2	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.2	0.95	0.75
3	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
4	AHPNFPB	0.35	0.2	0.2	0.35	0.2	0.2	0.35	0.35	0.35	0.75
5	AHPC	0.95	0.35	0.35	0.95	0.95	0.35	0.35	0.2	0.35	0.75
6	AHPC	0.95	0.35	0.95	0.95	0.95	0.35	0.2	0	0.35	0.75
7	AHPC	0.35	0.35	0.35	0.35	0.95	0.35	0.2	0	0.2	0.75
8	NZHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.2	0.2	0.75
9	NZHPNFPB	0.95	0.95	0.95	0.35	0.35	0.35	0.35	0	0.35	0.75
10	NZHPNFPB	0.95	0.95	0.95	0.95	0.95	0.95	0.35	0.2	0.95	0.75
11	NZHPNFPB	0.35	0.35	0.35	0.95	0.95	0.35	0.35	0.2	0.35	0.75
12	NZHPNFPB	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0	0.35	0.75
13	NZHPNFPB	0.35	0.35	0.35	0.35	0.95	0.95	0.35	0.2	0.35	0.75
14	NZHPNFPB	0.35	0.35	0.95	0.95	0.95	0.35	0.95	0.2	0.35	0.75
15	NZHPCB	0.95	0.35	0.35	0.95	0.95	0.35	0.35	0	0.35	0.75
16	NZHPCB	0.95	0.35	0.35	0.95	0.95	0.35	0.35	0	0.95	0.75
17	NZHPCB	0.95	0.95	0.2	0.35	0.95	0.2	0.95	0	0.95	0.75

**Table 16: Australian HP Not-for-Profit and Corporate**

Case	case	sce1	sce2	sce3	sce4	sce5	sce6	sce7	oc
1	AHPNFPB	0.65	0.65	0.65	0.65	0.2	0.2	0.65	0.75
2	AHPNFPB	0.2	0.2	0.65	0.2	0.65	0.65	0.65	0.75
3	AHPNFPB	0.95	0.65	0.65	0.2	0.65	0.65	0.95	0.75
4	AHPNFPB	0.65	0.2	0.2	0.2	0.65	0.2	0.65	0.75
5	AHPC	0.95	0.2	0.2	0.2	0.65	0.65	0.2	0.75
6	AHPC	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.75
7	AHPC	0.2	0.65	0.65	0.65	0.65	0.65	0.65	0.75

**Table 17: New Zealand HP Not-for-Profit and Corporate**

Case	case	sce1	sce2	sce3	sce4	sce5	sce6	sce7	oc
1	NZHPNFPB	0	0.2	0.2	0.2	0.65	0.65	0.2	0.75
2	NZHPNFPB	0.6	0.2	0.95	0	0.95	0.95	0.65	0.75
3	NZHPNFPB	0.65	0.65	0.65	0.65	0.95	0.95	0.95	0.75
4	NZHPNFPB	0.65	0.2	0.2	0.2	0.65	0.65	0.65	0.75
5	NZHPNFPB	0.6	0.65	0.65	0.65	0.65	0.65	0.65	0.75
6	NZHPNFPB	0	0.2	0.65	0.2	0.65	0.65	0.65	0.75
7	NZHPCB	0	0.65	0.65	0.65	0.65	0.95	0.2	0.75
8	NZHPCB	0	0.95	0.95	0.95	0.65	0.95	0.95	0.75
9	NZHPCB	0.95	0.65	0.65	0.65	0.65	0.95	0.95	0.75

