The Transformation of Corporate Boards Characteristics:

A study of New Zealand listed firms 1995 – 2007

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Xu (Jane) JI

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Abstract

This research primarily examines the trends of changing characteristics of corporate boards within New Zealand listed firms. Expressing in a quantitative framework, this research provides an insight of how board compositions have changed over the past decade, within which two major corporate governance legislative reforms have occurred. These two reforms are known as the Companies Act in 1993 and the New Zealand Corporate Governance Best Practice Code in 2003.

This study aims to cover a full range of board characteristics mentioned in previous related literatures in order to give a more complete view. Sixteen variables are selected and examined: board size, board independence, multiple directorships, CEO compensation, chair and director fees, CEO duality, gender diversity, staggered board, directors' ownership, director tenure, directors' experience, committee existence, committee independence, CEO involvement on board committees, board and committee Meetings, directors' educational and industrial background.

Within the above variables, board size, board independence and CEO duality receives the most attention from New Zealand investors and regulators. Tendencies of movements regarding these characteristics appear to collaborate with public expectations. Board size has decreased while independence has increased throughout the periods examined. CEO duality phenomenon sharply reduced during the periods after 2003 legislative reform. Committee independence has also grown according to the public recognition, especially for audit committees. CEO involvements on board committees are less than before. Boards within New Zealand listed firms desire more diversification of both gender and backgrounds of directors. These findings fill the

gap of the evolution of corporate boards' characteristics of New Zealand listed firms over the past decade.

Keywords: Board characteristics, Corporate governance, New Zealand listed firms, Descriptive study

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Introduction

There has been extensive acknowledgment and empirical verification that corporate governance provisions can play a key role in affecting shareholder wealth and firm value. A good corporate governance structure can obviously assist in a firm's sustainability and growth. Within the broad construction of corporate governance, there has been growing awareness by academic researchers of the need to examine the structure of boards of directors of corporations. As indicated by numerous researchers, an efficient structure facilitates effective decision making by directors and helps improve the performance of the service, control and strategy roles (Fama, 1980, Fama and Jensen, 1983, Zahra and Pearce, 1989).

Jane Diplock, Chairman of the Securities Commission of New Zealand, said in her 2003 annual speech that good corporate governance is a positive contributor to the growth and prosperity of business. Good governance undoubtedly requires a board of directors that is genuinely effective in the role, i.e., one that can properly discharge its responsibilities for directing the entity and overseeing management. Therefore, it is important and interesting for an investor to study the characteristics of the firm's board before investment decision-making.

The well-known and shocking corporate scandals such as Enron and WorldCom signaled the need for better corporate governance worldwide and the US authorities have since been prompted to establish significant corporate governance reforms, particularly the Sarbanes-Oxley Act (SOX) of 2002 and the NYSE Governance Reforms. The same also happened in the UK and Australia. Both the international implications (the Sarbanes-Oxley Act and the UK Cadbury Code) and subsequent local awareness of high standard corporate governance regulations finally triggered the official resolution and adoption of similar corporate governance practice codes in New Zealand in 2003, known as the Code of Best Practice of Corporate Governance in New Zealand (hereafter "the Code"). This code was incorporated into the Listing Rules of NZX in the same year. The updated provisions in the Code approved the proposals from the Institute of Directors with reference to board independence and separation between CEO and chair. Specifically, corporate boards within listed firms are required by the new listing rules to have at least three independent members or a third of the total number of directors must be independent. The CEO and the Chairperson of the Board must be separate individuals. With regard to the

committees, an Audit Committee is mandatory with the required level of independence as well. Many other board features deemed to be good factors for better corporate governance are discussed and recommended in the Corporate Governance in New Zealand – Principles and Guidelines. This booklet contains principles developed by the Securities Commission for high standards of corporate governance system and summaries of opinions from the listed member firms who were consulted.

In this study, the primary goal is to identify those board characteristics deemed to be important elements for better corporate governance within the Code, Principles and Guidelines as well as those that have received a large amount of examination by academic scholars. These board characteristics are arguably the influential drivers for improving a company's corporate governance structure and hence firm performance. Therefore, the objective of this research is to examine how these board characteristics are structured and have evolved within NZ listed firms from 1995 to 2007, and to what extent these features have changed during this period. From this, it can be speculated whether arguably NZ listed firms generally have the characteristics necessary for good governance.

The social awareness of the importance of good corporate governance leads to academic researchers examining the influences of various NZ board characteristics on firm performance. While there have been studies of assorted aspects of NZ corporate governance, the literature lacks an all-encompassing study of the stylised facts, especially since the publication of the Companies Act in 1993. Therefore, the contribution of this study is to fill such a gap by reporting a comprehensive set of characteristics that relate to good governance. In addition, the aforementioned

legislative reform will presumably have impacts on firms' decisions on board structures. Therefore, it would be interesting to examine board characteristics prior to and after the reforms, i.e. to what extent board characteristics have changed around the new legislation. In a nutshell, this study allows entrepreneurs to sense whether their firms are running at an appropriate level and if they are market-oriented.

The remainder of this study is organized as follows: Section 2 surveys the completed literature on boards' roles and the empirical findings. Section 3 describes the data source, examination periods, selection and definition of variables, and the method employed. Results are presented in Section 4 and Section 5 gives concluding remarks and possible future research direction.

2 Literature Review

2.1 Role of the Board

Corporate governance is a broad framework dealing with mechanisms facilitating the firm's owners (principals), who provide resources and capital, to protect their own welfare by exerting control over corporate insiders and management (agents), who make major decisions for the firm. Owing to the wide dispersion of common stock ownership preventing shareholders' collective justification on resources utilization, shareholders possess little or no direct control over management decisions. Such a phenomenon is called the separation of ownership and control (Fama and Jensen, 1983). However, with differentiated responsibilities and pay-off structures for both principals and agents, conflicts between these two parties are likely to arise, namely agency problems. For instance, a modern large corporation is commonly owned by a

large number of shareholders with diffused ownership. Managers who control the actual operation of the corporation may typically lack a majority of, or not even own stock ownership positions. This would then create managerialism, meaning that managers purposely make decisions that are at the expense of the principals in order to secure their job positions and expand their reputations.

To overcome such agency conflicts, the formation of a board of directors has long been recognised by both institutional investors and empirical researchers (Fama and Jensen, 1983, Williamson, 1983) as the important mechanism to address the issues. The authors defined a board of directors as the entity which "has the power to hire, fire, and compensate the top-level decision managers and to ratify and monitor important decisions… [and]… helps to ensure separation of decision management and control even at the top of the organization". This characterization of a board is still maintained after two decades. Hermalin and Weisbach (2003) argued that a board of directors exists as the equilibrium contractual solution for ameliorating some agency problems which plague any corporation. Owing to the fact that shareholders neither have director control over management nor have large enough shareholdings to determine appropriate compensation for managers as their motivation, shareholders need to have helpers who are outside shareholders and have sufficient incentive to tackle the problems. These helpers are known as the board of directors, hence are the reason for board's existence.

The core duty of a board is to protect shareholders' assets and to ensure investment returns. Agency theorists define the primary duty of the board as providing continuity for the organization through both resources provision and governing. As it is central

to corporate governance mechanisms in market economies, the board is viewed as the chief means shareholders use to control management, and to align managers towards the interests of shareholders. In other words, a board of directors serves as the problem-solving interface between a particular set of manager-shareholder interactions to economize on the transaction costs in between (Baysinger and Butler, 1985). It has a mediating function in conflicts of interest without fracturing the contractual relationships.

Moreover, the law and economics literature suggest that directors have usefulness beyond pure governance purposes (Mace, 1972, Burt, 1980). Baysinger and Butler (1985) further expressed that directors accumulate valuable qualities of judgment, maturity, and leadership through occupational experiences, which allow them to contribute to board decisions more effectively. As Fama and Jensen (1983) documented, economists emphasize that an optimally constituted board should comprise a mixture of insiders and outsiders. As described by Byrd and Hickman (1992), inside directors are experts who can contribute valuable inputs for firm-specific business. Inside directors are usually corporate officers or who have family ties. Outside directors, on the other hand, are those bringing both expertise and resources from various aspects, and more importantly, objectivity in evaluating the management's decisions. Such resources possessed by individual outside directors may well be their social ties with other organizations as the competitive forces for the firm to defeat their competitors (Schoorman, Bazerman and Atkin, 1981). On the question of whether having inside directors on a board would lead to managerial entrenchment, Rosenstein and Wyatt (1990) reported the fact that the advantages of having inside directors as board members outweigh the disadvantages from

managerialism when interests are closely aligned between managerial and outside shareholders.

Theoretically, boards of directors should always be on the shareholders' side, helping them to monitor managers and prevent managerial abuse of capital. However, academic researchers found that the theory of directors always being shareholders' protectors was sometimes not true in reality. Herman (1981) and Mace (1986) pointed out that substantial power to appoint and fire directors still falls on the management's shoulders. This means board membership can be endogenously determined, i.e., management can appoint candidates who are their people on to a board. Wather (1998) documented that a board of directors is an independent entity which aligns neither with shareholders nor management. It is an active player in the same way as shareholders and management. Warther proposes that the board's function is no longer as simple as protecting shareholders against managers but is also affected by the complex dynamic within the board. That is, boards can be either docile or critical, depending on who owns more power within the board, the shareholders or the managers. Further, an individual director may be reluctant to voice a critical opinion to management but more often will wait for others' support in order to maintain their position. This means the board members sway between the extremes of passivity and action rather than being a society for open discussion, in order to secure their positions.

In a nutshell, decisions made by the board of directors are influenced by forces from both managers and shareholders. It depends on which side has sufficient power to shift the position back to its own side. Therefore, the board's composition is a critical

factor in influencing and determining the board's decisions. One of the most prominent changes to the recent corporate governance system is to add board independence. Fama and Jensen (1983) strongly advocated the presence of independent directors as a majority of board members as independent directors are not subject to the classical agency problems, which can be detrimental to shareholders' wealth. Apart from board independence, corporate governance scholars and empirical researchers also advocate the independence of board subcommittees (Abbott, 2000, Klein, 2002, Bronson, Carcello, Hollingsworth and Neal 2009), the reason generally being that these committees are more specialized in solving assigned tasks. Similarly, many other board characteristics have been examined and used as mechanisms to promote board effectiveness, such as board size, share ownership of each party, whether the CEO sits on board subcommittees, and so forth. Thereby, board composition and board characteristics are both significantly vital components in determining the effectiveness of corporate governance inside a firm and should be highly regarded. The revolution of these components should also be of great interest to economic scholars and institutional investors. Subsequently, Section 2.2 will introduce empirical investigation into hotly-debated board characteristics.

2.2 Prior studies for board characteristics

This section outlines some of the prior literatures examining the board characteristics that have received most attention (or interest) from academic scholars. These studies are categorized into board-specific and director-specific groups for better comprehension in Table 1. This table shows how important and hotly-debated these chosen variables are. Arguments, opinions and findings from these prior studies are specifically presented in section 4. However, this section presents a summarized

version of contents of these articles for the purpose to give a more complete picture of what is demonstrated later in section 4.

Firstly, variables for investigation are classified into two broad groups, either board-specific or director-specific. The board-specific category covers variables that describe board characteristics such as board size while the director-wise category pinpoints features of directors such as compensation to directors. Subsequently, board-specific variables are further distinguished between "board as a whole" and "board committees" while director-specific are "given by board" and "bring to board". "Board as a whole" subcategory isolates variables that describe the board generally such as gender diversity while variables fall into "board committees" subcategory are specifically committee-related. "Given by board" subcategory contains director-specific variables with characteristics given by the board such as director fees while "bring to board" are those qualifications brought by directors to the board such as director experience. The following subsections specifically summarize main points of prior articles quoted in this paper regarding these categories.

2.2.1 Regarding Board

2.2.1.1 Board as a whole

2.2.1.1.1 Board Independence

Directors, in general, are charged with looking over management's shoulder to ensure the company is being run in a proper and lawful manner. Boards of directors have several key tasks to perform for the firm: decision making for CEO replacement, response to a takeover bid, assessment for acquiring another company, strategy for takeover defences, evaluation for executive compensation, diversification and

research and development among others (Bhagat and Black, 1999). Independent directors are board members who are neither employed by nor affiliated to the firm, i.e., they do not have financial ties with the firm that can lead to conflicts with their shareholders. Owing to the conflict of interest between shareholders and management, it has been proposed that inside directors can compromise their impartiality when benefits are involved (Sheppard, 1994). In contrast, Fama and Jensen (1983) argued that independent directors could serve as a corporate governance mechanism by increasing the effectiveness of board oversight. They argue that independent directors are more efficient in monitoring management and will not collude with it. Consequently, under the separation of ownership and control, independent directors facilitate the governance functions of the board.

In New Zealand, there has not been a mandatory ratio of independent directors on board by law until the release of new NZX listing rules incorporating the proposed requirement regarding board independence in the NZ Corporate Governance Principles and Guidelines in 2003. Before then, the level of independence for board members was just determined in accordance with the constitution of the company. However, the series of corporate scandals and international legislative reforms greatly influenced NZ corporate governance legislation. In 2003, after consultation with listed issuers and other interested parties, the NZX released its new corporate governance regime. This regime is in the form of a Corporate Governance Best Practice Code and a number of governance-focused amendments to the NZX Listing Rules. The Corporate Governance Best Practice Code and amendments incorporating corporate governance regulation into the New Zealand Exchange Listing Rules entered into force in 2004, in which the ratio of independent directors on a board was mandatory at

33.33% minimum.[1]

Many studies have investigated the relationship between the presence of independent directors and various measures of firm performance, with mixed results. Uzun, Szewczyk and Varma (2004) found a negative association between the likelihood of corporate fraud and the degree of independence on a board. Ryan and Wiggins (2004) reported similar results to Uzun et al. with regard to the notion that board independence serves as an effective mechanism for aligning a firm's objectives with shareholders' interests. Beasley (1996) also showed that the likelihood of financial statement fraud is reduced by the existence of independent directors and an audit committee. Further, in firms with an entrenched CEO or a CEO who also chairs, a high percentage of inside directors are reluctant to either raise equity-based incentives for their CEOs or replace cash with equity. Australian firms also present similar phenomena of enhanced firm performance by having independent boards within the firms; the reason for this is that the level of specialist knowledge and skills brought by these independent directors to the firm can provide effective decision-making (Bonn, 2004). Hossain, Prevost and Rao (2001) reported the same independent board effect using NZ data. However, they did not find any influences from the Companies and Financial Reporting Acts 1993 on the board independence and firm performance relationship.

However, there has also been numerous research proposing arguments that oppose the presence of outside directors on boards. According to Zahra and Pearce II (1989), the insufficient time and expertise possessed by outsiders prevent them from performing effectively. They further proposed that outsiders may not be able to completely

[1] See NZSX rules 3.3.1 (c) for details.

comprehend the complexities incorporated in the company and thus ineffectively monitor and control its operation. Studies also report a negative relationship between board independence and Tobin's *q* (Agrawal and Knoeber, 1996, Barnhart and Rosentein, 1998). Bhagat et al. (1999) showed a lower level of profitability possessed by firms with supermajority-independent boards. They suggested that firms ought to have a moderate level of insider director presence on board. Coles, Daniel and Naveen (2003) advocated for more insider presence on boards for R&D-intensive firms owing to the level of firm-specific knowledge provided by insiders.

In all likelihood, a globally-optimal mixture of inside directors and outsider directors is unlikely to exist. Instead, the optimal mix depends on the individual condition of the firm (Fama, 1980 and Fama and Jensen, 1983). Fama and Jensen proposed that a majority of inside directors should serve on the board when the firm needs more specialty expertise for decision-making, while a more independent board should be employed for firms with a higher probability of collusion among managers.

The extensive debates regarding director independence and a series of global legislative reforms requiring minimum board independence reveal the fact that director independence is an important factor for firm performance and therefore its evolution in NZ firms would be of great interest.

2.2.1.1.2 Board Size

Jensen (1993), Lipton and Lorsch (1992), Hermalin and Weisbach (2003) and others have suggested that board size can have an important effect on firm performance. When all else is equal, bigger boards can result in impaired communication and

coordination between directors, free-rider problems, a lack of cohesiveness, less candid discussion of managerial performance, and greater control by the CEO. In short, board function risks becoming symbolic when board size becomes too large. By contrast, smaller boards permit better monitoring of management and impose fewer costs on shareholders. Many studies that examine the relationship between board size and firm performance find evidence for this view, across a wide range of markets and countries. Yermack (1996) found a negative relationship between board size and firm performance for large US firms, as did Eisenberg, Sundgren and Wells (1998) for small Finnish firms, and Mak and Kusndadi (2005) for Singaporean and Malaysian firms.

Not all researchers agree that smaller boards are necessarily better. For example, Coles, Daniel and Naveen (2003) argued that more complex firms, such as diversified conglomerates, and firms that rely heavily on debt financing, would require a large board in order to obtain the necessary range of skills.

Clearly, there is not yet any broad consensus on the optimal size of boards. Nevertheless, there are both theoretical and evidential reasons to believe that board size matters for firm performance, even if the exact mechanism by which it does so is unclear, and so the evolution through time of NZ board sizes is of obvious interest.

2.2.1.1.3 CEO Duality

CEO duality refers to the situation in which the CEO of the firm is also the chairman of the board of directors. Based on the agency theory, CEO duality is hostile to the firm's value owing to the insufficiency and incapability of impartial monitoring and

control by the board. As noted by Fama and Jensen (1983), CEO chairmanship "signals the absence of separation of decision management and decision control, and in our theory, the organization suffers in the competition for survival". After this argument, a series of articles were published in *Fortune* discussing the issues regarding CEO duality. Fromson (1990) concluded that the suggestions of these articles were that fund managers are willing to see an outside director be chairman rather than the CEO, who is not trusted to put shareholders' interests ahead of his own.

In contrast, the stewardship theory, which emphasizes a broader range of CEO motivations than solely self-interest, advocates for the CEO duality phenomenon because of the unity of command it presents. Muth and Donaldson (1998) showed obvious support for the Stewardship theory, finding a positive effect from having CEO chairmanship on firm performance. The reason is that the empowerment of the CEO stimulates them to provide responsible leadership, strategy formulation and implementation. Peng, Zhang and Li (2007) showed great support for the stewardship theory for the duality/performance relationship within Chinese companies as well.

The extensive existing literature regarding the CEO duality/firm performance relationship is inconclusive. Iyengar and Zampelli (2009) have pointed out that CEO duality is not related to the marginal performance. Lam and Lee (2008) declared that CEO duality fits in a family firm while separation between these two roles provides superior results for a non-family firm. Consistently, Faleye (2007) has suggested that firm characteristics should determine the form of leadership structure used, which would provide the best-fit balance of costs and benefits.

2.2.1.1.4 Gender Diversity

Increasing attention has been generated on the effects of having female workers employed within the top management team on the organizational performance. The underlying perception is the unique value brought by female directors from their perspectives, experiences and work styles to the corporation (Daily and Dalton, 2003). Daily and Dalton argued that it would be advantageous to add female board members owing to their inputs for wider customer needs and interests. That is, having female directors on the board would allow opinions and insights representing the other half of the population. In this way, board decisions could be made in a more comprehensive way. Further, a prerequisite of a high level of education (at least a university degree) is normally required for a female to be employed within a top management team (Smith, Smith, and Verner, 2006). Various high standard prerequisites for a female presence on boards indicate the high profile possessed by current female directors.

Carter, Simkins, and Simpson (2003) contributed to the literature by demonstrating a positive relationship between a female presence on a board or top management team and a firm's value. Carter et al. further indicated a favourable effect on the firm's value from having minorities, such as African Americans, Asians and Hispanics on the board. Additionally, a positive relationship between the size of the female proportion on the board and the size of the firm and a negative association between the proportions of insiders on the board and the female presence are identified. More specific to the governance standpoint, Adams, Almeida and Ferreira (2009) suggested that female quotas on boards are helpful in monitoring a firm with weak governance, indicating female directors tend to provide stronger supervision for the top

management than male directors. It would then be logical to say that firm value can be improved through better governance and thus there is less possibility of managerialism.

Siciliano (1996) has examined the association between a variety of diverse board members and different types of firm performance, which are social performance, fundraising results, and operating performance. Regarding the gender diversity on board, the author's finding is inconsistent with studies showing enhanced operating performance by employing female board members. The fundraising results are not positive on having female board members. However, a higher level of social performance can be achieved through the female presence on the board. Francoeur, Labelle, and Sinclair-Desgagne (2008) examined the effect of female board presence on firm performance using Canadian data and found insignificant results. Rather, they found having female officers assisted good firm performance, not female directors.

From prior studies regarding female board membership, it is obvious that they can have extensive influences on the board's decisions. The supportive and contrary conclusions and the endogeneity problems making this an even more complicated topic further justify the importance of investigation into gender diversity on boards.

2.2.1.1.5 Board and Committees Meetings

Board meetings are held for the board members to make strategic decisions with regard to the future direction of a company. These meetings are usually held publicly and regularly and only the board members can attend. Votes on company decisions will be presented by members in the meeting and there must normally be a quorum in

order for the meeting to be considered legal. As speculated by Brick and Chidambaran (2010), board meeting frequency would increase as investment activities such as mergers or acquisitions increase. Similarly, as one of the board functions is to provide strategic advice to management, the authors expect increased board meetings as investment opportunities grow.

Conger, Finegold and Lawler III (1998) suggested that effectiveness of board performance can be improved through board meetings. Arguably, a board meeting is a venue for directors to communicate ideas and exchange values, given that nowadays directors with multiple board appointments can be too busy to efficiently communicate with others (Jiraporn, Davidson III., DaDalt and Ning, 2009). A similar implication of these articles is that directors need to attend meetings to improve their performance in accordance with shareholders' interests. Additionally, having regular meetings could be a mechanism for directors to insulate themselves from litigation risk when the firm performs poorly, that is, to acknowledge to shareholders their commitment to the firm (Brick and Chidambaran, 2008).

Opposing views for frequent board meetings exist as well. Vafeas (1999) argued that the limited time for a board meeting is hardly useful for directors to effectively exchange thoughts and especially when the meeting agenda is always set by the CEO. In fact, Jensen (1993) advocated that boards be relatively inactive and pointed out that boards in badly-performing firms are usually forced to remain at a higher level of activity. Brick et al. (2010) correspondingly suggested that increased board meetings are simply in compliance with regulation or from fear that shareholder litigation will damage firm values as both directors and managements are interrupted from focusing

on running firms.

The study of Vafeas (1999) is probably the earliest investigation of board activity, measured by board meeting frequency, in relation to firm value. Vafeas found an inverse relation between board meeting frequency and prior firm performance, suggesting that firms with prior poor performance may require better monitoring through having more frequent meetings, that is, to be seen as being more engaged. Further, firms with prior poor performance improve strongly in the year of an abnormally high board meeting frequency. This improvement in operating performance is even superior when accumulated over the subsequent two and three years.

2.2.1.1.6 Staggered Board

A staggered board of directors is a practice allowing the corporation to only elect a portion of the directors on the board each year instead of all at a time. Directors are classified into a specified class, i.e. Class I, Class II, etc. This practice is famously known as the powerful antitakeover defence for the corporations. According to Bebchuk, Coates IV and Subramanian (2002), staggered boards have the effect of protection for boards from hostile takeover through forcing the hostile bidder to wait at least one year to dominate the board, and to win more than one election at successive shareholder meetings in order to exercise control of the firm. In addition to this increased power in the negotiation of a takeover, Koppes, Ganske and Haag (1999) also promoted that a staggered board brings increased stability and improved long-term planning. As the characteristic of a staggered board is to have only a portion of directors elected at a time, it retains a level of "institutional memory" in the planning and operations of a corporation's board of directors, and thus increases board

stability. Directors certainly will feel accountable for their performance and thus be willing to work harder. With regard to long-term planning, the three-year term of director board appointments will encourage directors to focus on long-term planning and return. Those directors motivated by many factors to strive for professionalism would prefer long-term employment to short-term. Thus, staggered boards will allow directors the opportunities to fulfil their aspirations.

On the other hand, staggered boards receive substantial opposition from institutional investors. Many academic researchers report the negative association between having a staggered board and the firm value (Bedchuk and Cohen, 2005, Guo, Kruse and Nohel, 2008, Rose, 2009). Extending the study of Gompers, et al. (2003) in which they reported a negative relationship between the index containing 24 management-favouring governance provisions identified by IRRC and the firm's value, BeBchuk and Cohen (2005) controlled for other governance provisions and found staggered boards especially contributing to the low firm value. This negative correlation is not only statistically significant but also economically meaningful, and is stronger when a staggered board provision is established in the corporate charter than in the company's bylaws. The reason for such a negative effect is that the protection might hurt shareholders by weakening the coercion of removal and thus allow opportunities for empire-building and managerial entrenchment. Consistent with these findings, Guo et al. (2008) examined 188 firms with staggered boards whose management intends to remove the stagger which report a wealth-creation effect by de-staggering boards. They further suggest that firms with better governance practices are more inclined to remove staggered boards while firms with poison pills prefer the opposite.

Table 1. Categorized prior studies for board characteristics

Regarding Board	Quoted Articles
Board as a whole	
Board independence	Bhagat and Black (1999), Sheppard (1994), Fama and Jensen (1983), Uzun, Szewczyk and Varma (2004), Ryan Jr. and Wiggins III (2004), Beasley (1996), Bonn (2004), Hossain, Prevost and Rao (2001)
Board Size	Jensen (1993), Lipton and Lorch (1992), Hermalin and Weisbach (2003), Coles, Daniel and Naveen (2005)
CEO duality	Fama and Jensen (1983), Fromson (1990), Muth and Donaldson (1998), Peng, Zhang and Li (2007), Iyengar and Zampelli (2009), Lam and Lee (2008), Fyleye (2007)
Director Tenure	Buchanan, 1974, Vafeas (2003), Bebchuk, Fried and Walker (2002), Byrd, Cooperman and Wolfe (2010)
Gender diversity	Daily and Dalton (2003), Smith, Smith, and Verner (2006), Carter, Simkins, and Simpson (2003), Adams, Almeida and Ferreira (2009), Siciliano (1996), Francoeur, Labelle, and Sinclair-Desgagne (2008)
Meetings	Brick and Chidambaran (2010), Conger, Finegold and Lawler III (1998), Jiraporn, Davidson III., DaDalt and Ning (2009), Brick and Chidambaran (2008), Vafeas (1999), Jensen (1993)
Staggered board	Bebchuk, Coates IV and Subramanian (2002), Koppes, Ganske and Haag (1999), Bebchuk and Cohen (2005), Guo, Kruse and Nohel (2008), Rose (2009), Gompers, et al. (2003)
Board Committees	
Committee existence	Krishnan (2005), Zhang, Zhou and Zhou (2007), Xie, Davidson III and Dadalt (2003), Chau and Leung (2006), Boyle and Roberts (2008), Newman and Mozes (1999), Vafeas (2003), Anderson and Bizjak (2003), Conyon and Peck (1998), Weir and Laing (2001)
Committee independence	Abbott (2000), Carcello and Neal (2003), Klein (2002), Bronson, Carcello, Hollingsworth and Neal (2009), Anderson and Bizjak (2003), Cotter and Silvester (2003)
CEO involvement on board committees	Beasley, Carcello, Hermanson and Neal (2009), Carcello, Neal, Palmrose and Scholz (2010), Cohen, Krishnamoorthy and Wright (2002), Sridharan (1996), Ueng, Wells and Lilly (2000)

Table 1. Categorized prior studies for board characteristics (continued)

Regarding Directors	Quoted Articles
Exogenous Characteristics	
CEO compensation	Jensen and Murphy (1990), Jensen and Meckling (1976), Chen, Steiner and Whyte (2006), Bryan, Nash and Patel (2006), Brunello, Graziano and Parigi (2001), Guay (1999), Edmans and Liu (2010), Andjelkovic, Boyle and McNoe (2002), Elayan, Lau and Meyer (2001), Jin (2002)
Chair and director fees	Fama and Jensen (1983), Yermack (2004), Cordeiro, Veliyath, and Eramus (2000), Davis (1996), Linn and Park (2005)
Directors' ownership	Jensen (1993), Bhagat, Carey and Elson (1999), Stulz (1988), Morck, Shleifer and Vishny (1988)
Endogenous Characteristics	
Directors' Educational and Industrial background	Jensen (1993)
Directors' Experience	Same as Director Tenure
Multiple directorships	Ferris, Jagannathan, and Pritchard (2003), Fama and Jensen (1983), Fich and Shivdasani (2006), Sarkar and Sarkar (2009)

2.2.1.2 Board Committees

2.2.1.2.1 Committee Existence

One of the responsibilities of the board of directors is to establish an audit and a compensation committee for the firm. The audit committee is mainly responsible for assisting with the board's oversight of the integrity of the company's financial statements and reporting process, the company's legal and regulatory compliance, and the performance and independence of the auditor. Key responsibilities for the remuneration committee are to set appropriate compensation packages for the board and Chief Executive Officer (CEO) which are aligned with organizational interests, mission and strategy, as well as review and oversee the compensation policy. Both committees are considered to have increasing importance in their roles to assist the board of directors. Particularly after the series of corporate scandals in 2002, the revised NYSE listing rules mandated the establishment of an audit committee in a listed firm, while a remuneration committee is also highly recommended to companies with large boards.

