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Corporate Governance and Board Performance:  
Empirical Evidence from Pacific Island Countries

Thesis submitted by

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in May 2011

for the degree of Doctor of Philosophy

in the School of Business

James Cook University

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## STATEMENT ON THE CONTRIBUTION OF OTHERS

I recognise AusAID for granting me a scholarship under the Australian Leadership Awards (ALA) which made it possible for me to complete this thesis. Also, I acknowledge the support of James Cook University in providing me with research assistance grants and conference grants which aided in the successful completion of this thesis.

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Morris O. Namoga

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Date

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## **ABSTRACT**

Achieving adequate economic growth is crucially important for the improvement of standards of living and the livelihoods of people in the Pacific island countries (PICs). A successful business sector is an important prerequisite for economic growth in the Pacific islands. However, the inability to attract investment capital, inefficiency, poor performance and even corporate failures, have been common phenomena in the PICs. Poor performance of the business sector has weakened its role as the engine of economic growth in the PICs. It has been widely held that the lack of good corporate governance practice in the business sector is largely responsible for such poor performance. Consequently, boards of directors have come under heavy criticism and scrutiny in the PICs, often accused for being ineffective, corrupt and lacking the ability to drive success in business enterprises. As such, an in-depth understanding of how boards of directors operate is of utter importance not only for academic inquiries but also for government and industry policy developments in the PICs. This thesis examines the role of boards of directors and the factors that affect the board's ability to perform their roles in the PICs, by focussing on two countries, Fiji and Solomon Islands.

The board is seen as a vital governance mechanism that plays an important function in business. How boards are structured, the processes in which they are involved and the role they play vary across different types of firms as well as countries, which often have important implications on how effective boards perform their roles. In the PICs, board size, composition, diversity and multiple directorships are often driven by political and socio-cultural motives (particularly in SoEs), not by economic or sound managerial motives. How such board attributes would promote effectiveness in boards is questionable. This thesis investigates if (1) board attributes have a direct effect on board performance; (2) the causal effect of board attributes on board performance occurs through the influence of board processes; and (3) there exist causal effects between different board processes which affect board performance.

A mediation model was developed for the investigation. Survey data were obtained from boards of businesses in Fiji and Solomon Islands. The factor/ordinal structure of board process and performance indicators were analysed and examined using CATPCA (categorical principal component analysis). The bootstrap technique was also used to test the mediation model.

The study found that (1) the board attributes of *size, composition, diversity* and *multiple directorships* affect board performance through the effects of board processes such as *effort norms, cognitive conflicts, board cohesiveness*, and the *use of knowledge and skills*, and (2) the board processes of *CEO/board relationships, board motivation, affective conflict* and *board information flow* also affect board performance through the processes of *effort norms, cognitive conflicts, board cohesiveness* and the *use of knowledge and skills*.

This study makes the following important contributions to the corporate governance literature: (1) board attributes do not necessarily directly affect board performance, but through the influence of board processes; (2) different board process elements also influence each other which in turn affect board performance; (3) the bootstrap technique is a useful tool in overcoming limited data problems associated with corporate governance research, especially in developing economies; and (4) it adds to the understanding of governance issues and challenges in developing economies in general, and in the PICs in particular.

In terms of government and industry policy development in the PICs, the contributions of this study include: (1) the establishment of policy guidelines on board appointments; (2) the improvement of decision-making regarding the structural design of boards; and (3) the formulation of corporate governance codes.

The key implication emanating from the findings of this study is that to improve board performance in the PICs, policy and decisions regarding the size, composition, diversity and multiple directorships should be based on a sound understanding of (1) how board attributes influence board processes, and (2) how different board process elements influence each other. Future board appointments must be made by judging a member's capability to enhance the board's performance, but not by political and socio-cultural motives. Only by doing so, can the boards of directors be expected to better contribute to the business sector's growth and hence the overall economic growth in the PICs.

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## ABBREVIATIONS

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ABV	Australian Business Volunteers
ADB	Asian Development Bank
AusAID	Australian Agency for International Development
CAAF	Civil Aviation Authority of Fiji
CATPCA	Categorical Principal Component Analysis
CBSI	Central Bank of Solomon Islands
CMDA	Capital Markets Development Authority
CEO	Chief Executive Officer
DBSI	Development Bank of Solomon Islands
DPO	Development Partner Organisations
DPE	Department of Public Enterprises
EIRP	Employment and Industrial Relations Plan
ESCAP	Economic and Social Commission for Asia and the Pacific
EU	European Union
FBLC	Fiji Broadcasting Limited Corporation
FDB	Fiji Development Bank
FEA	Fiji Electricity Authority
FHCL	Fiji Hardwood Corporation Limited
FHL	Fijian Holdings Limited
FICAC	Fiji Independent Commission Against Corruption
FNPF	Fiji National Provident Fund
FOC	Free of Charge
FPA	Fiji Ports Authority
GCC	Great Council of Chiefs
GDP	Gross Domestic Product
ICSI	Investment Corporation of Solomon Islands
IMF	International Monetary Fund
MPE	Ministry of Public Enterprises
NBF	National Bank of Fiji
NDP	National Directors Program
NLTB	Native Lands Trust Board
NZAid	New Zealand Agency for International Development

OECD	Organisation for Economic Cooperation and Development
PFL	Post Fiji Limited
PICs	Pacific Islands Countries
PIF	Pacific Islands Forum
PIFS	Pacific Islands Forum Secretariat
PNG	Papua New Guinea
RBF	Reserve Bank of Fiji
RRL	Rewa Rice Limited
SCI	Statement of Corporate Intent
SIEA	Solomon Islands Electricity Authority
SINPF	Solomon Islands National Provident Fund
SIPA	Solomon Islands Ports Authority
SIWA	Solomon Islands Water Authority
SoE	State-owned Enterprise
SPL	Solomon Post Limited
SPSE	South Pacific Stock Exchange
STL	Solomon Telekom Limited
TFL	Telekom Fiji Limited
TIF	Transparency International Fiji
USP	University of the South Pacific
UTOF	Unit Trust of Fiji

### 1.1 Introduction

The role of the board of directors as a corporate governance mechanism has attracted much attention in developed countries, but it is only recently that the subject has begun to receive awareness in the Pacific island countries (PICs). This thesis examines the role of the board and the structural and process attributes that influence its ability to direct and control its activities; hence its contribution to firm performance in the PICs.

There is little doubt that a robust and vibrant business sector is the key to the long-term economic growth of PICs. Unfortunately, economic growth in PICs is generally weak or poor as countries struggle to sustain overall positive growth. The poor economy in PICs in general is echoed in a wide range of economic indicators, one of which is a weak business sector which is unable to drive economic growth. Often, reports highlight that the business environment in PICs is not conducive to doing business (Asian Development Bank, 2005; AusAID, 2009; The World Bank, 2010), and therefore, firms are unable to attract the required investment capital that will allow them to drive the economic growth required to generate employment opportunities for the region's high unemployed population and the subsequent improvement of livelihood for its people. In response, governments in PICs with the backing of industry sectors and development partner organisations (DPOs) have focussed on improving their business environments by promoting efficiency and reducing the cost of doing business in the hope of creating an environment conducive to business investment.

While these actions are significant to the promotion of economic growth, they failed to recognise the importance of strengthening the internal governance systems in public and private enterprises in PICs, and importantly, how these systems impact on the performance of individual enterprises, the business sector and hence economic growth. In fact, evidence suggests that corporate governance systems play a central role in economic performance because they provide mechanisms that affect firm performance and subsequently the returns on investment by suppliers of external finance (Garay & Gonzalez, 2008). Indeed, the importance of corporate governance has increased dramatically following strings of business scandals, mostly in developed countries, which highlight serious governance weaknesses in corporate organisations (Brown & Caylor, 2004; Kiel & Nicholson, 2003). Specifically, the collapse of once thought unsinkable or beyond reproach companies like Enron and

WorldCom in the US, and Ansett, OneTel and HIH in Australia, have compelled investors and other stakeholders to demand better governance by those responsible for corporate bodies (Kang, Cheng & Gray, 2007). This is because corporate governance is widely regarded as the way to keep businesses on course by preventing abuse and scandals (PanAsian, 2003), based on increasing evidence that associates corporate governance with firm performance (Brown & Caylor, 2004; Harris & Raviv, 2006).

In PICs, corporate governance has attracted attention for very similar reasons. The lack of good corporate governance has led to the inability and failure of state-owned enterprises (SoEs) to generate profit, which has continuously put governments under huge budgetary pressure just to keep them afloat in line with national interest. Some countries have encountered more painful losses following the bankruptcy of important economic institutions. Two prominent cases in point were the collapses of National Bank of Fiji (NBF) in 1995 and the Development Bank of Solomon Islands (DBSI) in 2004. These failures have significantly affected the livelihoods of a large number of employees, customers, shareholders, vendors and other key stakeholders in the two countries (Boyd, 2003). Furthermore, compelling evidence in PICs suggests that enterprises continue to face difficulties in accessing capital to finance even viable projects (Asian Development Bank, 2009; The World Bank, 2010). Significantly related to this, is the lack of investor confidence in the governance mechanisms that supposedly exist to protect the interests of capital providers to enterprises (Pacific Islands Forum Secretariat, 2005). In this sense, corporate governance is seen as an important pre-requisite for the success of the corporate sector, and hence, economic growth in the PICs.

While corporate governance comprises a broader spectrum of mechanisms, one of the important components of an enterprise's governance system is the board of directors. Specifically, the effectiveness with which the board of directors governs the affairs of the enterprise affects its ability to meet its objectives.

Tang (2007:3) summed up the significance of the board of directors to the success of an enterprise by stating that,

*“.....sound governance is critical for firms to perform well and to ensure effective performance by corporate boards. Hence, resolving issues prevalent in board governance should help ensure that firms meet their objectives, funds are well managed, and the interests of shareholders are reflected in strategic decisions”.*

Without doubt, the role of the board of directors in corporate governance will inevitably become a significant area of focus in the economic development policy priorities in PICs. This study, being the first of its kind on the Pacific to the best of my knowledge, contributes to the examination of the role of boards of directors in PICs. Specifically, given the researcher's experience and the practical limitations in undertaking a larger PICs study, this thesis focuses on Fiji and Solomon Islands as case examples.

## **1.2 Motivations for this study**

First, there is limited literature and hence knowledge on corporate governance systems in developing economies such as the PICs. This is because corporate governance research has mainly focussed on the experience of developed economies like the US, the UK, other European nations, and recently, countries such as Australia and New Zealand. Thus, research on corporate governance systems and practices in developing economies is scarce. Although some recent studies help us to understand the differences between corporate governance systems and practices in developed countries such as the US and emerging countries such as China, Korea and India (Charkham, 1994; Demb & Neubauer, 1992; Sheridan & Kendall, 1992), knowledge on the governance systems in developing economies such as PICs is still limited or even non-existent. One possible explanation is the lack of interest from corporate governance researchers in the governance issues in developing economies (Maassen, 1999). However, the main factors could well be the unavailability of data and resources, researcher's lack of familiarity and insights into the corporate governance systems in developing economies, and more so, the lack of capability by academic researchers in PICs. As a result, our knowledge of corporate governance systems is overwhelmed by what Maassen (1999) described as "the domination of Anglo-Saxon perspectives of corporate governance".

Second, the nature of business ownerships in PICs presents a unique setting to study issues of board governance in developing economies. In PICs, the predominant form of business ownership is the family-owned business, which is managed and closely controlled by the family. In a family-owned business, normally there is little or no separation of ownership and control as members of the owning family manage and control the affairs of the business themselves. In cases where a board of directors exists, the board is mostly dominated by family members and sometimes by professional individuals close to the family. Otherwise, outside directorship of family-owned businesses is rare. Often, a senior member of the family would concurrently assume the chairmanship position on the board and the top management

position in the business. In essence, this ownership system serves as a corporate governance system in itself, through which, the interests of the owner-family are assumed to be adequately protected. Indeed, due to lack of research, there is a gap in the knowledge of the role of boards in family-owned businesses in developing economies like the PICs, an issue which is further discussed in Chapter 2.

Third, the governments in PICs continue to actively participate in the economy through its involvement in SoEs. Usually, the government or a specific holding company established by it, holds all, if not the largest share of the equity in SoEs. Accordingly, the state's ownership interests in SoEs are managed through this institution. In effect, with SoEs the ownership is often separated from management, hence, the government as the owner (through the holding company or a responsible body) appoints the board to oversee its interest in SoEs. However, the unfortunate reality is that board appointments are often subjected to socio-political manipulations, which implies that boards do not necessarily provide the skills required by SoEs. Additionally, while the state is expected to act as a passive investor by allowing the board and management to run SoEs, often ministers and politicians intervene in the operations of the enterprise. As a result, SoEs have often become a central focus of corruption allegations and poor governance in the PICs. These issues are addressed in Chapter 2.

Lastly, anecdotal evidence suggests that individuals who own big businesses often present themselves as enthusiastic political rent-seekers, and therefore, they have the ability to influence the government in PICs. Many of these individuals sit on important positions in SoE boards; thus, board appointments at times are hard to explain other than through the rent-seeking influence of big business people. Unfortunately, too often, the award of SoE service contracts is influenced by the presence of these individuals in decision-making bodies such as boards. Consequently, this affects the efficiency of SoEs and it makes good corporate governance practices very difficult to implement in SoEs.

No doubt, these factors highlight the urgent need to develop a sound understanding of the specific issues affecting the ability of boards of directors to contribute to enterprise performance in PICs. Simultaneously, our knowledge and understanding is limited by the lack of empirical research on board governance in PICs. In response, this thesis examines how the structural attributes of the board and the processes that boards involve, influence the ability of boards of directors to carry out their roles in public and private enterprises in PICs.

### 1.3 Research questions and research objectives

#### 1.3.1 Research questions

This thesis examines the causal relationship between board attributes, board process and board performance in public and private enterprises in Fiji and the Solomon Islands. Accordingly, the leading research question investigated in this thesis is:

*Do board attributes affect board performance through the influence of board process in public and private enterprises in Fiji and the Solomon Islands?*

In addition to the above leading question, the thesis also investigates the following specific research questions in the context of Fiji and the Solomon Islands:

- *Is the relationship between board size and board performance influenced by board process?*
- *Does board composition indirectly affect board performance through its effect on board process?*
- *Is the relationship between board diversity and board performance indirectly influenced by the effect of board process?*
- *Do multiple directorships affect board performance through the effect of board process?*
- *Are there causal inter-relationships between different board processes that affect board performance?*

#### 1.3.2 Research objectives

In answering the above research questions, this study seeks to verify the potential causal effects of board attributes and board processes on board performance and to promote the need to apply such knowledge to board design and to appointment policy decisions in PICs. Thus, the specific objectives of this study are to examine:

- the effect of board size on board performance and to determine if this effect is indirectly mediated by board process.
- the effect of board composition on board performance and to examine if this relationship is mediated by board process.

- the effect of board diversity on board performance and to find out if this effect is indirectly influenced by board process.
- the effect of multiple directorships on board performance and to determine if this relationship is indirectly mediated by board process.
- if interrelationships exist between different board process variables and to investigate if these relationships affect board performance.

#### **1.4 Research methodology**

To provide answers to the above research questions, the research strategy in this thesis involves a combination of the quantitative and qualitative research approaches. This approach and the methods used in the research are briefly highlighted below.

##### 1.4.1 Secondary data

The secondary data required in the study include data on board size, board composition, board diversity, multiple directorships, firm size, firm type, industry sector, and other industry descriptive statistics. These data were mostly collected through individual company annual reports, financial reports, quarterly reports, handbooks, proxy statements and specific industry and government department database. Other important industry and country publications were also used to supplement these sources.

##### 1.4.2 Primary data

The primary data for this research were mainly sourced through survey questionnaires and personal interviews. The survey questionnaire was administered with the very people involved in boardroom activities such as CEOs, chairpersons, directors, board secretaries, and board observers to obtain data on board processes and board performance. Additionally, personal interviews were conducted with board personnel to supplement the data obtained through the survey questionnaires. Indeed, the interviews have proved extremely useful in gaining insightful information into the internal operations of boards of directors. A detailed description of the procedures involved in the administration of the survey questionnaires and the personal interviews is given in Chapter 4.



### 1.4.3 Research sample

The sampling procedure applied in this thesis involves both probability sampling and the non-probability sampling technique of snowballing. Initially, 150 firms in Fiji and 100 firms in the Solomon Islands were selected using probability sampling based on the records obtained from the Registrar of Titles/Companies in the two countries. Overall, the response rate for Fiji and the Solomon Islands was 25 per cent and 22 per cent, respectively, based on the probability sample. The snowball technique was further applied to improve the observed sample which generated another 12 firms from Fiji and 14 firms from the Solomon Islands. In total, 50 firms responded for Fiji and 36 firms responded for the Solomon Islands, resulting in a total final sample of 86 firms covered in the study. A detailed description of the sampling process is provided in Chapter 4.

### 1.4.4 Data verification

Various techniques, such as data coding, data capture, data editing, dealing with invalid or missing data, creating derived variables where necessary, non-respondent follow-ups, data output spot-check are used to verify the data in order to minimise any non-sampling errors that could have been introduced during various stages of the survey. Statistical quality control tools such as descriptive statistics in the form of the mean, standard deviation, range, and other measures of distribution of the data were also used. The details of these processes are presented in Chapters 4 and 5.

### 1.4.5 Statistical analysis techniques

A number of statistical techniques were applied to process and analyse the data gathered for this study. First, Categorical Principle Component Analysis (CATPCA) was applied in the processing and analysis of ordinal data on the board process variables and board performance variables considered in the research. Second, Pearson correlation was applied as a form of preliminary analysis to determine bi-variate correlations between board attributes, board process, and board performance variables. Third, the hypotheses tests were conducted using the mediation analysis technique of bootstrapping, which estimates the effect of an independent variable on a dependent variable through changes in a mediator variable. These techniques are discussed in detail in Chapter 4.

## **1.5 Contributions and significance**

This thesis contributes to the corporate governance literature through the advancement of knowledge on corporate governance problems and challenges in developing economies such as the PICs.

Firstly, corporate governance and board research have mainly focussed on developed and emerging economies. Governance knowledge in the context of developing economies like PICs is limited. In this regard, this thesis will make an important contribution to the literature by examining the structural and process attributes that influence board performance based on the experience of Fiji and the Solomon Islands.

Secondly, board research has mainly linked specific attributes of the board to firm performance without any direct evidence of the processes or mechanisms which presumably link these board inputs to performance outputs. However, input variables such as board structural attributes are just as important as the process through which boards are involved in performing their duties. Hence, simply having a structure is not sufficient because the right process must be in place to transform board inputs into the desired performance outputs. Thus, board performance is as much a function of board structure as it is of board process. Therefore, this thesis will contribute to the literature by empirically examining the causal relationships between board attributes, board process and board performance to create a better understanding of what boards actually do, how they work, and derivatively, to what extent they influence firm performance.

Thirdly, board research naturally faces difficulty with getting access to data given the confidential nature of board activities. As a result, board research often encounters the challenge of obtaining a sufficient sample size required for popular econometric analysis such as regression models. Thus, alternative techniques appropriate for small sample analysis need to be explored to overcome sample size limitations in board research. This thesis will contribute to the literature by demonstrating the usefulness of the bootstrap technique as an alternative statistical tool to deal with the limitations imposed by small data samples which is common in board research.

Additionally, the findings of this research are expected to be of great relevance to a number of players in PICs who are interested in improving corporate governance in their countries,

such as public and private enterprises, government departments and their holding companies, and development partner organisations.

- Public and private enterprises. Since this research explores the causal relationship between attributes, process and performance, the results will assist firms in their internal effort to address problematic areas so as to make significant improvements in their performance. This is a significant step as it involves highlighting the differences between successful and failed boards.
- Governments and their holding companies. At the national level, the results of this research will help policy makers improve their understanding of corporate governance issues. In particular, the results will enable them to assist government investment arms such as holding companies as to what can be done to improve the contribution of boards to SoE performance in PICs.
- Development partner organisations (DPOs). The findings of this research will inform DPOs that, unless the internal governance systems in enterprises in PICs are strengthened, their ability to attract domestic and foreign capital will be affected, and therefore, their performance and capacity to drive economic growth in PICs will remain weak.