**Table 18: Combined New Zealand and Australian HP Not-for-Profit and Corporate**

Case	case	sce1	sce2	sce3	sce4	sce5	sce6	sce7	oc
1	AHPNFPB	0.65	0.65	0.65	0.65	0.2	0.2	0.65	0.75
2	AHPNFPB	0.2	0.2	0.65	0.2	0.65	0.65	0.65	0.75
3	AHPNFPB	0.95	0.65	0.65	0.2	0.65	0.65	0.95	0.75
4	AHPNFPB	0.65	0.2	0.2	0.2	0.65	0.2	0.65	0.75
5	AHPC	0.95	0.2	0.2	0.2	0.65	0.65	0.2	0.75
6	AHPC	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.75
7	AHPC	0.2	0.65	0.65	0.65	0.65	0.65	0.65	0.75
8	NZHPNFPB	0	0.2	0.2	0.2	0.65	0.65	0.2	0.75
9	NZHPNFPB	0.65	0.2	0.95	0	0.95	0.95	0.65	0.75
10	NZHPNFPB	0.65	0.65	0.65	0.65	0.95	0.95	0.95	0.75
11	NZHPNFPB	0.65	0.2	0.2	0.2	0.65	0.65	0.65	0.75
12	NZHPNFPB	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.75
13	NZHPNFPB	0	0.2	0.65	0.2	0.65	0.65	0.65	0.75
14	NZHPCB	0	0.65	0.65	0.65	0.65	0.95	0.2	0.75
15	NZHPCB	0	0.95	0.95	0.95	0.65	0.95	0.95	0.75
16	NZHPCB	0.95	0.65	0.65	0.65	0.65	0.95	0.95	0.75



**Table 19: Australian HP Not-for-Profit and Corporate**

Case	case	cc1	cc2	cc3	cc4	cc5	cc6	cc7	cc8	cc9	cc10	cc
1	AHPNFPB	0.2	0.2	0.2	0.2	0	0	0.2	0.35	0.2	0.2	0.75
2	AHPNFPB	0.35	0.95	0.95	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.75
3	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
4	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.2	0.75
5	AHPC	0.35	0.35	0.95	0.95	0.35	0.35	0.35	0.2	0.35	0.35	0.75
6	AHPC	0.35	0.95	0.95	0.95	0.95	0.2	0.35	0.35	0.35	0.35	0.75
7	AHPC	0.35	0.35	0.35	0.35	0.35	0.95	0.35	0.2	0.35	0.35	0.75

**Table 20: New Zealand HP Not-for-Profit and Corporate**

Case	case	cc1	cc2	cc3	cc4	cc5	cc6	cc7	cc8	cc9	cc10	cc
1	NZHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.2	0.2	0.35	0.75
2	NZHPNFPB	0.95	0.35	0.35	0.35	0.35	0.2	0.35	0	0.35	0.35	0.75
3	NZHPNFPB	0.95	0.95	0.95	0.95	0.95	0.35	0.95	0.35	0.35	0.35	0.75
4	NZHPNFPB	0.35	0.35	0.35	0.35	0.35	0.2	0.35	0.35	0.2	0.35	0.75
5	NZHPNFPB	0.35	0.35	0.35	0.35	0.95	0.2	0.35	0.35	0.35	0.35	0.75
6	NZHPNFPB	0.35	0.35	0.95	0.35	0.35	0.2	0.35	0.35	0.35	0.35	0.75
7	NZHPNFPB	0.35	0.35	0.35	0.35	0.95	0.2	0.35	0.35	0.35	0.35	0.75
8	NZHPCB	0.95	0.95	0.95	0.95	0.95	0.35	0.95	0	0.35	0.35	0.75
9	NZHPCB	0.35	0.95	0.35	0.95	0.35	0.35	0.35	0.25	0.35	0.35	0.75
10	NZHPCB	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0	0.95	0.95	0.75