Studies have examined the relationship between the audit committee and corporate internal control issues based on comparing firms disclosing such issues with control sample firms changing auditor without disclosing such issues (Krishnan, 2005; Zhang, Zhou and Zhou, 2007). Both studies found that the establishment of an audit committee lessens the frequency of internal control weakness. These are the weaknesses in respect to material weakness and reportable conditions. Further, this audit committee effect is especially prominent for audit committees comprising a majority of independent members and finance experts. Also advocating for the existence of an audit committee but from the earnings management angle, Xie,

Davidson III and Dadalt (2003) reported the findings of less manager propensity for earnings management from more active board and audit committee activities. Chau and Leung (2006) studied the impact of family ownership on audit committees with data of Hong Kong firms. It was found that audit committee existence is low when the family ownership is at a medium level, about 5% to 25%. However, the existence of an audit committee increases significantly when the family ownership is above 25%, considered as dominating entrenchment.

The impact of remuneration committees on corporate control efficiency is also closely scrutinized by academic researchers. Legislation or exchange trading rules from many countries recommend that the composition of remuneration committees be fully independent, such as UK Cadbury Committee and NYSE listing rules (only for domestic issuers). Remuneration committees are considered to have the most vital role in determining and affecting the level of the executive compensation package (Boyle and Roberts, 2008). Thus, the composition of the subcommittee is likely to affect the corporate governance structure. Newman and Mozes (1999) indicated that CEO membership of the remuneration committee allows the opportunity for more CEO-favoured compensation packages. However, a number of studies failed to report similar results (Vafeas, 2003, Anderson and Bizjak, 2003, Conyon and Peck, 1998, Weir and Laing, 2001). These authors all reported evidence that remuneration committees with executive directors as members do not contribute to inappropriate levels of executive compensation or reduce overall incentives.

Despite the different findings regarding committees' impact on corporate governance efficiency, the prior literature suggests that both audit and remuneration committees

play a critical role in assisting boards to protect shareholders' interests. Therefore, it is worthwhile to study the evolution of the existence of committees.

2.2.1.2.2 Committee Independence

Apart from the tremendous scrutiny placed on board independence in the past decade, committee independence has perhaps been a more popular and focused topic among regulators, economists and academic researchers. As the allocated vital responsibilities of each committee are to maximize shareholder value, their independence would surely be worthy of interest and examination. In particular, during in the post-Enron era, the NYSE mandates the independence of audit, remuneration and nomination committees. The NASDAQ also requires, although it is not compulsory, board decisions regarding three committees to be made by the majority of independent directors on the board. This study only examines the audit and remuneration committees and not the nomination committee, which does not reach commonality among firms at the beginning of the chosen examination periods.

Audit committee independence is more frequently cited as the prerequisite of its effectiveness now. Abbott (2000) reported the result of having an audit committee composed of independent directors and holding two or more meetings annually as less fraudulent financial reporting. Consistent with Abbott's study, Carcello and Neal (2003) documented the evidence of higher reporting quality associated with oversight by independent audit committees. Similarly, Klein (2002) found that audit committee independence contributes lower earnings manipulation. Further, bearing in mind the question of how much independence is needed for the audit committees to accomplish the quality-reporting effect, Bronson, Carcello, Hollingsworth and Neal (2009)

documented that the benefits could only be realized under the circumstances of 100 percent independent audit committees. Such results reflect the SOX requirement of 100 percent independent audit committees.

Firm requirements for remuneration committee independence did not take place until around 2009 in the US. The US Department of Treasury delivered draft legislation to Congress on 16 July 2009 to promote genuine remuneration committee independence, not just in name.[2] Specifically, legislation requires members of a remuneration committee to meet the independence criteria set for audit committees in SOX, and compensation consultants and legal counsel hired to be fully independent from management. Possibly owing to the late awareness of the importance of remuneration committee independence, there are much fewer studies examining the association between the independence of remuneration committees and firm value. Anderson and Bizjak (2003) found no significant influence on executive pay when firms established remuneration committees that are fully independent. Likewise, Cotter and Silvester (2003) did not find evidence supporting their prediction of a positive relationship between an independent compensation committee and firm performance.

All the debates and regulatory terms suggest that along with the importance of the independence of the committees, the scale of their independence should be of consideration as well. Although there is unlikely to be a universal optimal independence level, committee independence is regarded as an effective mechanism to reduce collusion among managers, reflecting the importance of studying their evolution.

2.2.1.2.3 CEO Involvement on Board Committees

[2] See article at http://www.ustreas.gov/press/releases/tg218.htm

Board and committee independence are both considered by the public and regulators as the most effective mechanisms to maintain impartiality in monitoring management behaviour in order to protect shareholders' interests. However, such independence may become less genuine if the CEO is involved in selecting audit committee members or influences the operation of the audit committee through their social ties or membership of the committees (Beasley, Carcello, Hermanson and Neal, 2009). Consistently, Carcello, Neal, Palmrose and Scholz (2010) have reported CEO involvement in appointing board and audit committee members, though membership of a nomination committee will diminish the audit committee's oversight of financial reporting. Arguably, the function of an independent audit committee to help auditors confront management regarding financial reporting misstatements would be converted back to assisting management (Cohen, Krishnamoorthy and Wright, 2002).

Regarding remuneration committees, Sridharan (1996) would probably be the first to report that CEO pay is positively associated with CEO influence over the board, even in badly-performing firms. A CEO with higher influence can be more capable of increasing the compensation level than a CEO with less influence. Following Sridharan's study direction but also including small firms for examination, Ueng, Wells and Lilly (2000) documented that this CEO influence, meaning this pay effect is only applied in large firms but not small firms (asset size less than $250 million). A possible reason for such insignificant CEO influence on pay level could be that the CEOs of small firms may be the owners or have family ties to the firm where CEO influence could be diluted by the co-owners or other family members.

Apparently, CEO involvement on board committees has possible negative consequences, mostly less effectiveness brought by CEO influence through exertion

of power to accomplish their own goals at shareholders' expenses. This is reflected by many corporate governance rules mandating the full independence of audit committees and a majority of independent members on remuneration committees. Hence, it would be interesting to look at changes in CEO involvement on board committees for the past two decades within which the implementation of the new rules occurred.

2.2.2 Regarding Directors

2.2.2.1 Given by Board

2.2.2.1.1 CEO Incentive Compensation

Shareholders elect directors to look after the interests of executives. One of the vital responsibilities of directors is to determine the level and structure of compensation for top executives. As directors exist to protect shareholders' welfare, their decisions on the level and structure of compensation for top executives aim to align the interests of the executives with the shareholders. Jensen and Murphy (1990) suggested that one way to achieve this is to proportionately make executive compensation incentive-based, that is, through stocks or options. This is the criteria used in this study to identify whether the CEO is paid with incentive compensation or not. Annual reports document their means of remunerating the CEO, either in a cash format (usually salary plus pension) or through incentive packages (either stocks or options).

One of the aims of shareholders of the firms is to pursue well diversified assets and thus they may sometimes prefer risk-induction strategies. Managers, on the other hand, may take conservative approaches (low risk/low return) to protect their position. Such discretion can lower firm value and owners' wealth. Jensen and Meckling

(1976) suggested that the incentive effects of equity based compensation induce executives to undertake riskier investments and ultimately enhance market valuations. Specifically, Jensen and Murphy (1990) suggested options particularly motivate managers to pursue risky strategies because of the ability to align the interests of executives with shareholders. Consistent with Jensen and Murphy, Chen, Steiner and Whyte (2006) found an increasing use of stock option-based compensation for top managers in the US banking industry owing to its induction of risk-taking. Such risks refer to those that boost the firm's short-term value where the stockholders benefit from their call options. As a result, the welfare of the firm is transferred from the bondholders to the stockholders.

Similarly, Bryan, Nash and Patel (2006) documented a positive association between the US firms' values (based on Altman's Z score) and the equity-based compensation structure. Additionally, the level of financial distress and thus the impact on the agency costs of debt trigger more use of option-based executive compensation in the US. They suggest that firms that are hard to monitor should use larger amounts of option-based compensation to resolve shareholder/manager conflicts. Another related suggestion from the authors is that large firms or firms with declining performance should use more equity-related compensation. Brunello, Graziano and Parigi (2001) also reported a growing trend in employing incentive compensation for CEOs in Italy.

Not all empirical studies agree with the equity-performance relationship. Guay (1999) argued that option compensation does not help with strongly conservative managers who may act so as to preserve the value of his or her option grants. Edmans and Liu (2010) advocated more efficiency in using inside debt than other means of executive

compensation, such as equity or fixed bonuses. In comparison with fixed bonuses, paying off inside debt in bankruptcy is proportional to the liquidation value, not just the probability of default. Equity compensation, on the other hand, is designed to induce effort which could simply increase liquidation value. Debt, instead, could improve effort while deterring risk shifting.

Unlike the US study of Bryan et al., using NZ data, Andjelkovic, Boyle and McNoe (2002) reported that CEO pay is not related to performance in NZ after control for firm size, risk, leverage and board structure. Firm size, rather, is the sole determinant of variations for CEO pay levels. Similarly, Elayan, Lau and Meyer (2001) found that a corporation's decision on offering an incentive compensation package to executives does not depend on firm performance. Instead, company size and risk are the two primary determinants of executive compensation structure. More specifically, Jin (2002) reported that prior empirical studies using total risk to examine the relationship between risk and CEO compensation structure are not accurate enough. Rather, it is the firm-specific risk level that determines the level of incentive pay for the CEO, namely, the less firm-specific risks the higher the incentive pay for the CEO. Market risk does not relate to CEO pay structure at all.

2.2.2.1.2 Chair and director fees

Fama and Jensen (1983) recognized outside directors' incentives to develop reputations as experts in decision control. They would use their directorships to signal decision agents that they are experts. Such signals are convincing when direct payments to outside directors are small. However, Yermack (2004) reported findings that are in contrast to Fama and Jensen's conjecture relative to the after-market

incentives regarding the directors' reputations. He found compensation, turnover, and opportunities give directors positive performance incentives, within which compensation and ownership account for more than half of the influence. In more detail, there is a change in director wealth of approximately $285,000 for each 1 standard deviation change in the performance of the median sample firm. That is, compensation to outside (non-executive) directors is arguably one of the most important incentive mechanisms to shape and drive director behaviour in support of the shareholders. Yermack's findings are consistent with the results of Cordeiro, Veliyath, and Eramus (2000) who reported that director compensation is related to firm performance, director effort and external monitoring.

Yermack's viewpoint regarding pay-performance relationship is not that it is all greed. Davis (1996) proposed reasons for an insignificant pay-performance relationship. He suggested that there could be other non-financial reasons that attract board services, such as creating interlocks and engaging in possible relationships with other industry leaders. Linn and Park (2005) also provided evidence that director compensation is positively associated with the investment opportunities of firms. Their results are consistent with hypotheses that director compensation is designed to attract directors whose productivity increased firms' opportunities, and to mitigate agency problems.

2.2.2.1.3 *Directors' Ownership*

Jensen (1993) advocates equity ownership for board members owing to the better incentives provided. The author writes "this investment would force new members to recognize from the outset that their decisions affect their own health as well as that of

remote shareholders, and that over the long term the investment can be made much larger by, for example, stock-based compensation" (p.865). This is consistent with the findings of Bhagat, Carey and Elson (1999) that substantial director ownerships can lead to better monitoring. Further, they suggested that the higher the board equity possession the more likely a disciplinary-type CEO would exist in a poorly-performing firm. Better monitoring functions performed by the directors, and the CEO having a disciplinary role result in a better firm performance.

Stulz (1988), on the other hand, raised concerns that excessive voting powers held by executive directors can lead to managerial entrenchment. Accordingly, Morck, Shleifer and Vishny (1988) studied the relationship between deviations on either side of optimal board ownership and firm performance. They found a significant non-linear relationship between board ownership and firm value. For each 1% increase in board ownership between 0% and 5%, Tobin's Q rises while Q decreases for each 1% increase in board ownership between 5% and 25%. When board ownership is beyond 25%, Q figures increase at a lower level. Literally, board ownership has positive effects on firm value, consistent with the incentive alignment hypothesis of Jensen and Meckling (1976). However, corporations should keep the level of board ownership at the pre-determined optimal level to fully maximize firm values, reflecting the managerial entrenchment hypothesis of Morck et al.

Bring to Board

2.2.2.2.1 Directors' Educational and Industrial Background

The expertise and experience possessed by each director are the mechanisms helping directors to understand the business of the firm and to analyze the performance of the CEO. Further, these talents enable directors to create ideas and make decisions for the right corporation path. Therefore, the educational and industrial background of a director is a vital indication of their qualification. As suggested by Jensen (1993), boards should contain financially literate members who can offer financial planning related inputs, particularly the corporate objective and value determinants.

Jensen's suggestion was reflected in the legislative reforms of the SOX. This Act mandates all listing firms in US to have an audit committee comprising financially literate members, and at least one financial expert. Such a new rule in this well-known corporate governance act has further underlined the importance of having board members who are highly educated and well experienced.

Educational and industrial backgrounds from each director are unique and helpful possessions for them to understand firms' operations and contribute valuable inputs. These talents enable directors to create ideas and make decisions for the right corporation path. Both Jensen (1993) and corporate governance legislations suggest some of the board members to be financially literate. Therefore, director's educational and industrial backgrounds not only indicate directors' qualification but also help to make better decisions.

2.2.2.2.2 Multiple Directorships

Directors with multiple directorships indicate that they are also a board member of

other companies. According to Ferris, Jagannathan, and Pritchard (2003), directors who are the members of large boards or employed by large firms receive more opportunities for multiple directorships. These directors tend to be older and non-affiliated with the firm. The most common reasons for hiring these directors are their abilities with regard to management, consultation, and network of external resources. Fama and Jensen (1983) proposed the Quality Hypothesis[3] referring to the signal of director quality possessed by directors with multiple appointments. Consistent with Fama and Jensen, Ferris et al. (2003) reported the enhancing firm value associated with a high portion of directors with multiple appointments. They further suggested that reputational effect in the market for directors in United States has a positive effect on firm performance from having a board largely constructed of members with multiple directorships. However, Ferris et al. did not observe the negative relationship between firm performance and the percentage of directors with multiple appointments on boards as suggested by the Busyness Hypothesis[4]. In other words, directors who are deemed as being busy through having multiple directorships do not receive a decrease in investors' confidence in the United States.

However, there are also studies showing an adverse effect on firm values from introducing multiple directorships on boards (Fich and Shivdasani, 2006). Sarkar and Sarkar (2009) extended the existing literature on multiple directorships by examining the effect on firm performance by companies operating in an emerging economy, India. They further sub-categorized their sample firms into multiple directorships possessed by inside or outside directors, and within group-affiliated or non-affiliated

[3] Quality Hypothesis: Positive market reaction for appointing directors having multiple board appointments as they signal the directors being more experienced, more capable to offer advice, and to provide better monitoring.
[4] Busyness Hypothesis: directors with many other directorships at the same time are argued to be too busy to perform properly and hence the quality of directing is lower.

companies. The authors discovered a favourable reaction from the market to non-affiliated firms that employed independent directors with multiple directorships on the board. This implies that the market signals the occurrence of multiple directorships within the non-affiliated firms as the directorial quality. On the contrary, a negative relationship was found between the firm's performance and multiple directorships held by inside directors irrespective of the ownership status of the company.

The uneven results in various prior research do not definitely show the impact of employing directors with multiple directorships on firm performance. However, it can be agreed that multiple directorships are deemed to be one important factor that can have influences. Therefore, it is valuable to examine its evolution in NZ listed firms.

2.3 A US study examining transition of board composition

Chhaochharia and Grinstein (2007, hereafter C & G) examined the transformation of US listed corporate board characteristics from 1997 to 2003, between which times, the famous SOX Act came into effect. Since the early 1990s, there has been an increasing level of recognition for the importance of board oversight among US institutional investors and other entities. Together with the legislative requirements regarding board composition, this raised the interest of C&G to investigate the overall picture of the board characteristics of US listed firms and the revolution which had been undergone. Data for over a thousand firms were collected from Investor Responsibility Research Centre (IRRC) for 1997, 2000 and 2003. Variables for each board feature were selected based on popularity in prior literature. Differences in changes between each time interval were statistically tested to look for significances. The primary results of their study showed trends in decreasing board size, increasing

the level of board independence and a growing number of directors with financial backgrounds. They also found a decreasing pattern in the frequency of interlocking directorships, and in the number of directors with multiple directorships. Regarding the hotly-debated CEO duality phenomenon, the authors did not find significant changes during the selected time periods. Another finding of this paper was that the changes observed occurred more significantly during 2000 and 2003 than during 1997 and 2000, suggesting the legislative changes may have had much influence on these changes. This study shows valuable insights as to the public perception and market trends of better corporate governance through board characteristics manipulation. Therefore, not only interesting but it is imperative to do a New Zealand study in similar area.

2.4 NZ Literature Reviews

There has been little research undertaken on the boards of directors of New Zealand companies. Most of this consists of studies regarding the relationship between board independence and firm performance as well as aiming to find out what kind of contingencies can lead to more independence for boards. Fox (1996), who extended the earlier rare NZ studies regarding CEO duality by Turner (1985) and board size by Chandler and Henshall (1982) within the literature context, was the first to conduct an investigation into the board characteristics of NZ companies. He presented the changes that occurred in the board structure of New Zealand listed companies from 1962 to 1993. Interestingly, NZ companies showed a significant non-executive (i.e. outsider) director dominance on boards; over 80% in earlier sample periods and approximately 75% by 1993. As indicated by these figures, there was a reduction in outsiders on boards of New Zealand listed companies. The author suggested that such

reduction may indicate that outsiders are "more likely to constitute 'dead wood' than insiders, and are more likely than insiders to have suffered legitimacy problems following the sharemarket 'crash'" (Fox, 1996, p 17). Another finding of this paper was the percentage of the CEO duality phenomenon among NZ listed companies, which was only 14.3%. As proposed by the author, NZ companies have an effective board leadership structure according to this percentage.

Research has been conducted into the contingencies that contribute to a higher or lower percentage of independent directors on the boards of NZ listed companies (Mak and Roush, 2000, Prevost, Rao and Hossain, 2002). Both papers present a positive relationship between board size and the percentage of outside directors, suggesting that independence can be an effective corporate mechanism to control agency problems. In addition, a positive relationship is also revealed between insider ownership and outside directors owing to the ability of outsiders to mitigate the negative entrenchment effect brought by insider concentration. Interestingly, Prevost et al. (2002) suggested that the likelihood of growth of a NZ listed company is negatively correlated with the number of outsiders on the board due to the requisite specialised knowledge and skills that the insiders possess to evaluate the complex, specialized, and uncertain nature of their projects. Regarding growth opportunities, Mak and Roush (2000) demonstrated that firms with relatively more growth opportunities are likely to use dual leadership. These two findings add up to the negative relationship between CEO duality and number of outsiders, which was also confirmed by Prevost et al. Moreover, it is also indicated that the new legislation, the Companies Act 1993, is associated with an increase in the percentage of the outsiders on boards in New Zealand. It appears that the increased disclosure requirement and

emphasis on the fiduciary responsibilities of the board have caused firms to strengthen their corporate governance structure by increasing outsider representation on the boards. Consistent with previous research (Byrd and Hickman, 1992), Prevost et al evidenced a positive association between outsider representation on boards and corporate performance.

Executive compensation has also come under scrutiny by researchers in relation to the board characteristics of New Zealand listed companies. Andjelkovic, Boyle and McNoe (2002) examined the level of executive compensation prior to, during and following the introduction of public disclosure legislation in 1997. These authors reported that CEO pay is not related to performance in NZ after controlling for firm size, risk, leverage and board structure. However, firms which voluntarily disclose CEO remuneration exhibit positive pay performance sensitivity; but those firms which choose not to disclose the information until the last possible dates by legislation do not. These together suggest that inefficient executive pay setting existed among NZ listed firms prior to the new legislation. Nevertheless, CEO pay has been found to be independent from firm performance even after the legislation. Firm size, rather, is the sole determinant for variations in CEO pay levels. Cahan, Chua and Nyamori (2005) reported a consistent finding that firm size and board size have higher value-wise effect on executive pay in NZ public sector corporations. Elayan, Lau and Meyer (2001) have also drawn attention to these two size-related factors. Consistent results from the papers of both Cahan et al. and Elayan et al. demonstrate that the business risk involved in large companies will create positive impacts on compensation levels. Director reputation, which defines the directors' quality, shows an expected negative coefficient with executive compensation level, suggesting a board with more high-

quality directors is likely to constrain excessive compensation to CEOs.

The political process can also play a key role as a corporate governance mechanism. The Companies Act was revised for New Zealand companies in 1993. Some of its provisions provided for an average increase of approximately 5% in outsider representation on a board after the introduction of legislation reforms, as reported by Cahan and Wilkinson (1999). As discussed and evidenced by previous research that an increase in outsiders on a board enhances the firm's performance, one would imagine a legislation change would result in an improved firm's value. However, according to Hossain, Prevost and Rao (2001), the positive relationship between outsider representation and firm performance still stays true, but the legislative reforms do not seem to much affect such a relationship.

As can be summarized from the previous two sub sections, board independence, CEO duality and CEO compensation have been the three issues receiving most attention from financial professionals who conduct studies with New Zealand data. Overall, little is known about the overall structure and characteristics of New Zealand boards and their evolution. Since the study of Fox (1996), there has been a gap from 1993 to the present regarding the transformation of board characteristics. The focus of this study is therefore to fill such a gap by reporting the overall board characteristics and the changes occurring from 1995 to 2007.

3 Sample Construction

3.1 Data Collection

Sample datasets were manually collected from the IRG online archive, an online

service providing a comprehensive collection of data about New Zealand listed companies, including data from annual reports, prices, charts, forecasts, and indices. The periods selected for examination were from 1995 to 2007 and in order to view the transitional pictures of board characteristics, time intervals were constructed as 1995, 2000, and 2007. Hence, these allow enough time for the changes evolving between the periods. The reason for choosing 1995 to 2007 is that 1995 is the earliest period to gather board information as required by the 1993 Companies Act and 2007 permits enough time for changes to happen as a result of those new legislative reforms in the NZ Corporate Governance Best Practice Code.

From the IRG online archive, the number of listed firms on the NZ Stock Exchange during 1995, 2000 and 2007 was respectively 99, 113 and 156. However, there are two companies whose annual reports do not provide any relevant information, making the sample dataset for 1995 consist of only 97 sample firms. All annual reports of the listed firms provide relevant full or partial data in 2000 and 2007. Further, it is necessary to exclude overseas issuers listed on NZX as board characteristics of these foreign-owned firms (although listed in NZ) will arguably introduce bias to the datasets. For this reason, those firms registered overseas are excluded from the dataset of each year. Specifically, there are respectively 8, 9 and 14 overseas-registered firms in the sample years of 1995, 2000 and 2007. The sample size of firms after excluding these firms is then 89, 104 and 142 for 1995, 2000 and 2007. The sample size of directorships after excluding these firms is 594 in 1995, 671 in 2000, and 791 in 2007, meaning there are total number of 594, 671, and 791 directorships possessed by all the directors in the particular year.

The data gathering process for each firm regarding information on the targeted board characteristics involved reading through the firm's annual report for each year of the study. This information was subsequently recorded into separate spreadsheets for each firm within each year and became three very detailed databases for the following data analyses.

3.2 Variables Selection and Definition

Using the prior literature, a list of variables that, arguably, are necessary for effective corporate governance has been identified and will be examined. These variables are the ones which have received popular attention by various scholars, who refer to their influence in the corporate governance framework. This list includes director independence, board size, multiple directorships, staggered boards, director fees, CEO compensation, director share ownership, board diversity, director tenure, CEO duality, board subcommittee existence and independence, CEO involvement on committees, and meetings for boards and committees (See Table 2 and 3 for a description of the variables and data availability for each variable).

Table 2. Variables Examined

Variables	Description
Board Size (Total directors)	Number of directors on the board, including both non-executive, executive directors and CEO (if also a director)
Board Size (Non-executive directors only)	Number of non-executive directors on the board
Director independence	Number of independent directors on the board according to NZSX listing rule requirement
Director independence %	Percentage of independent directors on the board (excluding the CEO as also a board member)[5]
Director independence % including CEO	Percentage of independent directors on board (including the CEO as also a board member)[6]
Staggered board	The incidence of re-election of a portion of board members every year; a binary variable
Multiple directorships	A director holding more than one board membership at a time, measured by the number of directors on the board having multiple directorships and the average directorships held by each variable.
CEO compensation	Whether the CEO compensation package contains incentive terms or not; a binary variable
Chair & Director fees	The fees received by the chairman and each director
Directors' ownership	The percentage of shares (beneficial plus affiliated) owned by each director
Directors' total ownership	The percentage of shares (beneficial, affiliated plus non-beneficial) owned by each director
Gender diversity - female directors	The number and percentage of firms with female directors (including female CEO) on the board; a binary variable
Educational background	The areas of education that a director has gained certificates in.. Categories chosen: Medical, Law, Finance/Real Estate, Arts, Commerce/Business, Engineering, Science/Technology, Accounting, Management/Marketing, Computing/IT, Agriculture/Farming, Others
Industrial background	The areas of occupation that a director has worked in. Categories chosen: Legal, Food, Finance, Industry /Construction, Management/Marketing, Engineering/Science, Logistics/Transportation, Retailing/Manufacturing, Accounting, Agriculture/Farming, IT/Technology, Investment, Government/Politics, Others

Table 3. Variables Examined (Continued)

[5] This variable is calculated as the percentage of independent directors on the board as a portion of board size excluding CEO board membership. For example, if there are two independent directors on a five-directors board, of which the CEO is also a board member, the percentage of independent directors is 2/4 = 50%, not 2/5 = 40%.

[6] This variable is calculated as the percentage of independent directors on the board as a portion of board size including CEO board membership. Using the example from footnote 2, the independent director ratio is 40%. These two ways of measurement are used to present how much CEO board membership affects the board independence ratio, i.e., if board independence, excluding CEO board membership, increases on a larger scale than when including the CEO, it means CEO board membership has become more common.