## **1.6 Organisation of the thesis**

Following this introductory chapter, the next chapter (Chapter 2) is devoted to providing background information that helps the understanding of issues concerning corporate governance and board performance in PICs. In Chapter 3, relevant literature is reviewed.

Building on the discussions in Chapters 2 and 3, Chapter 4 presents the conceptual framework which highlights the key relationships to be examined in this thesis, and summarises the key propositions to be tested. The chapter then goes on to explain and justify the research design and describes how the design is to be implemented to generate answers to the research questions set out for this study.

Chapters 5, 6 and 7 report the research findings. In Chapter 5, the preliminary descriptive results of the study are presented. Chapter 6 reports the results related to the causal relationship between board attributes, board process and board performance. This is followed

by the results concerning the inter-relationships between board processes and the impact of these effects on board performance in Chapter 7.

Finally, Chapter 8 summarises the findings, draws conclusions, considers the limitations of the thesis, and offers recommendations for policy formulation and for future research.

## **Chapter 2    CORPORATE GOVERNANCE IN PACIFIC ISLAND COUNTRIES: STATUS AND CURRENT ISSUES**

### **2.1    Introduction**

Given the dominance of corporate governance research in developed countries, little is known about corporate governance systems, practices and related challenges that continue to hinder economic growth in developing countries like the PICs. Hence, this chapter is devoted to providing background information about current issues and developments concerning corporate governance and the roles of boards of directors in public and private enterprises in the PICs.

In PICs, discussions on corporate governance have been linked to the lack of adequate economic growth and the perceived failure of economic and social development in the region (Asian Development Bank, 2005). At least, this occurs at three levels. First, at the regional level through the Pacific Islands Forum (PIF), governments have acknowledged the importance of good governance to the development and economic growth in PICs. The Pacific Plan initiated by PIF leaders in 2007 was testimony to this, in which leaders reaffirmed the importance of achieving good governance as a fundamental regional priority (Pacific Islands Forum Secretariat, 2007). Secondly, at a national level, individual governments have begun to translate some of the promises made in regional forums toward improving governance into their national policy frameworks. However, most of these efforts lack political enthusiasm and therefore progress is negligibly slow. Finally, at the business or industry sector level, corporate governance is a new concept but one that has increasingly engaged the minds of shareholders, investors, corporate regulators, government and stock markets, including boards of directors and business executives who are involved in the management and control of public and private enterprises.

Research shows that enterprises in developing countries face difficulties in accessing finance to fund viable projects (Shleifer & Vishny, 1997). In PICs specifically, a number of factors contribute to this problem. First, the financial capital markets are relatively underdeveloped, hence there is inadequate support available to the business sector to promote growth. Second, the law and legal system in PICs is generally weak, and therefore, regulatory enforcement mechanisms are poor with little protection to providers of capital and potential investors. Third, socio-cultural issues such as communal land ownership, the primacy of the

community, and social network relationships are seen as significant barriers to private entrepreneurship, investor confidence, and hence, the growth of the business sector in PICs. In addition, evidence suggests little confidence in the ability of enterprise managers, boards of directors and people who are charged with managing and governing the affairs of enterprises to protect the interests of capital providers and investors (McKee, 2007; McMaster, 2005). No doubt, these factors are critical to the inability of the business sector to access capital in PICs. The more difficult they become, the more doubtful investors will be about the chances of getting a return on their investment funds (Shleifer & Vishny, 1997). This is referred to as the “expropriation risk” which is the essence of corporate governance (Garay & Gonzalez, 2008; Shleifer & Vishny, 1997). Anecdotal evidence suggests that expropriation risks are more pronounced in developing economies, therefore corporate governance becomes essentially crucial for economic growth in PICs.

This chapter focuses on current corporate governance issues in PICs by linking poor economic growth and the weak performance of the business sector to corporate governance mechanisms, in particular, the role of boards of directors. In doing so, the chapter intends to show that a host of political, socio-cultural, and internal structure and process factors influences the contribution of boards to the performance of enterprises, and therefore, economic growth in PICs. In the next section (Section 2.2) background information on PICs is given. Following this, the main corporate governance systems in PICs were highlighted in Section 2.3. Section 2.4 deals with the state’s involvement in economic activities with specific focus on the governance and performance of SoEs. In Section 2.5, key issues affecting board performance in PICs are discussed, followed by the measures taken to promote board effectiveness in Section 2.6. Finally, Section 2.7 concludes the chapter.

## **2.2 Background and characteristics of the PICs**

The PICs vary widely in terms of size, topography, geographic isolation, resource endowments, economic and physical vulnerability, population, and culture and they are scattered over an area that makes up one third of the globe. As shown in Figure 2.1, Papua New Guinea (PNG) is by far the largest with a population of five million people, and on the other extreme, there are smaller countries like Nauru and Tuvalu with a population of approximately only 12,000 people. In terms of resources, the few larger countries have substantial mineral resources, some have pelagic resources while others have virtually no

resources at all apart from what the ocean offers (Holden, Bale & Holden, 2004; Mellor & Jabes, 2004).



Figure 2.1 Map of the Pacific island countries (PICs)

Source: <http://go.worldbank.org/PJYI41PVW0>

In livelihood terms, most people live in rural villages within a communal arrangement that has a very strong affiliation with the land and are involved in a high degree of sharing. There are three distinct ethnic groups in PICs – Melanesians (PNG, Fiji, Solomon Islands, Vanuatu), Micronesians (Palau, Federated States of Micronesia, Kiribati, Nauru), and Polynesians (Samoa, Cook Islands, Tonga, Tuvalu) – with unique cultures and characteristics as well as wide differences within each group.

The institutional settings in PICs also differ a great deal from those in developed countries. These differences can be found in the economic conditions, capital markets, internal control systems, political systems, legal and regulatory systems, and socio-cultural systems, which have important implications for corporate governance practices in PICs (Bonn, Yoshikawa & Phan, 2004; Jensen, 1993). An understanding of these characteristics is important because corporate governance systems evolve within the country's regulatory, institutional and political environment, and they also relate to the country's economic and socio-cultural conditions. These characteristics are highlighted below.

### 2.2.1 The economies of the PICs

The majority of Pacific islands people live in rural communities, and they engage in mixed subsistence/cash income activities, mainly in agriculture and forestry, though this accounts for a very small part of the GDP. Apart from PNG and Fiji, the industrial sector in most PICs is small, and is often encouraged and sustained through the use of import restrictions and state enterprises (Duncan & Nakagawa, 2006). Export from PICs is dominantly natural resource-based which include agricultural commodities, marine products and gold mining. Moreover, most PICs rely heavily on remittance, tourism and aid to sustain their economies.

Figure 2.2 gives the distribution of GDP in selected PICs. It shows that PNG and Fiji are the two major economies, jointly accounting for almost 80 per cent of the region's economic output (Asian Development Bank, 2009; AusAID, 2009). Generally, the potential for growth in PICs has been described as weak. As highlighted in Figure 2.3, only PNG, Solomon Islands and Vanuatu achieved growth of over five per cent in 2008. For Vanuatu, the main reason for growth has been the improvement of private sector development policies, coupled with political and macroeconomic stability (AusAID, 2009). On the other hand, growth in PNG and the Solomon Islands was largely driven by high mineral prices rather than any distinctive economic management policy by the two countries (Asian Development Bank, 2009). Figure 2.3 further shows that Samoa has also experienced an average growth of over four percent between 2004 and 2007, and this was largely due to reforms in the telecommunications and aviation sectors and the reduction of costs associated with doing business in the country (AusAID, 2009). The rest of the PICs, however, continue to experience volatile, flat or even declining growth.

Obviously, the 2008 global recession can be blamed for the poor growth of PICs; however, as revealed in Figure 2.3, the economies of most PICs had been troublesome even in the years preceding the crisis. Indirectly, it can be argued that poor economic growth in PICs may have a lot to do with how each country governs and manages its resources and affairs. In response, development aid organisations and governments such as the ADB, AusAID, NZAid and the World Bank have warned PICs that weak governance continues to hinder their ability to make significant gains, resulting in weak economic prospects (Mellor & Jabes, 2004). The poor use of public resources, capacity constraints, political instability and lawlessness are significant issues that PICs must deal with if they are to meet their economic potentials (Asian Development Bank, 2005; AusAID, 2006). According to the ADB, the recent down-



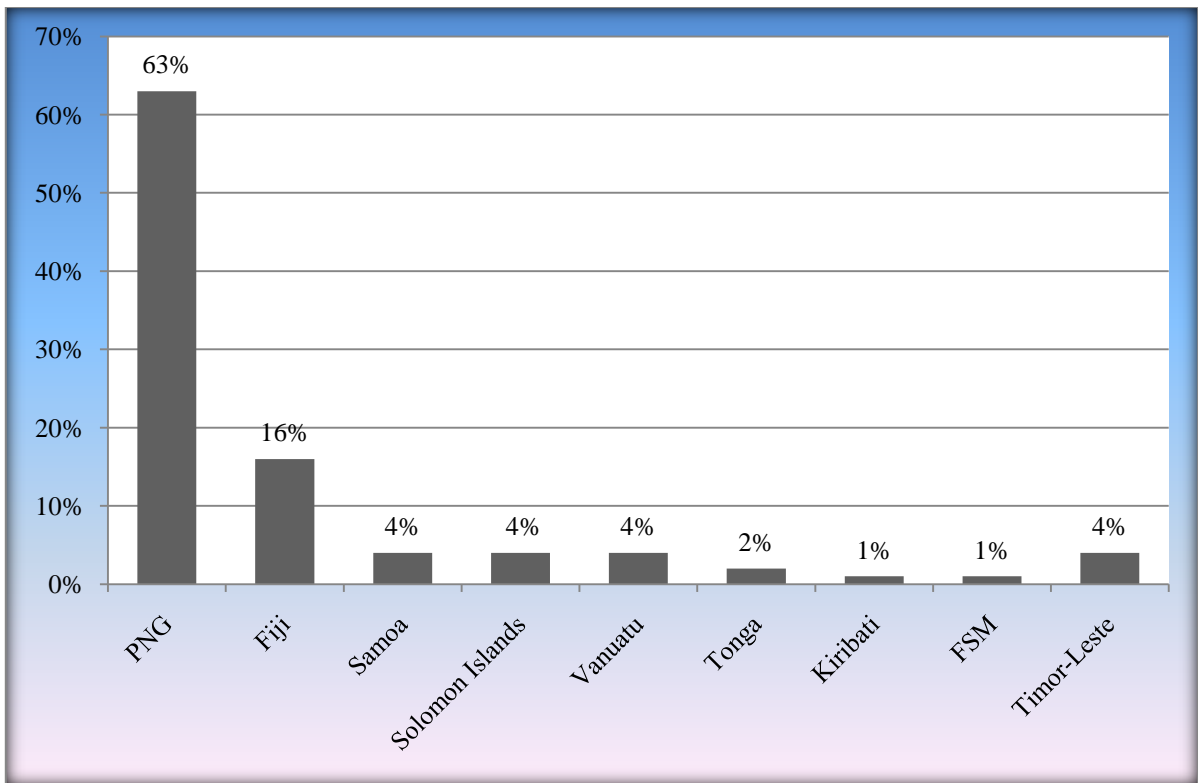


Figure 2.2 Distribution of GDP in selected PICs and Timor-Leste (2007)

(Note: GDP data are not available for Cook Is., Marshall Is., Tuvalu, Palau, Niue and Nauru)

Source: ADB (2009), AusAID (2009).

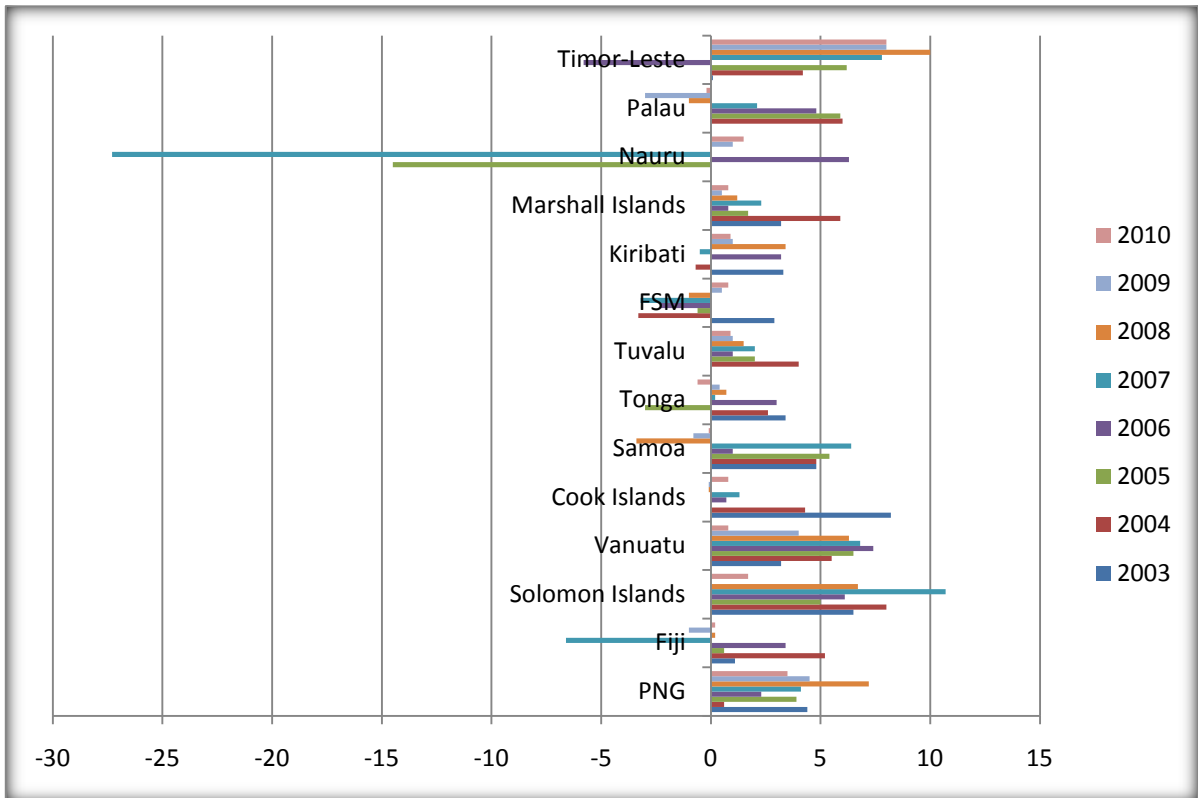


Figure 2.3 Real GDP growth rate for the PICs (2003- 2010) (per cent)

Source: ADB (2009), AusAID (2009).

turn in international markets is a concern to PICs but the region's deeply rooted problems as mentioned above pose a far greater concern for each country (Asian Development Bank, 2009, August 19). Below, the specific economic context of Fiji and the Solomon Islands will be discussed and the relationship between corporate governance and economic growth is highlighted.

(a) The Fijian economy

Fiji is made up of some 330 islands and coral atolls, 105 of which are inhabited. The population is estimated at approximately 838,000, principally comprising two communities namely the indigenous Fijians (56 per cent) and Indo-Fijians (37 per cent) who are descendants of migrants from India during the colonial period (Fiji Islands Bureau of Statistics, 2007). The economy is heavily reliant on tourism, sugar, garment manufacturing and gold as the key foreign exchange earning sectors. Fiji enjoys a relatively high income level compared to other PICs hence it has been historically regarded as one of the better performing countries. However, following the turn of political events experienced by the country in the last two decades, Fiji's longer term prospects are not assured. Military coups in 1987, 2000 and the more recent one in 2006 have caused political, social and economic upheaval which has impacted heavily on the country.

In 2005, economic growth slowed to an estimated 1.7 per cent (see Figure 2.3) compared to an average growth rate of 3.4 per cent between 1999 and 2004 (Asian Development Bank, 2006). In 2006, the economy grew at 3.4 per cent but then contracted at -6.6 per cent in 2007 (Reserve Bank of Fiji, 2006, 2007). Furthermore, as shown in Fig 2.3, growth in 2008 even fell below the government's optimistic estimate of 0.2 per cent (Reserve Bank of Fiji, 2008). Overall, the country has gone through sustained periods of economic slowdown in recent years despite growth in tourism and this was largely due to the fall in two key export industries: garment manufacturing and sugar. The sugar industry has long enjoyed preferential prices from the European Union (EU), while its garment industry has received similar treatments based on trade arrangements with Australia, New Zealand and the United States. In recent years, both industries, however, have come under strong competitive pressures, following the reduction and ceasing of preferential pricing for sugar by the EU and recent changes in trade arrangements with regards to garments with key markets as a result of WTO rules and globalisation (Chand, 2007). Moreover, the sugar industry faced additional

pressures with largely unresolved land tenure issues which forced thousands of farmers out of the industry in recent years.

With the decline in economic growth, indications were that poverty in Fiji has also increased significantly as more people are driven into poverty or “hardship” as commonly referred to in PICs (Australian Business Volunteers, 2004b; Chand, 2007). Hence, lack of economic growth has serious implications for the livelihoods of the people and with 34 per cent of the population already living below the poverty line, depressed economic growth in the years ahead could significantly push more people into poverty (Prasad & Narayan, 2008). Inevitably, this is a clear economic and social divide that Fiji must address.

#### (b) The Solomon Islands economy

The Solomon Islands comprise 992 islands and has a population of approximately 500,000 people made up of five major ethnic groups (Melanesians, Polynesians, Micronesians, Chinese and European settlers), of which Melanesians account for 93 per cent (AusAID, 2004). The economy is heavily reliant on forestry, agriculture, fishing and manufacturing for export earnings (Central Bank of Solomon Islands, 2008 and various issues). Although the country is endowed with natural resources and attractions, the economy has been severely diminished and is struggling to regain sustainable growth after the ethnic tensions and periods of civil unrest between 1999 and 2003. Since then, deeper underlying economic and social problems have slowly eroded the fundamental stability of the Solomon Islands as a nation.

The Central Bank of Solomon Islands (CBSI) estimated that the economy grew at an average of seven per cent between 2005 and 2008 (see Fig 2.3). This results from growth across all production sectors which reflect the general improvement of law and order and the growing confidence in the business environment. Despite this, the country continues to face key fundamental issues that remain unresolved. Examples include poor infrastructure, inefficient state-run utilities and public institutions, an ineffective taxation system, difficulties in accessing land for development purposes and a narrowly based export sector that is heavily reliant on log exports (Central Bank of Solomon Islands, 2006 & various issues). In particular, the forestry sector is beginning to show signs of decline following three decades of unsustainable harvesting that poses serious implications for export earnings and government revenue. As reported by the Central Bank of Solomon Islands (2008:10), “logging will slow down and contribute less to real GDP growth in 2009 and the years ahead. Since logging is

one of the major contributors to GDP, a negative growth in the forestry sector will mean a drop in foreign exchange earnings, government revenue, and employment”.

Undoubtedly, a decline in the economy will have serious long-term implications for the Solomon Islands, a country that has a large proportion of its population under 18 years and a great number of school leavers entering the job market each year without skills. This situation exacerbates the already high percentage of the population living in poverty, a situation which is significantly rising, with the gradual erosion of traditional support systems, rural-urban migration, and a move away from subsistence farming (ESCAP, 2006). Therefore, the private sector will become increasingly important as the most viable means of achieving economic growth to create job opportunities for the country’s growing population.

### (c) Corporate governance and economic growth

Overall, the lack of adequate economic growth in Fiji and the Solomon Islands relates to a poorly performing business sector, a relationship that can be linked to corporate governance weaknesses. Importantly, the ability of the two countries to attract private sector investment is crucial to drive economic growth and prosperity because government by itself cannot sustain the economic growth necessary for long-term sustainability (Duncan & Chand, 2002; Hayward-Jones, 2008). Accordingly, developmental aid agencies have been encouraging Fiji, the Solomon Islands and other PICs in general to promote private-sector driven growth through the creation of an environment conducive to doing business. Nevertheless, as discussed in the next section, lack of domestic capital continues to be a significant hindrance to private-sector driven economic growth in Fiji and the Solomon Islands. Therefore, economic development and growth in these two countries including the rest of the PICs is dependent on attracting international capital (White, 2008). Inevitably, this means that Fiji and the Solomon Islands will compete for international investment capital. Therefore, effective corporate governance both through an effective regulatory environment and improved corporate governance practices in enterprises is crucially important.