**Table 21: Combined New Zealand and Australian HP Not-for-Profit and Corporate**

Case	case	cc1	cc2	cc3	cc4	cc5	cc6	cc7	cc8	cc9	cc10	cc
1	AHPNFPB	0.2	0.2	0.2	0.2	0	0	0.2	0.35	0.2	0.2	0.75
2	AHPNFPB	0.35	0.95	0.95	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.75
3	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
4	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.2	0.75
5	AHPC	0.35	0.35	0.95	0.95	0.35	0.35	0.35	0.2	0.35	0.35	0.75
6	AHPC	0.35	0.95	0.95	0.95	0.95	0.2	0.35	0.35	0.35	0.35	0.75
7	AHPC	0.35	0.35	0.35	0.35	0.35	0.95	0.35	0.2	0.35	0.35	0.75
8	NZHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.2	0.2	0.35	0.75
9	NZHPNFPB	0.95	0.35	0.35	0.35	0.35	0.2	0.35	0	0.35	0.35	0.75
10	NZHPNFPB	0.95	0.95	0.95	0.95	0.95	0.35	0.95	0.35	0.35	0.35	0.75
11	NZHPNFPB	0.35	0.35	0.35	0.35	0.35	0.2	0.35	0.35	0.2	0.35	0.75
12	NZHPNFPB	0.35	0.35	0.35	0.35	0.95	0.2	0.35	0.35	0.35	0.35	0.75
13	NZHPNFPB	0.35	0.35	0.95	0.35	0.35	0.2	0.35	0.35	0.35	0.35	0.75
14	NZHPNFPB	0.35	0.35	0.35	0.35	0.95	0.2	0.35	0.35	0.35	0.35	0.75
15	NZHPCB	0.95	0.95	0.95	0.95	0.95	0.35	0.95	0	0.35	0.35	0.75
16	NZHPCB	0.35	0.95	0.35	0.95	0.35	0.35	0.35	0.25	0.35	0.35	0.75
17	NZHPCB	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0	0.95	0.95	0.75

**Table 22 Australian HP Not for Profit**

Case	case	lmx1	lmx2	lmx3	lmx4	lmx5	lmx6	lmx7	cc
1	AHPNFPB	0.2	0.35	0.35	0.75	0.35	0.75	0.35	0.75
2	AHPNFPB	0.75	0.95	0.2	0.2	0.35	0.95	0.35	0.75
3	AHPNFPB	0.75	0.75	0.35	0.75	0.75	0.75	0.75	0.75
4	AHPNFPE	0.95	0.75	0.95	0.75	0.75	0.75	0.35	0.75
5	AHPNFPE	0.35	0.2	0.35	0.2	0.75	0.35	0.2	0.75
6	AHPNFPE	0.2	0.2	0.2	0.35	0.75	0.35	0	0.75
7	AHPNFPE	0.75	0.35	0.75	0.35	0.75	0.75	0.75	0.75

**Table 23: Australian HP Corporate**

Case	case	lmx1	lmx2	lmx3	lmx4	lmx5	lmx6	lmx7	oc
1	AHPB	0.95	0.95	0.95	0.35	0.75	0.95	0.35	0.75
2	AHPB	0.95	0.75	0.75	0.35	0.75	0.75	0.95	0.75
3	AHPB	0.75	0.2	0.75	0	0.2	0.75	0.35	0.75
4	AHPE	0.75	0.75	0.95	0.35	0.75	0.75	0	0.75
5	AHPE	0.95	0.75	0.75	0.2	0.75	0.75	0.75	0.75
6	AHPE	0.95	0.95	0.75	0.95	0.95	0.95	0.35	0.75
7	AHPE	0.35	0.2	0.75	0.35	0.75	0.35	0.75	0.75
8	AHPE	0.75	0.2	0.35	0	0	0	0	0.75
9	AHPE	0.95	0.75	0.95	0.75	0.75	0.95	0.95	0.75