Director Tenure	The number of years a director has been a board member for this NZ listed company. A binary variable.
Director Experience	The number of years since the director's first directorship.
CEO duality	The incidence of the board having the same person as both the chairman and the CEO; a binary variable
AC existence	The incidence of the board having an audit committee; a binary variable
RC existence	The incidence of the board having a remuneration committee; a binary variable
AC independence	The number and percentage of independent directors on the audit committee
CC independence	The number and percentage of independent directors on the remuneration committee
CEO involvement on board committees	The incidence of CEO membership on either the audit or remuneration committee; a binary variable
Board Meetings held	The number of board meetings held during the financial year
Board meeting attended	The average number of board meetings attended by each director
AC meetings held	The number of meetings held by the audit committee
AC meeting attended	The average number of audit committee meetings attended by each member
CC meetings held	The number of meetings held by remuneration committee
CC meeting attended	The average number of remuneration committee meetings attended by each member

Table 4. Data Availability

Variables	1995 (89*)	2000 (104*)	2007 (142*)
Board Size	89	104	142
Board Size including CEO	89	104	142
Director independence	62	103	127
Director independence %	62	103	127
Director independence % including CEO	62	103	127
Staggered board	89	104	142
Multiple directorships	76	104	141
CEO compensation	69	96	126
Chair fees	57	94	126
Director fees	61	102	130
Director ownership	61	103	127
Director total ownership	61	103	127
Gender diversity - female directors	89	104	142
Gender diversity - Female CEO	89	104	142
Ethnic diversity (Asian or African)	89	104	142
Educational background	43	57	93
Industrial background	50	66	98
Director tenure	89	104	142
CEO duality	89	104	142
AC existence	89	104	142
RC existence	89	104	142
AC independence	54	86	126
CC independence	33	69	93
CEO involvement on AC	54	86	126
CEO involvement on RC	33	69	93
Board Meetings held	35	52	93
Board meeting attended	35	52	93
AC meetings held	36	46	75
AC meeting attended	36	46	75
CC meetings held	17	34	47
RC meeting attended	17	34	47

* number of NZ-registered listed firms during this year

3.3 Methods

This study aims to show the trends of movements for each selected variable, i.e. to see if any increasing or decreasing changes happened during the period from 1995 to 2007. Mean, median, percentiles, and standard deviations are performed to demonstrate the movements. Statistical tests, T and Wilcoxon Z values are then. Total

assets are used to determine firm size. These total assets for the full sample size of each year are then sorted and split into three groups. The top third of the sorted firm sizes are the large firms, followed by middle third being the medium firms and bottom third being the small firms. In 1995, 2000 and 2007 respectively, there are 29, 34 and 47 large firms, 30, 35 and 48 medium firms, and 30, 35 and 47 small firms if the variable has no missing data. Otherwise, the sample size for each size group depends on data availability and eligibility within each group for each variable. Sample size of firms and directorships and explanations for number of missing data are given in the results section for each variable.

3.4 Normality Tests and the Meaning of Median Tests

The Jarque-Bera Normality Test is performed for each variable, excluding binary variables, to justify if data sets are normally distributed. T tests are performed to justify the significance for differences in means between intervals while Wilcoxon signed rank tests are performed for differences in medians. As the distribution of sample data is sometimes skewed for various reasons, median figures might be seen as a better indication of tendency than means in these cases. The results of the Jarque-Bera Normality Test demonstrate that none of the data samples for our non-binary variables are normally distributed. Hence, Wilcoxon Z values are very important statistical analysis tools to justify tendencies in this study.

3.5 Endogeneity Issues

When something is determined within the system it is regarded as endogenous and exogenous when it is determined outside the system. Endogeneity issues within a

corporate governance system are considered to be a relatively common problem. Academic scholars who examine governance-performance relationships always address their methods for controlling endogeneity issues. The fundamental concept of this problem is the self-selection bias between governance and performance, i.e. the discovered influences from governance on performance might originally be determined by previous firm performance. For example, better performing corporations may feel comfortable appointing independent directors, that is, the positive independence-performance relationship was reversely delivered. In other words, there are exogenous relationships existing between governance and performance which are uncovered by the commonly used Ordinary Least Square methods. Such endogeneity issues may have implication on this study as to the increasing or decreasing trends observed. For example, an increasing pattern of board independence does not necessarily reflect the public consensus to positively do so for better firm performance. Rather, it could have been a period of booming economy in NZ that many companies achieved greater results than before and choose to increase level of board independence. However, finding the true causality between board characteristics and firm performance is not an objective for this study, but to merely present the revolution of board characteristics.

4 Results and Discussions

4.1 Board Size

Table 4 demonstrates the statistics of board size of NZ listed firms in 1995, 2000 and 2007. Panel A shows that the average number of total directors on NZ boards decreased from 5.98 in 1995, to 5.72 in 2000 and to 5.06 in 2007. When only counting non-executive directors, the same trend is revealed, from 5.61 to 5.24 and then to 4.66 respectively. By the degree of reduction, it is noticeable that number of non-executive directors has decreased in a larger scale than number of total directors on board. Further into this study, the decrease in average board size between the latter two years is larger than between the former two years for total directors. Similar level of decrease happened during two intervals for non-executive directors. Panel B shows a high statistical significance for the mean and median differences of average total board size between 2000 and 2007, and between 1995 and 2007. Same observed for non-executive directors. In other words, the significant reductions between 1995 and 2007 for both total directors and non-executive directors have primarily occurred since 2000.

Table 5 Panel A shows the distribution of average board size by different firm sizes. The data samples of three years were partitioned into large, medium, and small firms. Firms are firstly partitioned according to their firm sizes (Total Assets). Large firms are the top one-third, followed by the middle one-third being medium firms and the bottom third being small firms. Panel A also demonstrates that both average total board size and non-executive directors only have been reducing between 1995 and 2007 across all size groups. Comparing these three sub-groups specifically, large firms appear to have a larger reduction in average board size than the other two

groups. For total directors, there were on average 1.20 fewer directors on the boards of these firms in 2007 than in 1995, whereas medium firms and small firms have been reduced by 0.63 directors and 0.97 directors on average respectively. This is unsurprising insofar as large firms normally have larger boards than medium and small firms. For non-executive directors only, there were on average 1.30 to 1.40 directors reduction for all size groups during 1995 and 2007. Median values demonstrate the same decreasing trends. In Panel D, the decreases from 2000 to 2007 and from 1995 to 2007 are more significant than from 1995 to 2000 in all size groups for both total directors and non-executive directors only.

The reduction in average board size over the sample period must reflect either a fall in demand, or a fall in supply, or both. On the demand side, one possible reason is that a perception of over-sized boards existed within corporations or related institutions in NZ , i.e., NZ listed firms may have come to agree with Jensen's (1993) argument that the problem of coordination outweighs the advantages of having more directors on the board and actively sought to reduce board numbers.

Turning to the supply side, one of the biggest evolutions of New Zealand governance legislative reform, the 1993 Companies Act, specifically codified the definition of the "standard of care" from directors for the corporation. This Act significantly differs from its predecessor (the 1955 Companies Act) mainly in terms of the requirements for the directors to take on more responsibilities, more duties of care for the companies. In other words, a director must act in good faith and in what the director believes to be in the best interests of the company. Directors must exercise the care, diligence, and skill that a reasonable person would exercise in the same

circumstances. Although these requirements also existed in the 1955 Companies Act, shareholders can now actually bring direct legal action against directors. These sharper responsibilities may have deterred potential directors from seeking NZ board appointments, or encouraged them to look overseas.

A final interesting feature of Table 4 is that, although the reduction in average board size is consistent with the US findings of Chhaochharia and Grinstein (2007), a sharper decrease is observed in this study than in that of Chhaochharia and Grinstein. They found, on average, only 0.2 directors fewer for 2000 than 1997, and for 2003 than 2000, compared with the 1.01 average falls in NZ between 1995 and 2007. Turning to the size sub-groups, reductions in board sizes in each group are observed in both our study and the study of Chhaochharia and Grinstein.

Table 4
Board Size

This table reports the summary statistics for board size. Panel A gives yearly descriptive statistics for the sample sizes of both listed firms and total directorships, means and medians for both total directors and non-executive directors only. 25th and 75th percentiles are also shown in Panel A for two measurements. Standard deviations are given in brackets. Panel B reports the results of parametric and non parametric tests for differences in mean and median of board size across the years. The t value and the Wilcoxon z value are provided for the parametric and non parametric tests respectively. A normality test is performed using the Jarque-Bera method (if the statistic for JB does not have any * underneath, it means normality is rejected).

Panel A: Descriptive Statistics

Year	N Firms	N Directorships (Total)	N Directorships (Non-Exe)	Mean (Total)	Mean (Non-Exe)	Median (Total)	Median (Non-Exe)	25th Percentile (Total)	25th Percentile (Non-Exe)	75th Percentile (Total)	75th Percentile (Non-Exe)	Jarque-Bera Mean (Total)
1995	89	532	499	5.98	5.61	6	5	4	4	7.25	7	3.28
				(1.98)	(2.13)							
2000	104	595	545	5.72	5.24	5	5	4	4	7	6	2015.32
				(1.93)	(1.97)							
2007	142	718	662	5.06	4.66	5	5	4	3	6	6	145.26
				(1.73)	(1.75)							

Panel B: Tests of difference in Mean (excl CEO)

1995-2000				2000-2007				1995-2007			
Ttest (Total)	Ttest (Non-Exe)	Wilcoxon (Total)	Wilcoxon (Non-Exe)	Ttest (Total)	Ttest (Non-Exe)	Wilcoxon (Total)	Wilcoxon (Non-Exe)	Ttest (Total)	Ttest (Non-Exe)	Wilcoxon (Total)	Wilcoxon (Non-Exe)
-0.91	-1.24	-1.00	-1.20	-2.82	-2.43	-2.52	-2.07	-3.72	-3.67	-3.51	-3.23
				***	**	**	**	****	****	****	****

significance * 10% ** 5% *** 1% **** 0.5%

Table 5
Board Size by Firm Size

Panel A presents summary statistics for the sample size of both listed firms and total directors, means, medians and percentiles of board size, both including the CEO and excluding the CEO, across different firm sizes. Panel B reports the results for parametric and non parametric tests for differences in mean and median.

Panel A: Descriptive Statistics by Firm Size

Year	Firm Size	N Firms	N Directorships	N Directorships (Non-Exe)	Mean (Total)	Mean (Non-Exe)	Median (Total)	Median (Non-Exe)	25th Percentile (Total)	25th Percentile (Non-Exe)	75th Percentile (Total)	75th Percentile (Non-Exe)
1995	Large	29	207	202	7.14 (2.01)	6.97 (2.16)	7	7	5.75	5	9	8.25
2000	Large	34	238	219	7.00 (2.00)	6.44 (2.00)	7	6	5	5	8	8
2007	Large	47	279	259	5.94 (1.66)	5..51 (1.85)	6	6	5	5	7	6
1995	Medium	30	177	154	5.90 (1.56)	5.13 (1.83)	6	5	5	4	7	7
2000	Medium	35	185	163	5.46 (1.70)	4.97 (1.92)	5	5	4	4	6.75	6
2007	Medium	48	247	224	5.27 (1.57)	4.79 (1.52)	5	5	4	4	6	6
1995	Small	30	148	143	4.93 (1.74)	4.77 (1.76)	5	4.5	4	3	6	6
2000	Small	35	166	152	4.74 (1.42)	4.34 (1.76)	5	4	4	3	6	5
2007	Small	47	192	179	3.96 (1.37)	3.68 (1.35)	4	3	3	3	4.75	4

Table 5
Board Size by Firm Size (continued)

Panel D: Tests of difference

	1995-2000				2000-2007				1995-2007			
Firm Size	Ttest (Total)	Ttest (Non-Exe)	Wilcoxon (Total)	Wilcoxon (Non-Exe)	Ttest (Total)	Ttest (Non-Exe)	Wilcoxon (Total)	Wilcoxon (Non-Exe)	Ttest (Total)	Ttest (Non-Exe)	Wilcoxon (Total)	Wilcoxon (Non-Exe)
Large	-0.27	-1.00	-0.37	-1.14	-2.61 **	-2.16 **	-2.30 **	-2.02 **	-2.82 ***	-3.12 ***	-2.76 ***	-3.02 ****
Medium	-1.09	-0.35	-1.22	-0.43	-0.52	-0.48	-0.37	-0.07	-1.73 *	0.89	-1.72 *	-0.77
Small	-0.49	-1.10	-0.25	-0.79	-2.53 **	-2.19 **	-2.55 **	-2.18 **	-2.74 ***	-3.05 ****	-2.57 ***	-2.72 ***

significance * 10% ** 5% *** 1% **** 0.5%

4.2 Board Independence

Table 6 contains statistics on director independence in NZ listed firms for 1995, 2000 and 2007. The sample size for each of these three years is less than the board size which represents the complete sample. For the years 2000 and 2007, the firms' annual reports advise if a director is qualified as an independent director. As director independence did not receive enough awareness in 1995 to be entered into force, many annual reports only classify directors into executive and non-executive. As the new definition for an independent director in NZ Corporate Governance – Principles and Guidelines[7] is a director who is not an employee of the entity and who does not represent a substantial shareholder and who has no other direct or indirect interest or relationship that could reasonably influence their judgement and decision making as a director, I classify independent directors in 1995 listed firms to be non-executive directors with less than 5% shareholding. Therefore, there are 27 missing sample firms in 1995 because the information for either director independence or director ownership or both, has not been disclosed. Regarding the 1 and 15 missing sample firms in 2000 and 2007, they are all for the same reason, non-disclosure of information.

Panel A shows that the average number of independent directors on NZ boards decreased from 3.90 in 1995, to 3.77 in 2000 and then decreased to 3.35 in 2007. The median number of independent directors correspondingly grew from 3 to 4 and decreased to 3 again. However, percentage may be a better mechanism to demonstrate director independence than number as the latter is a function of board size. The variable Mean % (incl CEO) clearly shows that the ratio of independent directors has

[7] http://www.fma.govt.nz/keep-updated/reports-and-papers/handbook-corporate-governance-in-nz-principles-and-guidelines/

been increasing from 55.63% in 1995, to 58.73% in 2000 and to 59.75% in 2007. When CEO board members are excluded, the same trend is revealed between 1995 and 2007 but conflicting results appear. Further, the variable Majority Independent % both with and without CEO on the board has also increased from 1995 to 2007.

Interestingly, the average percentage of independent directors on the board is significantly higher in 2000 than in 1995 but the difference between 2000 and 2007 is tiny. Panel B shows high statistical significance for the difference in the percentage of director independence between 1995 and 2007. It can be interpreted that the percentage of independent directors on NZ listed boards has increased significantly from 1995 to 2007.

Table 7 shows the distribution of average independent directors by different firm sizes. It demonstrates that the percentage of independent directors increased in large and small firms from 1995 to 2007 while medium firms behaved the opposite way. Interestingly, the percentage of independent directors of large and medium firms experienced an increase between 1995 and 2000, and then a decrease between 2000 and 2007, while this percentage continued to grow inside small firms. Clearly this means the number of non-independent directors actually reduced. Among these three size groups, small firms experienced the most significant change in the level of board independence, from 56.68% to 76.23% between 1995 and 2000. Large firms showed an approximately two percentage points increase while medium firms show reduction of two percentage points. Panel D reveals that only the changes happening inside small firms are statistically significant.

One possible reason for the increase in the average percentage of independent

directors between 1995 and 2000 is that recognition of higher board independence leading to better firm performance existed within corporations in NZ. NZ listed firms may have come to agree with Fama and Jensen's argument about the important corporate governance functions of board independence through increasing the effectiveness of board oversight and actively sought to increase board independence. Fama and Jensen's viewpoint has been highly regarded in many countries. The Securities and Exchange Commission (SEC) in the US required company boards to be dominated by independent directors. According to Hossain et al. (2001), the former SEC Chairman Harold Williams even suggested companies have a board on which the CEO is the only executive director. Similar legislation was imposed in 1998 on the developing country of India. The Confederation of Indian Industry required any listed companies with a turnover of Rs.100 crores and above to have independent directors, who should constitute at least 30% of the board if the Chairman is a non-executive director; or at least 50% of the board if the Chairman and Managing Director is the same person. The Australia Investment and Financial Services Association also recommended that listed firms have a board comprising mainly independent directors. All these legislative requirements or recommendations further reflect the important functions of independent directors. Although NZ did not have a compulsory board independence ratio from the Companies Act 1993, the series of global legislative changes may have influenced recognition by NZ firms of the necessity to increase the demand for independent directors on a board.

The increase in board independence between 1995 and 2000 is difficult to explain from a supply point of view. Under the standards imposed by the Companies and Financial Reporting Acts 1993, boards are legally required to increase their caution in

preventing managers' exploitation of shareholders' wealth. This increased responsibility is perceived by the financial professionals as being disproportionately borne by independent directors. Arguably, it should reflect a fall in the supply of independent directors. Even though the average number of independent directors has dropped for large and medium numbers, this is also true of the board size for both firms during this period. Therefore, it is not reasonable to suggest that the Companies and Financial Reporting Acts 1993 have caused a decrease in the supply of independent directors. Rather, the average percentage of independent directors would be the appropriate measurement. However, the increasing percentage of independent directors on boards between 1995 and 2000 did not mirror the expectation of a decrease in the supply of independent directors, meaning the decrease in supply either did not occur or occurred in later periods.

However, the above discussed legislative effect on the supply of independent directors appears untrue even for the later periods. Even though the figures demonstrate drops in the average percentage of board independence between 2000 and 2007 for large and medium firms, they are statistically insignificant, meaning that the Companies and Financial Reporting Acts 1993 did not influence board independence. This is consistent with the study of Hossain et al. (2001).

Comparing the study with that of Chhaochharia and Grinstein (2007) using US data, the definition in US for an independent director is similar to that in NZ.[8] Moreover, the US corporate governance regime, the Sarbanes-Oxley Act, requires boards to have

[8] Sarbanes Oxley: Section 301: An independent director is defined as one who (i) cannot accept any consulting, advisory, or other compensatory fee from the issuer. (ii) be an affiliated person of the issuer or any subsidiary thereof.

a majority of independent directors rather than a third in NZ.[9] Overall both NZ and the US display increases in average board independence during the sample period. However, US firms generally have a higher independence percentage, as expected, than NZ firms across all size groups. Large and medium firms in NZ actually started to decrease their independence ratio while US firms still kept increasing after 2000. However, small firms in both NZ and US revealed the most significant increase in board independence after 2000.

[9] NYSE Rule 303A: Listed companies must have a majority of independent directors.

Table 6
Director Independence

This table reports the summary statistics for independent directors expressed as average number and average percentage of the board size. Panel A gives yearly descriptive statistics for the sample size of both listed firms and total directorships, means and medians of independent directors, both in numbers and percentages. The 25th and 75th percentiles and majority independent percentage are also shown in Panel A. Standard deviations are given in brackets. Including CEO means the variable is measured when including the CEO as a board member whereas excluding CEO means the variable is measured when excluding the CEO as a board member. Panel B reports the results of parametric and non parametric tests for differences in mean and median percentages of independent directors across the years. The t value and the Wilcoxon z value are provided for the parametric and non parametric test respectively. A normality test is performed using the Jarque-Bera method (if the statistic for JB does not have any * underneath, it means normality is rejected).

Panel A: Descriptive Statistics

Year	N Firms	N Director -ships	Mean #	Median #	Mean % (incl CEO)	Mean % (excl CEO)	Median % (incl CEO)	Median % (excl CEO)	25th Percentile #	75th Percentile #	Majority ind % (excl CEO)	Majority Ind % (incl CEO)	Jarque-Bera Mean % (excl CEO)
1995	62	402	3.90	3.00	55.63	61.34	50.00	57.14	2.00	5.00	53.62	67.67	3.69
			(2.01)		(20.22)	(21.30)							
2000	103	585	3.77	4.00	58.73	66.84	57.14	66.67	3.00	5.00	79.41	72.00	5.34
			(1.81)		(21.53)	(24.19)							
2007	127	611	3.35	3.00	59.75	67.04	60.00	66.67	2.00	4.00	89.08	79.00	3.12
			(1.44)		(19.97)	(22.41)							

Panel B: Tests of difference of Mean and Median % (excl CEO)

1995-2000		2000-2007		1995-2007	
Ttest	Wilcoxon	Ttest	Wilcoxon	Ttest	Wilcoxon
1.48	1.56	0.07	0.12	1.67	1.74
				*	*

Significance * 10% ** 5% *** 1% **** 0.5%

Table 7
Director Independence by Firm Size

Panel A presents summary statistics for the sample size of both listed firms and total directors, means and medians of independent directors, both in numbers and percentages across different firm sizes. Panel B reports the results for parametric and non parametric tests for differences in mean and median %.

Panel A: Descriptive Statistics

Year	Firm Size	N Firms	N Director -ships	Mean #	Median #	Mean %	Median %	25th Percentile	75th Percentile	Majority Independence %
1995	Large	23	153	4.70	4.00	63.66	62.50	3.00	6.00	80.00%
				(2.52)		(18.97)				
2000	Large	34	234	4.83	4.00	67.42	64.58	3.50	6.00	82.86%
				(2.36)		(25.63)				
2007	Large	43	251	3.93	4.00	65.32	66.67	3.00	5.00	72.09%
				(1.71)		(25.57)				
1995	Medium	23	174	4.00	4.00	62.26	57.14	3.00	5.00	80.95%
				(1.58)		(22.43)				
2000	Medium	35	185	3.63	3.00	65.92	66.67	3.00	4.00	74.29%
				(1.66)		(21.79)				
2007	Medium	45	191	3.19	3.00	60.73	57.14	2.00	4.00	78.57%
				(1.07)		(20.15)				
1995	Small	16	75	3.05	2.00	56.68	50.00	2.00	5.00	83.33%
				(1.56)		(23.39)				
2000	Small	34	166	3.38	3.00	67.20	66.67	2.00	5.00	80.00%
				(1.63)		(25.73)				
2007	Small	39	169	2.90	2.00	76.23	71.43	2.00	3.00	97.62%
				(1.27)		(18.33)				

Table 7
Director Independence by Firm Size (continued)

Panel B: Tests of difference of Mean and Median %

	1995-2000		2000-2007		1995-2007	
Firm Size	Ttest	Wilcoxon	Ttest	Wilcoxon	Ttest	Wilcoxon
Large	0.60	0.54	-0.36	-0.27	0.27	0.22
Medium	0.62	0.76	-1.10	-1.26	-0.28	-0.23
Small	1.39	1.51	1.74 *	1.68 *	3.31 ****	2.97 ****

Significance * 10% ** 5% *** 1% **** 0.5%

4.3 Multiple Directorships

Table 8 Panel A exhibits the information on multiple directorships of NZ listed firms in 1995, 2000 and 2007. # pp represents the number of directors on the board who have multiple directorships during the financial year. Measurement ave/pp stands for the average number of directorships held by each director on the board. The other directorships held by each director are identified from the firms' annual reports, which report other directorships held by each director, both in listed and private firms. These directorships both in listed and private firms are collected in this study. For those annual reports that do not reveal this information, the NZ Companies Office website is used as the alternative to search for information by director name.[10]

Clearly, both # pp and avg/pp experienced a notable fall during the former two years. Such a decrease persists for # pp while avg/pp is followed by a slight increase during the latter two years. # pp fell from 5.75 in 1995 to 5.35 in 2000, and then to 4.48 in 2007. As a percentage of board size, the percentage of directors on board who have multiple directorships decreased from 86.21% in 1995 to 82.95% in 2000, and then to 80.43% in 2007. Avg/pp reduced from 9.71 in 1995 to 6.95 in 2000, and slightly increased to 7.07 in 2007. Medians for #pp persist at around 5 while avg/pp displays reductions overall. Put differently, the number of directors with other board appointments has decreased as a portion of board size and the number of directorships held by each director has reduced.

Statistical tests in Panel B of Table 8 report that the reduction in # pp between 2000 and 2007, and between 1995 and 2007 are significant at the 0.5% level respectively.

[10] http://www.business.govt.nz/companies

However, the percentage measurement indicates a lesser degree of significance for the decrease between 1995 and 2007, and no signal of specific time of occurrence. Moreover, the decreases in avg/pp between 1995 and 2000, and between 1995 and 2007 are significant at the 0.5% level according to Wilcoxon Z values. As the significant reductions for #pp could be attributed to reductions in board size, significances for avg/pp would be a better mechanism to justify changes. Therefore, the significance results for avg/pp justify average directorships per director started to fall during 1995 and 2000.

In the results conditioned by group sizes in Panels A, C and E of Table 9, all three size groups exhibit diminution in the number of directors with multiple directorships within the period of 1995 to 2007. The same trends are observed with the percentage measurement. However, the second measurement, average number of directors with multiple directorships, suggests a different structure. The average number of directorships currently held by each director in large (medium) firms decreased from 6.48 (8.50) directorships to 5.89 (5.82) during 1995 and 2000, and then increased to 6.84 (6.22) in 2007, while small firms show a continuous fall from 14.05 directorships in 1995 to 9.49 in 2000, and then to 8.25 in 2007. From these figures, it is easy to identify that directors in small firms hold around five or six more directorships in each sample year than large firms or medium firms respectively. Additionally, small firms also have the largest shrinking in average directorships held by each director among all size groups during 1995 and 2007.

Table 9 Panels B, D and F present the statistical tests of difference in mean and median for # pp, # pp (%) and avg/pp between three time intervals. Although

decreases in the number of directors with multiple directorships reveal high significance for both large and medium groups between 1995 and 2007, but as a percentage of board size the decrease in percentage is only significant in small firms. An obvious reason for this inconsistency is that significance decreases indicated by # pp (number-wise) could be contaminated by board size. Instead, # pp (percentage-wise) reveals a more genuine movement. Other significant figures appear at the number of directorships held by each director on the boards of medium and small firms between 1995 and 2007.

Possible reasons for the diminution in the number of directorships held by each director between 1995 and 2007 could be drawn from demand, or supply, or both. A logical notion has long existed among many corporations, shareholder activists and institutional investors that having too many external board appointments could reduce the ability of directors to perform effective monitoring functions on management. For example, a few days after the report from the Wall Street Journal on December 28th 2000 regarding Elaine Chao's prospective cabinet appointment for President-elect George Bush, a journal article revealed the increasing tendency among US firms to restrict directors' external board appointments owing to the perceived detrimental effect on corporate governance from having directors with multiple directorships on board. As a result, Ms Chao resigned six of her other directorships eventually. Similarly, a perception by corporations or investors has existed in NZ that the busyness of directors having too many board memberships is likely to reduce directors' working efficiency. Following this logic, in 1995, directors of NZ firms on average having more than nine external board memberships were possibly recognised by the public as being too busy to have adequate ability to perform their duties

effectively. Thus, it is logical to say that the demand for directors with too many board appointments was reduced.

The above incident of Ms Chao could also reflect the possible reason for a fall in the supply of directors with too many board appointments. In other words, there could be the possibility of a loss of precious board membership opportunities because the director is perceived as fully occupied with other directorships. Consequently, directors seeking high quality board memberships would voluntarily reduce the number of jobs to a more appropriate level. More importantly, as discussed before, as the NZ 1993 Companies Act reform created less comfortable working conditions for directors, they may have willingly left unnecessary jobs in order to avoid legal charges from shareholders.

Another noteworthy point from the tables above is that both this study and the Chhaochharia and Grinstein (2007) study using US data indicate that a decrease in board members multiple directorships. Although the US paper does not mention whether they only examine other board memberships in listed firms or both listed and private firms, the same tendency is observed in this study, which examines both listed and private firms. Moreover, it was revealed that large firms in US had the biggest reduction in mean board memberships while in NZ it was the small firms.

Table 8
Multiple Directorships

This table reports the summary statistics for multiple directorships. # pp is the variable representing the number of directors on the board who have multiple directorships during the financial year. Avg/pp is the average directorships held by each director on the board. Panel A gives yearly descriptive statistics for the sample size of firms and directorships on the board, means (expressed in both number and percentage of total board size), medians and 25th and 75th percentiles across years. Standard deviations are given in brackets. Panel B reports the results of parametric and non parametric tests for differences in mean and median percentages of independent directors across the years. The t value and the Wilcoxon Z value are provided for the parametric and non parametric tests respectively. A normality test is performed using the Jarque-Bera method (if the statistic for JB does not have any * underneath, it means normality is rejected).