Evidence suggests that good corporate governance is an important prerequisite for attracting investment capital because investors place greater priority on good governance along with factors such as macroeconomic stability and secure property rights (Singh, 2007). Australia-Fiji Business Council President, Bob Lyon, succinctly addressed the nexus between corporate governance and economic development and how important it is to the PICs when he said,

“Good governance and respect for private property ownership are issues with which Fiji and many PICs are still grappling, and these are very important issues for ensuring that the business enabling environment in Fiji and the PICs is positioned to facilitate economic growth” (Lyon, 2005, October 17). Indeed, the solution to the problems of Fiji and the Solomon Islands lies at the footsteps of their governments which has a lot to do with governance. Unless the two countries take active steps to improve the overall governance and management of their economies, it would be difficult to build the confidence that is necessary to boost investment and grow the economy.

### 2.2.2 Financial capital market in the PICs

The financial market in PICs is underdeveloped and does not provide sufficient support for the private sector to grow. In most PICs, the financial markets are characterised by limited access to banking services beyond urban centres, little outreach by commercial banks to low-income households, limited extension of credit to indigenous business people, large interest rate spreads, prevalence of informal lending and a growth of microfinance schemes (Holden *et al.*, 2004). Notably, two critical factors relate to the underdevelopment of the financial sector in PICs. First, there are shortcomings in the security of the transactions framework imposed by commercial banks. The lack of adequate collateral to access affordable credit is an obvious problem because the system for using property as lending security is onerous, costly and in most cases not available. Secondly, customary land ownership in PICs is incompatible with the lending security requirements of financial lending institutions (Asian Development Bank, 2006). In practical terms, the nature of the customary ownership system makes it difficult to offer land outside urban centres as security for loans, an issue further compounded by the inflexibility of commercial banks to accept land and leases as adequate security given the frequent exposure of leaser ownership rights to challenge in many PICs (Duncan & Chand, 2002).

In effect, the typical sources of credit or loans available to people in PICs are mainly development banks, national provident funds (NPFs) and credit unions, with provident funds being the dominant force in the financial system. In Fiji, for example, the Fiji National Provident Fund (FNPF) accounts for nearly 40 per cent of the country’s financial system (Reserve Bank of Fiji, 2006:6). There is little doubt that PICs need to address the collateral issues highlighted above to develop their financial markets by increasing the access to credit to the entrepreneurial population. Additionally, only Fiji and Papua New Guinea operate

stock markets which offer sources of liquidity for firms, though, the size of the exchange in these two countries is still relatively small. Regulatory wise, the financial sector in PICs is subject to prudential regulation by their respective independent central banks (Asian Development Bank, 2006). However, overall financial markets in PICs are still underdeveloped and therefore cannot be fully relied upon to serve as an efficient control mechanism in corporate governance.

### 2.2.3 The legal and political framework in the PICs

Three political systems are found in PICs. The first is the constitutional monarchy found in Tonga with the King as the head of state who appoints the cabinet. The second is found in North Pacific countries such as the Federated States of Micronesia (FSM) and Palau which adopted the US presidential system, where executive power and authority rest with a congress and an elected President (Holden *et al.*, 2004). The third system is found in the majority of countries (including Fiji and the Solomon Islands) which adopted the Westminster system, characterised by political parties, a parliament, and an executive and judiciary, which is similar to the structure maintained in colonial governments (Holden *et al.*, 2004; Mellor & Jabes, 2004). In these countries, the power and authority of traditional chiefs is recognised over the protection of traditional customs and values but it does not interact closely with the “national” layer of government. The exception is Fiji, where the chieftain system was given recognition via the Fijian Affairs Act of 1874 to look after the welfare of native Fijians (Mellor & Jabes, 2004). This authority is vested in the Great Council of Chiefs (GCC) which does not have formal political power but whose status can be one of significant legitimacy and influence in governance.

In addition, many PICs have their legal origins in the British common law tradition, inherited directly or indirectly through Australia, New Zealand or the United States. Even much legislation in PICs today typically reflect the state of these laws as it was then in their parent country at the time of independence, an indication that commercial laws in PICs are indeed outdated (Asian Development Bank, 2006). Furthermore, there is a general lack of trust in law enforcement institutions in PICs, most of which are often under-funded (ESCAP, 2006). As a result, there are limited training opportunities for legal personnel and these officers are often susceptible to bribery with little capacity to deal with increasingly sophisticated cases (Asian Development Bank, 2005). Moreover, the low salary of law enforcers and poor governance within agencies responsible for law and order responsible, have resulted in

corruption and serious abuse of the law in many PICs. In some PICs, corrupt practices occur to the extent where institutions such as the police and military have become direct causes of insecurity (Asian Development Bank, 2005). No doubt, the legal system in PICs is weak; hence laws and regulations related to corporate governance lack vigorous and consistent enforcement. This means little legal protection for shareholders and capital providers in the corporate sector. Inevitably, to attract investment into viable projects and businesses in PICs, the legal system must be strengthened to offer an efficient domestic legal framework that gives confidence to investors regarding the enforcement of their relationship to those responsible for overseeing their interests in firms. Below, specific laws and regulations as well as key regulatory institutions, established to promote good corporate governance in Fiji and the Solomon Islands will be discussed.

#### (a) Law and regulations

Many PICs have some form of legal provision and rules that promote good corporate governance in enterprises. For example, the *Public Enterprise Act* (1996) and the *Public Enterprises Reform Policy Framework* in Fiji, and the *State-owned Enterprises Act* (2008) and the *SoE Regulations* in the Solomon Islands, as well as the *Companies Act*, *Articles of Associations* and individual SoE Acts in each country, are important legal instruments that promote good governance in enterprises. For instance, the *Public Enterprise Act* in Fiji and the *SoE Act* in Solomon Islands both outline the appointment process for boards, their roles, the enterprise's accountability to government and the board's obligation to keep government (through relevant Ministers) reasonably informed of the performance of SoEs. Similarly, the Companies Act outlines specific provisions with regard to the appointment, accountability and duties, and responsibilities of directors in companies. This is based on common law which defined three general duties owed by directors to their company namely: (1) the duty to act within their power in the best interest of the company and to exercise power for the purpose for which they are intended, (2) the duty to exercise a proper degree of skill and care in the performance of their duties, and (3) the fiduciary duty to act in good faith (Companies Act of Fiji, 1984). Likewise, the Articles of Association also places specific obligations on company directors. Furthermore, in Fiji, government policies on corporate governance are also contained in the Public Enterprise Reform Policy Framework and in the case of the Solomon Islands, the SoE Regulations. These frameworks and regulations cover issues such

as accountability and monitoring, performance measures and board appointments and performance assessment.

#### (b) Regulatory institutions and environment

A range of regulatory institutions and agencies have functions related to corporate governance in PICs. In Fiji and the Solomon Islands, this includes the Office of Registrar of Companies and the central banks (Reserve Bank of Fiji [RBF] and Central Bank of Solomon Islands [CBSI]). In Fiji, others include the Capital Markets Development Authority (CMDA), the South Pacific Stock Exchange (SPSE) and the Fiji Independent Commission against Corruption (FICAC).

The Registrar of Companies is mandated to carry out registration of companies as required by the Companies Act. In Fiji and the Solomon Islands, the Companies Act was modelled on the UK company legislation and its coverage is wide in scope including many aspects of the life span of the company such as incorporation of company, memorandum of association, articles of association, registration, membership of companies, contracts and management and administration. Nevertheless, a report by the Foreign Investment Advisory Service highlighted that the Act is more than 20 years old and its model dates back another 40 years in history (Fiji Islands Registrar of Companies, 2005). Hence, the act is not up to date with fundamental changes in the business world. McKee (2007) highlighted specific clauses that are in urgent need of review and these include the provisions related to the board and the position of company secretary. Other issues highlighted include the Registrar of Titles' database which lacks updated information, hence access to important information is fairly limited. Further criticism was also levelled at the Registrar of Titles Office for slackness in ensuring reporting compliance in accordance with the Act.

In Fiji, the Capital Market Development Authority (CMDA) was established under the CMDA Act (1996) and commenced operation in 1998. It is responsible for developing and regulating the capital markets in Fiji and has the power to license security professionals including brokers, dealers, investment advisers, unit trusts and their representatives, securities exchanges and central depositories. Since 2004, CMDA began work to establish a corporate governance code for the corporate sector in Fiji. Based on the draft content, the code is going to be based on the Australian Code and the OECD Principles of Corporate Governance (1999), but is specifically tailored to meet the needs of the Fiji corporate sector (Capital



Markets Development Authority, 2006). CMDA hopes that the instrument once formalised and adopted, will signal a new direction in the development of the corporate sector and serve as an important tool for raising the level and standard of corporate governance in Fiji.

In terms of the stock market, the South Pacific Stock Exchange (SPSE) is the only licensed securities exchange in Fiji, on which 16 companies were listed in 2009. Its primary function is to facilitate raising equity/capital for businesses by providing a primary market for companies who want to list and to ensure a responsive, fair and transparent trading system in the secondary market to provide improved liquidity to market participants (South Pacific Stock Exchange, 2008, 2009). Additionally, its secondary function is to provide a regulated market for the trading of existing stocks between investors by ensuring smooth and effective regulatory compliance by members of the stock exchange and listed companies, and through emphasis on the importance of sound corporate governance (South Pacific Stock Exchange, 2008). SPSE has listing rules that apply to all listed companies and those that fail to comply with these rules are dealt with accordingly. A good example was the delisting of the Yagara Group Ltd in August 2008 after failing to lodge audited financial statements and annual reports as required under the SPSE rules (Fiji Sun, 2008, August 2).

Another agency in Fiji that has important implications for corporate governance is the Fiji Independent Commission Against Corruption (FICAC), established by the military government in 2007. FICAC's function is to investigate and bring charges against leaders, people in the public sector and the private sector alleged to have been involved in corrupt practices. In June 2008, FICAC announced that a total of 22 public officials and 2 private persons had been charged, some of whom include chairpersons, CEOs and directors of various boards of SoEs (Larmour, 2009). An example is FICAC's charge against a former Chairman of Fiji Ports Authority Ltd, for allegedly approving payment to the Authority's then CEO without the board and the Higher Salaries Commission's approval (The Fiji Times, 2008, October 30 & November 19). Charges of similar nature were also laid by FICAC against former chairpersons of Fijian Holdings Limited (FHL) and Post Fiji Limited (PFL) (The Fiji Times, 2008, June 26; Radio New Zealand International, February 6). Thus, FICAC has been generally regarded a success and continues to receive support for the progress it has achieved so far in tackling white collar crime in Fiji. The country's Interim Attorney General, in particular, reputed the establishment of the FICAC as one that is free of political interference and a great success for Fiji (Fiji Daily Post, 2008, June 5). However, others have

raised questions about the role of FICAC, its impartiality and whether it has been able to serve its purpose. For instance, Dr. Biman Chand of the University of the South Pacific (USP) argued that the anti-corruption campaign through FICAC provides the military government with legitimacy among the general population as it tries to reveal corrupt practices of the last government (The Fiji Times, 2008, July 2). This implies a political string to the establishment of FICAC.

Overall, while rules and regulations are vital to enforce good corporate governance practices, PICs must be cautious about regulatory efforts since excessive regulations can easily jeopardise the innovation required to develop businesses and markets (Capital Markets Development Authority, 2006). The Australian High Commissioner to Fiji, H.E Mr. James Batley, stated at a governance conference in September 2007 that, *“it is important to ensure that corporate governance principles and the regulatory legal framework do not stifle the innovativeness of businesses, but rather it is important that these instruments should provide confidence to investors through transparency and accountable practices”* (Batley, 2007:2). It is therefore important that corporate governance principles become an important ingredient to encourage investment and consequently economic growth. As stressed by McKee (2007), there is need to align principles, guidelines and regulations across regulatory regimes in Fiji involving institutions like CMDA, SPSE and the Fiji Reserve Bank (FRB).

#### 2.2.4 Socio-cultural environment in the PICs

Socio-cultural factors exert considerable influence over policy and decision making on issues such as asset ownership, economic mobility, and overall governance outcomes in PICs (Asian Development Bank, 2005; ESCAP, 2006). Culture in the PICs is characterised by a sense of family, clan or tribal and ethnic identity manifesting itself in two significant ways. First, Pacific people have long relied on strong social networks defined by family and clan connections to deal with the harsh effects of poverty and economic misfortunes faced. Land is an asset that identifies one’s identity in terms of family, clan, and lineage hence it is valued in the PICs for what it symbolises, as well as the subsistence and livelihood it provides (ESCAP, 2006). As such, the undeniable access to communally owned land for subsistence farming and the existence of strong social norms to provide support to the needy have essentially become the basis of livelihood for Pacific people (ESCAP, 2006). Secondly, culture in the PICs through the primacy of community and social network relationship, also creates barriers against private entrepreneurship. For instance, as stated earlier, communal

ownership generally makes land unavailable to be offered as security for entrepreneurial activities and this limits the scale and scope of financial intermediation in the PICs (Duncan & Chand, 2002). This situation is exacerbated by the high incidence of land ownership disputes in the PICs which has become a disincentive for investors when considering leasing arrangements (Anere *et al.*, 2001). These factors have popularised support for active public sector involvement in many economic activities which further constrains private sector development (ESCAP, 2006; Hunt & Stocker, 2004).

In addition, social norms and systems associated with culture also have serious implications for corporate governance in the PICs. Too often, social norms that evolved to control village community life have been extended to influence behaviour in private and public sector enterprises (Hunt & Stocker, 2004). For instance, it is not uncommon to see board chairpersons or CEOs repaying their obligations to their tribe or clan rather than to the shareholders or tax payers in the form of employment recruitments or the diversion of assets. Similarly, government ministers also engage in obligatory relationships to their clans or community, thus board appointments reflect none other than social obligations. The term “*wantok*” system (referring to people of the same tribe, clan or language group) is often used in Melanesian countries of the region (PNG, the Solomon Islands, Vanuatu) as the basis for inappropriate and corrupt behaviours by people in responsible positions. No doubt, cultural forces and social systems will continue to be part of the way things are done in many PICs and the longer they are allowed to influence decision-making in enterprises, the less likely they will improve in performance (Duncan & Chand, 2002; Duncan & Toatu, 2004). It is therefore important for all stakeholders to understand that everyone is better off when enterprises are managed to maximise efficiency rather than to benefit tribal or communal interests.

In summary, there is little doubt that the poor economies of the PICs have their links to the inability of the business sector to drive growth due to significant governance weaknesses. The underdeveloped nature of financial markets, weak legal systems, poor regulatory environments, and a socio-cultural system that functions contrary to the entrepreneurship principles, have become the key hindrance to good corporate governance and economic growth in PICs.

## 2.3 Corporate governance systems in the PICs

Since corporate governance emanates from the desire to protect and enhance the interests of shareholders, capital providers and investors in enterprises (Shleifer & Vishny, 1997), it has become significantly important to the PICs by providing the mechanism by which shareholders and other stakeholders are assured that those responsible for overseeing the enterprises are indeed serving their interests. This section highlights two systems that can be found in PICs enterprises and discusses why they are dominant in PICs.

### 2.3.1 The family-based system

The family-based system is commonly found in enterprises where ownership and management are controlled by a family kinship group (either nuclear or extended) and where profit is distributed between members inside the family group (Tabalujan, 2002). Indeed, the prevalence of family ownership and relationship-based transactions is a common characteristic of developing countries (Claessens & Fan, 2002; La Porta, Lopez-de-Silanes, Shleifer & Vishny, 1998). In PICs particularly, most economic activity revolves around enterprises controlled by a small group of wealthy and powerful family groups, and therefore, they represent a significant part of the business sector. Often, these enterprises are not necessarily controlled by banks or by equity markets, but they operate as economic entities within the context of a relationship-based system (Filatotchev, Lien & Piesse, 2005; Khan, 1999, 2001; Tabalujan, 2002). In this regard, the family-based system is distinguished from the shareholder and stakeholder governance systems commonly found in developed countries because it is embedded in the concentration of family ownership in enterprises (Filatotchev *et al.*, 2005; Khan, 1999).

Significantly, the concentration of ownership and control in a family-based system has implications for the management and governance in enterprises. Presumably, the values and culture of controlling families affect how the enterprise is managed and how the business runs. For instance, in Fiji the population of Indo-Fijians is approximately 37 per cent of the total population (Fiji Islands Bureau of Statistics, 2007). A small proportion of Indo-Fijians are wealthier than the rest of the population and they control a large number of small businesses. To some extent, this implies that doing business in Fiji involves dealing with the Indian way of business culture. Likewise, in the Solomon Islands the population of Chinese settlers is estimated to be less than 0.2 per cent of the total population (Solomon Islands

National Census Office, 1999), but yet they dominate the business sector. Hence, to some extent doing business in the Solomon Islands may mean dealing with the Chinese business culture. Indeed, Backman and Butler (2003) and Hock (2005), confirmed that the Chinese have a distinctive culture in running their businesses, most of whom operate their business as family firms, where the firm is synonymous with the family and the family is synonymous with the recognition of the anointed leader as the patriarch.

Furthermore, boards of directors in family-controlled firms comprise mostly family members and sometimes professional people closely linked to the family (Filatotchev *et al.*, 2005). Also, the management of the business is often exercised through a senior member of the family who typically assumes the chairmanship role concurrently with the top executive position in the business, thus, this person has complete control of the firm (McMaster, 2004; White, 2004). The leader in a family-controlled business may occasionally use trusted staff in key positions and rely on social networks as avenues to appoint trusted individuals to the board and even going further in rewarding loyal staff with board appointments and empowering them to make decisions with the leader's endorsements. Nevertheless, the overall power and control in the enterprise rests with the controlling-family.

So why is the family-based system dominant in the PICs? La Porta *et al.* (1998) suggest that concentrated ownerships (like the family-based system) are more prevalent in countries where the legal system does not adequately protect the rights of shareholders, capital providers and investors in general. In such situations, entrepreneurs or original owners are more likely to maintain large portions of the business with them to align their incentives with other shareholders (Shleifer & Vishny, 1997). Hence, given the weak legal system in many PICs, the concentration of business ownership within the family group is regarded as desirable as the rights and interests of the family are assumed to be better protected.

However, research has also highlighted serious governance weaknesses in family-controlled enterprises. According to Khan (1999), in the early stages of the life of the business, family owners are mostly the managers of the firm and there is no outside financier involved. This means the business is fully financed by the controlling family hence there is no agency problem, thus, self-monitoring is effective. But as the business later sees the need to take advantage of growth opportunities, it seeks external capital usually through bank borrowings or by issuing stocks. At this stage, even with the entry of external finance, the management and governance of the firm still rests with the controlling family, effectively creating an

asymmetry of information between external suppliers of capital and the controlling family which also give rise to agency problems (Khan, 1999; Tabalujan, 2002). Because of this, agency costs will rise because the family-based system lacks the mechanism whereby the interest of external providers of capital can be protected. Therefore, family-based systems need to be improved through appropriate reforms to avoid inefficiencies in production, mismanagement of assets and other types of unproductive managerial behaviour that result in inefficient performance (Khan, 1999).

### 2.3.2 The shareholder-based system

The business sector in PICs has also experienced an increase in enterprises with ownership structures based on the shareholder-based system. At least three factors contributed to this increase. First, the introduction of stock markets in Fiji and PNG has encouraged individuals and institutions to buy shares in listed-firms that were once traditionally family-owned and controlled, resulting in the broadening of the shareholder base of these firms. Secondly, the increased number of partnership firms involving several private investors has also led to an increase in the number of shareholder-based firms. Thirdly, the increased involvement of state and semi-government institutions in commercial activities, most of which are joint venture operations with private investors, has increased the number of firms relying on shareholder-based systems. Often, the government is the major financial stakeholder in these firms and at the same time acts as the controller or regulator (Kimber & Lipton, 2005). In this regard, as discussed later in this chapter, the state through SoEs (partly and fully-owned) has become an important player in the corporate sector in the PICs.