**Table 24: New Zealand HP Not-for-Profit**

Case	case	lmx1	lmx2	lmx3	lmx4	lmx5	lmx6	lmx7	oc
1	NZHPNFPE	0.75	0.35	0.35	0.35	0.95	0.95	0	0.75
2	NZHPNFPE	0	0.2	0.2	0.35	0.2	0.2	0	0.75
3	NZHPNFPE	0.75	0.35	0.2	0.35	0.95	0.75	0.2	0.75
4	NZHPNFPE	0.75	0.35	0.2	0.75	0.35	0.75	0.75	0.75
5	NZHPNFPE	0	0	0.35	0.35	0.75	0.35	0.75	0.75
6	NZHPNFPE	0.95	0.35	0.75	0.95	0.95	0.95	0.35	0.75
7	NZHPNFPB	0.75	0.95	0.75	0.75	0.75	0.95	0.35	0.75
8	NZHPNFPB	0.95	0.75	0.75	0.75	0.75	0.95	0.35	0.75
9	NZHPNFPB	0.35	0.75	0.75	0.75	0.75	0.95	0	0.75
10	NZHPNFPB	0.35	0.75	0.75	0.2	0.35	0.75	0	0.75
11	NZHPNFPB	0.75	0.35	0.35	0.75	0.35	0.75	0.2	0.75
12	NZHPNFPB	0.35	0.2	0.2	0.35	0.35	0.75	0.2	0.75
13	NZHPNFPB	0.35	0.75	0.75	0.75	0.55	0.85	0.17	0.75

**Table 25: New Zealand HP Corporate**

Case	case	lmx1	lmx2	lmx3	lmx4	lmx5	lmx6	lmx7	oc
1	NZHPE	0.75	0.75	0.75	0.75	0.95	0.95	0.35	0.75
2	NZHPE	0.35	0.75	0.2	0.2	0.35	0.35	0	0.75
3	NZHPE	0.75	0.35	0.35	0.75	0.35	0.75	0.35	0.75
4	NZHPB	0.95	0.75	0.75	0.35	0.75	0.75	0.95	0.75
5	NZHPB	0.95	0.75	0.95	0.75	0.75	0.75	0.95	0.75
6	NZHPB	0.95	0.95	0.95	0.95	0.75	0.95	0.95	0.75

**Table 26: Combined Corporate**

Case	case	lmx1	lmx2	lmx3	lmx4	lmx5	lmx6	lmx7	oc
1	AHPE	0.95	0.95	0.95	0.35	0.75	0.95	0.35	0.75
2	AHPB	0.95	0.75	0.75	0.35	0.75	0.75	0.95	0.75
3	AHPB	0.75	0.2	0.75	0	0.2	0.75	0.35	0.75
4	AHPE	0.75	0.75	0.95	0.35	0.75	0.75	0	0.75
5	AHPE	0.95	0.75	0.75	0.2	0.75	0.75	0.75	0.75
6	AHPE	0.95	0.95	0.75	0.95	0.95	0.95	0.35	0.75
7	AHPE	0.35	0.2	0.75	0.35	0.75	0.35	0.75	0.75
8	AHPE	0.75	0.2	0.35	0	0	0	0	0.75
9	AHPE	0.95	0.75	0.95	0.75	0.75	0.95	0.95	0.75
10	NZHPE	0.75	0.75	0.75	0.75	0.95	0.95	0.35	0.75
11	NZHPE	0.35	0.75	0.2	0.2	0.35	0.35	0	0.75
12	NZHPE	0.75	0.35	0.35	0.75	0.35	0.75	0.35	0.75
13	NZHPB	0.95	0.75	0.75	0.35	0.75	0.75	0.95	0.75
14	NZHPB	0.95	0.75	0.95	0.75	0.75	0.75	0.95	0.75
15	NZHPB	0.95	0.95	0.95	0.95	0.75	0.95	0.95	0.75