Panel A: Descriptive Statistics

Year	MD	N Firms	N directorships	Mean #	Mean %	Median	25th Percentile	75th Percentile	Jarque-Bera (Mean #)
1995	# pp	89	532	5.75 (2.04)	86.21%	6.00	4.00	7.00	0.68
2000	# pp	104	595	5.35 (2.23)	82.95%	5.00	4.00	7.00	1.94
2007	# pp	142	718	4.48 (1.77)	80.43%	5.00	3.00	6.00	26.07
1995	avg/pp	89	532	9.71 (8.01)	-	-	4.50	11.50	148.87
2000	avg/pp	104	595	6.95 (9.18)	-	-	3.71	6.90	8526.98
2007	avg/pp	142	718	7.07 (6.35)	-	-	4.00	7.00	745.32

Panel B: Tests of difference in mean and median

	1995-2000		2000-2007		1995-2007	
MD	Ttest	Wilcoxon	Ttest	Wilcoxon	Ttest	Wilcoxon
# pp	-1.31	-1.16	-3.43 ****	-3.54 ****	-5.08 ****	-4.73 ****
# pp (%)	-1.65	n/a	-0.30	n/a	-2.17 **	n/a
avg/pp	-2.18 **	n/a	0.08	n/a	-2.77 ***	n/a

significance * 10% ** 5% *** 1% **** 0.5%

Table 5
Multiple Directorships by Firm Size

This table exhibits summary statistics for the sample size of both listed firms and total directorships, mean (expressed in both number and percentage of total board size), median and 25th & 75th percentiles for both # pp and avg/pp by firm sizes. Panels A and B present summary statistics and statistical tests for large firms respectively, followed by Panels C and D for medium firms and Panels E and F for small firms.

Panel A: Descriptive Statistics by Firm Size

Large Firms

Year	MD	N Firms	N Directorships	Mean #	Mean %	Median	25th Percentile	75th Percentile
1995	# pp	29	207	6.79 (2.18)	84.88%	6.00	6.00	8.00
2000	# pp	34	238	6.62 (2.20)	86.76%	6.00	5.00	7.00
2007	# pp	47	279	5.13 (1.76)	79.80%	5.00	4.25	6.00
1995	avg/pp	29	207	6.48 (3.33)	-	5.40	4.16	8.01
2000	avg/pp	34	238	5.89 (3.38)	-	5.35	4.00	6.50
2007	avg/pp	47	279	6.84 (5.15)	-	5.17	4.18	6.94

Panel B: Tests of difference in mean and median

	1995-2000		2000-2007		1995-2007	
Firm Size	Ttest	Wilcoxon	Ttest	Wilcoxon	Ttest	Wilcoxon
# pp	-1.53	-1.59	-2.68 ***	-2.99 **	-5.62 ****	-4.80 ****
# pp %	0.32	n/a	-0.39	n/a	-1.12	n/a
avg/pp	-0.78	-0.56	1.31	0.56	0.32	0.13

significance * 10% ** 5% *** 1% **** 0.5%

Table 9
Multiple Directorships by Firm Size (continued)

Panel C: Descriptive Statistics by Firm Size

Medium Firms

Year	MD	N Firms	N Director-ships	Mean #	Mean %	Median	25th Percentile	75th Percentile
1995	# pp	30	177	5.67 (1.65)	70.88%	6.00	4.00	7.00
2000	# pp	35	185	5.09 (1.77)	66.71%	5.00	4.00	6.00
2007	# pp	48	247	4.40 (1.51)	68.43%	4.50	3.00	5.00
1995	avg/pp	30	177	8.50 (6.47)	-	7.38	4.50	10.00
2000	avg/pp	35	185	5.82 (4.82)	-	5.00	3.20	6.00
2007	avg/pp	48	247	6.22 (5.78)	-	4.75	3.67	6.17

Panel D: Tests of difference in mean and median

	1995-2000		2000-2007		1995-2007	
Firm Size	Ttest	Wilcoxon	Ttest	Wilcoxon	Ttest	Wilcoxon
# pp	-1.36	1.24	-1.91 *	-1.85 *	-1.84 *	-2.15 **
# pp %	-0.83	n/a	-1.13	n/a	-0.50	n/a
avg/pp	-1.91 *	-2.81 **	0.34	0.65	-2.39 **	-2.71 **

significance * 10% ** 5% *** 1% **** 0.5%

Table 9
Multiple Directorships by Firm Size (continued)

Panel E: Descriptive Statistics by Firm Size

Small Firms

Year	MD	N Firms	N Director -ships	Mean #	Mean %	Median	25th Percentile	75th Percentile
1995	# pp	30	148	4.83 (1.82)	60.38%	5.00	4.00	6.00
2000	# pp	35	166	4.32 (2.02)	56.62%	4.50	3.00	6.00
2007	# pp	47	192	3.68 (1.52)	57.23%	3.00	3.00	5.00
1995	avg/pp	30	148	14.05 (10.52)	-	10.13	6.29	23.50
2000	avg/pp	35	166	9.49 (14.92)	-	5.29	3.33	9.80
2007	avg/pp	47	192	8.25 (7.74)	-	5.75	4.00	9.50

Panel F: Tests of difference in mean and median

	1995-2000		2000-2007		1995-2007	
Firm Size	Ttest	Wilcoxon	Ttest	Wilcoxon	Ttest	Wilcoxon
# pp	-1.08	-0.75	-1.67 *	-1.84 *	-1.74 *	-1.45
# pp %	-2.00 **	n/a	0.75	n/a	-2.11 **	n/a
avg/pp	-1.40	-3.08 **	-0.49	-0.60	-2.38 **	-3.16 **

significance * 10% ** 5% *** 1% **** 0.5%

4.4 Incidence of CEO Equity-based Compensation

Table 10 exhibits the summary statistics for CEO compensation. Panel A reports figures of CEO compensation structure, measured in both number and percentage. Zero represents the situations in which CEOs of firms receive incentive compensation such as stocks or options etc. One, on the other hand, features CEOs who only receive cash benefits such as a cash salary, bonus etc. Annual reports normally have a section outlining the executive remuneration, which explains how the seniors or executive management are compensated. This is where the relevant information for this variable is identified. As NZ listed firms are not mandated to disclose executive compensation prior to 1 July 1997, the sample size for 1995 is limited. For 2000 and 2007, not every firm specifically discloses CEO's salary package composition. However, annual reports disclose whether or not senior executives are issued with incentive packages through equities. In this case, it is presumed that CEO is paid with an equity incentive package. This assumption enlarges the sample size of this variable to a full sample for 2000 and 2007.

Percentages of Zero shown exhibit a continuous reduction in the number of firms which use incentive compensation for their CEOs while percentages of One show a persistent increase in the number of firms which only offer cash benefits for CEOs in NZ. In a comparison of the sample years, more than half (64.71%) of the listed NZ firms offered incentive salary packages to their CEOs in 1995, while this ratio fell to just below half (47.12%) in 2000 and somewhat below half (42.96%) in 2007. Moreover, the decrease in the percentage of Zero between 2000 and 2007 (5 percentage points) is about one-third of the scale between 1995 and 2000 (17

percentage points). Furthermore, Table 10 Panel B reveals that the falls in the percentage of CEOs with incentive packages between 1995 and 2000, and between 1995 and 2007, are both significant at the 5% level.

Table 11 Panel A reports the summary statistics of CEO compensation across different firm sizes. The percentages of CEOs employed who receive incentive based compensation persist in a decreasing pattern across all three groups. Given the statistical tests in Panel B, the percentage of large firm CEOs receiving incentive benefits fell significantly from 76.00% in 1995 to 48.94% in 2007. A similar significant reduction occurred for small firms between 1995 and 2007, from 68.42% to 38.30%. Medium firms exhibited the same trend but with an insignificant decrease of 10 percentage points.

In New Zealand, public disclosure of executive compensation was not mandatory prior to 1997. This would arguably deepen the conflicts between principal and agents owing to reduced board incentives to effectively monitor the executive compensation structure. Consequently, the CEO will have more power to exert on influencing pay levels. The compulsory disclosure of executive compensation could have reflected the growing recognition of the risk associated with generous pay settings within NZ listed firms. Incentive benefits, such as issuing large stock shares or options as a mechanism to align CEO interests with the shareholders' were also deemed to be risky because they encourage executives to focus on short-term performance rather than strategic views. Therefore, the continuous reduction in the percentage of NZ listed firms with CEOs who receive incentive benefits could possibly be explained by the social awareness of the risk in doing this. Rather, corporations would choose cash benefits

such as salary and bonuses to reward CEOs. As such, the long-term performance of CEO is also being monitored.

On 16 February 2004, the New Zealand Securities Commission (NZSC) published Corporate Governance in New Zealand Principles and Guidelines. This document specifically instructs that the principle of remuneration of directors be transparent, fair, and reasonable. Option or share benefits should be offered in efforts to focus on making a contribution to future investor returns rather than only on short term gains. When NZSC surveyed the participants regarding whether executives should receive remuneration in the company's stocks or options, many responded negatively owing to the issues of compromising judgment, options diluting existing share holdings, and the possibility of abuse. Those who supported some payment in shares strongly suggested that this be fully disclosed and approved by the shareholders. All these responses reflect the market consensus on exercising caution in issuing incentive packages to executive directors including CEOs. Accordingly, a reduction in the percentage of listed firms issuing incentive benefits to their CEOs would be expected.

Table 10
Incidence of CEO Equity-based Compensation

This table exhibits the summary statistics for CEO compensation. This is a dummy variable taking the value of 0 if the CEO of the firm receives incentive benefits, such as stocks, options etc; otherwise it takes the value of 1. Panel A gives yearly descriptive statistics for the sample size, the number of firms in which CEOs are, and are not, receiving incentive packages, and the percentage of firms in which CEOs are, and are not, receiving incentive benefits. Panel B reports the results of parametric and non parametric tests for differences in median percentages of incidences in which CEOs receive incentive packages across the years. The Wilcoxon z values are provided for in the non parametric test.

Panel A: Descriptive Statistics

Year	N Firms	# 1	# 0	Percentage 1	Percentage 0
1995	68	24	44	35.29%	64.71%
2000	104	55	49	52.88%	47.12%
2007	142	81	61	57.04%	42.96%

Panel B: Tests of difference of in mean percentage

		1995-2000	2000-2007	1995-2007
Payment type		Z value	Z value	Z value
0		-2.26	-0.65	-2.95
		**		**
significance	* 10%	** 5%	*** 1%	**** 0.5%

Table 11
Incidence of CEO Equity-based Compensation by Firm Size

Panel A presents summary statistics for the number and percentage of firms in which the CEO receives incentive benefits across different firm sizes. Panel B reports the results of non parametric tests for differences in the percentage.

Panel C: Descriptive Statistics by Firm Size

Year	Firm Size	N Firms	# 1	# 0	Percentage 1	Percentage 0
1995	Large	25	6.00	19.00	24.00%	76.00%
2000	Large	34	18.00	16.00	52.94%	47.06%
2007	Large	47	24.00	23.00	51.06%	48.94%
1995	Medium	24	12.00	12.00	50.00%	50.00%
2000	Medium	35	17.00	18.00	48.57%	51.43%
2007	Medium	48	28.00	20.00	58.33%	41.67%
1995	Small	19	6.00	13.00	31.58%	68.42%
2000	Small	35	20.00	15.00	57.14%	42.86%
2007	Small	47	29.00	18.00	61.70%	38.30%

Panel D: Tests of difference in mean percentage 0

	1995-2000	2000-2007	1995-2007
Firm Size	Z value	Z value	Z value
Large	2.24 **	-0.17	2.22 **
Medium	-0.11	0.88	0.67
Small	1.80 *	0.42	2.22 **

significance * 10% ** 5% *** 1% **** 0.5%

4.5 Non-executive Director and Chair fees

Summary statistics regarding non-executive chair fees and non-executive director fees are shown in Panel A and Panel C of Table 12 respectively for the three sample years. Director fees refer to the fees received by individual directors who are non-executive. Chair fees refer to fees paid to chairmen who are non-executive. Sample data for these two variables are limited mainly because only non-executive fees are collected. In addition, owing to the fact that NZ listed firms were not required to disclose compensation for their directors until 1 July 1997, sample data for 1995 exhibit the largest number of missing observations. Only 40 out of 89 sample firms provide information for non-executive director fees, and 38 for non-executive chair fees. Director fees are missing for the following reasons: 1. Only aggregate fees are provided[11]; 2. Firms do not disclose any information regarding compensation paid to their directors[12]. Apart from these missing firms, a further two firms have been removed from the sample data for chair fees for these reasons: 1. Executive chairman[13]; 2. CEO duality[14].

Similarly in the 2000 sample data, there is one missing firm for director fees and ten missing firms for chair fees. The only one missing firm for director fees is attributed to only aggregate fees having been provided. For the other nine missing firms for chair fees, six are due to CEO duality, two are due to an executive chairman, and one is due to chair fees reported incorporating more rewards than solely fees, such as allowances. In 2007, four sample firms have not recorded their director fees and

[11] Aggregate fees mean only collective director fees are provided in the financial statement section within the annual report so one cannot determine specific levels of payments for director and chair fees. There are 39 missing firms for this reason. However, these cases do not necessarily indicate the chairman of these firms is not non-executive.
[12] 10 firms are missing for this reason.
[13] 1 firm is missing for this reason.
[14] Payment to the chairman incorporates rewards for his CEO position. 1 firm is missing for this reason.

thirteen sample firms have not included their chair fees data. Apart from one firm that did not disclose information about director fees, all the other three firms only provided aggregated director fees. Five out of the remaining nine firms with chair fees missing have CEO duality, four of which are due to an executive chairman.

Regarding the minimum level of payment to chairmen, zero fees, they are paid solely by stocks/options but no fees. One firm in 2000 and two firms in 2007 adopted this form of remuneration to the CEO. For zero directors' fees, one firm paid no director fees or other remuneration packages to their directors in both 2000 and 2007 respectively.

The mean represents the average amount of fees received by the chairman and each director of the listed firm in NZ. These fees have all been adjusted with annual inflations (base year 2007). Panel A shows the fluctuated average level of chair fees during the periods examined while Panel C reports continuing increases for means and medians, that is, the levels of payments to chairmen fluctuate while payments to directors have been growing through all these years in NZ listed firms. It is worth noting that average fees paid to chairmen increased from $45,298 in 1995 to $71,373 in 2007. However, the median of chair fees only increased from $33,433 to $50,000. The magnitude of the increase in director fees is much smaller than that for chairmen, from $26,178 in 1995 to $40,493 in 2007 only. A lesser degree of increase is observed for the median of director fees, only from $20,660 in 1995 to $32,250 in 2007.

Table 12 Panels B and D display the results of the T test and Wilcoxon Z test for chair fees and director fees. Z values of 2.36 and 3.58 correspondingly report that increases

in salary levels of chairmen and directors are significant at the 5% and 0.5% level between 1995 and 2007. Thereby, both statistical tests evidence the significant increases in levels of fees paid to chairmen and directors in NZ during 1995 to 2007.

Table 13 Panels A and C both present the trend in the level of salary paid to chairmen and directors across different firm size groups between 1995 and 2007. Panels B and D separately display the results of statistical tests regarding the mean and median changes between sample periods. With regard to chair fees, between 1995 and 2007, the average amount awarded increased from $64,639 to $108,768 for large firms, from $41,451 to $58,723 for medium firms, and from $29,508 to $42,484 for small firms. The Z value of 1.97 indicates that the increases in the compensation to chairmen between 1995 and 2007 are significant at 5% for medium firms. Such an increase occurred during 1995 and 2000 (z value of 2.21 and t value of 2.06). However, statistical tests do not confirm the significance of the increase in the level of payments to chairmen of large and small firms during these sample years. Even though the T statistic of 1.68 implies that the increase in the level of payments to chairmen between 1995 and 2007 for large firms is significant at the 10% level, with the normality rejection for the sample data it means T results are not reliable.

For director fees, the growth in the level of salary is on a much smaller scale than chair fees. Panel C of Table 13 shows the average level of fees paid to each director in large firms was $39,645 in 1995, $46,849 in 2000, and $60,002 in 2007. Average director fees paid by medium firms increased from $28,002 in 1995 to $37,095 in 2000, and then decreased to $34,277 in 2007. Directors working for small firms received fees averaging $11,638 in 1995, which increased to $19,660 in 2000, and

then to $27,023 in 2007. Median values for all size groups present the same trend as the mean values except for medium firms, which is a continuous increase while its mean fluctuates. According to the statistical results in Panel D, the increases in director's salary levels in large and small firms are significant, indicating this growth is genuine. Significant Z values in other intervals indicate that increase for large firms occurred during 1995 and 2000 while occurred within both the first and second intervals for small firms.

The NZ Securities Commission advocates adequate remuneration as a mechanism to attract, retain and motivate potential directors. The level of compensation should be fair and reasonable in a competitive market for the skills, knowledge and experience required by the entity. Such remuneration is expected to be positively correlated with entity performance. Executive and non-executive directors are different in terms of their roles and incentives. Therefore, their remuneration packages are supposed to be distinguished. Non-executive directors in NZ are usually paid by way of fees.

The increase in levels of directors' and chairmen's compensation could be explained from both demand and supply sides. From the demand side, as discussed in the Director Independence section, NZ directors' responsibilities for monitoring management receive high scrutiny from the public. Such responsibilities are considered to rest particularly on non-executive directors' shoulders. The public attention and more restricted legislation create for the directors the risk of both losing their jobs and facing legal charges. Under such working conditions, it is logical that directors may request an increase in the level of remuneration.

From the supply side, participants in the consultation of Corporate Governance in New Zealand Guidelines and Principles 2003 raised concerns that current levels of remuneration for non-executive directors were too low to attract and retain people who can make a contribution to the company, regarding the responsibilities, expectations, and risks associated with being a director. This implies that the current average director remuneration is generally considered to be under the appropriate level in NZ. Corporations may seek to raise payments in order to attract, retain, and motivate directors to fully contribute.

Table 12
Non-Executive Chair Fees and Directors' Fees

This table shows the summary statistics for chair and directors' fees. These fees are all adjusted with annual inflation and the base year is 2007. Panel A gives yearly descriptive statistics for the sample size of listed firms (i.e., number of chairmen), means, medians, percentiles, minimum and maximum values across years. The mean represents the average amount of fees received by the chairman of the board

across the three sample years. Median figures, the 25th and 75th are also measured. Medians for non-executive directors are based on sample of directorships. Standard deviations are shown in parentheses. Panel B reports the results of parametric and non parametric tests for differences in the mean and median of the amount of fees for chairmen. The t value and the Wilcoxon Z value are provided by the parametric and non parametric test respectively. Panels C & D respectively present summary figures for average fees received by each director, and statistical tests for differences in mean and median of director fees. Jarque-Bera measurements are performed to justify if data are normally distributed or not (if result for JB does not have any * underneath, it means normal distribution is rejected).

Panel A: Descriptive Statistics

Chair Fees

Year	N Firms	Mean	Median	25th Percentile	75th Percentile	Min value	Max value	Jarque – Bera (Mean)
1995	38	$45,298 ($28,192)	$33,433	$21,639	$64,917	$8,656	$123,651	2.62
2000	94	$80,988 ($229,056)	$56,685	$34,973	$73,831	$0	$245,591	28731.02
2007	129	$71,373 ($69,853)	$50,000	$30,000	$88,500	$0	$410,500	10.09

Panel B: Tests of difference

1995-2000		2000-2007		1995-2007	
Ttest	Wilcoxon	Ttest	Wilcoxon	Ttest	Wilcoxon
0.96	1.98 **	-0.45	-0.68	2.36 **	2.36 **

significance * 10% ** 5% *** 1% **** 0.5%

Table 12
Non-Executive Chair Fees and Directors' Fees (continued)

Panel C: Descriptive Statistics

Director fees / pp

Year	N Firms	N Non-exe Directorships	Mean	Median	25th Percentile	75th Percentile	Min value	Max value	Jarque – Bera (Mean)
1995	40	213	$26,178 ($22,886)	$20,660	$13,132	$29,495	$2,061	$108,710	
2000	103	545	$34,390 ($30,334)	$28,901	$20,447	$40,316	$0	$258,951	
2007	138	648	$40,493 ($30,091)	$32,250	$20,600	$50,000	$0	$180,531	159.24

Panel D: Tests of difference

1995-2000		2000-2007		1995-2007	
Ttest	Wilcoxon	Ttest	Wilcoxon	Ttest	Wilcoxon
1.56	2.50 **	1.55	1.74 *	2.80 **	3.58 ****

significance * 10% ** 5% *** 1% **** 0.5%

Table 13
Non-Executive Chair Fees and Directors' Fees by Firm Size

Panels A and C respectively present summary statistics for the average fees received by the chairman and each director on the board across different firm sizes. These fees are all adjusted with annual inflation and the base year is 2007. Panels B and D separately report the results for parametric and non parametric tests for differences in the chair fees and the directors' fees.

Panel A: Descriptive Statistics by Firm Size

Chair Fees

Year	Firm Size	N Firms	Mean	Median	25th Percentile	75th Percentile	Min value	Max value
1995	Large	13	$64,639 ($35,553)	$70,257	$31,822	$88,101	$12,400	$123,651
2000	Large	32	$146,080 ($386,527)	$71,888	$48,962	$93,261	$0	$2,245,591
2007	Large	45	$108,768 ($92,397)	$50,750	$41,750	$83,464	$0	$410,500
1995	Medium	11	$41,451 ($18,621)	$41,423	$26,276	$53,367	$18,548	$74,190
2000	Medium	31	$57,770 ($24,766)	$58,288	$40,802	$69,581	$0	$106,581
2007	Medium	44	$58,723 ($27,312)	$32,000	$77,500	$77,500	$15,000	$135,500
1995	Small	9	$29,508 ($26,721)	$21,639	$13,511	$37,681	$8,656	$83,959
2000	Small	31	$37,016 ($23,993)	$29,727	$22,004	$46,630	$0	$97,924
2007	Small	40	$42,484 ($32,662)	$22,000	$25,000	$50,000	$0	$143,944

Table 13
Non-Executive Chair Fees and Directors' Fees by Firm Size (continued)

Panel B: Tests of difference

Chair Fees

	1995-2000		2000-2007		1995-2007	
Firm Size	Ttest	Wilcoxon	Ttest	Wilcoxon	Ttest	Wilcoxon
Large	0.75	0.74	0.62	0.68	1.68 *	1.51
Medium	2.06 **	2.21 **	0.16	0.07	2.06 **	1.97 **
Small	0.96	1.29	0.78	0.38	1.33	1.53

significance * 10% ** 5% *** 1% **** 0.5%

Table 13
Chair Fees and Directors' Fees by Firm Size (continued)

Panel C: Descriptive Statistics by Firm Size

Director fees / pp

Year	Firm Size	N Firms	N Non-exe Directors	Mean	Median	25th Percentile	75th Percentile	Min value	Max value
1995	Large	12	132	$39,645 ($28,061)	$28,557	$20,969	$51,439	$14,641	$108,710
2000	Large	34	211	$46,849 ($22,610)	$40,331	$31,475	$58,288	$15,406	$108,217
2007	Large	46	245	$60,002 ($37,146)	$47,923	$35,000	$58,288	$0	$180,531
1995	Medium	14	53	$28,002 ($18,313)	$24,800	$15,876,	$33,406	$8,037	$82,679
2000	Medium	34	143	$37,095 ($41,246)	$29,144	$23,315	$38,179	$0	$258,951
2007	Medium	47	205	$34,277 ($17,684)	$32,000	$23,792	$39,799	$10,417	$106,608
1995	Small	9	41	$11,638 ($6,741)	$11,430	$6,789	$16,396	$2,061	$20,608
2000	Small	35	134	$19,660 ($14,900)	$19,002	$9,341	$23,315	$0	$73,443
2007	Small	45	156	$27,023 ($21,345)	$22,000	$13,750	$33,125	$0	$105,625

Table 13
Chair Fees and Directors' Fees by Firm Size (continued)

Panel D: Tests of difference

Director Fees

	1995-2000		2000-2007		1995-2007	
Firm Size	Ttest	Wilcoxon	Ttest	Wilcoxon	Ttest	Wilcoxon
Large	0.89	1.74 *	1.83 *	1.50	1.77 *	2.29 **
Medium	0.82	1.38	-0.42	-0.51	1.19	1.66 *
Small	1.87 *	2.02 **	1.74 *	1.70 *	2.55 **	3.00 ***

significance * 10% ** 5% *** 1% **** 0.5 %

4.6 Directors' Ownership

Sample data for board ownership are limited. As annual reports are the only sources of information for this variable, for those firms that do not report their directors' ownership, data will be missing. There are specifically 7, 0 and 3 missing firms respectively in 1995, 2000 and 2007. Table 14 Panel A describes the statistics for directors' ownership across the three sample years. The mean is the variable calculating average beneficial and associate shareholding held by each director across three sample years. Mean total also includes non-beneficial shareholding. Median values are medians of all the median shareholding on each board. It is obvious that the mean shareholding held by each director in NZ remained at around 20% for the earlier two sample years, and then decreased to 13.50% in 2007. A similar pattern was observed with mean total figures from around 23% during first two intervals and decreased to 17.31% in 2007. The 25th and 75th percentiles both exhibit decreasing trends as well. However, it is interesting that median and median total reveal opposite patterns; median total shows continuous increase. Moreover, the big difference between means and medians reflects that the sample is skewed by several cases of very high holdings.

Table 14 Panel B reveals the statistical significance regarding differences in Mean and Median percentages of board shareholding. Apart from three significant T values, none of the Wilcoxon Z statistics is significant, meaning there has been no change in the mean of directors' possession in firm equity between all these years in NZ.

Means and medians of board ownership across the three sample years are subsequently divided into large, medium and small firms. Summary figures are shown

in Table 15 Panel A. Both large and medium firms had increased average directors' ownership between 1995 and 2000 and subsequent reduction between 2000 and 2007 to an even lower level than 1995. Small firms, however, revealed continual reduction during all these years. Nevertheless, all three groups present generally decreasing trends in average directors' ownership between 1995 and 2007. However, none of the T and Wilcoxon Z figures in Panel B of Table 8 is significant, indicating no meaningful changes in the mean and median of directors' ownership across group sizes in these three sample years.

The above steadiness of levels of board ownerships in NZ listed firms is not too surprising. Board composition characteristics have long been one of the hottest debates within corporate governance fields in NZ, with most of the attention being placed on board size, board independence, outstanding committees and directors' compensation etc. However, the level of board ownership did not seem to be of as much concern as the other issues. Since the major global corporate governance reforms, NZ has had many legislative reforms regarding board composition and characteristics recently. However, neither the well-known Corporate Governance Best Practice Code nor the Corporate Governance in NZ Principles and Guidelines paid much attention to the level of board ownership in NZ listed firms. It may be true that the current level of total directors' possession of equities is considered appropriate by the public and academics. Therefore, the analysed stability of NZ directors' shareholdings is just according to expectation.

Compared with Chhaochharia and Grinstein's (2007) study using US data, this paper demonstrates a relatively high consistency. Both studies find a slight increase in

directors' ownership during the first period of examination and a subsequent sharper decrease in the following period. However, statistical tests in both studies do not present any significance regarding the changes in directors' ownership between sample years. It seems that board ownership in both countries is keeping at a level compatible with local corporate governance requirements.

Table 6
Board Ownership

This table exhibits the summary statistics for board ownership. Panel A gives yearly descriptive statistics for the sample size of both listed firms and total directorships, means, medians and percentiles. The mean represents the average beneficial and associate shareholding held by all directors across three sample years. The mean total also includes non-beneficial shareholding. Panel B reports the results of parametric and non parametric tests for differences in mean and median percentages of the shareholding of directors. The t value and the Wilcoxon z value are provided for in the parametric and non parametric test respectively. Jarque-Bera measurements are performed to justify if data are normally distributed or not (if result for JB does not have any * underneath, it means normal distribution is rejected).