Research shows that critical corporate governance weaknesses and challenges exist in shareholder-based systems. In private shareholder-based firms, often the positions of CEO and chairman remain with a leading member of the founding family or a major controlling group. In Fiji, a survey by McKee (2007) found that in almost half of private companies surveyed, the CEO was also the chairman who belonged to the same family or control group. Thus, despite the broadening of the firm's shareholding base, management and control are not completely separated from the owners. As a result, the board and management are likely to be mindful of the interests of dominant owner-managers in decision-making at the expense of minority shareholders (Kimber & Lipton, 2005). Consequently, firms closely held by a founding family are relatively weak in enforcing the rights of minority shareholders (Gibson, 2002). Even so, corporate governance problems in PICs are mostly highlighted through the

discussions on enterprises partly and fully-owned by the state (Duncan, 2005; McKee, 2007; McMaster, 2005). With SoEs, the government or an institution nominated by it hold total or majority shares in the enterprise on the people's behalf and the control function is delegated to the board of directors who then pass on the day-to-day management responsibilities to the CEO and the management team. Too often, governance problems associated with the relationship between the government as the owner of SoEs, board of directors and the management of the enterprise were highlighted as significant causes of poor performance in SoEs (Duncan & Chand, 2002; Duncan & Toatu, 2004; McMaster, 2004).

A limited number of papers have contributed to the debate on corporate governance practices and problems in the PICs and how they affect the performance of SoEs and shareholder-based firms based on agency theory (Duncan, 2005, 2008; Lal, 2006; Singh & Reddy, 2007). According to Duncan (2005), the agency perspective is just as applicable in explaining the relationships between CEO/chairman and boards of private shareholder-based firms acting on behalf of minority shareholders, or in the event of government through a Minister (responsible for the SoE) acting on behalf of tax-payers, as it is in the case of the board of directors and management of a firm acting on behalf of shareholders. In effect, these agency relationships are equally pervasive in public and private enterprises in PICs, and therefore, the threat they pose to the success of enterprises is indeed real (Duncan, 2005, 2008).

In summary, both family-based and shareholder-based firms in the PICs face significant corporate governance problems at different levels. The real challenge, therefore, is for enterprises in the PICs to minimise the threats associated with each system, and this lies in the appropriate reform of these systems.

#### **2.4 State participation in the economy in the PICs**

Research shows that the state continues to be an active participator in the economy through SoEs for two reasons. First, there is the argument that some areas of the economy lack private sector interest hence the government has no choice but to be involved in these activities in the interest of the people (Amosa, 2007b; Chand, 1999; Duncan, 2008). Secondly, the philosophy is held since the country's independence that the best means of serving the people is through the state or state-supported institutions and activities (Chand, 1999; Duncan, 2008; Orlegge, 2005; Saldanha, 2004). It is therefore common to find public enterprises not only at national

government level, but also at provincial and local government levels, most of which have received assistance from the national government during their establishment phase.

In most cases in the PICs, the government has monopoly control over a range of public utilities such as water, electricity, telecommunications, shipping, aviation and other services (Prasad, 1999). In the financial sector, the government continues to be one of the largest actors through institutions such as development banks, national provident funds and unit trusts. But in recent years, important sectors like telecommunications, shipping and aviation have been deregulated in a number of PICs including Fiji and the Solomon Islands. This section briefly highlights the reforms in SoEs and reviews SoE performance with specific reference to Fiji and the Solomon Islands.

#### 2.4.1 State enterprise reforms in the PICs

Most PICs engaged in reform programs since the 1990s, aimed at scaling down state involvement in public service delivery through encouraging private sector involvement (Amosa, 2007a; Reddy, 2006; So & Shin, 1995). Often, these reform programs include activities to commercialise, corporatize and divest public enterprises following the poor performance of SoEs (McMaster, 2004). A significant objective of these reforms was to introduce commercial cultures and practices into SoEs by encouraging SoE managers to act like private sector managers to enhance efficiency and achieve higher returns, as well as to reduce political influence in SoEs (Duncan, 2005).

In Fiji, reforms began in the early 1990s with the corporatisation of four government institutions, namely, Fiji Post & Telecommunication Ltd, Ika Corporation Ltd, Fiji Pine Ltd and National Marketing Corporation Ltd (Appana, 2003; Reddy, 2006). Like many PICs, SoEs in Fiji have a unique ownership structure, most of which are equity carved out of statutory enterprises. Profitable units in statutory enterprises were repackaged to form new entities. An example is Post Fiji Ltd, which has its history in the country's first Postal Act (1871) that officially established the Postal Department that was part of the then Department of Posts and Telecommunications (Post Fiji Ltd, 2008). Until 1989, Fiji's postal operations were a division of a government department. In 1990, the department was corporatised and called Fiji Post and Telecommunications (FPL). In 1996, the inevitable separation of the post and telecommunications functions was formalised and two new separate entities were formally established, namely, Post Fiji Ltd (PFL) and Telecom Fiji Ltd (TFL). As the case



with all SoEs, the two new entities were registered and incorporated under the companies Act as a private company with shareholding wholly owned by the state. Similar processes were also adopted in the reform of SoEs in the Solomon Islands, with examples including Solomon Post Ltd (SPL) and Solomon Telekom Ltd (STL). Even so, a number of commercially viable enterprises continue to remain as statutory enterprises. In the Solomon Islands, these include Solomon Islands Water Authority (SIWA), Solomon Islands Electricity Authority (SIEA) and Solomon Islands Ports Authority (SIPA), while in Fiji this includes Fiji Electricity Authority (FEA), Fiji Ports Authority (FPA) and Civil Aviation Authority of Fiji (CAAF).

The reform of SoEs in the PICs comes with significant costs. In most cases, governments were required to seek financial assistance in the form of long-term loans with low interest rates to implement these reforms. These soft loans, as they are called, are not commonly available within the domestic capital market, forcing governments to look abroad to institutions like the World Bank, the ADB and the IMF. Normally, soft loans are accompanied by strict conditions that require governments to follow specific policies such as balanced budgets, financial improvement of SoEs, and the progressive reduction of government involvement in SoEs (Amosa, 2007b; Reddy, 2006). In some cases, governments invite international investors to be joint partners in newly created entities with the objective to introduce western commercial ideas, technology and much needed capital injection into the entity (Firth, Fung & Rui, 2006). But still, the government retains a substantial shareholding in the entity, either directly or indirectly through nationally owned institutions. An example is the joint-venture arrangement between the Solomon Islands Government through the National Provident Fund (SINPF) and Cable & Wireless (UK) as joint shareholders of Solomon Telekom Limited (STL). Furthermore, in Fiji some corporatised entities were allowed and encouraged to sell shares to the public through the stock market to raise additional capital for specific projects.

#### 2.4.2 The governance of SoEs in the PICs

In the PICs, the state is the major shareholder in SoEs and the key motive is to avoid direct influence on the running of the enterprise, instead of playing the role of a dispassionate profit maximising investor. The board of directors is therefore appointed to oversee the affairs of the SoE and to protect the government's interest. In the Solomon Islands, the authority for appointing boards of state-owned companies rests with the Investment Corporation of Solomon Islands (ICSI), a holding authority established by an act of parliament (ICSI Act

1996) to administer and oversee government portfolio companies. Similarly, in Fiji state-owned companies are supervised by the Department of Public Enterprises (DPE), through which board appointments are conducted. For statutory enterprises, board appointments are normally done by a Minister of a line ministry who is responsible for the enterprise. For instance, in the Solomon Islands the appointment of directors to the board of Solomon Islands Electricity Authority (SIEA) is done by the Minister responsible for Energy. In Fiji, the appointment of the board of Fiji Electricity Authority (FEA) is under the Minister responsible for works and public utilities. Overall, SoEs in the PICs (which include state-commercial companies and state commercial authorities) are governed by the board of directors under the supervision of a responsible body representing government, either a holding authority or the Minister.

Unfortunately, research shows that governments in the PICs commonly interfere in the management and the operations of SoEs (McMaster, 2005; Reddy, 2006). Too often, politicians are appointed as chairman and directors of the SoE board to serve the political and social interests of those in power rather than the economic interests of the enterprise. Tuhaika (2007) indeed revealed that in the Solomon Islands, successive governments seek innovative ways to remain in power by using board positions in SoEs to engage their political supporters. This political influence on board appointments is further compounded by the goal of winning elections and the interest to retain political power. As concisely put by one politician, *“we have a three year term in office...in the first year we try to adjust and get used to our roles as Ministers and the way things are done, the second year we try to develop some policies and maybe try to implement some of them, and by the third year we are thinking about the next election and how we can get back into power”* (Reddy, 2006:3).

In addition, political interference in SoEs is not only restricted to the board of directors but also the operational procedures of these enterprises. For instance, in development banks, reports show that a lot of lending activities were politically influenced through the board by bank managers, implying that bank officers have failed to take appropriate actions to maximise the commercial interests of the bank (Gibson, 2002). Indeed, a report on the now failed Development Bank of Solomon Islands (DBSI) claimed that sustained periods of politically motivated excessive lending by the bank to politicians and individuals associated with the board has significantly contributed to the bank’s insolvency in 2003 (Central Bank of Solomon Islands, 2005). Furthermore, evidence suggests that the political influence on

board appointments creates difficulties for the board to make independent decisions regarding the financial well-being of the enterprise. An example is the case of utility SoEs such as SIWA, SIEA or FEA, who are often forced to absorb huge arrears from other government agencies on their utility bills, significantly affecting their cash-flow position. In spite of initiatives by these SoEs to introduce tough policy measures such as termination of power or water supply to force clients with arrears to pay up, the presence of a politician or government representative as chairman of the board implies that the board is less likely to take tougher action against government agencies that defaulted on their accounts (Amosa, 2007b; Tuhaika, 2007). Consequently, this limits the practical options available to these SoEs in recovering debts.

In summary, the effective governance of SoEs in PICs is hindered by significant agency problems (Duncan, 2005). In particular, the agency issues associated with the politicisation of the board of directors have been widely blamed for the high inefficiency and poor performance of SoEs. Unfortunately, many of the loss-making SoEs continue to depend on large subsidies to maintain operations, and also, the management and board of directors of these SoEs have become hotspots of corruption and nepotism for too long (Duncan, 2008).

#### 2.4.3 The performance of SoEs in the PICs

In common, the key performance objective of SoEs in the PICs is the delivery of certain services or the production of certain goods in an efficient and effective manner, and the yielding of profit and payment of dividends to the government. SoEs are therefore required to operate as efficient and profitable enterprises comparable to similar businesses in the private sector to avoid unbudgeted losses to the government. For example, in Fiji it is a government policy that SoEs must achieve a 10 per cent benchmark rate of return on funds invested and remit 50 per cent of net profit as dividend to government (Fiji Auditor General, 2006; Department of Public Enterprises, 2003).

Nevertheless, evidence suggests that SoEs in the PICs have generally performed poorly compared to similar businesses in the private sector. A report on Fiji SoEs revealed that many enterprises incurred losses since their inception while others made consistent losses since 2002 (Fiji Auditor General, 2006). This report further showed that none of the 16 SoEs achieved the required 10 per cent rate of return even with ongoing annual grants and subsidies from the government. Consequently, the government is obliged to bail out SoEs

that have got into financial difficulties to keep them afloat based on national interest (Chand, 1999; Pacific Islands Forum Secretariat, 2007). For example, in 2008 the Fiji Hardwood Corporation Ltd (FHCL) sought a government guarantee to support the company's application for additional working capital from commercial lenders, after experiencing sustained periods of cash-flow problems (The Fiji Times, 2008, September 3). Around the same time, the Chairman of Rewa Rice Ltd called on the government to write off a \$FJ6 million (\$A\$3.5 million) debt that has prevented the company from securing loans from lending institutions due to cash-flow problems (Ralogaiavau, 2008). In Samoa, the cost associated with the loss incurred by the state-owned airline in the mid-1990s was covered by cutting government expenditures on health care and education by up to 25 per cent (Asian Development Bank, 2006). No doubt, the poor performance of SoEs in the PICs continues to cause significant pressures on national government budgets (Amosa, 2007a, 2007b).

The reasons for the poor performance of SoEs appear to be common in the PICs. One reason is that the economic objectives of SoEs, which closely parallel similar firms in the private sector, were often confused by the addition of divergent or sometimes conflicting objectives, loosely described as "community service obligations" (Bosch, 2008). Often, SoEs by virtue of government policy are required to deliver general community benefits that were at times irrelevant and incompatible with the enterprise's economic objectives. An example is the \$FJ4 million loss by the Fiji Development Bank (FDB) under the government's affirmative action program which was established in 2002 to help indigenous Fijians get into business (Wise, 2008). Such conflicting nature in the objectives pursued by SoEs significantly affects the ability to deliver on their economic objectives.

In addition, the lack of clear corporate structures and legislative framework in SoEs is associated with poor SoE performance in the PICs (Amosa, 2007b; Duncan, 2005, 2008; Lal, 2006; McMaster, 2005; Singh & Reddy, 2007). For instance, a study on SoEs in Samoa and Tonga showed that poor performance in SoEs was partly due to lack of a constructive legislative framework hence the lack of clarity in the key roles of government officials and ministers in charge of SoEs (Amosa, 2007a, 2007b). This was also confirmed in Fiji by Former Vice-President, Ratu Joni Madraiwiwi, in his speech at a CMDA workshop for enterprises owned by provincial governments in 2008, who stated that "the success of provincial companies is limited and part of the reason is that provincial companies were established without clear corporate structures" (Raicola, 2008). Similarly, Orlegge (2005)

highlighted that the performance of SoEs in PNG was hindered by lack of evaluation and control standards. As a result, SoEs often suffer from political influence, excessive benefits and entitlements to executives, inadequate education and lack of business experience of directors, and the absence of direction and decisions based on economic rationality.

Finally, following the above, the poor performance of SoEs in the PICs has been strongly associated with the ineffectiveness of boards of directors. According to McMaster (2004:8), the ineffectiveness of boards of SoEs in PICs was characterised by “.....*cronyism, unbalanced composition of boards, conflicts of interest, untrained directors, lack of role understanding, absence of board charter and work programs, lack of induction training for directors, lack of performance evaluation of boards, inadequate board papers/information to aid good quality decisions, lack of analysis and logic in board decision making processes, board negligence of risk management issues, and lack of preparation by board members ahead of meetings*”. Similar findings were also revealed by Singh and Reddy (2007) in their study on the Native Lands Trust Board (NLTB), indicating lack of transparency, accountability and efficiency by the board which has caused significant losses to NLTB and the subsequent reduction of income to resource owners. Singh and Reddy (2007) argued that the board and management were to be blamed for the poor performance of NLTB in recent years. Likewise, Lal’s (2006) study on the Fiji Sugar Corporation (FSG) revealed that the company’s poor performance is a result of failure of the board of directors to perform its duties. Consequently, the boards of directors in SoEs have come under increasing criticism for failing to meet their governance responsibilities and their inability to protect the interests of shareholders and other stakeholders. Because of this, there is ongoing debate over whether the board is the most effective solution to the problems faced by SoEs in the PICs, especially in light of the potential for divergence of interest among directors (Duncan, 2005).

Notwithstanding the reforms undertaken to downsize the state’s involvement and the subsequent increase of private sector participation in the economy, governments through SoEs continue to be active players in commercial activities in the PICs. Indeed, the reforms implemented in SoEs fall short of removing the direct influence of politicians in the operations of SoEs since board appointments are still very much subjected to political interests. As a result, the effectiveness of boards of directors and their ability to perform the work expected of them continues to be a significant concern in the PICs.

## **2.5 The board of directors in the PICs and related issues**

Corporate governance is still underdeveloped in the PICs; hence, the challenges faced in improving good corporate governance practices are quite significant. Nevertheless, evidence suggests that there is an increasing awareness of the role that boards of directors could play by adding value to the performance of enterprises (McKee, 2007). This section highlights some of the specific issues related to the performance of the board of directors in public and private enterprises in the PICs.

### **2.5.1 Board appointment process**

In the PICs, the appointment of the chairman, directors and CEO, varies with the ownership of the enterprise. In family-owned enterprises, often a senior figure within the family holds the chairmanship role within the board. In other private enterprises, the chairman is appointed by the directors and can be removed by them collectively. Hence, the chairman is accountable to the board which reinforces the board's collective accountability to shareholders (Bosch, 2008). In contrast, the chairman in SoEs is directly appointed by or on the advice of the Minister. This implies that the chairman does not necessarily hold accountability to the board, but has a special relationship to the Minister (Bosch, 2008). This relationship promotes regular meetings between the chairman and the Minister. Subsequently, the informal communication links and influence that results from this interaction seriously undermines the unity of the board, which can diminish the board's collective accountability to the Minister and the overall effectiveness of the board.

Also, the recruitment of CEOs in private enterprises often reflects the ownership structure of the enterprise. Research shows that enterprises and subsidiary operations with off-shore owners are more likely to appoint CEOs based on a planned career path (Bosch, 2008). In fact, many enterprises in the PICs still have founding families as key shareholders and often a member of the family is appointed as the CEO (McKee, 2007). On the other hand, CEO appointment in SoEs is the responsibility of the board as required by the specific legislation that established the enterprise or other relevant policy framework. However, sometimes boards are forced by government to appoint a candidate of its choice. An example is the claim in the Fiji media in 2007 that a brother of the Interim Attorney General was directly appointed CEO of Fiji Broadcasting Limited Corporation (FBLC) without the knowledge of the board (Matau, 2008). This appointment triggered reaction from organisations like

Transparency International Fiji (TIF) and others calling on FBLC to exercise public accountability and transparency in its recruitment process (The Fiji Times, 2007, November 21). As confirmed by McKee (2007), the recruitment process in many SoE boards in the PICs is not transparent and less understood. Subsequently, the board cannot dismiss the CEO and the CEO is unlikely to owe primary responsibility to the board, and therefore, the board is unable to hold the CEO accountable to it (Bosch, 2008).

Additionally, the appointment of directors varies between public and private enterprises. In private enterprise boards, shareholders appoint directors based on the needs of the board. McKee (2007) observed that in Fiji some enterprises were able to attract quality directors, not so much on the basis of their remuneration policy and associated benefits, but mainly as a result of personal relationships and affiliations with the founder of the enterprise. Contrarily, there is generally a lack of clear guidelines for appointments of directors in SoEs which only exposes the appointment process to political patronage (Bosch, 2008). Because of this, many director appointments on SoE boards are difficult to explain without the suspicion that constituency loyalty is being repaid or other political debts have been discharged. Often, ethnic origin or the *wantok* system, gender, trade-union affiliation and other forms of political correctness have become the basis for board appointments (Duncan, 2005; McMaster, 2004, Tuhaika, 2006; Bosch, 2008). An example relates to reports that the military government was behind the mass resignation of executives and directors of Fijian Holdings Ltd (FHL) in 2008, purposely to put people loyal to the military regime in key board positions (Fiji Times, 2008, June 18 & 26; Fiji Sun, 2008, June 16).

In recent years, Fiji and the Solomon Islands respectively in 2005 and 2009, introduced policy frameworks to improve board appointments in SoEs which clearly promote the recognition of professional skills. Following this, the Public Enterprise Department in Fiji introduced and began to maintain a database of existing and potential directors from which appointments to SoE boards are drawn. Public invitations are normally sent out through the media seeking interested individuals with professional qualifications and skills who have the time and interest to serve on SoE boards. Anecdotal evidence, however, suggests that many board appointments were not necessarily based on this policy since the appointment responsibilities are still very much attached to the Minister and government. This is also the practice in the Solomon Islands, evidenced by the recent legal action taken by the incumbent board of the Solomon Islands Water Authority (SIWA) against the Minister for Mines,

Energy and Rural Electrification, which seeks to restrain the minister from making new appointments in respect to existing regulatory frameworks (Mamu, 2011).

The lack of clarity in board appointments in SoEs is another issue for many PICs (Amosa, 2007a; McKee, 2005; McMaster, 2005). Usually, letters of appointment were sent to individual directors. However, these letters contain no information on the roles expected of directors on boards. As such, there is no basis on which directors can apply diligence to consider the financial position of SoEs, the background and styles of other directors, as well as the competence of senior management in SOEs before accepting appointments. Thus, appointments were often accepted without prior knowledge or full appreciation of the associated liabilities under existing laws (McKee, 2007). Interestingly, according to McKee, many directors were even unsure if they were personally covered under a director's professional indemnity insurance or otherwise. Furthermore, the lack of induction programs for new directors in many SoEs does not assist the already ill-informed status of directors in the PICs (McKee, 2005).