**Table 27: Combined HP Not-for-Profit**

Case	case	l <sub>mx1</sub>	l <sub>mx2</sub>	l <sub>mx3</sub>	l <sub>mx4</sub>	l <sub>mx5</sub>	l <sub>mx6</sub>	l <sub>mx7</sub>	oc
1	NZHPNFPE	0.75	0.35	0.35	0.35	0.95	0.95	0	0.75
2	NZHPNFPE	0	0.2	0.2	0.35	0.2	0.2	0	0.75
3	NZHPNFPE	0.75	0.35	0.2	0.35	0.95	0.75	0.2	0.75
4	NZHPNFPE	0.75	0.35	0.2	0.75	0.35	0.75	0.75	0.75
5	NZHPNFPE	0	0	0.35	0.35	0.75	0.35	0.75	0.75
6	NZHPNFPE	0.95	0.35	0.75	0.95	0.95	0.95	0.35	0.75
7	NZHPNFPB	0.75	0.95	0.75	0.75	0.75	0.95	0.35	0.75
8	NZHPNFPB	0.95	0.75	0.75	0.75	0.75	0.95	0.35	0.75
9	NZHPNFPB	0.35	0.75	0.75	0.75	0.75	0.95	0	0.75
10	NZHPNFPB	0.35	0.75	0.75	0.2	0.35	0.75	0	0.75
11	NZHPNFPB	0.75	0.35	0.35	0.75	0.35	0.75	0.2	0.75
12	NZHPNFPB	0.35	0.2	0.2	0.35	0.35	0.75	0.2	0.75
13	NZHPNFPB	0.35	0.75	0.75	0.75	0.55	0.85	0.17	0.75
14	AHPNFPB	0.2	0.35	0.35	0.75	0.35	0.75	0.35	0.75
15	AHPNFPB	0.75	0.95	0.2	0.2	0.35	0.95	0.35	0.75
16	AHPNFPB	0.75	0.75	0.35	0.75	0.75	0.75	0.75	0.75
17	AHPNFPE	0.95	0.75	0.95	0.75	0.75	0.75	0.35	0.75
18	AHPNFPE	0.35	0.2	0.35	0.2	0.75	0.35	0.2	0.75
19	AHPNFPE	0.2	0.2	0.2	0.35	0.75	0.35	0	0.75

**Table 28: Australian HP Not-for-Profit and Corporate**

Case	case	ks1	ks2	ks3	ks4	ks5	ks6	ks7	ks8	ks9	ks10	oc
1	AHPNFPE	0.35	0.2	0.35	0.2	0.35	0.2	0.35	0.35	0.35	0.95	0.75
2	AHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
3	AHPNFPE	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.35	0.35	0.75
4	AHPNFPE	0.95	0.95	0.95	0.35	0.35	0.95	0.35	0.95	0.95	0.35	0.75
5	AHPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
6	AHPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
7	AHPE	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
8	AHPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
9	AHPE	0	0	0	0.35	0.35	0.35	0	0	0	0	0.75

**Table 29: New Zealand HP Not-for-Profit and Corporate**

Case	case	ks1	ks2	ks3	ks4	ks5	ks6	ks7	ks8	ks9	ks10	oc
1	NZHPNFPB	0.35	0.2	0.35	0.35	0.35	0.2	0.35	0.2	0.35	0.35	0.75
2	NZHPNFPB	0.2	0.2	0.2	0.2	0.35	0.2	0.2	0.2	0.35	0.2	0.75
3	NZHPNFPB	0.95	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
4	NZHPNFPB	0.95	0	0.95	0.35	0.35	0.35	0.35	0	0.2	0.35	0.75
5	NZHPNFPB	0.35	0.2	0.2	0.35	0.95	0.35	0.2	0.95	0.95	0.95	0.75
6	NZHPCE	0.95	0.95	0.35	0.35	0.35	0.35	0.95	0.35	0.35	0.35	0.75
7	NZHPCE	0.2	0.2	0.35	0.2	0.2	0.2	0.2	0.2	0.35	0.35	0.75
8	NZHPCE	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.35	0.75