Panel A: Descriptive Statistics

Year	N Firms	N Director-ships	Mean (%)	Mean Total (%)	Median (%)	Median Total (%)	25th Percentile (%)	25th (Total) Percentile (%)	75th Percentile (%)	75th (Total) Percentile (%)
1995	82		21.43	24.24	3.61	4.23	0.29	0.37	36.78	43.97
			(27.70)	(21.78)						
2000	104		19.80	22.28	3.91	5.51	0.23	0.28	33.41	43.97
			(26.12)	(27.25)						
2007	138		13.50	17.31	3.44	6.27	0.25	0.70	20.51	22.88
			(19.95)	(23.67)						

Panel B: Tests of difference

1995-2000				2000-2007				1995-2007			
Ttest	T Total	Wilcoxon	W Total	Ttest	T Total	Wilcoxon	W Total	Ttest	T Total	Wilcoxon	W Total
-0.47	-0.57	0.51	0.64	-2.01	-1.34	-1.22	0.54	-2.41	-1.86	-1.57	1.07
				**				**	*		

significance * 10% ** 5% *** 1% **** 0.5%

Table 75
Directors' Ownership by Firm Size

Panel A presents summary statistics for the average percentage held by directors across different firm sizes. Panel B reports the results of parametric and non parametric tests for differences in the percentage.

Panel A: Descriptive Statistics by Firm Size

Year	Firm Size	N Firms	N Director-ships	Mean %	Mean Total %	Median %	Median Total %	25th Percentile %	25th (Total) Percentile %	75th Percentile %	75th (Total) Percentile %
1995	Large	27		16.82	17.30	3.81	3.81	0.10	0.23	32.08	32.08
				(23.23)	(23.16)						
2000	Large	34		17.58	18.82	1.39	3.14	0.08	0.08	24.11	24.44
				(26.55)	(27.17)						
2007	Large	47		9.92	16.31	0.75	1.20	0.03	0.06	10.73	22.68
				(17.92)	(26.65)						
1995	Medium	29		23.03	27.71	3.40	4.11	0.33	0.37	45.42	53.28
				(29.47)	(33.76)						
2000	Medium	35		23.58	26.58	7.81	16.49	0.22	0.27	40.28	50.64
				(28.84)	(30.18)						
2007	Medium	47		12.69	15.43	4.03	7.26	0.62	0.78	20.5	21.74
				(18.58)	(20.29)						
1995	Small	26		24.44	27.57	4.69	14.58	1.36	1.45	55.85	65.99
				(30.29)	(31.02)						
2000	Small	35		17.65	20.03	4.37	6.12	0.71	0.71	26.59	40.83
				(23.05)	(24.21)						
2007	Small	43		18.19	20.20	8.78	12.07	1.06	1.68	31.36	35.76
				(22.80)	(23.84)						

Table 15
Directors' Ownership by Firm Size (continued)

Panel B: Tests of difference in mean and median

	1995-2000				2000-2007				1995-2007			
Firm Size	Ttest	Ttest Total	Wilcoxon	W Total	Ttest	Ttest Total	Wilcoxon	W Total	Ttest	Ttest Total	Wilcoxon	W Total
Large	0.12	0.23	-0.07	-0.20	-1.54	-0.42	-1.39	-0.52	-1.42	-0.16	-1.29	-0.51
Medium	0.07	-0.14	0.19	-0.15	-2.07 **	-2.00 **	-1.07	-0.96	-1.88 *	-1.98 *	0.79	062
Small	-0.99	-1.07	-0.63	-0.91	0.18	0.14	0.38	0.60	-0.90	-1.02	-0.35	-0.51

significance * 10% ** 5% *** 1% **** 0.5%

4.7 CEO Duality

NZ firms are mandated to disclose the names of chairmen and CEO in the annual reports, from which CEO duality can be identified by the employees' names. Table 16 Panel A reports the frequency of CEO duality across three sample years. Panel B displays the results of statistical tests for differences of incidences of CEO chairmanship between years. It is necessary to make it clear that the sample size of firms in Table 11 Panel A indicates 32 non-executive chairmen in 1995 while Table 16 Panel A reports 88 non-CEO chairmen in 1995. A non-CEO chairman does not necessarily mean a non-executive chairman.

Only one firm employed the same person as the CEO and the chairman in 1995, which accounts for just 1.12% of the sample size. This percentage jumps to 8.65% in 2000 and shrinks back to 3.52% in 2007. The pattern shows a big fluctuation during these three years, that is, a significant increase (z value of -2.35) in the number of firms having CEO duality during 1995 and 2000, and a sharp decrease (z value of 1.72) during 2000 and 2007.

In order to show a clearer picture for the trend of CEO duality frequency across three sample years, the sample firms are subsequently categorized into large, medium and small sizes. Table 17 Panel A reports the CEO chairmanship phenomenon inside firms of different sizes across three sample periods. The first noticeable part of this Panel is that CEO duality is drastically unpopular in medium firms, as only one incidence occurred in 1995 with none in 2000 and 2007. Another noteworthy fact is that both large and small firms have an up-and-down trend regarding the frequency of firms having CEO duality. More specifically, the number of firms employing the same

person as their CEO and chairman increased from 0% in 1995 in large firms and small firms to 8.82% and 17.14% in 2000 respectively. Subsequently between 2000 and 2007 in both group firms, CEO duality occurrences fell largely, especially for large firms which fell back to 0% again while for small firms the drop is only 10.64%.

Panel B exhibits the results of a z test for differences in percentage. Z value -2.38 indicates the significant increase in the number of firms having CEO chairmanship in small firms between 1995 and 2000. However, z value 2.08 reports that the CEO duality phenomenon significantly reduced between 2000 and 2007 in large firms. On the other hand, CEO duality occurrences exhibited an increasing trend in small firms between 1995 and 2000, and between 1995 and 2007.

According to the Corporate Governance in New Zealand Principles and Guidelines, there is a strong advocacy in public for the separation of CEO and chairperson in an entity. However, some participants from the consultation process indicated that this general agreement, i.e. CEO/chair separation should not be prescribed. There might still be cases in which CEO duality is the best choice for the company owing to the specialist skills and attributes. According to the Stewardship theory, a CEO with the willingness to truly take care of the corporation will perform better with condensed power. Therefore, the significant increase in the incidence of CEO duality between 1995 and 2000 might be due to the increasing number of CEOs who want to work for firms offering power to them. Another possible explanation for the significant increase is the growth in the number of firms which demand a union of CEO and chairman because the CEO is the best choice for the position.

The significant reduction in the occurrence of CEO duality between 2000 and 2007 can be interpreted as the social recognition of the importance of the separation of CEO and chairman. The public consultation for Corporate Governance in New Zealand Principles and Guidelines raised questions on the fundamentality of separating CEO and chairman. The question: "How can the same person provide an interface?" is being asked. As the chairman is the key person to monitor management, it would be necessary for a relatively sized company to separate these two positions to ensure effective scrutiny of the CEO is being performed. As the average size of NZ listed firms is larger than before, the requirement for the separation of CEO and chairman would presumably be higher. This could possibly explain the significant reduction between 2000 and 2007.

Compared with US firms, NZ firms show greater change in separating CEO and chairman. Chhaochharia and Grinstein (2007) reported a slight decrease in the frequency of CEO duality inside US listed firms between 1997 and 2000, followed by a small increase between 2000 and 2007. However, the number of firms having CEO duality in US is much more common than in NZ. Around 75 - 80% of the US listed firms employ the same person as CEO and chairman, while the percentage remains below 18% in NZ.

Table 86
Incidence of CEO Duality

This table exhibits the summary statistics for CEO duality. This is a dummy variable taking the value of 1 if the CEO of the firm is also the chairman of the board; otherwise it takes the value of 0. Panel A gives yearly descriptive statistics for the sample size, number of firms of which the CEO is holding the chairmanship or not, and the percentage of each occasion. Panel B reports the results of parametric tests for differences in the median percentage of incidences of CEO duality across the years.

Panel A: Descriptive Statistics

Year	N Firms	# 1	# 0	Percentage 1	Percentage 0
1995	89	1	88	1.12%	98.88%
2000	104	9	95	8.65%	91.35%
2007	142	5	137	3.52%	96.48%

Panel B: Tests of difference of percentage for CEO duality

	1995-2000	2000-2007	1995-2007
Duality	Z value	Z value	Z value
1	-2.35 **	1.72 *	-1.11

significance * 10% ** 5% *** 1% **** 0.5%

Table 97
Incidence of CEO Duality by Firm Size

Panel A: Descriptive Statistics by Firm Size

Year	Firm Size	N Firms	# 1	# 0	Percentage 1	Percentage 0
1995	Large	29	0.00	29.00	0.00%	100.00%
2000	Large	34	3.00	31.00	8.82%	91.18%
2007	Large	47	0.00	47.00	0.00%	100.00%
1995	Medium	30	1.00	29.00	3.33%	96.67%
2000	Medium	35	0.00	35.00	0.00%	100.00%
2007	Medium	48	0.00	48.00	0.00%	100.00%
1995	Small	30	0.00	30.00	0.00%	100.00%
2000	Small	35	6.00	29.00	17.14%	82.86%
2007	Small	47	5.00	42.00	10.64%	89.36%

Panel B: Tests of difference in percentage 1

	1995-2000	2000-2007	1995-2007
Firm Size	Wilcoxon	Wilcoxon	Wilcoxon
Large	-1.64	2.08 **	n/a
Medium	1.08	n/a	1.27
Small	-2.38 **	0.85	-1.85 *

significance * 10% ** 5% *** 1% **** 0.5%

4.8 Female Presence on Boards

Panel A of Table 18 displays the number and the percentage of firms involving gender diversification, that is, a female director or female CEO board presence across three sample periods. # 1 is the symbol representing a firm appointing female board members or a female CEO, otherwise shown as # 0. Data for this variable are identified from either the name or profile picture or both of the directors. Panel A exhibits incessant growth in the percentage of firms having female directors or a CEO on the board. More specifically, the percentage of NZ listed firms that have female board appointments rose from 12.36% in 1995 to 18.27% in 2000, and then to 30.28% in 2007. Regarding the incidence of firms having female CEOs, the percentage increase between the latter two years is much larger than the former two years, indicating recognition of the importance of having gender diversity on boards in NZ listed firms during 2000 and 2007. Using the measurement of total number of female directors or CEOs as a percentage of total directorships, the frequency of female board membership jumps from 2.63% in 1995 to 3.87% in 2000, and then to 7.80% in 2007. Average number of female directors or CEO has almost tripled between 1995 and 2007. Altogether these facts advise that NZ needs more female directors or CEOs.

Panel B presents the Z tests for the differences in the percentages of firms having female directors or female CEOs between the sample years. A Z value of 2.14 further reflects the significance of the increase in board presence of female directors between 2000 and 2007. A larger Z value, 3.13, indicates that the growth between 1995 and 2007 is even more significant. A similar significance of the increasing tendency is revealed in the total number (%) measurement, with addition of higher degree of significance for the increase between 2000 and 2007.

Turning to Table 19, Panel A shows the summary statistics for the number and percentage of firms appointing female directors or female CEOs on boards across different firm sizes. Panel A reports large and nonstop escalation in the percentage of firms with director gender diversification across three group sizes. In terms of the scale of growth between years, large firms show superior development during the first time interval (15 percentage points) while the second time interval shows more advanced development for both medium (27 percentage points) and small firms (19 percentage points). Comparing group sizes, firm size is positively correlated with the percentage of firms having female board appointments. Shown by the measurement of total number as a percentage of total directorships, the pattern reveals again the continuous increasing trend among all size groups. Panel B justifies the significance of the growth in the percentage of firms having female directors. The increase for small firms is statistically significant at the 5% level and medium firms show even more significant growth, at the 0.5% level, between 1995 and 2007, within which the increase occurred during 2000 and 2007 (z value of 2.33 for percentage 1 and 2.86 for total number %).

Such an increasing trend in female board presence in NZ listed firms is understandable. NZ was the first country where women were able to vote, implying social recognition of their skills and talents. On 15 April 2010, the Minister of Woman's Affairs, the Hon. Pansy Wong, expressed her appreciation in the Momentum of Change[15] for the support of the Women on Boards initiative from various organisations. The Prime Minister, the Hon. John Key, launched the Women on Boards initiative in May 1995, promoting the outperformance achieved by corporations with a female presence in the boardroom. Within 1995, their

[15] See http://beehive.govt.nz/speech/momentum-change-institute-directors-new-zealand-agm

investigation showed that the top 25 percent of the firms with most female directors had returns 53 percent higher on equity, 42 percent higher on sales and 66 percent higher on invested capital than the bottom 25 percent of the firms.

Australia also has changed its system requiring businesses listed on the stock exchange to disclose the gender diversity of their boardroom. Similarly, Norway legislation mandates 40% of board memberships to be owned by females. The routes taken may vary from country to country, but these together reflect the global recognition of the constructive contribution that can be brought into the boardroom by women. Although there is no legislation in NZ mandating the quota for women board presence, it is possible that the international implication regarding the importance for women to be involved in the top management of businesses has long alerted the NZ corporations and reminded them to change according to their needs. Thus, this could be a possible explanation for the significant increase in the female presence on the boards of NZ listed firms during our sample periods.

Table 10
Incidence of Female Directors / CEO presence

This table exhibits the summary statistics for female directors / CEOs. A dummy variable is used for both variables each taking the value of 1 if the board contains a female director / CEO; otherwise it takes the value of 0. Panel A gives yearly descriptive statistics for the sample size of both listed firms and total directorships, the number of firms which employ female directors / CEOs and not, the percentage of each occasion, and the total number of female directors / CEOs on the board as a percentage of total directorships each year. Panel B reports the results of parametric tests for differences in the median percentage of incidences of female directors / CEOs across the years.

Panel A: Descriptive Statistics

Year	N Firms	N directorships	# 1	# 0	Percentage 1	Percentage 0	Avg number per board	Total number (%)
1995	89	532	11	78.00	12.36%	87.64%	0.28	2.63%
2000	104	595	19	85.00	18.27%	81.73%	0.44	3.87%
2007	142	718	43	99.00	30.28%	69.72%	0.78	7.80%

Panel B: Tests of difference of mean percentage 1 and total number %

	1995-2000	2000-2007	1995-2007
	Z value	Z value	Z value
Percentage 1	1.13	2.14 **	3.13 ****
Total number (%)	1.17	2.98 ****	3.93 ****

significance * 10% ** 5% *** 1% **** 0.5%

Table 11
Incidence of the Presence of Female Directors / CEOs by Firm Size

Panel A presents summary statistics for the number and percentage of firms employing female directors across different firm sizes. Panel B reports the results for non parametric tests for differences in the percentage.

Panel A: Descriptive Statistics by Firm Size

Year	Firm Size	N Firms	N Director-ships	# 0	# 1	Percentage 0	Mean Percentage 1	Avg number per board	Total number (%)
1995	Large	29	207	23	6	79.31%	20.69%	0.28	3.92%
2000	Large	34	238	22	12	64.71%	35.29%	0.44	6.29%
2007	Large	47	279	30	17	63.83%	36.17%	0.45	7.58%
1995	Medium	30	177	27	3	90.00%	10.00%	0.10	1.69%
2000	Medium	35	185	30	5	85.71%	14.29%	0.17	3.22%
2007	Medium	48	247	30	18	62.50%	37.50%	0.54	10.49%
1995	Small	30	148	28	2	93.33%	6.67%	0.10	2.03%
2000	Small	35	166	30	5	85.71%	14.29%	0.14	2.95%
2007	Small	47	192	35	12	74.47%	25.53%	0.28	6.85%

Panel B: Tests of difference in mean percentage 1 and Total Number (%)

	1995-2000		2000-2007		1995-2007	
Firm Size	Z value (P 1)	Z value (T %)	Z value (P 1)	Z value (T %)	Z value (P 1)	Z value (T %)
Large	1.28	1.12	0.08	0.57	1.43	1.68 *
Medium	0.52	0.94	2.33 ***	2.86 ****	2.66 ****	3.55 ****
Small	0.99	0.52	1.24	1.68 *	2.09 **	2.07 **

significance * 10% ** 5% *** 1% **** 0.5%

4.9 Staggered Board

Table 20 Panel A outlines the summary statistics regarding the number and percentage of listed firms having staggered boards in NZ. # 1 indicates that the number of firms having staggered boards increased continuously during 1995 and 2007, from 52 to 63. However, the better justification, the percentage, shows that staggered boards have become less and less favourable, i.e. a reduced percentage, during 1995 and 2007. The percentage of listed firms in NZ that have staggered boards reduced from 58.43% in 1995 to 50.96% in 2000, and then to 44.37% in 2007, that is, an over 5% reduction between adjacent years. Panel B of this table demonstrates the statistical significance of the difference in the percentage of staggered boards between sample years. Only the reduction between 1995 and 2007, an approximate 14 percentage points, is significant (Z value of 2.08).

Similarly to the previous provisions examined, sample data for staggered boards across three sample years are subsequently categorized into large, medium and small firms. From Panel A of Table 21, three groups each show different trends in the popularity of staggered boards within firms. For large firms, the percentage reduced from 68.97% in 1995 to 55.88% in 2000, and to 48.94% in 2007. Medium firms also display a reduction but to a greater degree between 1995 and 2000 than large firms, from 66.67% to 48.57%. However, this ratio increased back to 50% in 2007. Small firms, on the other hand, reveal exactly the opposite trend to medium firms. The percentage rose from 40.00% in 1995 to 48.57% in 2000, and then fell to 34.04% in 2007. Regarding the statistical significance of these movements, only the reduction in

large firms between 1995 and 2007 is significant.

An aforementioned characteristic of staggered boards is its ability to be an effective mechanism to defend hostile takeovers, but at the same time a staggered board is also a potential device to help management escape from exposure to the corporate control market. In other words, it might cause management entrenchment. After the shocking corporate scandals, there has been a worldwide calling for better corporate governance structures in terms of more effective monitoring of managements. However, staggered boards may seem to create the opposite effects because they reduce shareholders' power over the removal of management.

From the 1990s to the present, all of the corporate governance legislation such as the Companies Act 1993, the Corporate Governance Best Practice Code 2003-04 and many other related legislative reforms reveal the resolution for better corporate governance structures in NZ. As one of the studies opposing the use of staggered boards, Guo et al. found that firms tending to drop the stagger are the ones considered to have better corporate governance and/or stricter monitoring of managers/directors. Therefore, the significant decreases in the number of firms having staggered boards in NZ might reflect the negative effects of staggered boards on firm values and the wealth creation from de-staggering. Another finding of Guo et al. (2008) was that firms with a higher proportion of independent directors are more inclined to de-stagger. As reported earlier in this study, the ratio of independent directors on boards has been increasing significantly during the periods examined. It is uncertain that if such an increase in independent directors contributed to the reduction in the use of staggered boards, but it does not contradict the finding of Guo et al. (2008). This

conjecture could be used for future research.

Table 12
Incidence of Staggered Boards

This table displays the summary statistics for incidences of staggered boards within NZ listed firms. A dummy variable is used taking the value of 1 if the board is staggered; otherwise it takes the value of 0. Panel A gives yearly descriptive statistics for the sample size, the number of firms which have staggered boards and do not, and the percentage of each occasion. Panel B reports the results of parametric tests for differences in the percentage of incidences of staggered boards across the years.

Panel A: Descriptive Statistics

Year	N Firms	# 1	# 0	Percentage 1	Percentage 0
1995	89	52	37	58.43%	41.57%
2000	104	53	51	50.96%	49.04%
2007	142	63	79	44.37%	55.63%

Panel B: Tests of difference of mean percentage

	1995-2000	2000-2007	1995-2007
	Z value	Z value	Z value
1	1.04	1.02	2.08 **

significance * 10% ** 5% *** 1% **** 0.5%

Table 13
Incidence of Staggered Boards by Firm Size

Panel A exhibits summary statistics for the number and percentage of firms employing staggered boards across different firm sizes. Panel B reports the results for parametric tests for differences in the percentages.

Panel A: Descriptive Statistics by Firm Size

Year	Firm Size	N Firms	# 1	# 0	Percentage 1	Percentage 0
1995	Large	29	20	9	68.97%	31.03%
2000	Large	34	19	15	55.88%	44.12%
2007	Large	47	23	24	48.94%	51.06%
1995	Medium	30	20	10	66.67%	33.33%
2000	Medium	35	17	18	48.57%	51.43%
2007	Medium	48	24	24	50.00%	50.00%
1995	Small	30	12	18	40.00%	60.00%
2000	Small	35	17	18	48.57%	51.43%
2007	Small	47	16	31	34.04%	65.96%

Panel B: Tests of difference in mean percentage 1

	1995-2000	2000-2007	1995-2007
Firm Size	Z value	Z value	Z value
Large	1.07	0.62	1.71 *
Medium	1.47	-0.13	1.44
Small	-0.69	1.33	0.53

significance * 10% ** 5% *** 1% **** 0.5%

4.10 Director Tenure

Director tenure is defined as the length of time a director has held a board membership. Both social and financial researchers have scrutinised director tenure regarding its impact on firm performance (Buchanan, 1974, Vafeas, 2003). Buchanan discovered that prolonged tenure for directors reflected their importance to the organization and thus enhances hard working directors' organizational commitment. Accordingly, Vafeas developed an expertise hypothesis suggesting a positive relationship applies to tenure and firm- and industry-specific knowledge and environment, and thus better monitoring by long-term directors. Additionally, Bebchuk, Fried and Walker (2002) also suggested that long-term members are more inclined to criticize the CEO than new board members who tend to be deferential to the CEO. In short, lengthy-tenure directors, who have accumulated extensive relevant knowledge and experience for the organization and the willingness to point at the CEO, would provide a positive contribution to the corporation.

On the other hand, there are also concerns regarding relationship building between directors and the management over time. The management friendliness hypothesis suggested by Vafeas (2003) highlights the possibility of compromising monitoring of the CEO by directors as their relationships developed. In other words, it is possible that long-serving board members, who may have constructed close relationships with the CEO, might be inclined to shift their interest in protecting shareholders to accommodating CEO wishes. Byrd, Cooperman and Wolfe (2010) reported that compensation of long-tenure CEOs is positively related to the median tenure of outside directors, indicating the CEO allegiance hypothesis. Similarly, Vafeas (2003)

also found that directors with twenty years or more of board membership were more likely to be classified as “grey” directors, suggesting a tendency to compromise their impartiality in supervising the management.

Table 22 reports the number and percentage of listed firms within which the majority of the board members are long-term directors. A long-term director is defined in this study as one who has served the board for five years or longer. Panel A shows a continuous increase in both the number and percentage of listed firms having a long-term board. Percentage 1 represents the boards filled with a majority of long-time directors. Regarding percentage, in particular 1, it increased from 20.22% in 1995 to 36.54% in 2000, and then to 47.18% in 2007. In other words, there is a huge growth of 27 percentage points between 1995 and 2007, in which the increase of 16 percentage points between 1995 and 2000 accounts for the major portion. Further, the last column of Panel A confirms the fact that there is an increasing number of directors with lengthy tenure. The percentage of the total number of long-serving directors grew from 33.84% in 1995 to 45.52% in 2000, and then to 50.95% in 2007.

Panel B shows the statistical test for the difference in percentage 1 and percentage 1 (#) across sample years. It reveals that the huge increase of 27 percentage points between 1995 and 2007 for percentage 1 is significant at the 0.5% level, and this increase started occurring between 1995 and 2000. A similar significance for percentage 1 (#) is observed also, but to a lower level.

When the full sample is partitioned into large, medium and small firms, the same trend is exhibited for each size group. Table 23 shows the summary figures for each

group. All three size groups display a continuous increase in percentage 1 across three years, within which the increase between the former two years is superior to the latter two years. Across the sample years, medium firms exhibit the highest percentage 1 (30.00%) in 1995 and in 2000 (40.00%). Small firms take the lead in 2007 (51.06%). Turning to size groups, large firms have the largest increase (40 percentage points) in percentage 1 during the full sample period followed by small firms (38 percentage points) and medium firms (15 percentage points). Percentage 1 (#) records the total number of long-serving directors as a percentage of board size at around 30% to 40% for large firms, 40% to 50% for medium firms, and above 50% for small firms across these years. The tendency of movement for this percentage fluctuates for large and medium firms while it continuously decreases for small firms.

Z values in Panel B of Table 23 further justify the significance of these increases. Z values of -3.45 and -1.97 indicate that the increase in percentage 1 for large firms between 1995 and 2007 and between 2000 and 2007 are significant at the 0.5% and 5% levels respectively. Similar statistics are observed for small firms. Z values of -3.36 and -1.95 indicate the significant increases in percentage 1 for small firms between 1995 and 2007 and between 1995 and 2000 correspondingly.

The constitution of NZX Listing Rules do not provide for a maximum fixed term for a director or a mandatory retiring age. However, Rule 3.3.8[16] of the NZX listing rules as of May 2006 constitutes the rotation of director requirement. Directors will normally be elected at an annual meeting for a term of three years. Continuation of appointment is contingent on re-election at annual shareholders' meetings. The reasonable expected

[16] Rules 3.3.8: Subject to Rule 3.3.9, at least one third of the Directors or, if their number is not a multiple of three, then the number nearest to one third, shall retire from office at the annual meeting each year, but shall be eligible for re-election at that meeting. Those to retire shall be those who have been longest in office since they were last elected or deemed elected.

tenure for a director will be two terms (i.e. two terms of generally three years each) following first election at an annual meeting.

It is clear from the above legislation that director tenure has not had a strict limit in NZ. Even though the new legislative reform requires a director to rotate for retirement every three years, it still allows continuation of appointment. This suggests a culture in NZ that does not perceive long tenure of directors as harmful to board performance. Taking ING Property Ltd as an example, their current annual report says: "The Board does not impose a restriction on the tenure of any Director as it considers that such a restriction may lead to the loss of experience and expertise from the Board". This example reflects the conjecture of the Expertise Hypothesis indicated by Vafeas (2003) earlier in this study. If a director can supply needed knowledge or experience to the board, i.e. help the board improve its performance, a sudden cut to his/her service would be a loss to the firm. Knowing there is a deadline for board membership, a director might not be willing to make great efforts but simply wait for the term to end. Therefore, the culture of keeping long-serving directors on boards of NZ listed firms could be interpreted as the firms placing a high valuation on the expertise and contribution brought by directors. Such expertise and contribution are gained by many years of service on a board.

Table 14
Director Tenure

This table reports the figures for the number of firms in which a majority of the board members have lengthy tenure. Lengthy tenure is defined as five years or more. A dummy variable is used taking the value of 1 if the board contains a majority of long-serving directors; otherwise it takes the value of 0. Panel A gives yearly descriptive statistics for the sample size of both listed firms and total directorships, the number of firms which have lengthy board tenure (Percentage 1) and not (Percentage 0), and the percentage of each occasion. It also displays the percentages of the total number of directors with lengthy-tenure (Percentage 1 (#)) and not (Percentage 0 (#)) each year. Panel B displays the results of parametric tests for differences in the percentage of incidences of lengthy board tenure across the years.

Panel A: Descriptive Statistics

Year	N Firms	N Director -ships	# 1	# 0	Percentage 1	Percentage 0	Percentage 1 (#)	Percentage 0 (#)
1995	89	532	18	71	20.22%	79.78%	33.84%	66.16%
2000	104	595	38	66	36.54%	63.46%	45.52%	54.48%
2007	142	718	67	75	47.18%	52.82%	50.95%	49.05%

Panel B: Tests of difference of mean percentage

	1995-2000	2000-2007	1995-2007
	Z value	Z value	Z value
1	-2.49 ***	-1.67 *	-4.13 ****
1 (#)	-1.65 *	-0.84	-2.55 **

significance * 10% ** 5% *** 1% **** 0.5%

Table 15
Director Tenure by Firm Size

Panel A exhibits summary statistics for the number and percentage of firms employing lengthy boards across different firm sizes. The percentages of the total numbers of long-serving directors on boards are also displayed across different firm sizes in each year. Panel B reports the results for parametric tests for differences in the percentage.