A few SoEs, on the other hand, have established appointment guidelines that promote the representation of stakeholder groups on the board. Examples include the Fiji National Provident Fund (FNPF) and the Solomon Islands National Provident Fund (SINPF), whose board members were drawn from groups such as trade unions, employer federations, government agencies, and so forth. Nevertheless, appointments based on representative models can potentially undermine the effectiveness of the board because directors are more likely to show loyalty to those they represent and those who had initial influence on their appointment (Bosch, 2008). As a result, board discussions may no longer be conducted in confidence due to divergence in loyalty which affects the unity and effectiveness of the board. Thus, boards appointed on a representative model may not offer the best form of governance due to the potential for directors to be primarily concerned with the interest of those they represent rather than the interest and success of the enterprise (Bosch, 2008).

In addition, practical evidence in the PICs suggests that representative boards may encounter issues of conflicts of interest where directors are involved with boards of seemingly competing enterprises in a particular industry. An example is the board of Unit Trust of Fiji (UTOF) which is traditionally chaired by the CEO of the Fiji National Provident Fund (FNPF), a precedent established based on the belief that the CEO of FNPF would bring knowledge and skills relevant to the success of UTOF (McKee, 2007). Obviously, this



arrangement may not be intentionally motivated but the increasing complexity in the financial sector and the competition for investment opportunities makes it inappropriate and conflicting for directors to have access to information on competing firms, as with the FNPF and the UTOF in this case (McKee, 2007). Due to the potential for conflicts of interest, there is strong recommendation to avoid cross-memberships on boards of competing enterprises in the PICs (Duncan, 2005).

### 2.5.2 Board skills and expertise

Reports show that lack of experienced and qualified directors is a problem in the PICs particularly in enterprises operated in sectors that were heavily reliant on technical skills such as finance, aviation and shipping (Pacific Islands Forum Secretariat, 2005). For instance, in Fiji, McKee (2005, 2007) stated that many boards experience skills shortage in finance, commerce, technical expertise and a strong sense of entrepreneurship. Likewise, Lal (2006) highlighted the lack of relevant technical expertise as a significant factor in the board's inability to effectively scrutinise the performance of the enterprise.

Overall, the lack of appropriate skills on boards in the PICs can be attributed to a number of factors. First, many enterprises fail to evaluate their skill-set needs by defining the attributes and skills required by the board, and therefore, board appointments were often made without considering the skills and personal attribute needs of the board (McKee, 2005, 2007). Secondly, enterprises often find it difficult to attract the services of individuals with the required skills to serve on their boards given the low remuneration of board positions taken against the liability risks involved and the time demanded (McKee, 2007). In Fiji, board remuneration ranges between \$FJ 3,000 to \$15,000 per annum (McKee, 2007), which is a meagre reward when compared to the remuneration of boards in developed and emerging economies (Fernandes, 2008). Thus, non-financial rewards such as the satisfaction gained from fulfilling a public duty and the continuous up-skilling of directors to enhance future careers have become the primary motivating factors for professionals in accepting board appointments (McKee, 2007). Thirdly, generally there is a shortage of adequate professional skills in the PICs to serve on board positions (Pacific Islands Forum Secretariat, 2005). For instance, many enterprises prefer to have auditing skills on their boards; however, the shortage of experienced auditors in the PICs makes this difficult to achieve (McKee, 2007). Also, experienced auditors are likely to decline invitations for board memberships given the

potential conflict of interest that may arise from their role as external auditors in a related enterprise.

In addition, particularly in Fiji in recent years, professionals such as accountants, auditors, lawyers, and academics often decline the invitation to join SoE boards due to the travel ban imposed by foreign governments such as Australia, New Zealand and others on people linked to the military regime. For example, in June 2008 a prominent business executive resigned from the Chair of Fijian Holdings Ltd (FHL) following the travel ban imposed by New Zealand and Australia on executive people linked to the military regime (Nawaikama, 2008; Serelini, 2008).

Another related issue is the tenure of board appointments, particularly on SoE boards. In PICs, some boards have a tenure of 12 months which is not sufficient to enable directors to become acquainted with their roles and the business of the enterprise (McKee, 2005). In other cases, the appointment tenure for most directors ends at the same time and this makes it difficult for the board to retain institutional knowledge and maintain continuity. Moreover, in a lot of PICs given the political influence on SoEs, the board changes every time a new government comes into power which is a real hindrance to the effectiveness of boards.

To sum up, the lack of people with relevant skills to serve on board enterprises in the PICs has led to the heavy reliance on a few professional individuals serving on a number of boards, an issue which is addressed later in this chapter. This problem is further exacerbated by the political patronage in board appointments without the relevant skills, which leads to poor commercial and technical decision-making by boards. There is little doubt that the above issues surrounding the appointment process in PICs enterprises are significant barriers that continue to affect the ability of boards to effectively perform their functions.

### 2.5.3 Professional development for directors

Generally, professional development opportunities for directors in the PICs are limited. At the regional level, the Australian Business Volunteers (ABV) has successfully delivered the NEW Directors Program (NDP), a formal training course focusing on governance issues, in several countries over a number of years (Australian Business Volunteers, 2004a). This course provides new and existing directors and senior managers with practical training in their roles and responsibilities. A similar program was also delivered in several PICs by the University of the South Pacific (USP) between 2002 and 2005 through support from the EU

(McMaster, 2004). At the national level, Fiji is one of a few countries that have actively taken steps to develop its directors. Examples of such initiatives include Prime Minister's Summit on Corporate Governance jointly organised by the Fiji Institute of Directors, University of the South Pacific (USP) and the Ministry of Public Enterprises (MPE) in 2005. In recent years, similar programs were also organised through the DPE for chairpersons, directors and CEOs of SoEs. These initiatives were aimed at improving corporate governance in SoEs and to ensure SoEs are operating in an open and transparent manner consistent with government policies (Anonymous, 2007a). Similarly, at the in-house level, the South Pacific Stock Exchange (SPSE) conducts compliance workshops targeting directors, CEOs and company secretaries of listed firms although attendance and commitment also varied (McKee, 2007). Additionally, some enterprises have taken the initiative to encourage their directors to attend courses with the Institute of Company Directors in Australia. According to McKee (2007), new directors are more likely to be keen to take advantage of professional development programs, but the limited opportunities available in PICs generally imply that the skills capacity of directors remains a significant issue for many boards.

#### 2.5.4 The structure of boards in the PICs

Reports suggest that issues related to the structure of boards of directors in the PICs may have important implications for board performance (Asian Development Bank, 2009; McKee, 2007; McMaster, 2004). For instance, in terms of board size, a report by McKee (2007) found that the size of boards in Fiji range between five to 12 members. This finding is consistent with the results of this research, which confirms that the majority of enterprises surveyed have boards of between five to 10 members, as discussed later in Chapter 5. A case in point is Air Vanuatu, a national airline owned by the Vanuatu government, which once had 28 directors on its board, none of whom were reported to have the necessary technical or professional skills required (Pacific Islands Forum Secretariat, 2005). At one stage, more than 20 directors of the Air Vanuatu board were trying to get Free of Charge (FOC) tickets for international travel, an entitlement normally accorded to directors on airline boards. In this regard, it is important to investigate how significant board size may affect the economic interests of the enterprise.

Another important structural attribute of boards of directors in the PICs is its composition in terms of the proportion of outside (non-executive) to inside (executive) directors. This research found that almost 60 per cent of Fijian enterprises and 50 per cent of Solomon

Islander enterprises surveyed have boards with 100 per cent outside (external) directors, as discussed later in Chapter 5. While this may reflect a high degree of board independence, interestingly, indications are that the composition of boards in the PICs does not necessarily contribute to effectiveness in their performance, given the way boards are appointed. A similar concern relates to board diversity in terms of the proportion of women to men on boards in PICs. According to this study, on average 35 per cent of boards surveyed in Fiji and the Solomon Islands have between zero to nine per cent female directors, indicating that boards in PICs are dominantly men's clubs. In addition, the issue of multiple directorships in PICs has raised concerns over the ability of boards to perform their duties. According to the results of this study, 40 per cent of Fijian directors and 32 per cent of Solomon Islander directors surveyed, hold between three to seven directorships. These results were further discussed in Chapter 5. Overall, the way boards are structured in the PICs in terms of size, composition, diversity and multiple directorships impose significant implications for the performance of boards of directors. Therefore, investigating how board structure influences the ability of boards to perform their roles is crucial to the improvement of corporate governance in the PICs.

#### 2.5.5 Board standards, boardroom ethics and conflicts of interest

Research shows that unethical behaviour, conflicts of interests involving directors and executives, and alleged board corrupt practices within enterprises have been a common problem in many PICs (Lal, 2006; Duncan, 2005; McMaster, 2004). In Fiji, audit investigations by the Ministry of Finance into the affairs of Post Fiji Ltd (PFL) in 2007 revealed evidence of high level corruption and abuse of office by directors and senior management (Prime Minister's Office, 2007). According to this report, the board and senior managers of PFL engaged in unethical and corrupt practices in collusion with those they do business with, and at times among themselves, to defraud the enterprise and the state for their personal gains, resulting in a total breakdown of accountability and transparency in the financial operation of the company (Radio New Zealand International, 2008, February 6 & August 22). Similar stories of boardroom corrupt practices were highlighted through the media in many PICs.

Obviously, the absence of board standards and code of ethics in many enterprises presents a significant challenge to addressing boardroom corruption in PICs. In Fiji, a few enterprises have introduced the keeping of a "Register of Interests" to deal with conflicts of interest,

whereby new directors are invited to complete a form declaring their interests when initially appointed (McKee, 2007). However, the concept is still new to many boards, and often, registers were filed away without being updated since they are kept confidential only to individual directors and the board secretary. As a result, the important purpose of the register in ensuring that all directors are aware of each other's interests has often been neglected. Therefore, issues related to board standards, board ethics and conflicts of interest continue to be a real challenge for boards and enterprises in PICs.

#### 2.5.6 Management, board and government relationships

As highlighted in Chapter 1, management, the board of directors and shareholders form the crux of an enterprise's governance system, thus, the relationship between these players is crucial to its success. In PICs, too often relationship issues at the executive and top management levels in enterprises have captured media attention for various reasons. In July 2008, the CEO of the Fiji Development Bank (FDB) was dismissed for what the board claims as irreconcilable differences over management philosophy with the board (Wilson, 2008). Similarly, the media in Fiji reported the dismissal of a particular director with the board of Rewa Rice Ltd (RRL) following allegations of personal differences with the board chairman (Radio Fiji, 2008, April 8). Later that year, the Chairman of RRL board resigned citing frustrations with the government for ignoring board recommendations aimed at improving the country's rice industry (The Fiji Times, 2008, July 19). In other PICs, relationship issues of a similar nature have been reportedly common, hence, they continue to be a serious problem for enterprises and undermine the ability of boards to effectively carry out their roles. This potential effect of board relationships on performance is further discussed in Chapter 3.

### 2.6 Promoting board effectiveness in the PICs

No doubt, the task of ensuring the effectiveness of the board of directors in carrying out their responsibilities is a significant one for PICs. Many PICs have introduced instruments for the purpose of evaluating board and management, and the overall performance of SoEs. For instance, in Fiji's case, the Public Enterprise Act (1996) requires SoEs to submit a *Statement of Corporate Intent* (SCI) at the beginning of each financial year [section 93(2)], which shall indicate the financial and non-financial performance targets for the year [section 95(1)]. In addition, the act requires SoE boards to prepare a *Corporate Plan* in consultation with the line Minister and other relevant Ministers [section 87(1, 2)]. Also, the Act requires SoE

boards to prepare an *Employment and Industrial Relations Plan* (EIRP) which covers major employment and industrial issues of the enterprise [section 108(1, 2)]. Furthermore, the Act requires SoE boards to submit half-yearly reports and annual reports according to the SCI, corporate plan and EIRP (section 101). In essence, these instruments serve as the benchmark against which the performance of the board, management and the entire SoE is evaluated. In Fiji, the Public Enterprise Department is mandated by the act to ensure SoE boards fulfil their obligation under the Act.

Unfortunately, compliance by SoEs to the provisions of the Public Enterprise Act has been poor. A report by the Auditor General (2006), found that six SoEs continuously failed to submit planning documents to the Public Enterprise Department between 2003 and 2005. Also, the report revealed that four SoEs have consecutively failed to submit annual reports between 2002 and 2004 and 10 SoEs did not submit half-yearly reports for the same period. Thus, lack of compliance to the Act has been an ongoing problem. This implies that SoE boards have continuously breached the Act and at the same time, the Public Enterprise Department is not furnished with the information and tools to effectively monitor SoEs. Consequently, the government is poorly placed to oversee SoEs and to respond to crisis situations (Pacific Islands Forum Secretariat, 2005).

In addition, the notion of board evaluation is a sensitive one in PICs. Mostly, PICs are made up of small communities and everyone knows just about everybody, and therefore, it is not always easy for individuals to objectively evaluate the performance of people they know. For instance, directors may collaborate to mark down a more vocal colleague during evaluation. Also, boards with more qualified and experienced members may not seriously value the need of being evaluated. In private sector boards, reports show that boards comprising family members and friends of family members have little interest in developing evaluative processes (McKee, 2007). It is therefore not a surprise that when the idea of board evaluation was raised in the interviews with directors in McKee's 2007 study, it received mixed reactions.

In summary, it can be concluded that the ability of boards in PICs to effectively carry out their responsibilities is impacted by many factors. The influence of socio-political factors on board appointments, terms and conditions of board positions, and the lack of professional development opportunities for directors, makes it difficult for enterprises to attract the services of qualified and experienced professionals to serve on boards. Additionally,

structural issues such as the size, composition and diversity of boards, as well as multiple directorships, have significant implications for board effectiveness. These factors were further complicated by lack of board standards, board ethics, conflict of interest and poor boardroom relationships, which make boards a perfect breeding ground for corrupt practices, particularly in SoEs. To ensure that boards have the ability to add value to enterprises, appropriate reforms are urgently required in the PICs.

## **2.7 Summary**

The performance of public and private enterprises is crucially important to the achievement of economic growth in the PICs. The lack of good corporate governance practices in public and private enterprises continues to affect their performance hence their capacity to contribute to economic growth in the PICs. Corporate governance weakness in the PICs is partially attributable to factors external to these enterprises, but primarily to the effectiveness at which the boards of directors perform their roles. Many of these internal problems were grounded in the way boards were structured and the processes that boards involve, and how these characteristics influence the ability of boards to perform their duties. All such issues deserve careful study. Before addressing the methodology required to investigate these issues in the context of PICs, the next chapter first reviews the literature to highlight what research has been done on the subject and to position this research within the current knowledge of the contribution of boards of directors to firm performance.

Corporate governance research has increased dramatically during the last decade becoming a hot topic amongst academics, practitioners and policy makers. This increasing interest is driven by a growing string of business scandals worldwide (Brown & Caylor, 2004; Harris & Raviv, 2006; Kiel & Nicholson, 2003) and the emerging literature evidence linking corporate governance and firm performance (Brown & Caylor, 2004). This chapter reviews the literature to highlight corporate governance developments, particularly on the role of boards of directors in developed, emerging, and developing economies. The chapter is organised as follows. Section 3.1 defines the corporate governance concept and highlights the role of the board of directors as a governance mechanism. Section 3.2 discusses the main qualifying theories for the role of boards in firms. This is followed by the different approaches to board research in Section 3.3. In Section 3.4, the main roles of the board of directors in firms are discussed. Section 3.5 highlights the processes that boards go through in carrying out their duties and how these processes may affect board performance. In Section 3.6, the key board attributes and how they may affect board performance are discussed, followed by how board attributes can affect board process in Section 3.7. In Section 3.8, inter-board process effects and how they affect board performance are discussed, and lastly, Section 3.9 concludes the chapter.

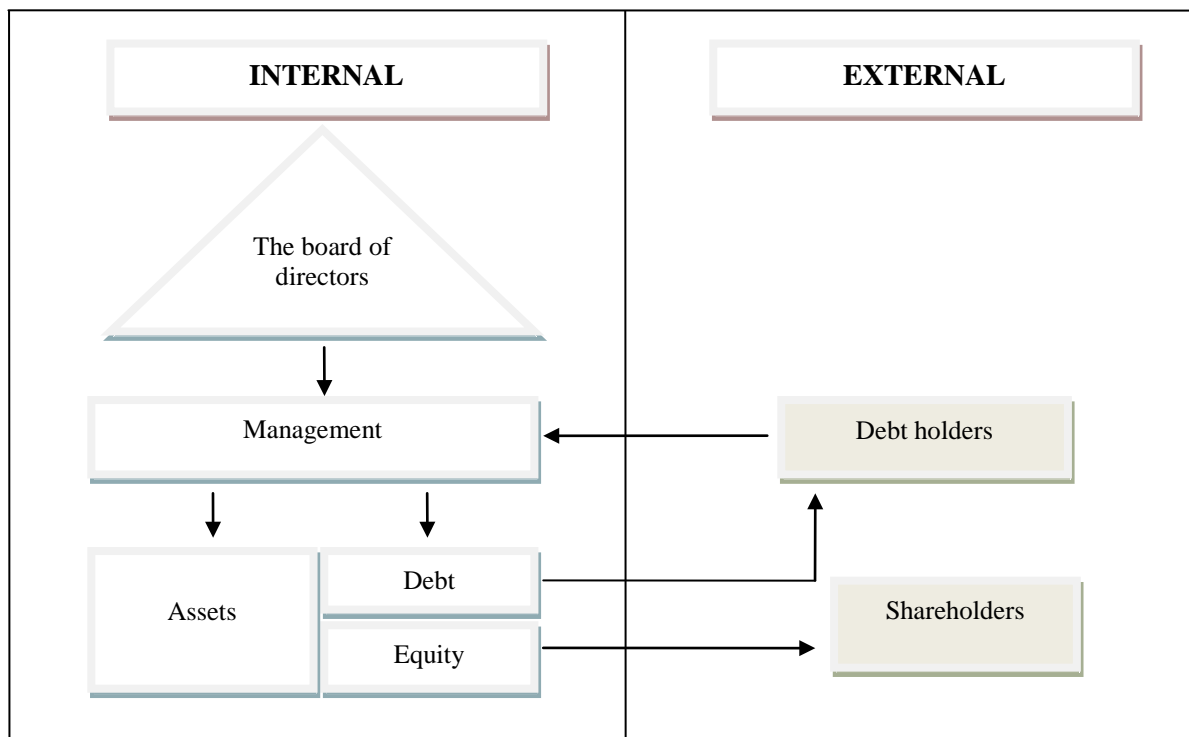
### **3.1 Corporate governance concept and boards of directors**

Corporate governance as a concept is defined in different ways based on one's view of the world. The Cadbury Committee Report (1992) defined it as the system or process by which firms are directed or controlled. This system or process, as highlighted by Shleifer and Vishny (1997), includes the ways in which suppliers of finance to firms assure themselves of getting a return on their investment. In this sense, corporate governance covers the laws, rules, and factors that control the operations of a firm (Gillan & Starks, 1998), as well as the relationships between different people who are involved in the system, i.e. management, boards of directors, shareholders and other stakeholders (OECD, 1999). In essence, a corporate governance system provides the structure through which the objectives of the firm are set and the means by which these objectives are attained and monitored (Plumtree, 2004). A former Auditor-General of Australia, Pat Barret in November 2000, summed this all up by stating that, "*corporate governance is largely about organisational and management*



*performance. It is about how an organisation is managed, its corporate and other structures, its culture, its policies and the ways in which it deals with its various stakeholders. It is concerned with structures and processes for decision making and with control and behaviour that support effective accountability for performance outcomes” (McMaster, 2004:1).*

In Figure 3.1, a simple balance sheet diagram showing the relationships in a firm’s typical corporate governance system is presented. On the left-hand side are the basics of the firm’s internal governance system which includes the management and the board of directors. Here, management acts as an agent of shareholders in deciding which assets to invest and how to finance these investments, either through debt or equity. The board of directors, which is located at the apex of the internal control system, is charged with the oversight role of advising and monitoring management, including the responsibility to hire, fire and compensate managers to safeguard their roles as effective agents of shareholders (Jensen, 1993).



*Figure 3.1 Corporate governance and a balance sheet model of a firm*

*Source: Gillan (2006:382)*

On the right-hand side are the external elements of the firm’s corporate governance system. The two main external elements are the firm’s debt holders and shareholders and they arise from the firm’s need to raise capital from external sources. Inevitably, this situation leads to

the separation between capital providers and those who manage the capital in firms. This is the essence of corporate governance (Gillan, 2006; Gonzalez & Garay, 2003; Jensen, 1993), through which, the suppliers of finance to the firm (debt-holders and shareholders) are assured of getting a return on their investment (Jensen & Meckling, 1976; Shleifer & Vishny, 1997).