**Table 30: Combined New Zealand and Australian HP Not-for-Profit and Corporate**

Case	case	ks1	ks2	ks3	ks4	ks5	ks6	ks7	ks8	ks9	ks10	oc
1	AHPNFPB	0.35	0.2	0.35	0.2	0.35	0.2	0.35	0.35	0.35	0.95	0.75
2	AHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
3	AHPNFPE	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.35	0.35	0.75
4	AHPNFPE	0.95	0.95	0.95	0.35	0.35	0.95	0.35	0.95	0.95	0.35	0.75
5	AHPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
6	AHPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
7	AHPE	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
8	AHPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
9	AHPE	0	0	0	0.35	0.35	0.35	0	0	0	0	0.75
10	NZHPNFPB	0.35	0.2	0.35	0.35	0.35	0.2	0.35	0.2	0.35	0.35	0.75
11	NZHPNFPB	0.2	0.2	0.2	0.2	0.35	0.2	0.2	0.2	0.35	0.2	0.75
12	NZHPNFPB	0.95	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
13	NZHPNFPB	0.95	0	0.95	0.35	0.35	0.35	0.35	0	0.2	0.35	0.75
14	NZHPNFPB	0.35	0.2	0.2	0.35	0.95	0.35	0.2	0.95	0.95	0.95	0.75
15	NZHPCE	0.95	0.95	0.35	0.35	0.35	0.35	0.95	0.35	0.35	0.35	0.75
16	NZHPCE	0.2	0.2	0.35	0.2	0.2	0.2	0.2	0.2	0.35	0.35	0.75
17	NZHPCE	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.35	0.75

**Table 31: Australian HP Not-for-Profit**

Case	case	te2	te3	te4	te5	te6	te7	te8	te9	te10	te11	oc
1	AHPNFPB	0.35	0.2	0.35	0.35	0.35	0.35	0.2	0.2	0.2	0.2	0.75
2	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.95	0.2	0.35	0.35	0.95	0.75
3	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.2	0.35	0.35	0.35	0.75
4	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.2	0.2	0.2	0.2	0.75
5	AHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
6	AHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
7	AHPNFPE	0.35	0	0	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
8	AHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.95	0.95	0.75

**Table 32: Australian HP Corporate**

Case	case	te2	te3	te4	te5	te6	te7	te8	te9	te10	te11	oc
1	AHPB	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
2	AHPB	0.95	0.35	0.35	0.35	0.95	0.95	0.95	0.35	0.35	0.35	0.75
3	AHPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
4	AHPE	0.35	0	0.35	0.35	0	0.35	0.35	0	0	0	0.75
5	AHPE	0.35	0.35	0.35	0.35	0.35	0.95	0.35	0.35	0.35	0.35	0.75
6	AHPE	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.95	0.35	0.35	0.75
7	AHPE	0	0	0	0	0	0	0	0	0	0	0.75
8	AHPE	0.95	0.35	0.35	0.35	0.95	0.35	0.95	0.35	0.35	0.35	0.75

**Table 33: New Zealand HP Not-for-Profit**

Case	case	te2	te3	te4	te5	te6	te7	te8	te9	te10	te11	oc
1	NZHPNFPE	0.35	0.95	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.75
2	NZHPNFPE	0.35	0	0	0	0.35	0	0	0	0	0.35	0.75
3	NZHPNFPE	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.75
4	NZHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.95	0.95	0.35	0.75
5	NZHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
6	NZHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
7	NZHPNFPB	0.95	0.35	0.35	0.95	0.95	0.35	0.35	0.35	0.35	0.35	0.75
8	NZHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.95	0.35	0.95	0.95	0.75
9	NZHPNFPB	0.95	0.95	0.95	0.95	0.95	0.35	0.35	0.95	0.95	0.35	0.75
10	NZHPNFPB	0.95	0.95	0.35	0.95	0.95	0.2	0.35	0.35	0.35	0.35	0.75
11	NZHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
12	NZHPNFPB	0.35	0.95	0.35	0.35	0.35	0.95	0.35	0.35	0.95	0.35	0.75
13	NZHPNFPB	0.35	0.35	0.35	0.35	0.95	0.2	0.35	0.35	0.35	0.95	0.75