Panel A: Descriptive Statistics by Firm Size

Year	Firm Size	N Firms	N Director-ships	# 1	# 0	Percentage 1	Percentage 0	Percentage 1 (#)	Percentage 0 (#)
1995	Large	29	207	5	24	17.24%	82.76%	29.87%	70.13%
2000	Large	34	238	12	22	35.29%	64.71%	41.00%	59.00%
2007	Large	47	279	27	20	57.45%	42.55%	30.67%	69.33%
1995	Medium	30	177	9	21	30.00%	70.00%	40.77%	59.23%
2000	Medium	35	185	14	21	40.00%	60.00%	54.42%	45.58%
2007	Medium	48	247	22	26	45.83%	54.17%	42.05%	57.95%
1995	Small	30	148	4	26	13.33%	86.67%	55.63%	44.37%
2000	Small	35	166	12	23	34.29%	65.71%	52.71%	47.29%
2007	Small	47	192	24	23	51.06%	48.94%	41.90%	58.10%

Table 23
Director Tenure by Firm Size (continued)

Panel B: Tests of difference in mean percentage 1

	1995-2000	2000-2007	1995-2007
Firm Size	Z value	Z value	Z value
Large	-1.61	-1.97 **	-3.45 ****
Medium	-0.84	-0.53	-1.39
Small	-1.95 **	-1.51	-3.36 ****

significance * 10% ** 5% *** 1% **** 0.5%

4.11 Director Experience

A director's experience is defined in this paper as the number of years of the longest board memberships of such director. In other words, it is the length of time that a director has been a board member for, i.e. director tenure. The supportive and opposing opinions promoted by prior academic studies regarding director tenure are presented in section 4.10. A director with lengthy experience as a director would arguably be more qualified as a professional director than those with short-serving tenure. The difference between this section the above section is that Director Tenure discusses the length of time of employment for the listed firm while Director Experience examines the length of time of the longest employment.

Data for this variable are manually collected from the Companies Office website[17]. PDF files are retrieved from the website when searching director names. These files contain names and dates of the companies that each director was appointed to the board of directors. The time length difference between the earliest date of appointment and year of examination is then collected as director experience. One limitation of using the information from the Companies Office is that this website was restructured in 1993 and date of director appointment prior to this period may be affected by the date of data being entered in the database[18]. However, this is the only reliable data source found for this variable.

Table 24 Panel A reports the summary statistics of average tenure per directors on board. Out of 594, 671 and 791 directors employed by listed firms in 1995, 2000 and

[17] http://www.business.govt.nz/companies/

[18] Statement that appears in all firms' records: "Where appointments are prior to February 1993 the date shown may relate to when the information was entered on this database."

2007, average longest tenure per director is 7.85, 10.30 and 14.97 respectively. Median values have increased at the similar pace, from 6 in 1995 to 10 in 2000, and to 15 in 2007. Same patterns are observed for percentiles. Panel B shows high statistical significances in each interval, suggesting directors with long-serving board experience have become more and more popular being employed in NZ listed firms.

Firm size is subsequently used to partition the yearly datasets. Table 25 Panel A shows descriptive statistics of conditioned datasets. Taking a quick glance over Mean and Median values, both columns contain continuous increasing trends for each group size. Among these group sizes, large firms display the biggest increase during both 1995 and 2000 (from 6.50 to 9.97), and during 2000 and 2007 (then to 15.09). Medium and small firms have very similar trends; average director's longest board-serving time jumped from around 8 to 10 and then to 15 years during 1995, 2000 and 2007. Z values in Panel B of Table 25 confirm that the increases among all size groups during each interval are highly significant. T values present similar findings except for the insignificant increase for medium firms between 1995 and 2000.

The above statistics and results of statistical analyses further indicate that directors with longer directing experiences are recognised as more qualified and professional directors in NZ. These kind of directors is more likely to be employed in NZ listed firms. Possibly the most critical reason for this tendency is due to the sophisticated experiences and skills possessed by these directors through the years of commitment to directorships. These precious and unique backgrounds from each director are surely a valuable asset to the firm.

Table 24
Director Experience

This table presents the figures for the director experience, measured by average longest time of being a director among the directors on board. Panel A gives yearly descriptive statistics for the sample size of both listed firms and total directorships, means and medians of average tenure per director. 25th and 75th percentiles are also shown. Standard deviations are given in brackets. Panel B reports the results of parametric and non parametric tests for differences in means and medians across the years. The t value and the Wilcoxon z value are provided for the parametric and non parametric test respectively. Jarque-Bera measurements are performed to justify if data are normally distributed or not (if result for JB does not have any * underneath, it means normal distribution is rejected).

Panel A: Descriptive Statistics

Year	N Firms	N Director -ships	Mean	Median	25th Percentile	75th Percentile	Jarque - Bera
1995	89	532	7.85 (4.62)	6.00	5.00	9.00	1199.44
2000	104	595	10.30 (2.47)	10.00	9.00	11.00	3.96
2007	142	718	14.97 (4.10)	15.00	13.00	18.00	15.43

Panel A: Tests of difference in Mean (excl CEO)

1995-2000		2000-2007		1995-2007	
Ttest	Wilcoxon	Ttest	Wilcoxon	Ttest	Wilcoxon
4.68 ****	6.55 ****	10.37 ****	9.43 ****	12.20 ****	10.21 ****

significance * 10% ** 5% *** 1% **** 0.5%

Table 16
Director Experience by Firm Size

Panel A exhibits summary statistics for the average longest director experience per director across different firm sizes. The percentages of the total numbers of long-serving directors on boards are also displayed across different firm sizes in each year. Panel B reports the results for parametric tests for differences in the percentage.

Panel A: Descriptive Statistics by Firm Size

Year	Firm Size	N Firms	N Director -ships	Mean	Median	25th Percentile	75th Percentile
1995	Large	29	207	6.50	6.00	4.50	8.00
2000	Large	34	238	9.97	10.00	8.00	11.00
2007	Large	47	279	15.09	15.00	13.00	18.00
1995	Medium	30	177	9.03	7.00	6.00	9.00
2000	Medium	35	185	10.57	11.00	9.00	12.00
2007	Medium	48	247	15.56	15.00	14.00	17.00
1995	Small	30	148	8.03	7.00	6.00	10.00
2000	Small	35	166	10.06	10.00	9.00	11.00
2007	Small	47	192	14.32	15.00	12.00	18.00

Panel B: Tests of difference in mean and median values

	1995-2000		2000-2007		1995-2007	
Firm Size	Ttest	Wilcoxon	Ttest	Wilcoxon	Ttest	Wilcoxon
Large	5.65 ****	4.65 ****	6.13 ****	5.51 ****	14.22 ****	7.14 ****
Medium	1.26	3.20 ****	6.83 ****	5.81 ****	4.26 ****	5.03 ****
Small	3.05 ****	3.29 ****	5.53 ****	5.16 ****	5.53 ****	5.28 ****

significance * 10% ** 5% *** 1% **** 0.5%

4.12 Committee Existence

The evolution of the establishment of audit committees and remuneration committees in NZ is shown in Table 26. Panel A and C each specifically report the evolution of the existence of audit and remuneration committees in NZ listed firms. Apart from the explicit increasing frequencies for both committees during sample periods, it is more worthwhile to mention that the percentage of firms establishing remuneration committees in 2007 almost doubled in 1995. As shown in Panels A and C specifically, Percentage 1 for audit committees increased from 60.67% in 1995 to 82.69% in 2000, and then to 88.73% in 2007, while this percentage also grew from 37.08% in 1995 to 66.35% in 2000, and then to 66.20% in 2007 for remuneration committees. Another similar observation comparing these two committees is that the scale of growth for both committees during 1995 and 2000 is much larger than during 2000 and 2007, accounting for more than 95% of the total growth during 1995 and 2007. Z values of -3.42 and -4.06 in Panels B and D further confirm the significance of the increases during 1995 and 2000 for both audit and remuneration committees. These figures are both significant at the 0.5% level. Moreover, the rises in percentage 1 for both committees during 1995 and 2007 are even more significant.

When sample firms for audit committee existence are partitioned into different size groups, the continuity in growth can be observed in all three subgroups, shown in Panel A of Table 27. Within these increases, small firms have the most prominent increases (almost doubled), from 40.00% in 1995 to 78.72% in 2007. Large and medium firms have smaller degrees of increase compared with small firms during 1995 and 2007; from 68.97% to 93.62% for large firms and from 73.33% to 93.75% for medium firms. Z values in Panel B report the increases in Percentage 1 for audit

committees within different group sizes. All firms display significant growth in Percentage 1 during 1995 and 2007, within which the changes occurred mainly during 1995 and 2000 for large and small firms. Medium firms, on the other hand, only show significant growth between 1995 and 2007 without indicating the time of occurrence.

Panels C and D display the summary statistics of remuneration committee existence across group sizes and statistical significance for differences in Percentage 1. Surprisingly, only medium firms show a continuous increase in Percentage 1 whereas increases in large and small firms only exist during 1995 and 2000, and then remain at similar levels in the subsequent period of examination. During 1995 and 2007, Percentage 1 grows from 41.38% to 78.72% for large firms, from 50% to 72.92% for medium firms, and from 20.00% to 46.81% for small firms. Z values in
anel D justify all these increases in each size group during 1995 and 2007 as statistically significant, and the time of occurrence started during 1995 and 2000.

The increases for board committees are understood to be predictable given that their characteristics are to promote efficient operation of the board by facilitating distribution of the board's workload and to enable more detailed consideration of matters by directors who have specific skills. The CEO of the Institute of Directors, Dr Crauford, specifically indicated in an article he published in 2006 entitled: "The Role of Board Committees",[19] that the purpose of using board committees is not to increase monitoring of management but to add value to the board, which will be more effective in constructing the right corporate governance framework inside the

[19] The Role of Board Committees, (Dominion Post 16/01/2006) Dr Crauford, CEO of the Institute of Directors. Article available at webpage http://www.iod.org.nz/Home/Articles/Press_Releases/Archived_news_and_articles/Dominion_Post_-_Board_Committe.aspx

company. Similarly, the Corporate Governance Best Practice Code advocates establishment of board committees as well, with audit committees being more like an assumed structure in the firms.

However, the uniqueness of the New Zealand market, meaning that business is small in scope and owner-operated in nature, does not allow regulations to mandate the existence of board committees. Arguably, the board's role of ensuring management performance and accountability is represented for small business by the owners looking in the mirror and assessing their own performance. The capital of the business is after all their own. Despite the nature of NZ businesses, the importance of board committees has long been treated with high recognition by regulatory bodies. As Dr Crauford said in the above article: "This is not a sudden proliferation of new committees but more an increased focus on the operation and importance of key committees such as audit, finance and remuneration." These interpretations of importance of both audit and remuneration committees can probably explain the significance of increases in the establishment of both committees during the sample periods.

The proliferation of remuneration committees is relatively smaller than audit committees during the sample periods in New Zealand. A possible reason is that a remuneration committee is more appropriately established for large boards, where more complicated compensation packages need to be designed. On the other hand, regardless of board size, monitoring of a company's financial statements and reporting process, the company's legal and regulatory compliance, and the performance and independence of the auditor are required to be accomplished.

Table 17
Committee Existence

This table reports the figures for the number of firms that have established subcommittees. A dummy variable is used taking value of 1 if the board contains the specific committee; otherwise it takes the value of 0. Panels A and C correspondingly gives yearly descriptive statistics for the sample size, number of firms which have audit and remuneration committees and not, and the percentage of each occasion for each committee. Panels B and D respectively display the results of parametric tests for differences in the percentage of incidences of audit and remuneration committees across the years.

Panel A: Descriptive Statistics

Audit Committee

Year	N Firms	# 1	# 0	Percentage 1	Percentage 0
1995	89	54	35	60.67%	39.33%
2000	104	86	18	82.69%	17.31%
2007	142	126	16	88.73%	11.27%

Panel B: Tests of difference of mean percentage

	1995-2000	2000-2007	1995-2007
Audit	Z value	Z value	Z value
1	-3.42 ****	-1.36	-5.00 ****

significance * 10% ** 5% *** 1% **** 0.5%

Panel C: Descriptive Statistics

Remuneration Committee

Year	N Firms	# 1	# 0	Percentage 1	Percentage 0
1995	89	33	56	37.08%	62.92%
2000	104	69	35	66.35%	33.65%
2007	142	94	48	66.20%	33.80%

Table 26
Committee Existence (continued)

Panel D: Tests of difference of mean percentage			
	1995-2000	2000-2007	1995-2007
Remuneration	Z value	Z value	Z value
1	-4.06 ****	0.02	-4.33 ****
significance * 10%	** 5%	*** 1%	**** 0.5%

Table 18
Committee Existence by Firm Size

Panels A and C each exhibit summary statistics for the number and percentage of firms establishing audit and remuneration committees across different firm sizes. Panel B reports the results of parametric tests for differences in the percentage.

Panel A: Descriptive Statistics by Firm Size						
Audit Committee						
Year	Firm Size	N Firms	# 1	# 0	Percentage 1	Percentage 0
1995	Large	29	20	9	68.97%	31.03%
2000	Large	34	31	3	91.18%	8.82%
2007	Large	47	44	3	93.62%	6.38%
1995	Medium	30	22	8	73.33%	26.67%
2000	Medium	35	31	4	88.57%	11.43%
2007	Medium	48	45	3	93.75%	6.25%
1995	Small	30	12	18	40.00%	60.00%
2000	Small	35	24	11	68.57%	31.43%
2007	Small	47	37	10	78.72%	21.28%

Panel B: Tests of difference in mean percentage 1			
Audit Committee			
	1995-2000	2000-2007	1995-2007
Firm Size	Z value	Z value	Z value
Large	-2.24 **	-0.41	-2.86 ****
Medium	-1.58	-0.84	-2.52 **
Small	-2.31 **	-1.08	-3.44 ****
significance * 10%	** 5%	*** 1%	**** 0.5%

Table 27
Committee Existence by Firm Size (continued)

Panel C: Descriptive Statistics by Firm Size

Remuneration Committee

Year	Firm Size	N Firms	# 1	# 0	Percentage 1	Percentage 0
1995	Large	29	12	17	41.38%	58.62%
2000	Large	34	27	7	79.41%	20.59%
2007	Large	47	37	10	78.72%	21.28%
1995	Medium	30	15	15	50.00%	50.00%
2000	Medium	35	25	10	71.43%	28.57%
2007	Medium	48	35	13	72.92%	27.08%
1995	Small	30	6	24	20.00%	80.00%
2000	Small	35	17	18	48.57%	51.43%
2007	Small	47	22	25	46.81%	53.19%

Panel D: Tests of difference in mean percentage 1

Remuneration Committee

Firm Size	1995-2000 Z value	2000-2007 Z value	1995-2007 Z value
Large	-3.10 ****	0.08	-3.30 ****
Medium	-1.77 *	-0.15	-2.05 **
Small	-2.40 ***	0.16	-2.38 ***

significance * 10% ** 5% *** 1% **** 0.5%

4.13 Committees Independence

The evolution of committee independence in NZ listed firms during 1995 and 2007 is shown in Table 28. Sample size shown in this table for each committee is limited owing to the frequency of existence. Panel A shows non-stop increases for the independence percentage of both committees during these examination periods. Committee independence is defined as the proportion of independent directors as a percentage of committee size. The same patterns are observed for all the percentiles. For audit committees, the independence percentage increased from 67.06% in 1995 to 76.07% in 2000, and then to 78.61% in 2007. Similarly, remuneration committees have become more and more independent during these years as well, from 69.67% in 1995 to 69.81% in 2000, and then 72.34% in 2007. Comparing the two time intervals, the increase in audit committees is larger during the former interval while the increase in remuneration committees is larger during the latter interval. From the results of T and Wilcoxon Z tests in Panel B, it is clear that the increase in audit committee independence during 1995 and 2007 is significant within NZ listed firms. Again, Z values indicate genuine movements as Jarque-Bera shows rejected normality. Although the T value of 1.96 seems to indicate that audit committees started to increase their independence during 1995 and 2000, the corresponding Z value is not significant, suggesting uncertain times of occurrence for the significance increase during 1995 and 2007.

The increasing trends are also displayed for different size groups in Table 29. Apart from the decrease in remuneration committee independence during 1995 and 2007 for large and small firms, all other size groups exhibit the same increasing patterns. For audit committees in 1995 and in 2007, the independence ratio increased from 69.67%

to 78.59% for large firms while it increased from 64.02% to 79.04% for medium firms, and grew from 68.31% to 77.63% for small firms. The evolution in remuneration committee independence shows interesting patterns among different size groups. Contrary to both large and small firms, which exhibit first-down-then-up trends in independence ratio, medium firms have exactly the opposite movements, i.e. first up then down. Regarding median figures, most of the median values in both committees demonstrate an increasing pattern. Panel B of Table 25 displays the significances for the aforementioned evolution in committee independence ratios. Only the movements of audit committee independence in medium firms are significant, particularly during 1995 and 2000.

A growing percentage of independent board committees in NZ listed firms is inevitable. Excluding the fact that board independence has been the most attention-drawing aspect of a good corporate governance framework since the US corporate scandals, board committees as the keys to enhancing effectiveness in key areas for the board would no doubt be in high demand for their independence, in order to maintain impartiality and functioning. Following the US legislative requirement mandating an independence ratio on board committees, the Securities Commission of New Zealand announced guidelines for audit committees to fully comprise non-executive directors in 2004, a majority of whom are independent and the chairman must be independent. This was expected for the core reason that the collapse of Enron and other corporate scandals were caused by a close alignment between the management and the auditor. Such contaminated activity has triggered public awareness of carefully examining the auditing part around the globe. Independence of audit committees is the major way to help oversee and maintain impartiality and the performance of the auditors.

Although the new rules do not mandate the independence ratio for remuneration committees in NZ public-traded firms, one of the key findings from public consultation for Corporate Governance in New Zealand – Principles and Guidelines – is to have a remuneration committee comprising a majority of independent directors, reflecting the social recognition that an independent remuneration committee is also very important. However, the loose legislative requirement for the independence ratio on remuneration committees may indicate that the most important change for NZ listed firms is to increase the level of independence on audit committees. Corporations may choose to increase the level of independence on remuneration committees once the relevant legislation takes effect.

Table 19
Committees Independence

This table reports the summary statistics for both audit and remuneration committees expressed as average percentages of the board size. Panel A gives yearly descriptive statistics for the sample size of both committees and total directorships on comittees, means and medians of independent directors on both committees in percentages. AC stands for audit committee and CC stands for compensation (remuneration) committee. 25th and 75th percentiles are also shown. Standard deviations are given in brackets. Panel B reports the results of parametric and non parametric tests for differences in mean and median percentages of independent directors across the years. The t value and the Wilcoxon z value are provided for the parametric and non parametric test respectively. Jarque-Bera measurements are performed to justify if data are normally distributed or not (if result for JB does not have any * underneath, it means normal distribution is rejected).

Panel A: Descriptive Statistics

Year	N AC	N Directorships on AC	Mean AC	Median AC	25th Percentile AC	75th Percentile AC	Jarque-Bera (AC)
1995	54	133	67.06% (28.22)	66.67%	50.00%	100.00%	2.03
2000	86	256	76.07% (27.08)	66.67%	50.00%	100.00%	6.23
2007	126	396	78.61% (20.82)	75.00%	66.67%	100.00%	8.37

Year	N CC	N Directorships on CC	Mean CC	Median CC	25th Percentile CC	75th Percentile CC	Jarque-Bera (CC)
1995	33	74	69.67% (28.94)	66.67%	50.00%	100.00%	2.28
2000	69	210	69.81% (25.40)	66.67%	50.00%	100.00%	5.25
2007	94	294	72.34%	66.67%	66.67%	100.00%	5.78

(25.42)

Table 28
Committees Independence (continued)

Panel B: Tests of difference of independence percentage

1995-2000				2000-2007				1995-2007			
T (AC)	T (CC)	W (AC)	W (CC)	T (AC)	T (CC)	W (AC)	W (CC)	T (AC)	T (CC)	W (AC)	W (CC)
1.96 *	0.10	1.60	0.09	0.64	0.45	1.06	0.64	3.00 ****	0.44	2.58 ***	0.53

significance * 10% ** 5% *** 1% **** 0.5%

Table 20
Committees Independence by Firm Size

Panel A presents summary statistics for the means and medians of independent directors in percentages on both committees across different firm sizes. Panel B reports the results for parametric and non parametric tests for differences in mean and median %.

Panel A: Descriptive Statistics by Firm Size

Year	Firm Size	N AC	N Directors on AC	N CC	N Directors on CC	Mean AC	Mean CC	Median AC	Median CC	25th Percentile AC	25th Percentile CC	75th Percentile AC	75th Percentile CC
1995	Large	20	59	12	37	69.67% (25.93)	77.43% (20.86)	66.67%	65.83%	50.00%	65.83%	100.00%	100.00%
2000	Large	31	105	27	93	72.91% (23.20)	69.53% (24.92)	66.67%	67.00%	50.00%	50.00%	100.00%	100.00%
2007	Large	44	147	37	118	78.59% (19.07)	74.24% (23.15)	66.67%	66.67%	66.67%	66.67%	100.00%	100.00%
1995	Medium	22	55	15	35	64.02% (30.36)	57.33% (32.57)	66.67%	50.00%	50.00%	50.00%	100.00%	91.67%
2000	Medium	31	87	25	72	80.17% (23.61)	74.42% (25.49)	100.00%	75.00%	50.00%	50.00%	100.00%	100.00%
2007	Medium	45	152	35	119	79.04% (19.63)	67.44% (27.46)	66.67%	66.67%	66.67%	50.00%	100.00%	100.00%
1995	Small	12	19	6	10	68.31% (24.57)	85.00% (25.71)	60.00%	100.00%	41.67%	60.00%	100.00%	100.00%
2000	Small	24	64	17	45	76.28% (34.13)	66.67% (26.60)	66.67%	66.67%	66.67%	50.00%	100.00%	100.00%
2007	Small	37	97	22	57	77.63% (24.21)	74.29% (26.05)	75.00%	66.67%	66.67%	66.67%	100.00%	100.00%

Table 29
Committees Independence by Firm Size (continued)

Panel B: Tests of difference

	1995-2000				2000-2007				1995-2007			
Firm Size	T (AC)	T (CC)	W (AC)	W (CC)	T (AC)	T (CC)	W (AC)	W (CC)	T (AC)	T (CC)	W (AC)	W (CC)
Large	0.47	-0.95	0.42	0.86	1.18	0.75	1.05	0.73	1.55	-0.42	1.36	0.28
Medium	2.14 **	1.81 *	1.74 *	1.45	-0.22	-0.95	0.05	0.82	2.38 **	1.09	1.94 *	1.11
Small	0.70	-1.53	0.50	1.29	0.19	1.01	0.88	1.15	1.10	-0.93	0.99	0.70

4.14 CEO Involvement on Board Committees

The summary statistics of firms within which CEOs are involved in board committees are displayed in Table 30. Panels A and C each report the sample size, number and percentage of firms with CEO involvement in audit and remuneration committees across three sample years. Sample size for this variable is limited by the number of firms that actually have these committees. For both committees, there has been a large fluctuation in both number and percentage of firms whose CEO is a member of the board committee. From 1995 to 2000 and then to 2007, the percentage of listed firms in which the CEO sits on the audit committee increased from 9.26% to 16.28% and then decreased to 7.94%, while the percentage of firms with CEO membership of remuneration committees rose from 9.09% to 23.19% and then fell to 10.64%.

Panels B and D respectively display statistical results for the differences in Percentage 1 for audit and remuneration committees across sample years. Remuneration committees exhibit a statistically significant increase during the first time interval followed by a statistically significant decrease during the second time interval, while the same applies for audit committees in the second interval. In other words, there had been an increasing trend of CEO involvement on remuneration committees during 1995 and 2000 in NZ. However, from 2000 until 2007, an opposite trend is displayed for both committees, and the reduction during this time period brings the percentage back to the beginning level.

When sample data for both committees are partitioned into different group sizes as shown in Table 31, similar trends are observed for large and small firms across sample years, i.e. CEO involvement firstly increases and then decreases. Medium

firms, on the other hand, present a general decreasing tendency. In 1995, the percentage of large firms that allowed the CEO to sit on audit committees was 10.00% while it was 13.64% for medium firms and none for small firms. In 2000, these percentages jumped to 12.90% for large firms and 25% for small firms. Subsequently during 2000 and 2007, small firms experienced the sharpest fall in CEO membership on audit committees. Percentage 1 fell to only 2.70% and 6.82% for small and large firms while it fell to 8.89% for medium firms. Statistical test results show that only the increase for small firms during 1995 and 2000 and the decrease during 2000 and 2007 are significant. Other aforementioned movements inside each size group are not significant.

On the other hand, CEO membership of remuneration committees shown in Panel C also exhibits the up-and-down trends across large and small firms while medium firms show exactly the opposite position. Similar to audit committees, the most prominent change happened in small firms; Percentage 1 skyrocketed from 0.00% in 1995 to 35.29% in 2000 and then quickly shrank back to 9.09% in 2007. Large firms followed the same pattern but to a lesser degree; from 8.33% in 1995 to 25.93% in 2000 and then back to 8.11% in 2007. Percentage 1 for medium firms shrank from 13.33% in 1995 to 8% in 2000 and remains at this level onwards. Panel D figures show low significance of the changes happening within large and small firms.

The dramatic drop in the number of firms within which CEOs are involved in board committees seems to be anticipated given how prominent the independence theory is within the corporate governance fields. Plus, CEO power exertion on board or committees is already proven to have negative impacts on board performance when

the CEO has too much influence, not to mention having them as a member of the committees. Additionally, the global listing rules regarding full independence on audit committees and at least a majority of independent members on remuneration committees have further emphasized the importance of the independence of board committees, which means no management sitting as members. Specifically in NZ, SEC especially advocated for total independence of audit committees in 2003. Therefore, the significant fall in the frequency of CEO involvement in board committees is just according to expectation.

However, the significant increase in CEO membership on board committees during 1995 and 2000 is unexpected. Possibly owing to the lack of vivid regulatory requirements regarding committee independence and because firm sizes are generally small in NZ, having CEOs sitting on board committees could have been a common practice especially on small boards. This could well be a possible research area in the future.

Table 21
CEO Involvement on Board Committees

This table reports the summary statistics for CEO involvement on both audit and remuneration committees. A dummy variable is used taking the value of 1 if the CEO sits on the committee; otherwise it takes the value of 0. Panels A and C correspondingly give yearly descriptive statistics for the sample size, number of firms which have CEO membership on audit or remuneration committee and not, and the percentage of each occasion for each committee. Panels B and D respectively display the results of parametric tests for differences in the percentage of incidences of audit and remuneration committees across the years.

Panel A: Descriptive Statistics

Audit Committee

Year	N Firms	# 1	# 0	Percentage 1	Percentage 0
1995	54	5	49	9.26%	90.74%
2000	86	14	72	16.28%	83.72%
2007	126	10	116	7.94%	92.06%

Panel B: Tests of difference of mean percentage

		1995-2000	2000-2007	1995-2007
Audit		Z value	Z value	Z value
1		-1.18	1.88 *	0.29
significance	* 10%	** 5%	*** 1%	**** 0.5%

Panel C: Descriptive Statistics

Remuneration Committee

Year	N Firms	# 1	# 0	Percentage 1	Percentage 0
1995	33	3	30	9.09%	90.91%
2000	69	16	53	23.19%	76.81%
2007	94	10	84	10.64%	89.36%

Panel D: Tests of difference of mean percentage

		1995-2000	2000-2007	1995-2007
Remuneration		Z value	Z value	Z value
1		-1.71 *	2.16 **	-0.25
significance	* 10%	** 5%	*** 1%	**** 0.5%

Table 22
CEO Involvement on Board Committees by Firm Sizes

Panels A and C each exhibit summary statistics for the number and percentage of firms within which the CEO sits on either the audit or remuneration committee across different firm sizes. Panel B reports the results for parametric tests for differences in the percentage.