Accordingly, firms instigate different mechanisms to address the problems associated with the separation of ownership from management or control. Arguably, the most important one is the board of directors (Barnhart, Marr & Rosenstein, 1994; Kang *et al.*, 2007; Shleifer & Vishny, 1997). The significance of boards of directors as a governance mechanism was first addressed by Adam Smith (1776), when he stated that “*the directors of [joint stock] companies, however, being the managers rather of other people’s money than of their own, it cannot be expected, that they should watch over it with the same anxious vigilance [as owners]...Negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company*” (Hermalin & Weisbach, 2003:9). However, as discussed in the next section, the theoretical qualification for the role of boards of directors in firms has developed on various theoretical fronts since Smith’s work.

### **3.2 Board theories**

Too often, when firms fail to perform, the board and management are two groups that receive most of the criticisms, since most of the activities of the enterprise revolve around them. In PICs, boards in particular have been the subject of public criticism for failing to take their responsibilities seriously and for being too passive, and their inability to provide appropriate leadership over the affairs of the enterprise (Lal, 2006; McMaster, 2004; Singh & Reddy, 2007). The literature highlights at least six theories that are significant to our understanding of the contribution of boards to firms namely; agency theory, stewardship theory, resource-based view, resource dependency theory, stakeholder theory and institutional theory (Gonzalez & Garay, 2003). Each theory is briefly discussed below.

#### **3.2.1 Agency theory**

The underlying assumption in the agency theory is that where management and ownership are separated, management as agents of shareholders may not necessarily act in the best interest of shareholders due to divergence of interests, and therefore, resources may not be expended to maximise the latter’s wealth (Berle & Means, 1932; Gillan, 2006; Gonzalez &

Garay, 2003; Jensen & Meckling, 1976; Shleifer & Vishny, 1997). Hence, agency theorists focus on identifying and strengthening of mechanisms that help discipline management's opportunistic inclinations to reduce negative effects on shareholder wealth (Kosnik, 1987). In this regard, the agency theory views the board of directors as the solution to agency problems in firms through their role as the internal formal link between managers and shareholders and the guardian of shareholder interests (Certo, Lester, Dalton & Dalton, 2006; Choi, Park & Yoo, 2005; Duncan, 2005; Fama & Jensen, 1983; Filatotchev *et al.*, 2005).

### 3.2.2 Stewardship theory

The stewardship theory was initially established as a direct challenge to agency theory (Donaldson & Davis, 1991; Gonzalez & Garay, 2003), in that, it views managers as trustworthy and good stewards of company assets who are not prone to inappropriate conduct (Donaldson & Davis, 1991; Finkelstein & D'Aveni, 1994). It asserts that through appropriate rewards and incentives, managers do not engage in self-serving behaviours hence their actions may be aligned with those of shareholders. Thus, the stewardship theory does not necessarily regard the separation of ownership and control as a problem but instead as a positive development that may potentially work to effectively manage the firm. This is because the depth of knowledge, commitment, and access to current operating information and technical expertise possessed by managers are more important to the effective running of firms than any potential agency issues that may arise (Learmount, 2002). In this regard, the stewardship theory favours the concentration of power and authority in the hands of management rather than the board as the best way to enhance the firm's economic performance.

### 3.2.3 Resource-based view

According to the resource-based view, the firm's internal resources and capabilities are critical for creating its competitive advantage (Ayuso & Argandona, 2007; Baysinger & Hoskisson, 1990). However, firms are often characterised by lack or scarcity of internal resources and internal knowledge (Storey, 1994). Hence, to overcome this situation the board of directors serve as an important source of expertise who compliment management with their experience, knowledge and skills. Through their professional and personal qualifications, board members can be helpful to the firm in providing advice and counsel to managers in areas where inside knowledge is limited or lacking.

### 3.2.4 Resource dependency theory

The resource dependency theory suggests that firms depend on other organisations within society for their economic success, and therefore, it focuses on the external linkages and networks of the firm and the importance of these networks for power within society to enhance the firm's interests (Pettigrew, 1992; Pfeffer & Salancik, 1978). In essence, the board of directors is seen as the means to manage the firm's dependence on external suppliers of resources as well as to enhance and consolidate its position and power in the market (Kosnik, 1987; Pettigrew, 1992). Therefore, resource dependency theory promotes the board as the focal link between the firm and its external network (Kiel & Nicholson, 2003).

### 3.2.5 Stakeholder theory

The stakeholder theory on firms originally focussed on those groups without whose support the firm would cease to exist (Freeman, 1984). However, recently its application has broadened to include any group or individual who can affect or is affected by the activities of the firm (Freeman, 1994; Sternberg, 1997). The key principle in the stakeholder theory is that firms operate by creating value for which others freely trade, hence, they should be managed and governed for the benefit of all stakeholders including customers, suppliers, employees, communities, as well as managers and shareholders. This requires a sound understanding of the needs of the different stakeholders and how they are affected by the activities of the firm (Freeman, Wicks & Parmar, 2004). In this sense, the board of directors serves as the means through which the firm is able to take into account the legitimate interests of stakeholder groups and individuals who can affect (or affected by) the activities of the firm (Donaldson & Preston, 1995; Freeman *et al.*, 2004; Freeman, 1994).

### 3.2.6 Institutional theory

The institutional theory asserts that over time conventional behaviour or practices in organisations, including the role of boards of directors, is shaped by the institutional environment (DiMaggio & Powell, 1983; Eisenhardt, Kahwajy & Bourgeois, 1997; Fried, Bruton, Hisrich & Dalton, 1998; Judge & Zeithaml, 1992; Meyer & Rowan, 1977; Peng, Tan & Tong, 2004; Powell, 1991; Scott, 2000; Zucker, 1983, 1987). Scott's (2000) three pillars of institutionalisation - *regulative*, *normative*, and *cognitive*- are significant to our understanding of the evolving nature of board structure, practices and behaviour. Based on the regulative pillar, the enactment of legal/regulatory requirements such as corporate law or 'coercive

isomorphism' (Meyer & Rowan, 1977; Scott, 2000), mandates boards to be structured and behave in a certain way. Similarly, based on the cognitive pillar, cognitive pressures may also compel firms and boards to behave the way they do (Peng, 2004). Furthermore, with or without the presence of regulator and cognitive pressures, changes in board structure and process may also be influenced by normative pressures (Luoma & Goodstein, 1999; Miller-Millesen, 2003). According to the normative pillar, firms or boards embrace the norms, values, beliefs, and expectations that will not cause them to be seen as different and consequently singled out for criticism. This implies that firms going through performance difficulties are likely to make changes based on normative pressures (Boeker & Goodstein, 1991; Meyer & Rowan, 1977), by adopting structures and processes to enhance the normative approval they receive, or their moral legitimacy (Luoma & Goodstein, 1999; Scott, 2000; Suchman, 1995), even when these pressures may get in the way of the effective performance of the firm (D'Aunno, Sutton & Price, 1991). Consequently, as noted by Zucker (1987), actions are taken by firms and boards in a specific way just because they have become an accepted way of accomplishing them.

The above theories are significant to our understanding of the roles of boards of directors in corporate governance, in developed, emerging and developing economies. Each theory is significant to the investigation in this thesis since they explain how the structural attributes of boards may influence the processes boards go through, and hence, their ability to perform the roles expected of them. In accordance, these theories were referred to throughout this chapter.

### **3.3 Different approaches to board research**

The literature on boards of directors follows two broad methodological approaches, the direct and process approach. First, the direct approach relates to the majority of studies that directly examined the relationship between the board of directors and firm performance based on the assumption that key board attributes such as size, composition, diversity, etc., have a direct effect on performance (Daily & Dalton, 1994; Dalton, Daily, Ellstrand & Johnson, 1998). This approach grounded on the "congruence assumption" phenomenon (Lawrence, 1997) and strengthened by the difficulty in measuring or directly observing board process (Levrau & Van Den Berghe, 2007a; Priem, Lyon & Dess, 1999), assumes that director behaviour can be successfully speculated and inferred from board demographic characteristics (Judge & Zeithaml, 1992).

The direct approach, however, has been criticised for two reasons. First, it implicitly regards board process as a “black box”, ignoring the potential impact of process on the ability of boards to perform their duties. According to Pearce and Zahra (1992), the complexities of the associations between organisational and group variables makes causal relationships difficult to be reliably claimed and supported without considering the processes involved. Hence, directly relating board attributes to firm performance does not progressively help in our understanding of the contribution of boards of directors and how they perform (Pettigrew, 1992). Secondly, empirical findings from direct approach studies have been frequently scant, ambiguous and inconclusive (Kakabadse, Kakabadse & Kouzmin, 2001; Kiel & Nicholson, 2003; Zahra & Pearce, 1989). Some studies claim a positive relationship between the board of directors and firm performance (Chaganti, Mahajan & Sharma, 1985; Daily & Dalton, 1993; Dalton *et al.*, 1998; Kiel & Nicholson, 2003; Pearce & Zahra, 1992; Provan, 1980), while others fail to establish any positive relationship (Conyon & Peck, 1998; Eisenberg, Sundgren & Wells, 1998; Gales & Kesner, 1994; Yermack, 1996). Thus, these studies fail to explain which characteristics lead to which outcomes (Coles, McWilliams & Sen, 2001; Dalton *et al.*, 1998; Johnson, Daily & Ellstrand, 1996; Zahra & Pearce, 1989); and as a result, the corporate governance literature is fraught with conflicting and inconclusive findings (Kakabadse *et al.*, 2001). In a way, this implies that a more complex and indirect relationship exists between the board and firm performance than often assumed. Therefore, alternative explanatory theories and models that recognise the influence of board process on performance are required to develop sound understanding of the contribution of the board to firm performance (Daily, Dalton & Cannella Jr., 2003; Zahra & Pearce, 1989).

In remedy, this study adopts the process approach, which emerges as the preferred approach to developing better understanding of the role of the board in firms. This approach is based on the rationale that the performance of any group is as much a function of its inputs and processes hence the right processes must be in place to transform these inputs into desired performance outcomes (Buchanan & Hucznski, 1997). In accordance, the process approach promotes the collection and analyses of data on board process instead of directly linking board attributes to firm performance (Dalton *et al.*, 1998; Forbes & Milliken, 1999; Kakabadse *et al.*, 2001; Maassen, 1999; Zahra & Pearce, 1989). According to Pettigrew (1992), our knowledge of what boards should look like must be supplemented with evidence of what boards actually do and how they behave. Thus, to have a better understanding of how boards influence the performance of firms, research cannot afford to ignore the processes in

which boards involve in carrying out their duties (Forbes & Milliken, 1999; Levrau & Van Den Berghe, 2007a; Ong & Wan, 2008; Phan, 1998).

Recent studies have favoured the process approach based on a number of reasons. First, the relationship between different attributes of the board and firm performance is a complex one hence the impact may not be a one-to-one effect (Finkelstein & Hambrick, 1996; Forbes & Milliken, 1999; Lawrence, 1997; Levrau & Van Den Berghe, 2007b; Ong & Wan, 2008; Pettigrew, 1992). Secondly, the beliefs and behaviours of directors cannot be reliably inferred from board attributes (Melone, 1994; Walsh, 1988). Therefore, it is unreliable to assume a direct link between board attributes and firm performance (Forbes & Milliken, 1999; Lawrence, 1997). Thirdly, board attributes may have multiple implications for board performance, thus, considering process factors in board research may improve our knowledge and understanding of the dynamics of board operations (Amason & Sapienza, 1997; Smith *et al.*, 1994). Lastly, evidence from recent process studies revealed encouraging results in explaining some of the ambiguities and inconsistencies in mainstream direct approach research on board issues (Huse, 2000; Nicholson & Kiel, 2007). As a result, there is overwhelming consensus that board research needs to address what boards do, how they function and the extent to which board process affects performance (Daily *et al.*, 2003; Finkelstein & Mooney, 2003; Forbes & Milliken, 1999; Huse, 2005; Levrau & Van Den Berghe, 2007a; Nicholson & Kiel, 2007; Ong & Wan, 2008).

According to van Ees, van Der Laan and Postma (2008), the process approach to board research has developed in three groups. The first group of studies addressed issues like executive succession and director effectiveness in certain tasks (Westphal, 1998; Westphal & Zajac, 1998). While this group contributed to develop theories, they still relied on board attributes and failed to consider the internal working processes of boards. The second group explored board behaviour in detail though at a smaller scale and provided insights into the operations of boards (Huse, 1998; McNulty & Pettigrew, 1999). Still, the methods used in these studies were mainly qualitative and tailored to specific case studies which made it difficult for researchers to build on their findings (van Ees *et al.*, 2008). Lastly, the third group covers a stream of recent articles that were mainly theoretical in nature and based on the notion that the consideration of board process provides a better insight into the behaviour of boards which helps to explain the relationship between board input variables and output variables (Daily *et al.*, 2003; Finegold, Benson & Hecht, 2007; Finkelstein & Mooney, 2003;

Forbes & Milliken, 1999; Huse, 2005; Levrau & Van Den Berghe, 2007a; Nicholson & Kiel, 2007; Ong & Wan, 2008). Inarguably, this group provided better analytical models to examine the role of process in the relationship between board inputs and outputs.

Nevertheless, the practicality of testing process models remains a challenge, given the difficulties associated with conducting research into the internal operations of the board. Not only that, but the dynamics and multiple causes and effects of the different concepts incorporated in process models require use of sophisticated data collection techniques beyond traditional survey methods. Hence, despite a recent increase in conceptual papers highlighting the need to consider process in board research, the empirical test of process models is rare. In fact, at the time this research commenced, there was a dearth of governance literature examining the impact of board process on board performance. To the author's knowledge, only Ong and Wan (2008) and van Ees *et al.* (2008) have empirically examined selected board attributes and board processes in relation to board performance, respectively, using data obtained from a survey of boards in Singapore and the Netherlands. Indeed, their result exemplifies the relevance of different board processes for explaining board performance. Otherwise, there is no evidence to suggest that a similar investigation was undertaken in developing economies.

In PICs specifically, a few papers highlight that the factors affecting the performance of boards are well grounded in the firm's ownership structure, the board's structure and the processes that boards involve to carry out their duties (Amosa, 2007a, 2007b; Duncan, 2005; Lal, 2006; McMaster, 2004, 2005; Singh & Reddy, 2007; Tuhaika, 2007). However, there has been no empirical research into the potential influence of process in relation to other board variables, and how these relationships affect the performance of boards. Therefore, based on the conceptual framework depicted in Figure 3.2, this thesis proposes that instead of directly linking board attributes and process to firm performance, it is appropriately important to first determine how attributes and process affect the ability of boards to perform their duties. In accordance, the rest of this chapter reviews the literature on each of the elements in the framework and the perceived relationships between these components. But first, in the next section, the literature is reviewed to highlight the roles expected of boards of directors in firms.



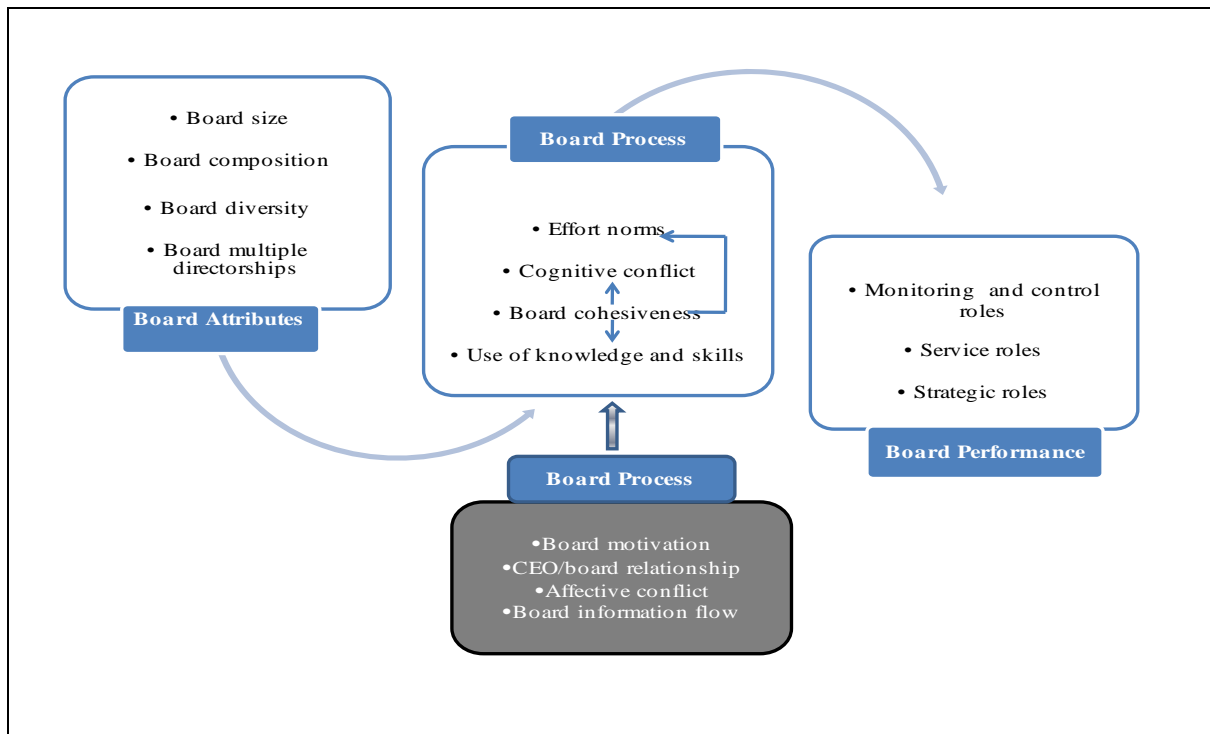


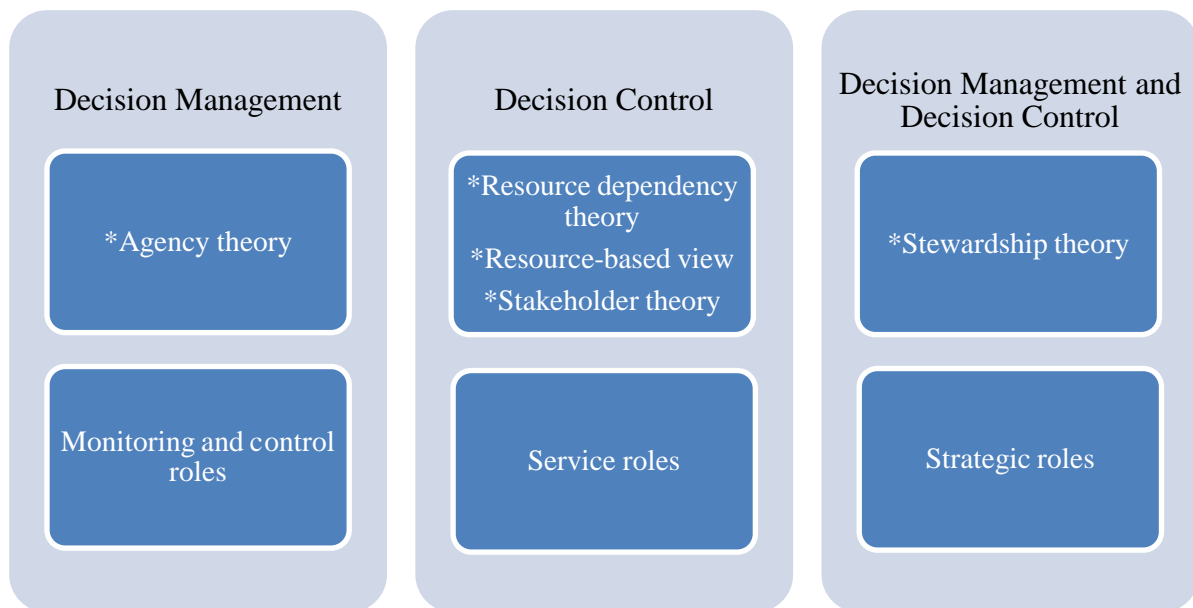
Figure 3.2 Conceptual framework of board attributes, board processes and board performance

### 3.4 Board role performance

Effective board performance is perceived as a requirement for sound firm performance based on the assumption that effective boards are likely to positively influence firm performance. In essence, there is concurrence that board effectiveness occurs through the execution of a set of roles (Gopinath, Siciliano & Murray, 1994; Johnson *et al.*, 1996; Levrau & Van Den Berghe, 2007a; Lipton & Lorsch, 1992; Maassen, 1999; Nicholson & Kiel, 2004b; Zahra & Pearce, 1989). Hence, it is only appropriate to determine the board's contribution in terms of its ability in performing the roles expected of it. Research show that boards perform at least three critical roles namely, monitoring and control roles, service roles, and strategic roles (Gopinath *et al.*, 1994; Hung, 1998; Johnson *et al.*, 1996; Levrau & Van Den Berghe, 2007b; Lipton & Lorsch, 1992; Maassen, 1999; McNulty & Pettigrew, 1996; Nicholson & Kiel, 2004b; Vance, 1983; Zahra & Pearce, 1989). As featured in Figure 3.3, these roles are based on the theories discussed earlier which are related and not necessarily mutually exclusive (Maassen, 1999). In practice, the strategic role may overlap with the service and control roles implying that two or more roles can very well operate concurrently (Maassen, 1999; Zahra, 1990). Therefore, given the impracticality in untangling board roles, an integrated approach to determining board performance is necessary (Bhagat & Black, 2002; Mintzberg, 1983; Nicholson & Kiel, 2004a).