**Table 34: New Zealand HP Corporate**

Case	case	te2	te3	te4	te5	te6	te7	te8	te9	te10	te11	oc
1	NZHPE	0.35	0.95	0.95	0.95	0.35	0.35	0.35	0.35	0.35	0.95	0.75
2	NZHPE	0.35	0.35	0.35	0.35	0.35	0.2	0.35	0.35	0.2	0.35	0.75
3	NZHPE	0.2	0.35	0.35	0.2	0.35	0.2	0.2	0.2	0.2	0.2	0.75
4	NZHPB	0.95	0.35	0.95	0.95	0.95	0.95	0.95	0.35	0.35	0.35	0.75
5	NZHPB	0.35	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
6	NZHPB	0.95	0.95	0.95	0.2	0.35	0.35	0.2	0.35	0.35	0.35	0.75



**Table 35: Combined HP Corporate**

Case	case	te2	te3	te4	te5	te6	te7	te8	te9	te10	te11	oc
1	AHPB	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
2	AHPB	0.95	0.35	0.35	0.35	0.95	0.95	0.95	0.35	0.35	0.35	0.75
3	AHPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
4	AHPE	0.35	0	0.35	0.35	0	0.35	0.35	0	0	0	0.75
5	AHPE	0.35	0.35	0.35	0.35	0.35	0.95	0.35	0.35	0.35	0.35	0.75
6	AHPE	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.95	0.35	0.35	0.75
7	AHPE	0	0	0	0	0	0	0	0	0	0	0.75
8	AHPE	0.95	0.35	0.35	0.35	0.95	0.35	0.95	0.35	0.35	0.35	0.75
9	NZHPE	0.35	0.95	0.95	0.95	0.35	0.35	0.35	0.35	0.35	0.95	0.75
10	NZHPE	0.35	0.35	0.35	0.35	0.35	0.2	0.35	0.35	0.2	0.35	0.75
11	NZHPE	0.2	0.35	0.35	0.2	0.35	0.2	0.2	0.2	0.2	0.2	0.75
12	NZHPB	0.95	0.35	0.95	0.95	0.95	0.95	0.95	0.35	0.35	0.35	0.75
13	NZHPB	0.35	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
14	NZHPB	0.95	0.95	0.95	0.2	0.35	0.35	0.2	0.35	0.35	0.35	0.75

**Table 36: Combined HP NFP**

Case	case	te2	te3	te4	te5	te6	te7	te8	te9	te10	te11	oc
1	AHPNFPB	0.35	0.2	0.35	0.35	0.35	0.35	0.2	0.2	0.2	0.2	0.75
2	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.95	0.2	0.35	0.35	0.95	0.75
3	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.2	0.35	0.35	0.35	0.75
4	AHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.2	0.2	0.2	0.2	0.75
5	AHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
6	AHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
7	AHPNFPE	0.35	0	0	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
8	AHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.95	0.95	0.75
9	NZHPNFPE	0.35	0.95	0.35	0.95	0.35	0.35	0.35	0.35	0.35	0.35	0.75
10	NZHPNFPE	0.35	0	0	0	0.35	0	0	0	0	0.35	0.75
11	NZHPNFPE	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.75
12	NZHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.95	0.95	0.35	0.75
13	NZHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
14	NZHPNFPE	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75
15	NZHPNFPB	0.95	0.35	0.35	0.95	0.95	0.35	0.35	0.35	0.35	0.35	0.75
16	NZHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.95	0.35	0.95	0.95	0.75
17	NZHPNFPB	0.95	0.95	0.95	0.95	0.95	0.35	0.35	0.95	0.95	0.35	0.75
18	NZHPNFPB	0.95	0.95	0.35	0.95	0.95	0.2	0.35	0.35	0.35	0.35	0.75
19	NZHPNFPB	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.75