Panel A: Descriptive Statistics by Firm Size

Audit Committee

Year	Firm Size	N Firms	# 1	# 0	Percentage 1	Percentage 0
1995	Large	20	2	18	10.00%	90.00%
2000	Large	31	4	27	12.90%	87.10%
2007	Large	44	3	41	6.82%	93.18%
1995	Medium	22	3	19	13.64%	86.36%
2000	Medium	31	3	28	9.68%	90.32%
2007	Medium	45	4	41	8.89%	91.11%
1995	Small	12	0	12	0.00%	100.00%
2000	Small	24	6	18	25.00%	75.00%
2007	Small	37	1	36	2.70%	97.30%

Panel B: Tests of difference in mean percentage 1

Audit Committee

	1995-2000	2000-2007	1995-2007
Firm Size	Z value	Z value	Z value
Large	0.31	0.56	0.14
Medium	0.45	0.12	0.60
Small	-1.90 *	2.67 ***	-0.58

significance * 10% ** 5% *** 1% **** 0.5%

Table 31
CEO Involvement on Board Committees by Firm Sizes (continued)

Panel C: Descriptive Statistics by Firm Size

Remuneration Committee

Year	Firm Size	N Firms	# 1	# 0	Percentage 1	Percentage 0
1995	Large	12	1	11	8.33%	91.67%
2000	Large	27	7	20	25.93%	74.07%
2007	Large	37	3	34	8.11%	91.89%
1995	Medium	15	2	13	13.33%	86.67%
2000	Medium	25	2	23	8.00%	92.00%
2007	Medium	35	3	32	8.57%	91.43%
1995	Small	6	0	6	0.00%	100.00%
2000	Small	17	6	11	35.29%	64.71%
2007	Small	22	2	20	9.09%	90.91%

Panel D: Tests of difference in mean percentage 1

Remuneration Committee

	1995-2000	2000-2007	1995-2007
Firm Size	Z value	Z value	Z value
Large	-1.26	1.94 *	0.02
Medium	0.54	-0.08	0.51
Small	-1.69 *	2.01 **	-0.77

significance * 10% ** 5% *** 1% **** 0.5%

4.15 Director Meeting Frequencies

Table 32 displays the summary statistics for the frequency of board and committee meetings held and attended. Data are collected from annual reports where firms voluntarily disclose relevant information. The sample sizes for committee meetings are much smaller than the board meetings, the reason being that it is less mandatory for board sub-committees to exist than the board itself. Therefore, the data availability for this variable in Table 2 is limited for these two reasons. Specifically, for the non-available information within small firm sizes in 1995, it is because only one firm falls into the small firm category that provides details of meetings held and attended. Such limited data cannot reveal a tendency.

Table 32 Panels A, C and E each represent meeting figures for board, audit committee, and remuneration committee respectively. Panels B, D and F separately reveal the results of the parametric and non-parametric statistical tests for each group meeting. As for board meetings in Panel A, the numbers of meetings held and attended have both been decreasing continuously during the sample periods. From Panel A, on average, there were 11.09 meetings held in NZ listed firms in 1995; such frequency reduced to 11.04 in 2000 and then to 9.88 in 2007. Director attendance decreased from 10.88 in 1995 to 10.61 in 2000, and then to 9.52 in 2007. The same trend was observed for median statistics and percentiles. Comparing time intervals, the reduction within the latter interval is larger than the former interval. Z values in Panel B still justify that the reduced frequency in the number of board meetings both held and attended are statistically significant. Further, statistical test results are also significant for reduction during 2000 and 2007, suggesting the number of board meetings held and attended started to drop during this period.

When the sample for board meetings is partitioned into different size groups measured by total assets, it can be observed in Panel A of Table 33 that both large and medium firms experienced a continuous decrease in both meetings held and attended while small firms experienced up and down. Median and percentile figures display exactly the same patterns as mean statistics. According to Panel B of Table 32, the reductions in the number of meetings held and attended in both large and medium firms during 1995 and 2007 are significant (at 10% or higher level), suggesting small firms did not experience changes in the frequency of meetings either held or attended during these years.

Interestingly, the trends in the frequency of committee meetings held and attended show different patterns from board meetings. Panels C and E of Table 32 respectively report the average frequency of meetings held and attended by members of audit committees and remuneration committees in the three sample years. The numbers of meetings held and attended by audit committee and remuneration committee members have both increased incessantly during 1995 and 2007. Audit committees in NZ listed firms averagely held almost 2.75 meetings annually in 1995, around 3.24 in 2000, and almost 3.56 in 2007. Attendance for these meetings in each sample year is nearly 100%. The number of remuneration committee meetings held during each sample year is averagely 0.4 less than audit committee meetings. Similarly, attendance at remuneration committee meetings is almost 100% in each sample year. Median values and percentiles both show the same tendencies. Z values in Panels D and F indicate that the increases in the average number of meetings held and attended by both audit and remuneration committee members are significant at 5% and higher during 1995 and 2007. Furthermore, statistical values are also significant for remuneration

committees during 1995 and 2000, reflecting the starting periods for growth in remuneration committee meetings.

Like board meetings, firm size is used to partition the sample data for audit and remuneration committee meetings across the three sample years, shown in Panels C and D of Table 33. Comparing year 2007 to 1995, meetings held and attended by audit and remuneration committee members have both increased in each size group. Frequency of meetings held for both committees are positively related to firm size, i.e. large firms have more meetings held than the other two groups. On an average basis, audit committee meetings are held more frequently than quarterly in large firms while they are held just about quarterly for medium firms and small firms. Turning to remuneration committees, the number of meetings held and attended averages at less than quarterly for both large and medium firms in 1995, around quarterly in 2000, and more frequently than quarterly in 2007. Regarding statistical significance for the difference in the frequency of meetings shown in Panels D and F, both committees in large firms held more meetings during 1995 and 2007, and meetings were attended more frequently during 1995 and 2007 for medium firms.

The purpose of the existence of boards of directors is to guide the strategic direction of the entity, and to direct and oversee management. The Securities Commission, economists and the public investors in NZ require the boards to have a balance of skills, knowledge, experience and perspectives from directors to work effectively. Official charters setting out the responsibilities and roles of the board and directors, including any formal delegations to management, are required to be constructed and viewed by the public. To ensure the accomplishment of specific responsibilities and

effective communication between board members, board meetings are necessarily held regularly as a venue to exchange ideas and raise challenges to each other. However, given that board meetings are limited by time length and frequency, it is not possible to make arrangements for all directors to state their thoughts, not even to attempt a deep discussion of all of their ideas. This is one of the major reasons to establish board committees, that is, to divide up and apportion specialised board responsibilities. However, the accountability of the board as a whole is maintained, including in relation to work undertaken by committees. Thus, this logic may be able to explain the significant reduction in the number of board meetings held and attended in NZ listed firms during the sample periods. In other words, a portion of the burden on the board as a whole is passed onto the outstanding committees, where directors are grouped according to their relevant qualifications and experience, and so that the discussion can be more effective.

Board committees are viewed by the Securities Commission and the public in NZ as entities that can enhance the effectiveness of the board through closer scrutiny of issues and provide more efficient decision making in key areas of board responsibility. This is especially true for audit committees. Remuneration committees are increasingly being recognized as important, particularly for large boards. Committee meetings are held for the issues from specific areas to be raised and discussed among a group of directors with similar knowledge and background. Consequently, time wasted on communication between a large number of people can be saved. More importantly, the participation of each director is allowed, helping ideas to penetrate more and become consolidated. Therefore, the increase in committee meetings can probably be explained by this notion. Furthermore, the

results of the statistical test indicate that the increases in committee meetings occurred during 1995 and 2000 while the reduction in board meetings happened during 2000 and 2007. It may reflect the fact that assigning partial board duties to committees has helped with the efficiency of decision making by the boards so board meetings are subsequently reduced.

Table 23
Meeting Frequency

This table reports the figures for frequency of meetings held and attended by each firm. Panels A, C and E each give yearly descriptive statistics for the sample size, number of meetings held and attended for board, audit committee, and remuneration committee meetings. Attendance % is the percentage of total number of meetings attended out of total number of meetings held. The 25th and 75th percentiles of each year are given as well. Standard deviations for mean frequency are shown in parentheses. Panels B, D, F and G respectively display the results of parametric and non parametric tests for differences in the frequency of meetings held and attended for board, audit committee and remuneration committee meetings across the years. Jarque-Bera measurements are performed to justify if data are normally distributed or not (if result for JB does not have any * underneath, it means normal distribution is rejected).

Panel A: Descriptive Statistics

Board Meeting

Year	N Held	N Attended	Mean Held	Mean Attended	Attendance %	Median Held	Median Attended	25th Percentile Held	25th Percentile Attended	75th Percentile Held	75th Percentile Attended	Jarque-Bera Mean Held
1995	35	35	11.09	10.88	98.18%	11.00	11.00	10.00	10.00	13.00	12.80	0.70
			(2.45)	(2.39)								
2000	52	52	11.04	10.61	94.53%	11.00	10.70	9.00	8.69	12.25	12.00	10.05
			(3.89)	(3.82)								
2007	93	93	9.88	9.52	94.81%	10.00	9.50	8.00	7.50	12.00	12.00	1.55
			(3.31)	(3.21)								

Panel B: Tests of difference

Board Meeting

1995 - 2000				2000 - 2007				1995 - 2007			
Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended	Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended	Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended
0.06	0.21	-0.29	-0.78	-2.05	-1.87	-1.95	-1.76	-1.96	-2.10	-2.29	-2.62
				**	*	*	*	*	**	**	**

significance * 10% ** 5% *** 1% **** 0.5%

Table 32
Meeting Frequency (continued)

Panel C: Descriptive Statistics

Audit Committee Meeting

Year	N Held	N Attended	Mean Held	Mean Attended	Attendance %	Median Held	Median Attended	25th Percentile Held	25th Percentile Attended	75th Percentile Held	75th Percentile Attended	Jarque-Bera Mean Held
1995	36	36	2.75	2.71	98.48%	2.50	2.25	2.00	2.00	3.25	3.25	4.72
			(1.05)	(0.97)								
2000	46	46	3.24	3.15	96.34%	3.00	3.00	2.00	2.00	4.00	4.00	25.01
			(1.39)	(1.30)								
2007	75	75	3.56	3.49	98.99%	3.00	3.00	2.00	2.00	4.00	4.00	224.82
			(1.95)	(1.93)								

Panel D: Tests of difference

Audit Committee Meeting

1995-2000				2000-2007				1995-2007			
Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended	Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended	Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended
1.59	1.41	1.48	1.23	1.21	0.98	1.31	0.91	2.39 **	2.25 **	2.34 **	2.08 **

significance * 10% ** 5% *** 1% **** 0.5%

Table 32
Meeting Frequency (continued)

Panel E: Descriptive Statistics

Remuneration Committee Meeting

Year	N Held	N Attended	Mean Held	Mean Attended	Attendance %	Median Held	Median Attended	25th Percentile Held	25th Percentile Attended	75th Percentile Held	75th Percentile Attended	Jarque-Bera Mean Held
1995	17	17	1.82	1.79	98.10%	2.00	2.00	1.00	1.00	2.00	2.00	0.46
			(1.01)	(1.00)								
2000	34	34	2.91	2.78	94.48%	2.00	2.00	1.25	1.25	4.00	3.38	16.47
			(2.18)	(2.06)								
2007	47	48	3.26	3.18	96.48%	3.00	3.00	2.00	2.00	4.00	4.00	28.98
			(2.15)	(2.05)								

Pane F : Tests of difference

Remuneration Committee Meeting

1995-2000				2000-2007				1995-2007			
Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended	Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended	Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended
1.96	1.66	1.88	1.77	0.82	1.08	0.98	1.15	2.66	2.69	2.70	2.71
*	*	*	*					***	***	***	***

significance * 10% ** 5% *** 1% **** 0.5%

Meeting Frequency (continued)

Panel G: Tests of difference in attendance percentage

	1995-2000		2000-2007		1995-2007	
	T test	Wilcoxon Z	T test	Wilcoxon Z	T test	Wilcoxon Z
Board	-1.53	-2.55 **	0.30	0.02	-1.43	-2.99 **
Audit Committee	-1.22	-0.56	0.78	0.13	-0.85	-0.74
Remuneration Committee	-0.30	-0.07	-0.01	-0.72	-0.52	-0.65

significance * 10% ** 5% *** 1% **** 0.5%

Table 24
Meeting Frequency by Firm Size

Panels A, C and E exhibit summary statistics for the frequency of meetings held and attended across different firm sizes. Panels B, D and F report the results of parametric and non parametric tests for differences in frequency.

Panel A: Descriptive Statistics

Board Meeting

Year	Size	N Held	N Attended	Mean Held	Mean Attended	Attendance %	Median Held	Median Attended	25th Percentile Held	25th Percentile Attended	75th Percentile Held	75th Percentile Attended
1995	Large	14	14	11.79	11.50	97.59%	11.50	11.50	10.25	10.25	13.75	13.00
				2.52	2.21							
2000	Large	25	25	11.40	10.68	93.22%	11.00	9.71	9.00	8.67	13.00	12.00
				4.17	4.02							
2007	Large	36	36	9.92	9.45	93.53%	9.50	9.00	8.00	7.79	12.00	12.00
				3.32	3.27							
1995	Medium	14	14	10.79	10.57	97.97%	11.00	11.00	10.00	10.00	12.75	12.45
				2.29	2.47							
2000	Medium	16	16	10.56	10.38	98.24%	11.00	10.70	9.75	9.75	12.00	11.68
				3.83	3.83							
2007	Medium	21	21	9.00	8.83	97.99%	9.00	8.75	8.00	7.50	11.00	11.00
				2.85	2.80							
1995	Small	7	7	10.29	10.29	98.80%	10.00	10.00	9.00	9.00	11.00	11.00
				2.63	2.63							
2000	Small	11	11	10.91	10.81	98.60%	11.00	11.00	9.00	9.00	12.50	12.50
				3.56	3.67							
2007	Small	36	36	10.36	9.99	96.44%	10.50	10.00	8.00	7.30	12.00	11.63
				3.52	3.37							

Table 33
Meeting Frequency by Firm Size (continued)

Panel B: Tests of difference

Board Meeting

	1995-2000				2000-2007				1995-2007			
Firm Size	Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended	Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended	Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended
Large	-0.56	-0.84	-378.00	-1.26	-1.14	-1.09	-0.81	-0.82	-1.90 *	-2.24 **	-1.67 *	-2.25 **
Medium	1.04	1.03	0.64	0.53	-2.44 **	-2.51 **	-2.50 **	-2.48 **	-1.56	-1.60	-2.18 **	-2.21 **
Small	0.04	-0.34	0.28	0.08	0.36	0.57	0.46	0.55	0.34	0.04	0.50	0.24

significance * 10% ** 5% *** 1% **** 0.5%

Table 33
Meeting Frequency by Firm Size (continued)

Panel C: Descriptive Statistics

Audit Committee Meeting

Year	Size	N Held	N Attended	Mean Held	Mean Attended	Attendance %	Median Held	Median Attended	25th Percentile Held	25th Percentile Attended	75th Percentile Held	75th Percentile Attended
1995	Large	15	15	3.33	3.27	98.20%	3.00	3.00	2.00	2.00	4.00	4.00
				(1.11)	0.96							
2000	Large	17	17	3.29	3.11	94.53%	3.00	3.00	2.25	2.25	4.00	4.00
				(1.61)	1.35							
2007	Large	27	27	3.56	3.45	96.91%	3.00	3.00	2.00	2.00	4.00	4.00
				(1.79)	1.72							
1995	Medium	16	16	2.31	2.28	98.70%	3.00	3.00	2.00	2.00	3.00	3.00
				(0.79)	0.77							
2000	Medium	18	18	2.94	2.93	99.66%	2.00	2.00	2.00	2.00	3.00	3.00
				(0.94)	0.96							
2007	Medium	26	26	3.65	3.58	98.08%	4.00	3.50	2.00	2.00	4.00	4.00
				(2.06)	2.06							
1995	Small	5	5	2.40	2.40	100.00%	2.00	2.00	2.00	2.00	2.50	2.50
				(0.89)	0.89							
2000	Small	13	13	3.38	3.29	97.34%	3.00	3.00	2.00	2.00	4.00	4.00
				(1.61)	1.68							
2007	Small	17	17	3.52	3.50	99.43%	3.00	3.00	2.00	2.00	4.00	4.00
				(2.18)	2.19							

Table 33
Meeting Frequency by Firm Size (continued)

Panel D: Tests of difference

Audit Committee Meeting

	1995-2000				2000-2007				1995-2007			
Firm Size	Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended	Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended	Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended
Large	-0.08	-0.37	-0.21	-0.30	0.50	0.70	0.42	0.53	0.45	0.39	0.18	0.50
Medium	2.11 **	2.14 **	1.78 *	1.79 *	1.36	1.25	1.17	0.94	2.49 **	2.41 **	2.64 ***	2.51 **
Small	1.28	1.11	1.38	1.18	0.20	0.29	0.07	0.16	1.28	1.09	1.37	1.37

significance * 10% ** 5% *** 1% **** 0.5%

Table 33
Meeting Frequency by Firm Size (continued)

Panel E: Descriptive Statistics

Remuneration Committee Meeting

Year	Size	N Held	N Attended	Mean Held	Mean Attended	Attendance %	Median Held	Median Attended	25th Percentile Held	25th Percentile Attended	75th Percentile Held	75th Percentile Attended
1995	Large	7	7	2.29	2.26	98.69%	3.00	2.81	2.00	2.00	3.00	3.00
				1.25	1.24							
2000	Large	14	14	3.14	2.91	92.68%	2.50	2.50	1.00	1.00	5.00	4.00
				1.96	1.75							
2007	Large	20	20	3.63	3.48	95.87%	3.00	3.00	2.50	2.25	4.50	4.33
				1.90	1.79							
1995	Medium	9	9	1.67	1.62	97.20%	2.00	2.00	1.00	1.00	2.00	2.00
				0.50	0.48							
2000	Medium	13	13	2.77	2.74	98.92%	2.00	2.00	1.00	1.00	3.00	3.00
				1.95	1.73							
2007	Medium	14	14	3.79	3.76	99.21%	3.50	3.50	1.00	1.00	4.00	4.00
				2.91	2.84							
1995	Small	1	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2000	Small	1	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2007	Small	1	1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Table 33
Meeting Frequency by Firm Size (continued)

Panel F: Tests of difference

Remuneration Committee Meeting

	1995-2000				2000-2007				1995-2007			
Firm Size	Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended	Ttest Held	Wilcoxon Held	Ttest Attended	Wilcoxon Attended	Ttest Held	Ttest Held	Wilcoxon Held	Ttest Attended
Large	1.05	0.88	0.78	0.71	0.78	0.91	0.89	0.86	1.76 *	1.66	1.52	1.23
Medium	1.18	1.22	0.77 **	0.93 **	0.93	0.95	1.21	1.21	2.14 **	2.22 **	1.86 *	1.89 *
Small	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a

significance * 10% ** 5% *** 1% **** 0.5%

4.16 Director Educational and Industrial Background

Panels A and C of Table 34 respectively report the summary statistics of the evolution of director educational and industrial backgrounds in NZ. Panels B and D each displays the statistical significance of differences in the percentage of educational and industrial backgrounds across the three sample years. Educational background refers to the areas of education accomplished by each director while industrial background indicates the industry(s) each director has worked in. Categories are chosen for each background according to frequency of occurrence in annual reports. Again, the sample sizes for this variable are not full because not every firm in the sample years reports this information. For those who disclose, data are collected from the annual reports.

For educational background, Panel A shows different trends in each category, that is, there have been increases and decreases in different education areas from directors across these years. According to the statistical results in Panel B, however, areas such as finance, real estate, engineering, and accounting have shown significant changes across the three sample years. Specifically, the number of directors who have had education in finance, real estate, and accounting increased significantly, particularly in the accounting area where the increase happened between 2000 and 2007. Engineering, on the other hand, has been the area that receives less and less interest. All increases in finance, real estate, and accounting and the decrease in engineering are significant at the 5% level or even higher.

Regarding industrial background, various patterns are observed for each category as well. Within those categories having statistically significant changes during these years, management/marketing, and agriculture/farming display increases in

popularity. In other words, there have been growing board appointments of directors who have worked in management/marketing and agriculture/farming areas in NZ. On the contrary, the number of directors with working experience in accounting, logistics/transportations, industry/construction, business, investment and government/politics went through a significant reduction during these years. All the significance levels are 5% or even higher.

Results are more difficult to interpret for both educational and industrial backgrounds after group sample data are sorted into different sectors. Sectors categories are derived from NZ Companies Research website.[20] Sector 2, 7 and 9 are removed from analyses section due to data insufficiency. There were either one or two, sometimes zero companies providing relevant data within these sectors. Some of the sectors are combined together for data analyses due to the data availability for each sector is not enough to be examined individually. Sectors similar to each other are grouped into one category. Panels A and C of Table 35 separately document the evolution of director educational and industrial background in different sectors during 1995 and 2007. Industry sectors are presented with codes in the tables.[21]

For sector of Agriculture and Fishing, numbers of directors with degrees in business and agriculture have both increased while those with degrees in law have decreased. Numbers of directors with occupational experience in legal or food and beverage industries have increased while decreasing for those who have worked in the commercial or accounting industries before.

[20] http://companyresearch.nzx.com.ezproxy.canterbury.ac.nz/deep_ar/

[21] 1= Agriculture & Fishing; 2 = Building Materials & Construction; 3 = Consumer; 4 = Energy Processing; 5 = Finance & Others Services; 6 = Food & Beverages; 7 = Forestry & Forest Products; 8 = Investments; 9 = Leisure & Tourism; 10 = Media & Telecommunication; 11 = Mining; 12 = Ports; 13 = Property; 14 = Textiles & Apparel; 15 = Transport; 16 = Intermediate & Durables.

Companies in the Consumer and Textile and Apparels sectors tend to employ more directors with degrees in accounting or law, but fewer directors with business or engineering qualifications. Directors who have worked in the legal or management and marketing sectors have a greater demand for their services while the opposite is true for directors who have worked within accounting or government environments before.

Regarding sectors of energy processing and mining, directors with a business degree are more welcomed while directors with law degree are less demanded. Work experiences in finance or industrial and construction will improve the likelihood of directors being appointed. On the other hand, directors with work experiences in accounting or management & marketing are less in demand.

In the finance and others and property sectors, directors with degrees in law, Business, accounting or finance are more likely to be appointed. Conversely, directors who have studied management and marketing or engineering are less in demand for board appointments. Directors who have been employed in legal or management and marketing environments are more welcomed while accounting and agriculture and farming working experiences do not promote board appointments.

On boards in the food and beverages and media and telecommunications sectors, the number of directors with degrees in law or accounting has increased while the number of directors with degrees in business or engineering has shrunk. Those who have worked in commercial, Consulting or management and marketing firms have a higher possibility of being appointed as directors while those were employed within

accounting or industrial and construction firms do not.

In boards in the Investment sector, directors with finance or accounting degrees are more popular for appointment while those with business or management and marketing degrees are not. Similarly, employment experience in accounting or finance firms helps directors to be appointed while commercial and IT firms experiences do not.

In the transport and ports sectors, companies tend to appoint directors with degrees in Finance or business, but not in law, arts or IT. Directors with working experiences in consulting or legal are more sought after while directors who have worked in industrial and construction or accounting firms are not.

With respect to companies in the Intermediate and Durables sectors, the number of directors who have studied business or science degrees has increased while directors with law or accounting degrees have become fewer. Directors who have worked for management and marketing, medical and healthcare or engineering firms are more likely to be appointed as board members while those who have worked for industrial and construction and accounting firms are not.

It would be difficult to suggest possible reasons for all of these ups and downs in the trends in each category for educational and industrial backgrounds. Sometimes they may only be attributed to the corporation's requirements. Aside the firm's individual specific needs, some changes can be explained by the New Zealand Corporate Governance Best Practice Code. The 2003 legislative reform required that there be at

least one director with chartered accountant qualifications, or another recognized form of financial expertise on an audit committee. Similarly, the Code also requires the board to have a range of relevant skills and experience. This requirement may have encouraged corporations in New Zealand to appoint board members with various qualifications and experiences, and may further explain the ups and downs in each category presented above.

Table 25
Director Educational and Industrial Background

This table displays the summary statistics for director educational and industrial background. Each category adds one if one of the directors on board is qualified. Panels A and C correspondingly report yearly descriptive statistics for educational and industrial background regarding the sample size of both listed firms and total directorships, and percentages of each category accounted for. Panels B and D respectively display the results of parametric tests for differences in the percentage of each category across the years. Fin/RE stands for Finance or Real Estate, Com/Busi stands for Commerce or Business, Engi stands for Engineering, Sci/Tech starnds for Science or Technology, Mgmt/Mkt stands for Management or Marketing, Comp/IT stands for Computing or Information Technology, Agri/Far stands for Agriculture or Farming, Food/Bever stands for Food or Beverage, Logis/Transp stands for Logistics or Transportation, Retailing/Manuf stands for Retailing or Manufacturing, Invmt stands for Investments, Govt/Politics stands for Government or Politics.

Panel A: Descriptive Statistics for educational background

Year	N Firms	N Director-ships	Medical	Law	Fin/RE	Arts	Com/busi	Engi
1995	43	309	0.29%	10.95%	0.86%	6.92%	21.61%	11.82%
2000	57	400	1.31%	10.11%	1.31%	6.18%	25.66%	7.30%
2007	93	532	0.70%	9.24%	4.34%	4.20%	24.79%	5.32%

Sci/Tech	Acc	Mgmt/Mkt	Comp/IT	Agri/Far	Others
6.05%	16.71%	16.71%	3.75%	2.02%	2.31%
7.68%	17.23%	15.92%	2.25%	2.06%	3.00%
7.42%	23.53%	13.73%	2.52%	2.94%	1.26%

Panel B: Z values of difference of percentage for educational background

	Medical	Law	Fin/RE	Arts	Com/busi	Engi	Sci/Tech	Acc	Mgmt/mkt	Comp/IT	Agri/Far	Others
1995 - 2000	-1.56	0.40	-0.61	0.43	-1.37	2.28 **	-0.92	-0.20	0.31	1.31	-0.04	-0.62
2000 - 2007	1.09	0.52	-3.08 ****	1.58	0.35	1.44	0.17	-2.71 ***	1.08	-0.31	-0.97	2.17 **
1995 - 2007	-0.84	0.88	-3.02 ****	1.89 *	-1.14	3.78 ****	-0.82	-2.54 ***	1.29	1.11	-0.88	1.27 *

significance * 10% ** 5% *** 1% **** 0.5%

Table 34
Director Educational and Industrial Background (continued)

Panel C: Descriptive Statistics for industrial background

Year	N Firms	N Director -ships	Legal	Food / bever	Finance	Industrial/ Construction	Business	Medical/ Health	Consultant	Mgmt/Mkt	Engi/Sci
1995	50	362	4.32%	1.88%	14.82%	7.32%	12.76%	1.88%	9.01%	7.13%	2.44%
2000	66	440	4.11%	2.99%	13.22%	7.98%	12.97%	2.62%	8.73%	6.61%	2.99%
2007	98	578	4.72%	2.76%	14.35%	5.08%	9.71%	2.32%	9.36%	9.89%	2.85%

Logis / Transp	Retailing/ Manuf	Account	Agri/ Far	IT/Tech	Invmt	Govt/ Politics	Telecom	Media	Others
3.75%	3.00%	9.38%	5.82%	1.69%	3.94%	6.19%	0.94%	1.31%	2.44%
1.62%	3.12%	1.15%	3.62%	2.37%	6.11%	3.12%	1.12%	1.50%	3.74%
1.87%	4.19%	6.06%	16.67%	1.78%	1.96%	1.52%	0.89%	0.98%	3.03%

Table 34
Director Educational and Industrial Background (continued)

Panel D: Z values of difference of percentage for industrial background

Year	Legal	Food/ bever	Finance	Industrial / Construction	Business	Medical/Health	Consultant	Mgmt/Mkt	Engi/Sci
1995 - 2000	0.18	-1.27	0.83	-0.44	-0.11	-0.88	0.17	0.37	-0.60
2000 - 2007	-0.64	0.30	-0.71	2.58 **	2.24 **	0.42	-0.47	-2.54 **	0.18
1995 - 2007	-0.37	-1.08	0.26	1.82 *	1.87 *	-0.57	-0.23	-1.84 *	-0.48

Panel D: Z values of difference of percentage for industrial background

Year	Logis / Transp	Retailing/ Manuf	Account	Agri / Farm	IT/Tech	Invmt	Govt / Politics	Telecom	Media	Others
1995 - 2000	2.46 **	-0.12	-1.21	1.90 *	-0.85	-1.74 *	2.70 ***	-0.32	-0.28	-1.32
2000 - 2007	-0.41	-1.22	4.24 ***	-8.94 ****	0.90	4.76 ****	2.37 **	0.51	1.03	0.86
1995 - 2007	2.30 **	-1.18	2.45 **	-6.10 ****	-0.14	2.36 **	5.19 ****	0.09	0.61	-0.68

Table 26
Director Educational and Industrial Background by Sectors

Panels A and C each exhibit summary statistics for the percentage of categories of education and industry within which directors are qualified and worked, conditioned by sectors defined by NZX. 1= Agriculture & Fishing; 2 = Building Materials & Construction; 3 = Consumer; 4 = Energy Processing; 5 = Finance & Others Services; 6 = Food & Beverages; 7 = Forestry & Forest Products; 8 = Investments; 9 = Leisure & Tourism; 10 = Media & Telecommunication; 11 = Mining; 12 = Ports; 13 = Property; 14 = Textiles & Apparel; 15 = Transport; 16 = Intermediate & Durables. Panels B and D each reports the results of parametric tests for differences in the percentage across sample years.