### 3.4.1 Monitoring and control roles

Corporate governance research has mainly centred on the monitoring and control role of the board of directors. According to Nicholson and Kiel (2004), this dominance was largely driven by three factors: the growing legislation of board duties, the fallout from corporate scandals, and the increasing popularity of agency theory.



*Figure 3.3 Theoretical perspectives on the role of the board of directors*

*Source: Maassen (1999:33)*

First, the board's role in monitoring and control is mainly based on agency theory. The agency perspective suggests that as the firm's size increases, its ownership diffuses which leads to the decrease in ownership power and the subsequent increase in managers' discretion over the firm (Berle & Means, 1932; Fama & Jensen, 1983; Jensen & Meckling, 1976; Zahra & Pearce, 1989). Inevitably, this situation leads to the separation of ownership and control in firms. In effect, agency theorists are concerned that the increase in management power may enable them to pursue self-interests that differ from those of shareholders (Berle & Means, 1932; Herman, 1981; Pathiban & Rahul, 1996). Thus, since individual owners (shareholders) generally lack the resources or the economic incentives to participate in monitoring, managerial actions often go unchecked, resulting in the reduction of shareholder wealth (Pathiban & Rahul, 1996). Accordingly, the board acts as the shareholder's first line of defence against incompetent and self-serving managers (Weisbach, 1988). In this regard, the board serves as the mechanism to address conflicts of interest that may arise between

managers and shareholders by bringing their interests into congruence to promote firm efficiency and hence to maintain high levels of shareholder value (Hermalin & Weisbach, 2003; Johnson, Hoskisson & Hitt, 1993).

Secondly, cases of high profile scandals in developed countries including the USA such as Enron, WorldCom, Arthur Anderson, and in Australia and New Zealand such as HIH, OneTel, Qantas NZ, Air New Zealand and Ansett Australia, highlight serious weaknesses in corporate governance which led to massive destruction of shareholder wealth in many countries (Burrough & Helyar, 1990; Haleblian & Rajagopalan, 2006; Jackling & Johl, 2009; Nicholson & Kiel, 2004a; van der Walt & Ingle, 2003). In many cases, the board's failure to exercise effective monitoring and control over management and the assets of the firm was identified as the root cause. For instance, the US senate report on Enron revealed that the board failed in its fiduciary duty by not questioning management regarding complicated financial transactions in which the company was involved (Adams, 2008). In Asia, reports also confirmed that lack of vigilance by boards have contributed to corporate failures that caused the 1997 financial crises in a number of countries (Baek, Kang & Park, 2004; Cho & Kim, 2007; Joh, 2003; Mitton, 2002). In PICs, similar conclusions were reached following the collapse of important organisations such as the National Bank of Fiji (NBF) and the Development Bank of Solomon Islands (DBSI) in 1995 and 2004, respectively. Consequently, we have witnessed increasing calls for boards to exercise greater vigilance in exercising their monitoring and control functions in firms.

Thirdly, the board's oversight and control duties have increased significantly following recent developments that involve the legislation of board duties in developed countries such as the Sarbanes Oxley Act (USA), CLERP 9 (Australia), Combined Code (UK), and the OECD Code (Jackling & Johl, 2009; Nicholson & Kiel, 2004a). These developments occur as firms increasingly become an integral part of the society, and as stakeholders demand higher standards of governance, greater accountability and professionalism from boards (Ingle & van der Walt, 2001). In a sense, these developments enhance existing company by-laws and capital market listing rules that require boards to exercise effective control over management in the interest of shareholders (Vagliasindi, 2008). In PICs, similar trends have been experienced and regulatory institutions have responded by focusing on compliance issues, emphasising tougher regulations, detailed codes of practice and more comprehensive

regulations as discussed in Section 2.2.3. In effect, this has led to increasing legislation of board duties in PICs.

In light of the above, there is little doubt that monitoring and control will become an undeniably critical role for boards in PICs enterprises, just as it is in developed countries. Importantly, the crucial question is about the ability of boards to exercise effective control and monitoring over management to safeguard shareholders' interests (Walsh & Seward, 1990). In fact, some critics perceive boards as weak monitoring devices hence their ability to monitor and control management behaviour is practically limited (Maher & Anderson, 1999) because its main control methods of hiring and firing are only one-off measures (Brennan, 2006). Furthermore, others argue that the monitoring and control activities of the board vary with economic conditions and the performance of the firm, suggesting that boards can be passive during periods of satisfactory performance, and therefore, they tend to be reactive in their assessment of management behaviour (Demb & Neubauer, 1992; Mizruchi, 1983). In this regard, monitoring and control is seen as only important in extra-ordinary circumstances as opposed to ordinary day-to-day operations of the firm. Nevertheless, these criticisms do not necessarily diminish the board's responsibility for monitoring and control, but instead, they highlight the urgency for boards to significantly improve their ability to monitor and control the activities of firms.

#### 3.4.2 Service roles

The board's service roles are mainly based on three theories; namely, the resource-based view, resource dependency theory, and stakeholder theory (Boeker & Goodstein, 1991; Boyd, 1990; Gabrielsson & Huse, 2005; Pfeffer & Salancik, 1978). As highlighted earlier, the resource-based view regards the board as an important source of expertise which compliments management with their experience, knowledge and skills, and therefore, it provides a critical competitive advantage for firms (Ayuso & Argandona, 2007; Baysinger & Hoskisson, 1990). In this regard, the board through the professional and personal qualifications of its members supports the management in providing appropriate advice and counsels in areas where inside knowledge of the firm is limited or lacking.

Resource dependency theory is based on the notion that firms require resources from the external environment to add value and create outputs. Resources may include finance and capital (Burt, 1983; Mizruchi & Stearns, 1988), links to key suppliers (Banerji & Sambharya,

1996), customers (Frooman, 1999) and significant stakeholders (Freeman & Evan, 1990) which are important for the firm's success. A firm that has better linkage to its external environment is more likely to have adequate access to these resources. Hence, the board is seen as an important boundary spanner for the firm and its environment by co-opting external organisations with which the firm is interdependent (Dalton & Daily, 1999; Johnson *et al.*, 1996; Pfeffer & Salancik, 1978). For example, evidence from developed countries suggests that executives of financial institutions are appointed as outside directors to assist in securing credit on the firm's behalf when required (Daily *et al.*, 2003; Stearns & Mizruchi, 1993). Similarly, some firms appoint partners in legal firms as outside directors to provide legal advice, either in board meetings or in private communication with the executives of the firm that may have been otherwise more costly for the firm to secure (Daily *et al.*, 2003). In PICs, similar practices also exist where firms invite individuals with government connections and experience to their boards to assist the board in lobbying and advocacy of the firm's interests (McKee, 2007). Indeed, research suggests that boards with outside directors enjoy a much better access to external resources (Daily *et al.*, 2003; Hillman, Cannella & Paetzold, 2000; Palmer & Barber, 2001). Accordingly, the resource dependency theory focuses on the appointment of representatives from interdependent organisations as a means of gaining access to resources critical to the firm's success (Pfeffer & Salancik, 1978).

The stakeholder theory suggests that boards should not only serve as boundary spanners but must also manage stakeholders and enhance corporate social performance (Freeman, 1984). This implies that boards should comprise members representing the different stakeholders of the firm to legitimise (Evan & Freeman, 1993) and safeguard stakeholders' interests (Freeman & Evan, 1990). Therefore, the board's objective is to identify the firm's key stakeholders and manage any potential conflicting interests to enhance its corporate social performance. In this regard, the board is the most appropriate mechanism through which the firm can effectively manage its relationship with key stakeholders. Indeed, as discussed in Section 2.5.1, some organisations in PICs such as the national provident funds emphasise representative boards which demonstrates their view of the significance in accommodating the wider stakeholder interests in the organisation's decision making process.

According to Mintzberg (1983), boards perform at least four specific service tasks. Boards perform the task of co-opting of external influencers as a device to secure connections to important stakeholders in their business. Also, boards must be active in establishing contacts

and in raising funds for the firm. This task deals with the control firms have over the availability of important external resources, hence, it concentrates on establishing contact between the board and outsiders to secure and obtain critical resources required by the firm, i.e. fundraising (Maassen, 1999). Boards must also act to enhance and maintain the reputation of the firm. This includes representing the interest of the firm in the community, performing ceremonial functions on behalf of the firm, presiding over shareholder's annual meetings and representing the firm at press conferences and public meetings (Pearce & Zahra, 1992). Lastly, boards should provide quality advice and counsel to management through involvement in the formulation and implementation of decisions. This task overlaps with the strategic roles discussed below, again confirming that the three roles are not mutually exclusive (Daily & Dalton, 1992; Maassen, 1999). Nevertheless, as highlighted in Sections 2.5.1 and 2.5.3, the lack of clarity in board appointments, the lack of induction programs for new directors and the overall lack of opportunity for professional development of directors in PICs, implies that very few directors would be aware of their service functions as board members.

### 3.4.3 Strategic roles

Debate on the board's involvement in the strategic affairs of the firm follows two opposing schools: the active school and the passive school (Golden & Zajac, 2001; Levrau & Van Den Berghe, 2007a). The passive school argues that boards have little involvement in the strategic functions of the firm because most of these tasks are fulfilled by management (Brennan, 2006; Pye, 2002). This school further argues that even if the board (through its non-executive directors) may have a role to play, strategies are rarely initiated by boards (Pye, 2002). Therefore, boards are often regarded as a "rubber stamp" tool of management that has little or no impact on the strategic direction of the firm (Hendry & Kiel, 2004; Hoskisson, Johnson & Moesel, 1994; Judge & Zeithaml, 1992). In this regard, the board's contribution to strategy is limited compared to management. Subsequently, studies on strategic roles have mainly focussed on the activities of overseeing and ratifying strategies, ignoring the board's participation in the formulation of strategies (Maassen, 1999).

In contrast, the active school regards boards as independent bodies that should participate in strategy formulation and guide management toward the achievement of missions and goals (Hung, 1998; Maassen, 1999). The passive school is grounded on the stewardship theory which regards the manager as a responsible steward, and therefore, is unlikely to

misappropriate resources being motivated by non-financial incentives (Boyd, 1995; Davis, Schoorman & Donaldson, 1997; Donaldson & Davis, 1991; Hung, 1998). In assuming that the manager will not engage in self-interest behaviours, the firm must have in place a structure that facilitates the manager's aspiration for high performance (Donaldson & Davis, 1991; Muth & Donaldson, 1998). In accordance, the stewardship theory promotes consensus by encouraging boards to act as an important strategic device in serving management with their professional expertise through participation in strategic decision-making (Carpenter & Westphal, 2001; Johnson *et al.*, 1996; Levrau & Van Den Berghe, 2007a).

Studies that endorsed the active school argued that in order for firms to remain competitive, boards need to go beyond their traditional control and service functions to actively participate in strategic activities (Demb & Neubauer, 1992; Finkelstein & Hambrick, 1996; Hendry & Kiel, 2004; Ingley & van der Walt, 2001; Ruigrok, Peck & Keller, 2006; Stiles, 2001; Zahra & Pearce, 1990). According to Zahra (1990), boards are expected to review, evaluate, analyse and propose changes, thus even if the task of developing new strategies may directly rest with management, boards must still engage in recommending changes to existing strategies. This means boards must be involved in carefully refining strategic plans, probing managerial assumptions about the firm and its environment, and ensuring that the board agrees with management on the strategic direction of the firm (Maassen, 1999).

According to research, firms that use their board as a platform for actively developing the business are more likely to be successful, therefore, boards must not only ensure that strategies are well formulated but also properly implemented (Sadler, 1993). Responsible and effective boards should require management to initiate corporate strategies, be involved in the review of these strategies on a periodical basis, use strategies as a point of reference for board decisions in general, and discuss the risks related to the strategy adoption with management (Andrews, 1980). Hence, boards should not depend entirely on management to initiate strategies but they should participate in defining and guiding the firm's mission through involvement in the development of strategies as well as the implementation and monitoring of these strategies (Gopinath *et al.*, 1994). This is a sensible thing for boards since they increasingly draw their membership from outsiders, and through the board's participation in strategic decisions, directors are encouraged to utilise their expertise and skills to benefit the board (Demb & Neubauer, 1992). As noted by Kiel and Nicholson

(2003), the broad range of experience available within a board is valuable in enhancing the efforts of management in strategic decision-making activities.

According to Zahra (1990) and Zahra and Pearce (1989), boards can be involved in the strategic activities of the firm through: (1) the provision of advice and counsel to the CEO and management, (2) the careful refinements of strategic plans, (3) the initiation of its own analysis or suggestion of alternatives, (4) the probing of managerial assumptions about the company and its environment, and (5) by ensuring that agreement exists among executives on the company's strategic direction. Essentially, these tasks form the strategic activities of the board by allowing boards to be involved with management in the development of strategies as well as the opportunity to make strategic changes during times of crisis. In fact, evidence from developed countries suggests that firms are increasingly requiring their boards to be involved in strategic decision-making activities (Demb & Neubauer, 1992; Finkelstein & Hambrick, 1996; Hendry & Kiel, 2004; Stiles & Taylor, 1996). Contrastingly, evidence from PICs suggest that boards are seldom involved in the development of strategies which means they basically act as rubber stamps for strategies proposed and initiated by management (Lal, 2006; McKee, 2007).

Overall, boards are mostly seen as a monitoring and control mechanism in firms. This is still very much the case in many PICs hence the board's involvement in service and strategic activities is minimal. By contrast, firms in developed countries have increasingly seen the need to encourage their boards to perform broader responsibilities that include service and strategic tasks, and therefore, board appointments are normally conducted to attract the knowledge, skills and experience required for the board to effectively perform these roles (Bhagat & Black, 2002; Nicholson & Kiel, 2004b). Correspondingly, boards in PICs must embrace broader functions beyond their monitoring and control roles to participate in service and strategic tasks to significantly contribute to firm success. However, research suggests that the ability of boards to effectively perform these roles is likely to be influenced by the structural attributes of the board and the processes boards are involved, in carrying out their duties. Before discussing how board attributes relate to board performance, the next section reviews the literature to highlight how board process can influence board performance.

### **3.5 How board process affects board performance**

Board process refers to the decision-making activities of the board as well as the behaviour of directors on the board (Ong & Wan, 2008), which affects the board's ability to perform its



roles (Finkelstein & Hambrick, 1996; Forbes & Milliken, 1999; Levrau & Van Den Berghe, 2007a; Nicholson & Kiel, 2007; Ong & Wan, 2008; Pettigrew, 1992). A review of the literature on organisational groups revealed that different processes are likely to affect the performance of boards which have relevance to boards of directors in PICs. These processes are discussed below.

### 3.5.1 Effort norms

*Effort* is an individual-level construct (Forbes & Milliken, 1999) and on its own, is an outcome of motivation which represents the vigour of an individual's behaviour or total cognitive behaviour that one gives to a target task (Forbes & Milliken, 1999; Kanfer, 1992; Ong & Wan, 2008). In interdependent groups like boards, the individual effort of members must be channelled in a cooperative manner to achieve group tasks. This occurs through the existence of norms in groups which exert influence on member behaviour by channelling individual effort toward group task (Feldman, 1984; Forbes & Milliken, 1999; Goodman, 1986; Steiner, 1972). In this sense, *norms* denote standards of behaviour for groups and larger social systems (Ong & Wan, 2008). Therefore, the concept of *effort norms* represents a set of shared beliefs and expected behaviours of groups for the performance of group tasks (Forbes & Milliken, 1999; Ong & Wan, 2008; Wageman, 1995). In theory, strong *effort norms* are expected to impact positively on the individual efforts of group members towards group performance (Forbes & Milliken, 1999; Steiner, 1972; Wageman, 1995).

Correspondingly, boards that have standards and expectations promoting high-effort behaviours among their members, are more likely to be effective in performing their roles (Forbes & Milliken, 1999). These standards and expectations may include devotion of sufficient time to board tasks, actively seeking information, and active participation in board discussions (Petrovic, 2008). Additionally, Nadler (2004) suggests that effective boards have norms regarding director honesty, constructive inputs, willingness to question and challenge colleague directors, actively seeking the views and contributions of other directors, and devotion of appropriate time to board issues. Nadler defined these norms as "board culture" which is derived from directors' shared beliefs regarding preparation and participation, including shared values of mutual respect between directors and the responsibility and accountability for the firm's performance.

In PICs, at least three factors signify the importance of “effort norms” to the performance of boards. Firstly, as highlighted in Section 2.2, culture in PICs is generally defined by a sense of family, clan, and ethnic identity. Given this strong cultural identity, there is a tendency for directors to carry strong unique cultural values into the boardroom. Because of this, “strong effort” norms are crucial to ensure members are committed to performing board tasks to the expected standard. Secondly, the strong political and socio-cultural influence on board appointments in PICs means that members are more likely to show loyalty to those who facilitated their appointment and those they represent. Hence, “strong effort” norms are critical for the effective execution of board responsibilities. Also, directors tend to have different motives for accepting appointments on boards (van der Walt & Ingley, 2003). Some directors may have genuine motives to serve on boards; however, others tend to be driven by self-centred motives such as personal business interests, board fees and allowances (McKee, 2005). Strong effort norm behaviour within the board is therefore important to ensure that there is shared responsibility and accountability for board performance (Forbes & Milliken, 1999; van Ees *et al.*, 2008).

### 3.5.2 Cognitive conflicts

Three types of conflicts are likely to occur in groups such as boards which are interdependent and faced with complex decision-making tasks, namely *cognitive or task-related conflicts*, *affective or interpersonal conflicts*, and *process conflicts* (Jehn, 1995; Jehn & Mannix, 2001; Monks & Minow, 1995). Here, cognitive conflict is examined to determine its potential effect on board performance, while affective conflict is examined later in Section 3.5.7.

According to Forbes and Milliken (1999:494), cognitive conflicts are “*conflicts pertaining to the task-oriented differences in judgement among members of a group*”. This conflict is distinguished from other forms of group conflict since it focuses on disagreements related to the content of tasks being performed due to different viewpoints, ideas and opinions expressed by individuals within groups (Jehn, 1995). In boardrooms, task-related disagreements arise due to the complexity and ambiguity of issues faced and also because directors are liable to characterise issues differently and hold different opinions about the appropriateness of board responses (Dutton & Jackson, 1987). In this regard, cognitive conflict differs from effort norms in that the former is concerned with the presence of issue-related disagreements while the latter refers to group expectations regarding the intensity of individual behaviour and input (Forbes & Milliken, 1999).

Unlike other types of group conflicts, cognitive conflict is by no means a bad thing for boards of directors. Instead, cognitive conflict can be useful for boards because it actually involves the use of critical and investigative interaction processes between members (Amason, 1996). The presence of critical analysis and discussions during board meetings is likely to promote effective monitoring and control by the board. Specifically, the occurrence of disagreement and critical investigation on boards often require the CEO and executive directors to explain and justify important strategic decisions through modification or improvement (Forbes & Milliken, 1999). Hence, through cognitive conflicts the management is reminded of the power and role of the board as well as the importance of considering shareholder interests beyond the boardroom, indirectly portraying the message that the board will not simply “rubber stamp” management decisions (Ong & Wan, 2008). Therefore, cognitive conflict can improve the monitoring and control activities and performance of boards.