Panel A: Descriptive Statistics for Educational Background

Year	Sector	N Firms	N Director-ships	Medical	Law	Fin/RE	Arts	Com/busi	Engi	Sci/Tech	Acc	Mgmt/mkt	Comp/IT	Agri/Far	Others
1995	1	4	24	0.00%	13.95%	4.65%	4.65%	13.95%	0.00%	6.98%	23.26%	13.95%	4.65%	6.98%	6.98%
2000	1	5	19	0.00%	6.90%	3.45%	0.00%	27.59%	0.00%	3.45%	24.14%	13.79%	3.45%	13.79%	3.45%
2007	1	8	33	0.00%	6.85%	2.74%	1.37%	28.77%	1.37%	10.96%	17.81%	15.07%	2.74%	12.33%	0.00%
1995	3 & 14	8	34	0.00%	7.35%	1.47%	4.41%	33.82%	10.29%	4.41%	14.71%	20.59%	2.94%	0.00%	0.00%
2000	3 & 14	6	33	1.56%	12.50%	0.00%	6.25%	28.13%	3.13%	4.69%	23.44%	17.19%	1.56%	1.56%	0.00%
2007	3 & 14	13	50	3.00%	10.00%	3.00%	5.00%	27.00%	2.00%	7.00%	24.00%	16.00%	1.00%	2.00%	0.00%
1995	4 & 11	4	15	0.00%	26.09%	0.00%	4.35%	17.39%	13.04%	8.70%	17.39%	13.04%	0.00%	0.00%	0.00%
2000	4 & 11	7	37	0.00%	10.77%	3.08%	7.69%	13.85%	16.92%	16.92%	10.77%	13.85%	0.00%	0.00%	6.15%
2007	4 & 11	10	51	0.00%	9.38%	3.13%	6.25%	25.00%	10.42%	10.42%	20.83%	11.46%	1.04%	1.04%	1.04%
1995	5 & 13	9	50	1.14%	5.68%	0.00%	7.95%	17.05%	14.77%	6.82%	21.59%	17.05%	4.55%	2.27%	1.14%
2000	5 & 13	12	53	2.06%	10.31%	1.03%	5.15%	28.87%	9.28%	6.19%	16.49%	17.53%	1.03%	1.03%	1.03%
2007	5 & 13	23	86	0.63%	10.69%	6.92%	3.77%	25.16%	2.52%	5.66%	28.30%	9.43%	4.40%	2.52%	0.00%

Table 35
Director Educational and Industrial Background by Sectors (continued)

Panel A: Descriptive Statistics for Educational Background (continued)

Year	Sector	N Firms	N Director-ships	Medical	Law	Fin/RE	Arts	Com/busi	Engi	Sci/Tech	Acc	Mgmt/mkt	Comp/IT	Agri/Far	Others
1995	6 & 10	6	23	0.00%	7.69%	0.00%	2.56%	35.90%	10.26%	12.82%	12.82%	15.38%	2.56%	0.00%	0.00%
2000	6 & 10	10	53	1.01%	11.11%	2.02%	8.08%	31.31%	7.07%	6.06%	15.15%	15.15%	1.01%	1.01%	1.01%
2007	6 & 10	10	37	0.00%	16.67%	2.08%	6.25%	22.92%	0.00%	10.42%	29.17%	12.50%	0.00%	0.00%	0.00%
1995	8	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2000	8	5	23	0.00%	5.56%	1.85%	5.56%	29.63%	0.00%	11.11%	14.81%	22.22%	1.85%	0.00%	7.41%
2007	8	12	52	0.00%	6.74%	6.74%	3.37%	22.47%	2.25%	3.37%	26.97%	16.85%	5.62%	1.12%	4.49%
1995	12 & 15	5	24	0.00%	17.50%	0.00%	10.00%	10.00%	12.50%	5.00%	17.50%	7.50%	5.00%	5.00%	10.00%
2000	12 & 15	8	40	2.30%	11.49%	0.00%	9.20%	19.54%	3.45%	6.90%	18.39%	12.64%	6.90%	3.45%	5.75%
2007	12 & 15	5	23	0.00%	8.33%	5.56%	2.78%	19.44%	8.33%	8.33%	19.44%	11.11%	0.00%	8.33%	8.33%
1995	16	5	20	0.00%	14.63%	0.00%	12.20%	9.76%	17.07%	0.00%	21.95%	17.07%	4.88%	0.00%	2.44%
2000	16	4	18	2.56%	7.69%	0.00%	0.00%	25.64%	17.95%	5.13%	20.51%	15.38%	2.56%	2.56%	0.00%
2007	16	9	43	1.23%	7.41%	1.23%	4.94%	25.93%	16.05%	7.41%	17.28%	17.28%	1.23%	0.00%	0.00%

Table 35
Director Educational and Industrial Background by Sectors (continued)

Panel B: Z values of difference of percentage for Educational Background

Year	Sector	Medical	Law	Fin/RE	Arts	Com/busi	Engi	Sci/Tech	Acc	Mgmt/mkt	Comp/IT	Agri/Far	Others
1995 - 2000	1	n/a	0.74	0.20	0.95	-1.11	n/a	0.51	-0.07	0.02	0.06	0.09	0.51
2000 - 2007	1	n/a	0.01	0.14	-0.51	-0.09	-0.51	-0.95	0.55	-0.13	0.05	0.10	1.07
1995 - 2007	1	n/a	0.89	0.39	0.75	-1.32	-0.58	-0.51	0.51	-0.12	0.05	0.08	1.54
1995 - 2000	3 & 14	-0.73	-0.71	0.70	-0.34	0.50	1.17	-0.05	-0.91	0.38	0.36	-0.73	-0.73
2000 - 2007	3 & 14	-0.42	0.36	-1.00	0.25	0.11	0.33	-0.44	-0.06	0.23	0.14	-0.15	-0.15
1995 - 2007	3 & 14	-1.02	-0.42	-0.46	-0.13	0.68	1.71	-0.50	-1.05	0.68	0.55	-0.83	-0.83
1995 - 2000	4 & 11	n/a	1.40	-0.69	-0.44	0.33	-0.35	-0.76	0.65	-0.08	n/a	n/a	-0.98
2000 - 2007	4 & 11	n/a	0.22	-0.01	0.27	-1.30	0.90	0.90	-1.26	0.34	-0.63	-0.63	1.35
1995 - 2007	4 & 11	n/a	1.68	-0.69	-0.28	-0.61	0.29	-0.20	-0.29	0.17	-0.40	-0.40	-0.40

significance * 10% ** 5% *** 1% **** 0.5%

Table 35
Director Educational and Industrial Background by Sectors (continued)

Panel B: Z values of difference of percentage for Educational Background (continued)

Year	Sector	Medical	Law	Fin/RE	Arts	Com/busi	Engi	Sci/Tech	Acc	Mgmt/mkt	Comp/IT	Agri/Far	Others
1995 - 2000	5 & 13	-0.38	-0.87	-0.72	0.59	-1.44	0.88	0.13	0.67	-0.07	1.12	0.51	0.05
2000 - 2007	5 & 13	0.79	-0.07	-1.66 *	0.40	0.50	1.82 *	0.13	-1.64	1.45	-1.15	-0.64	0.97
1995 - 2007	5 & 13	0.32	-1.00	-1.90 *	1.06	-1.11	2.75 ***	0.28	-0.87	1.32	0.04	-0.09	1.02
1995 - 2000	6 & 10	-0.48	-0.46	-0.69	-0.91	0.40	0.48	1.01	-0.27	0.03	0.53	-0.48	-0.48
2000 - 2007	6 & 10	0.61	-0.77	-0.02	0.33	0.89	1.65 *	-0.77	-1.64	0.36	0.61	0.61	0.61
1995 - 2007	6 & 10	n/a	-1.00	-0.70	-0.65	1.09	1.99 **	0.29	-1.47	0.32	0.98	n/a	n/a
1995 - 2000	8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2000 - 2007	8	n/a	-0.20	-0.88	0.45	0.67	-0.72	1.35	-1.16	0.56	-0.73	-0.51	0.52
1995 - 2007	8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

significance * 10% ** 5% *** 1% **** 0.5%

Table 35
Director Educational and Industrial Background by Sectors (continued)

Panel B: Z values of difference of percentage for Educational Background (continued)

Year	Sector	Medical	Law	Fin/RE	Arts	Com/busi	Engi	Sci/Tech	Acc	Mgmt/mkt	Comp/IT	Agri/Far	Others
1995 - 2000	12 & 15	-0.75	0.68	n/a	0.11	-1.01	1.40	-0.31	-0.09	-0.65	-0.31	0.31	0.64
2000 - 2007	12 & 15	0.73	0.40	-1.52	0.97	0.01	-0.84	-0.21	-0.10	0.18	1.29	-0.84	-0.40
1995 - 2007	12 & 15	n/a	0.93	-1.17	1.01	-0.92	0.47	-0.46	-0.17	-0.43	1.09	-0.46	0.20
1995 - 2000	16	-0.72	0.69	n/a	1.57	-1.31	-0.07	-1.03	0.11	0.14	0.38	-0.72	0.69
2000 - 2007	16	0.38	0.04	-0.49	-0.99	-0.02	0.19	-0.33	0.30	-0.18	0.38	1.05	n/a
1995 - 2007	16	-0.50	0.90	-0.50	1.03	-1.47	0.10	-1.25	0.44	-0.02	0.88	n/a	1.03

significance * 10% ** 5% *** 1% **** 0.5%

Table 35
Director Educational and Industrial Background by Sectors (continued)

Panel C: Descriptive Statistics for Industrial Background

Year	Sector	N	N Directorships	Legal	Food	Finance/ RE	Industr/ Constr	Busi	Medical/ Health	Consult	Mgmt/Mkt	Engi/Sci
1995	1	5	42	1.96%	0.00%	11.76%	1.96%	15.69%	0.00%	9.80%	3.92%	0.00%
2000	1	6	45	1.69%	5.08%	15.25%	0.00%	8.47%	1.69%	8.47%	3.39%	0.00%
2007	1	9	67	4.21%	10.53%	11.58%	1.05%	8.42%	2.11%	9.47%	9.47%	3.16%
1995	3 & 14	8	59	1.98%	0.99%	13.86%	0.99%	9.90%	0.99%	9.90%	8.91%	1.98%
2000	3 & 14	6	43	3.17%	7.94%	7.94%	3.17%	15.87%	4.76%	4.76%	14.29%	1.59%
2007	3 & 14	12	77	5.34%	2.29%	15.27%	2.29%	9.16%	5.34%	7.63%	15.27%	1.53%
1995	4 & 11	6	32	8.89%	0.00%	6.67%	24.44%	11.11%	2.22%	8.89%	11.11%	4.44%
2000	4 & 11	7	46	4.72%	0.00%	7.55%	27.36%	9.43%	1.89%	7.55%	9.43%	8.49%
2007	4 & 11	11	70	6.56%	1.64%	12.30%	29.51%	9.84%	0.82%	11.48%	6.56%	3.28%
1995	5 & 13	8	57	3.85%	0.00%	23.08%	0.96%	13.46%	4.81%	9.62%	7.69%	2.88%
2000	5 & 13	17	93	4.73%	0.59%	20.71%	4.73%	14.20%	4.14%	13.02%	6.51%	1.78%
2007	5 & 13	19	103	7.18%	1.10%	23.20%	2.76%	11.60%	3.87%	10.50%	11.60%	2.21%

Director Educational and Industrial Background by Sectors (continued)

Panel C: Descriptive Statistics for Industrial Background (continued)

Year	Sector	N	N Directorships	Logis/ Transp	Retail/ Manuf	Acc	Agri/ Farm	IT/Tech	Invmt	Govt/ Politics	Others
1995	1	5	42	3.92%	1.96%	19.61%	21.57%	0.00%	3.92%	3.92%	0.00%
2000	1	6	45	3.39%	1.69%	13.56%	25.42%	0.00%	6.78%	5.08%	0.00%
2007	1	9	67	0.00%	4.21%	4.21%	23.16%	1.05%	4.21%	2.11%	1.05%
1995	3 & 14	8	59	0.99%	6.93%	18.81%	1.98%	1.98%	0.99%	7.92%	10.89%
2000	3 & 14	6	43	0.00%	17.46%	6.35%	0.00%	0.00%	3.17%	3.17%	6.35%
2007	3 & 14	12	77	1.53%	9.16%	7.63%	0.76%	0.76%	3.05%	0.76%	12.21%
1995	4 & 11	6	32	2.22%	0.00%	13.33%	0.00%	2.22%	4.44%	0.00%	0.00%
2000	4 & 11	7	46	0.94%	3.77%	6.60%	0.00%	0.00%	3.77%	4.72%	3.77%
2007	4 & 11	11	70	2.46%	4.10%	4.92%	2.46%	1.64%	0.00%	0.82%	1.64%
1995	5 & 13	8	57	0.00%	2.88%	12.50%	7.69%	0.00%	3.85%	3.85%	2.88%
2000	5 & 13	17	93	0.00%	1.18%	5.33%	0.00%	4.73%	8.28%	1.78%	8.28%
2007	5 & 13	19	103	0.55%	4.42%	9.94%	2.21%	1.10%	2.21%	1.10%	4.42%

Table 35
Director Educational and Industrial Background by Sectors (continued)

Panel C: Descriptive Statistics for Industrial Background (continued)

Year	Sector	N	N Directorships	Legal	Food	Finance/ RE	Industr/ Constr	Busi	Medical/ Health	Consult	Mgmt/Mkt	Engi/Sci
1995	6 & 10	8	57	5.88%	6.86%	13.73%	7.84%	11.76%	1.96%	4.90%	5.88%	1.96%
2000	6 & 10	10	68	5.51%	7.87%	12.60%	11.02%	14.17%	1.57%	11.81%	5.51%	2.36%
2007	6 & 10	11	58	2.91%	7.77%	15.53%	1.94%	17.48%	0.00%	11.65%	12.62%	1.94%
1995	8	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2000	8	3	15	3.23%	3.23%	22.58%	0.00%	16.13%	0.00%	9.68%	0.00%	6.45%
2007	8	7	44	3.16%	2.11%	26.32%	3.16%	10.53%	2.11%	11.58%	10.53%	4.21%
1995	12 & 15	6	51	4.90%	1.96%	8.82%	7.84%	11.76%	0.98%	4.90%	2.94%	3.92%
2000	12 & 15	9	70	7.45%	3.19%	10.64%	4.26%	15.96%	4.26%	7.45%	4.26%	3.19%
2007	12 & 15	12	51	8.57%	2.86%	11.43%	2.86%	12.86%	0.00%	15.71%	5.71%	1.43%
1995	16	7	49	2.86%	0.00%	14.29%	8.57%	8.57%	0.00%	14.29%	5.71%	0.00%
2000	16	5	31	1.47%	1.47%	10.29%	0.00%	13.24%	1.47%	10.29%	11.76%	4.41%
2007	16	12	78	3.79%	1.52%	12.88%	3.03%	8.33%	5.30%	13.64%	17.42%	7.58%

Table 35
Director Educational and Industrial Background by Sectors (continued)

Panel C: Descriptive Statistics for Industrial Background (continued)

Year	Sector	N	N Directorships	Logis/ Transp	Retail/ Manuf	Acc	Agri/ Farm	IT/Tech	Invmt	Govt/ Politics	Others
1995	6 & 10	8	57	1.96%	0.98%	13.73%	1.96%	2.94%	6.86%	5.88%	4.90%
2000	6 & 10	10	68	0.00%	2.36%	3.15%	0.00%	1.57%	6.30%	4.72%	9.45%
2007	6 & 10	11	58	1.94%	3.88%	3.88%	0.00%	0.97%	2.91%	1.94%	12.62%
1995	8	0	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2000	8	3	15	0.00%	3.23%	6.45%	3.23%	9.68%	9.68%	0.00%	6.45%
2007	8	7	44	3.16%	3.16%	10.53%	1.05%	1.05%	3.16%	2.11%	2.11%
1995	12 & 15	6	51	13.73%	1.96%	11.76%	6.86%	0.98%	3.92%	11.76%	0.98%
2000	12 & 15	9	70	10.64%	3.19%	10.64%	4.26%	0.00%	4.26%	5.32%	1.06%
2007	12 & 15	12	51	14.29%	0.00%	5.71%	8.57%	0.00%	0.00%	7.14%	2.86%
1995	16	7	49	0.00%	5.71%	20.00%	2.86%	2.86%	2.86%	2.86%	8.57%
2000	16	5	31	0.00%	0.00%	10.29%	13.24%	7.35%	10.29%	0.00%	4.41%
2007	16	12	78	0.00%	6.82%	4.55%	0.76%	7.58%	3.03%	1.52%	2.27%

Table 35
Director Educational and Industrial Background by Sectors (continued)

Panel D: Z values of difference of percentage for Industrial Background

Year	Sector	Legal	Food	Finance/RE	Industr/Constr	Busi	Medical/Health	Consult	Mgmt/Mkt	Engi/Sci
1995 - 2000	1	0.09	-1.48	-0.47	0.94	1.04	-0.85	0.22	0.13	n/a
2000 - 2007	1	-0.74	-1.02	0.57	-0.69	0.01	-0.15	-0.18	-1.23	-1.20
1995 - 2007	1	-0.64	-2.17 **	0.03	0.39	1.17	-0.95	0.06	-1.08	-1.16
1995 - 2000	3 & 14	-0.38	-1.79 *	0.93	-0.80	-0.90	-1.19	0.96	-0.85	0.15
2000 - 2007	3 & 14	-0.55	1.46	-1.16	0.29	1.10	-0.14	-0.61	-0.14	0.03
1995 - 2007	3 & 14	-1.01	-0.58	-0.23	-0.58	0.15	-1.38	0.47	-1.11	0.20
1995 - 2000	4 & 11	0.74	n/a	-0.15	-0.29	0.24	0.10	0.21	0.24	-0.70
2000 - 2007	4 & 11	-0.41	-0.87	-0.82	-0.25	-0.07	0.51	-0.69	0.57	1.22
1995 - 2007	4 & 11	0.42	-0.73	-0.86	-0.53	0.20	0.59	-0.39	0.79	0.29

significance * 10% ** 5% *** 1% **** 0.5%

Table 35
Director Educational and Industrial Background by Sectors (continued)

Panel D: Z values of difference of percentage for Industrial Background (continued)

Year	Sector	Logis/Transp	Retail/Manuf	Acc	Agri/Farm	IT/Tech	Invmt	Govt/Politics	Others
1995 - 2000	1	0.13	0.09	0.76	-0.42	n/a	-0.59	-0.26	n/a
2000 - 2007	1	1.52	-0.74	1.79 *	0.27	-0.69	0.60	0.87	-0.69
1995 - 2007	1	1.63	-0.64	2.59	-0.19	-0.67	-0.07	0.56	-0.67
1995 - 2000	3 & 14	0.65	-1.65 *	1.82 *	0.93	0.93	-0.80	1.00	0.79
2000 - 2007	3 & 14	-0.81	1.34	-0.26	-0.57	-0.57	0.04	1.00	-1.02
1995 - 2007	3 & 14	-0.27	-0.47	1.95 *	0.62	0.62	-0.82	2.15 **	-0.24
1995 - 2000	4 & 11	0.46	-1.11	1.00	n/a	1.02	0.15	-1.25	-1.11
2000 - 2007	4 & 11	-0.59	-0.09	0.39	-1.07	-0.87	1.64	1.35	0.72
1995 - 2007	4 & 11	-0.07	-1.16	1.49	-0.89	0.20	1.78 *	-0.51	-0.73

significance * 10% ** 5% *** 1% **** 0.5%

Table 35
Director Educational and Industrial Background by Sectors (continued)

Panel D: Z values of difference of percentage for Industrial Background (continued)

Year	Sector	Legal	Food	Finance/RE	Industr/Constr	Busi	Medical/Health	Consult	Mgmt/Mkt	Engi/Sci
1995 - 2000	5 & 13	-0.26	-0.58	0.34	-1.26	-0.13	0.19	-0.63	0.28	0.45
2000 - 2007	5 & 13	-0.72	-0.39	-0.42	0.73	0.54	0.10	0.55	-1.23	-0.22
1995 - 2007	5 & 13	-0.85	-0.80	-0.02	-0.76	0.34	0.28	-0.18	-0.78	0.26
1995 - 2000	6 & 10	0.09	-0.21	0.19	-0.60	-0.40	0.16	-1.37	0.09	-0.15
2000 - 2007	6 & 10	0.72	0.02	-0.47	2.01	-0.51	0.96	0.03	-1.41	0.16
1995 - 2007	6 & 10	0.78	-0.19	-0.27	1.47	-0.87	1.07	-1.31	-1.25	0.01
1995 - 2000	8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2000 - 2007	8	0.01	0.25	-0.29	-0.70	0.58	-0.57	-0.20	-1.31	0.35
1995 - 2007	8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

significance * 10% ** 5% *** 1% **** 0.5%

Table 35
Director Educational and Industrial Background by Sectors (continued)

Panel D: Z values of difference of percentage for Industrial Background (continued)

Year	Sector	Logis/Transp	Retail/Manuf	Acc	Agri/Farm	IT/Tech	Invmt	Govt/Politics	Others
1995 - 2000	5 & 13	n/a	0.75	1.57	2.71 ***	-1.67 *	-1.06	0.78	-1.33
2000 - 2007	5 & 13	-0.72	-1.35	-1.21	-1.44	1.53	1.93	0.40	1.12
1995 - 2007	5 & 13	-0.56	-0.48	0.50	1.66 *	-0.80	0.60	1.16	-0.48
1995 - 2000	6 & 10	1.16	-0.59	2.17 **	1.16	0.52	0.13	0.29	-0.97
2000 - 2007	6 & 10	-1.15	-0.49	-0.22	n/a	0.30	0.89	0.85	-0.57
1995 - 2007	6 & 10	0.01	-1.01	1.87 *	1.07	0.76	0.98	1.09	-1.46
1995 - 2000	8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2000 - 2007	8	-0.70	0.01	-0.46	0.58	1.63	1.02	-0.57	0.82
1995 - 2007	8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

significance * 10% ** 5% *** 1% **** 0.5%

Table 35
Director Educational and Industrial Background by Sectors (continued)

Panel D: Z values of difference of percentage for Industrial Background (continued)

Year	Sector	Legal	Food	Finance/RE	Industr/Constr	Busi	Medical/Health	Consult	Mgmt/Mkt	Engi/Sci
1995 - 2000	12 & 15	-0.57	-0.41	-0.33	0.84	-0.65	-1.06	-0.57	-0.38	0.22
2000 - 2007	12 & 15	-0.23	0.11	-0.14	0.40	0.48	1.49	-1.44	-0.37	0.62
1995 - 2007	12 & 15	-0.74	-0.30	-0.44	1.12	-0.17	0.71	-1.80	-0.69	0.78
1995 - 2000	16	0.40	-0.85	0.52	1.67 *	-0.67	-0.85	0.52	-0.97	-1.48
2000 - 2007	16	-0.63	-0.02	-0.37	-0.98	0.78	-0.90	-0.47	-0.73	-0.60
1995 - 2007	16	-0.28	-0.87	0.23	1.37	0.05	-1.64	0.10	-1.92 *	-1.97 **

significance * 10% ** 5% *** 1% **** 0.5%

Table 35
Director Educational and Industrial Background by Sectors (continued)

Panel B: Z values of difference of percentage

Year	Sector	Logis/Transp	Retail/Manuf	Acc	Agri/Farm	IT/Tech	Invmt	Govt/Politics	Others
1995 - 2000	12 & 15	0.52	-0.41	0.19	0.63	0.83	-0.09	1.29	-0.04
2000 - 2007	12 & 15	-0.61	1.29	0.96	-0.98	n/a	1.49	-0.41	-0.73
1995 - 2007	12 & 15	-0.08	1.00	1.08	-0.32	0.71	1.43	0.80	-0.69
1995 - 2000	16	n/a	1.35	1.15	-1.79 *	-0.94	-1.39	0.95	0.71
2000 - 2007	16	n/a	-1.49	1.12	2.90	-0.04	1.56	-0.69	0.60
1995 - 2007	16	n/a	-0.25	2.76 ***	0.93	-1.11	-0.06	0.52	1.63

significance * 10% ** 5% *** 1% **** 0.5%

5 Conclusion

During the examination period of 1995 and 2007, board characteristics have significantly changed in NZ listed firms. Many of these characteristics show primary changes between 2000 and 2007, a period that experienced major corporate scandals followed by global governance legislative reforms, including NZ. Hence, it is reasonable to propose that changes happening within the corporate boards of NZ listed firms could be influenced by the global recognition of better corporate governance systems. In addition, the contribution of this study is to fill out the gap to report board characteristics of NZ listed firms since 1996.

Within the fifteen characteristics examined, all except board ownership have demonstrated significant transformation during the thirteen years. Among those changed, the most prominent are reductions in board size, multiple directorships by each director and growth in director fees, board diversity, and director tenure. Those which experienced less significant changes are board independence, staggered board frequency, meeting frequency, and CEO involvement on committees. Board independence and committee meeting frequency have increased during 1995 and 2007, while staggered board incidence, board meeting incidence and CEO involvement on committees are decreasing in popularity in corporate boards in NZ listed firms. In addition, the level of compensation for chairmen has increased modestly while the CEO duality phenomenon has shrunk.

After datasets are conditioned into different size groups for each variable, small firms have undergone more changes than the other two size groups. This is understood as meaning that the characteristic of small boards inside small firms might not permit the

board to be completely legislation-oriented. In other words, there are limitations on small firms being able to completely obey the best corporate governance rules. For example, if there are only three directors on board, it would be pointless to construct an audit committee. Rather, issues can be addressed by the whole board. Therefore, board structures inside small firms might be looser compared to larger firms. However, the subsequent more restricted governance rules could have impacted largely on board structures inside small firms so that changes occurring mostly in small firms can be expected.

This study does not address the quality of good corporate governance characteristics. It simply presents those factors that have received quantitative investigation and attention from academic scholars and institutional investors, which reflect the importance of their roles in the corporate governance framework. However, it does not explain the actual impacts of these characteristics examined on firm values. It also does not justify the relationship between all these changes and the new legislative reform which happened around 2004. This may well be a good future area for research.

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