Furthermore, cognitive conflict is also linked to the decision-making processes in groups. For instance, studies claimed that cognitive conflict leads to the consideration and careful evaluation of alternatives, and therefore, it enhances the quality of strategic decisions, particularly in uncertain environments (Eisenhardt *et al.*, 1997; Jackson, 1992; Milliken & Vollrath, 1991). Thus, group techniques that induce cognitive conflicts can contribute to effective strategic decision-making in groups (Schweiger, Sandberg & Ragan, 1986). Additionally, the inclusion of multiple viewpoints and the exchange of both positive and negative comments within groups are likely to facilitate group solutions which contribute to the quality of decision-making within groups (Wanous & Youtz, 1986; Watson & Michaelsen, 1988). In this sense, cognitive conflict can improve the quality of board decisions because the synthesis that emerges from the conflict is generally superior to individual perspectives of directors (Schweiger & Sandberg, 1989). Therefore, cognitive conflict can positively affect board performance by enhancing the board’s service and strategic abilities (Jehn, 1995).

Likewise, the nature of tasks expected of boards in PICs also requires directors to engage in cognitive discussions. In particular, as discussed in Section 2.4.3, the ongoing poor performance of SoEs in PICs requires directors to critically examine the activities and operations of these enterprises. Moreover, since the make-up of boards in PICs is often characterised by different social backgrounds and motivations, the board as a group must avoid the tendency to be muddled by personal differences and conflicts of interest by

focussing time and effort on key task-related issues that are critical to the success of the firm. In effect, the focus of members on task-related issues as opposed to personal issues is likely to increase in-board cognitive conflicts which consequently lead to effective board performance.

Nevertheless, studies have also cautioned against excessive cognitive conflicts in groups like boards (Forbes & Milliken, 1999; Li & Hambrick, 2005; Petrovic, 2008; Priem, 1990). This is because excessive task conflicts can potentially create emotions that reduce interpersonal interaction among directors which further causes director dissatisfaction and withdrawal from board matters, consequently creating communication problems that inhibit the board's ability to effectively perform its roles. This indicates that cognitive conflict is useful to boards to a certain level but as the conflict becomes too excessive, it can potentially disrupt the effectiveness of boards.

### 3.5.3 Board cohesiveness

The literature defined *board cohesiveness* as the degree to which directors are attracted to work with each other and are motivated to remain together on the board (Ong & Wan, 2008; Shaw, 1981; Summers, Coffelt & Horton, 1988). The significance of cohesiveness to boards is based on previous studies on organisational groups. According to Isbella and Waddock (1994), the attractiveness of group members to each other may lead to higher levels of satisfaction and commitment to group tasks. Similarly, Guth and MacMillan (1986) noted that socially integrated groups exhibit a high level of cooperation, frequent communication and group identification which enhance the chances of success in the implementation of group decisions. Likewise, O'Reilly *et al.* (1989) found that social integration and consensus at the group level is positively related to the effectiveness of strategic decision roles. These studies highlight the significance of cohesiveness to the success of organisational groups. On this basis, recent articles have related the importance of cohesiveness to board performance (Forbes & Milliken, 1999; Levrau & Van Den Berghe, 2007b; Ong & Wan, 2008). As noted by Forbes and Milliken (1999:493), "*boards are confronted with complex, ambiguous and interactive tasks; hence, much of the work that boards must do in order to produce effective outcomes involves cooperative decision-making and joint efforts*". No doubt, the level of interpersonal attraction among board members is likely to influence the effectiveness with which boards perform their roles (Williams & O'Reilly, 1998). Because of this, directors need to work together by mutual interaction and by sharing information and resources to

effectively contribute to the performance of boards. In this regard, cohesiveness is important to enable the board to transform itself from a loose aggregation of individuals into an effective team (Carter & Lorsch, 2004; Levrau & Van Den Berghe, 2007b).

In addition, boards normally comprise part-time members who only meet occasionally hence the relationship between directors and their inclusion on the board is only a partial one (Forbes & Milliken, 1999; Weick, 1979). As noted by Park (1995), the part-time involvement of directors is indeed a cause for the ineffectiveness of boards. Therefore, boards need to function as a collegial team in which the various contributions of directors are blended to facilitate judgement and decisiveness (Charan, 1998). This means that a minimum level of cohesion among directors must be present to capture the affective dimension of directors' inclusion on the board, their sense of connectedness and exchange relationships which reflects the board's ability to continue working together as a team (Austin, 1997; Forbes & Milliken, 1999; Levrau & Van Den Berghe, 2007b). In effect, cohesiveness facilitates collaboration and communication among directors which leads to positive influences on board performance (Williams & O'Reilly, 1998). The point is that, directors must be able to demonstrate some sense of liking for each other and to be part of the board as a group; otherwise, they cannot be expected to interact and integrate easily. In fact, recent studies on director perceptions revealed that directors value the chemistry of the board and the team spirit of their colleagues as important elements of board cohesiveness (Finkelstein & Mooney, 2003). These studies were also consistent with earlier studies that linked the ideas of 'team spirit' and 'team work' to the concept of cohesiveness in groups (Seashore, 1977).

In PICs, the importance of cohesiveness to the effective performance of boards relates to at least two factors. First, as discussed in Section 2.5.1, chairpersons in SoE boards are normally appointed by the minister, and therefore, they do not necessarily hold accountability to the board but the minister with whom they have a special relationship. Similarly, directors are not appointed on the basis of knowledge, skills, qualifications or experience, but for their political and social affiliations. Because of this, cohesiveness can be an issue between those who show accountability to the minister and those who demonstrate accountability to the board. Second, some boards observe guidelines that emphasise board appointments on the basis of stakeholder representation. In these boards, directors are more likely to experience cohesiveness problems because they are more likely to show loyalty to those they represent rather than the interest of the enterprise. Without cohesiveness, directors will struggle to work

together for the common good of the enterprise. Therefore, some level of cohesiveness must exist between directors to enable boards to effectively carry out their roles.

However, research shows that excessive cohesiveness may also be counter-productive to the effectiveness of boards, particularly in terms of the monitoring and control activities of the board. According to Janis (1982), excessive cohesiveness leads to “groupthink”, in which highly cohesive boards may have the tendency to subconsciously censor or suppress viewpoints that are not favoured and any information viewed as inconsistent with what is generally preferred within the board. Consequently, this affects the level of diligence exercised by the board in terms of its monitoring and control activities. Moreover, too excessive social cohesion within the board can lead to perceptual biases among directors about the viability of strategies considered by the board, and therefore, it may negatively affect board performance in terms of its strategic roles (Westphal & Bednar, 2005).

#### 3.5.4 Use of knowledge and skills

The nature and complexity of tasks dealt with by boards of directors requires members to possess specialised knowledge and skills to function effectively (Forbes & Milliken, 1999; Huse, 1995; Payne, Benson & Finegold, 2009; Zahra, 1990). Knowledge and skills were conceptualised as “the stock of information or expertise that directors on the board possess in aggregate” (Payne *et al.*, 2009), and they are normally categorised into functional and firm-specific knowledge and skills.

The *functional knowledge and skills* cover expertise in key business areas such as finance, accounting, marketing, management and law which are relevant for the firm’s relationship to its environment (Forbes & Milliken, 1999). Research shows that functional knowledge and skills are important in bringing in the external networks needed for information gathering and problem solving on boards (Ancona & Caldwell, 1988; Forbes & Milliken, 1999; Ong & Wan, 2008). Hence, it is a critical ingredient for effective board performance (Gabrielsson & Winlund, 2000). On the other hand, “*firm-specific*” knowledge and skills include detailed information about the firm and knowledge of the firm’s operations and internal management issues (Forbes & Milliken, 1999; Ong & Wan, 2008). Directors need “*firm-specific*” knowledge and skills to effectively deal with strategic issues such as making informed decisions regarding diversification or acquisition opportunities (Farjoun, 1994; Nonaka, 1994; Sirower, 1997). Without it, they can neither question the actions of management nor

give advice on specific issues concerning the firm's products, services and markets (Gabrielsson & Winlund, 2000). Furthermore, since directors bring different knowledge and skills into the boardroom, it is important that they understand and appreciate each other's knowledge and skills to reduce any potential for mistrust amongst members who may not have initially known each other or worked together before (Ong & Lee, 2000; Wan, 2001).

Nevertheless, the presence of knowledge and skills alone is not sufficient for board performance because it does not necessarily guarantee its use to benefit the board (Forbes & Milliken, 1999; Jackson, 1992; Ong & Lee, 2000; Ong & Wan, 2008; Wan, 2001). In fact, the existence of knowledge and skills is one thing, while putting the knowledge and skills into use to enhance board performance, is another. This signifies the concept of *use of knowledge and skills*, referring to "the ability of the board not only to tap the knowledge and skills available but also to apply them to board tasks" (Forbes & Milliken, 1999). This concept relates to Cohen and Bailey's (1997) behavioural dimension of social integration which is conceptualised in terms of a group's ability to cooperate. Also, it relates to Weick and Roberts' (1993) concept of 'heedful interacting' in which individual actions are subordinated and responsive to the demands of 'joint action'. Forbes and Milliken's (1999) review of these related constructs clearly supports the importance of *use of knowledge and skills* to board performance. Indeed, directors must be actively involved by putting to use their knowledge and skills if they are to make significant influence on board performance (Gabrielsson & Winlund, 2000; Huse, 1998). This implies that the board must be able to integrate its internal and external knowledge (van Ees *et al.*, 2008; Zahra & Filatotchev, 2004) and combine its functional knowledge and skills to apply them to "firm-specific" issues to enhance performance (Forbes & Milliken, 1999; Ong & Wan, 2008). Thus, directors must have respect for each other's expertise and cooperate by combining their contributions in a creative and synergistic manner (Wan, 2001). Through the active involvement and participation of directors, the board can live up to the demands of board effectiveness (Gabrielsson & Winlund, 2000).

Similarly, evidence suggests that the use of knowledge and skills is critical to the effective performance of boards in PICs. As highlighted in Section 2.5.2, the lack of appropriate knowledge and skills is a real problem for boards in PICs (Lal, 2006; Pacific Islands Forum Secretariat, 2005) which reflects the inability of boards to scrutinise the performance of firms and take appropriate actions. As noted by McKee (2007), even boards that were relatively

equipped with directors that possess knowledge and skills required by firms have been criticised for poor performance. This signifies that the presence of knowledge and skills alone is not sufficient for effective board performance; instead directors must be able to use their knowledge and skills to enhance board performance.

### 3.5.5 CEO/board relationship

The relationship between CEO and the board is perhaps the most basic element of corporate governance because it represents two primary players involved in the firm's quest for success (Finkelstein & D'Aveni, 1994; Jensen & Meckling, 1976; McKee, 2007; Westphal & Zajac, 1995). However, given the difficulties in gaining access to the boardroom (Pettigrew & McNulty, 1998), studies on CEO/board relationship and how it relates to board performance is rare (Kakabadse *et al.*, 2001; McNulty & Pettigrew, 1999; Westphal, 1999; Wu, 2008). According to Daily *et al.* (2003), directors often fear allowing external scrutiny of boardroom activities because of the potential risk of being subjected to shareholder lawsuits. Despite this, CEO/board relationship remains pivotal to our understanding of board performance (Nicholson & Kiel, 2007).

Often, matters concerning CEO/board relationships are reflected in the process through which directors are appointed to boards. For instance, research reveals that CEOs tend to exercise influence over the board selection process by favouring personal friends and other individuals with whom they have close social ties (Finkelstein & Hambrick, 1988; Johnson *et al.*, 1993; Kimberly & Zajac, 1988; Westphal, 1999). This practice promotes reciprocity norms on boards where directors are socially obliged to support CEOs on matters related to the management and the operation of the firm (Johnson *et al.*, 1993; Wade, O'Reilly & Chandratat, 1990; Westphal, 1999). Because of this, the real independence of boards from the CEO or management is often questioned (Fredrickson, Hambrick & Baumrin, 1988; Spencer, 1983; Walsh & Seward, 1990; Westphal, 1999). Thus, the impact of CEO-board relationship on board performance remains a critical issue for firms.

According to research, the existence of powerful social and psychological factors can compromise the willingness and ability of directors to objectively monitor management behaviour in firms (Westphal, 1999; Wu, 2008). For instance, studies claim that directors who have close personal ties to the CEO are less likely to be vigilant monitors, which means they are less likely to exert effective control over the CEO (Fredrickson *et al.*, 1988; Spencer,



1983; Walsh & Seward, 1990). Likewise, too close social ties between CEO and directors can reduce the precision of information collected and used by boards in determining resource allocation and monitoring priorities (Frieder & Subrahmanyam, 2007). In effect, a “too close” CEO/board relationship is regarded detrimental to the monitoring and control activities of the board.

On the other hand, the trust and perceived social obligations associated with close CEO/board relationships can encourage director involvement in providing counselling and advice to management in firms (Huse, 1998; Sundaramurthy & Lewis, 2003; Westphal, 1999; Wu, 2008). In fact, research suggests that the CEO’s decision to seek advice from the board usually depends on the perceived effect it could have on the CEO’s personal status (Jensen & Meckling, 1976). Such effect may include the fear of being seen as incompetent, lacking the ability to solve problems, and the perceived consequence of losing personal status (Sundaramurthy & Lewis, 2003). Hence, CEOs who are concerned about losing status and disclosing information are less likely to seek advice from the board, and this reduces the opportunity for directors to perform their service functions (Westphal, 1999; Wu, 2008). In this sense, a close CEO/board relationship is important since it creates mutual trust and a sense of social security that reduces perceived embarrassment and risk by the CEO, and hence, the CEO feels encouraged to seek advice from the board (Anderson & Williams, 1996; Rosen, 1983; Westphal, 1999). As noted by Shah and Jehn (1992), individuals are more likely to offer advice to others who demonstrate the need for assistance and with whom they have close social relationships. In effect, a close CEO/board relationship can create trust which increases the CEO’s propensity to seek advice and counsel from the board, and at the same time, expanding the board’s perceived social obligation to offer advice and assistance to the CEO and management.

Furthermore, research shows that the potential impact of the CEO/board relationship on the ability of boards to contribute to the strategic activities of the firm can vary. On one hand, close CEO-board ties can foster a collaborative decision-making environment which encourages director involvement in strategic activities (Westphal, 1999). On the other hand, some studies argue that since CEOs pack their boards with individuals loyal to them, they have the tendency to keep their boards largely passive and uninvolved in strategic decision-making processes (Herman, 1981; Kang *et al.*, 2007; Wade *et al.*, 1990). Similarly, a poor relationship between CEO and the board can lead to a similar effect whereby directors are

less likely to exert effective control over strategic decisions on behalf of their shareholders (Baliga & Rao, 1996; Boeker & Goodstein, 1993; Wu, 2008).

### 3.5.6 Board motivation

Motivation is defined as the willingness of individuals to commit their energy to perform a particular task (Mohrman, Cohen & Mohrman, 1995; Payne *et al.*, 2009). Correspondingly, board motivation refers to the desire to attend meetings, read board materials, spend time on corporate activities, and the urge to engage in decisions that contribute to firm success (Conger, Lawler & Finegold, 2001; Payne *et al.*, 2009). The importance of board motivation has been emphasised in corporate governance research because the extent to which directors commit themselves to board tasks depends on how motivated they are individually and as a team. Therefore, a sound understanding of what motivates individuals in accepting board positions is critically important to understand board performance.

According to van der Walt and Ingley (2003), directors are motivated by different factors for accepting board positions which include personally oriented benefits as well as societal and communal interests. Their finding was consistent with Maslow's theory of hierarchy of needs, in the sense that the relevance and importance of a motivating factor to individual directors is likely to vary depending on their personal goals and circumstances. For instance, a seat on the board may be highly symbolic of power, status and leadership in business; hence, power and status can be regarded as strong motivational factors for directors in accepting board positions (McGregor, 2000). In contrast, directors may also be motivated by the opportunity to learn and be challenged rather than by personal oriented benefits such as compensation and perks (Burke, 2000; Mattis, 1993).

Studies also linked board motivation to the risks associated with board directorships. According to Brennan (2006), directors are more high-risk averse in comparison to managers and shareholders because the remuneration they derive from board memberships is relatively modest. In this sense, their most valuable asset or priority is to protect their personal reputations or to avoid lawsuits by ensuring that the firm does not become subject to scandals (Bhagat, Brickley & Coles, 1987; Fama & Jensen, 1983). Indirectly, this implies that the attractiveness and prestige in accepting or holding on to board positions in failing firms is likely to decline as directors quit the board, and this hampers the effort to build or rebuild

boards (Gales & Kesner, 1994). As noted by Gilson (1989), directors that were associated with failed firms had significantly reduced chances of obtaining future board positions.

Although research has focussed on identifying factors that motivate directors in accepting board positions (Ingley & van der Walt, 2001), little has been done to determine how motivation affects board performance. In PICs, as highlighted in Section 2.5.2, directors are motivated by a range of factors in accepting board appointments. The factors that motivate directors can be categorised into two groups. One group includes factors such as status, prestige, fees and allowances, and a means for gaining other appointments. These factors can be classified as “extrinsic motivation” since they focus on externally driven rewards. The other group includes factors such as kindness and the desire to help others, willingness to contribute to the firm, representation of stakeholder interests, willingness to meet challenges, opportunity to learn and interest in the business. Thus, they can be classified as “intrinsic motivation” since they emphasise the intrinsically driven reward in accepting board positions. According to research, people often value the satisfaction derived from giving, for reasons of professional affiliation or commitment to a larger cause, not because they are rewarded with financial rewards (Malhotra & Galletta, 2003; Wenger, McDermott & Snyder, 2002). Therefore, in theory intrinsic motivation is likely to have a positive effect on board performance while extrinsic motivation may not necessarily induce the same effect.

### 3.5.7 Affective conflict

Affective conflict differs from cognitive conflict in that it involves interpersonal disaffection or negative emotions such as annoyance, frustration and irritation experienced among decision makers (Forbes, Korsgaard & Sapienza, 2009). Nevertheless, in practice both conflict types may simultaneously occur in groups like boards (DeDreu & Weingart, 2003; Ensley, Pearson & Amason, 2002). Indeed, as discussed earlier in Section 3.5.2, when task-related or cognitive disagreements becomes too intensified, it can be frustrating or anxiety provoking for group members, and if no effort is taken to resolve it, personal negative emotions and affective conflicts may arise (Forbes *et al.*, 2009; Pelled, Eisenhardt & Xin, 1999; Simons & Peterson, 2000). Other studies, however, showed that affective conflict may exist independently of cognitive conflict (Jehn & Bendersky, 2003).

Unlike cognitive conflict, affective conflict is predominantly regarded as a detrimental process for individual and group performance, member satisfaction, and the likelihood that

members of a group will work together in the future (Jehn, 1995; Shah & Jehn, 1993). Research suggests that affective conflict can be highly disruptive to boards by undermining the collective ability of directors to function effectively as a group which affects the quality of their decisions (Finkelstein & Mooney, 2003; Mace, 1986; Wan & Ong, 2005). This happens because the anxiety that arises from interpersonal animosity and emotional reactions (DeDreu, 2008; DeDreu & Weingart, 2003) inhibits the cognitive functioning of board members which distracts directors from group tasks, causing them to work less effectively by producing suboptimal results (Jehn, 1995; Payne *et al.*, 2009; Roseman, Wiest & Swartz, 1994; Wilson, Butler, Cray, Hickson & Mallory, 1986). According to Mace (1986), directors are more likely to respond to affective conflict by reducing, rather than increasing their commitment to board tasks.

### 3.5.8 Flow of board information

The effectiveness of information feedback from the environment and within the firm is crucially important to the success of work groups like boards (Payne *et al.*, 2009). Feedback may include information on the operations and management of the firm, the business environment, as well as the activities and performance of industry competitors (Lawler, Benson, Finegold & Conger, 2002). Research suggests that a timely flow of valuable information allows boards to reduce uncertainty, control transaction costs and increase their ability to access opportunities, thus, strengthening the firm's competitiveness in the broader market environment (Burt, 1983; Hillman, Zardkoohi & Bierman, 1999; Pfeffer, 1991). Hence, research on board information has largely focussed on its direct impact on firm performance (Payne *et al.*, 2009), but with little emphasis on how board information influences the ability of boards to perform their roles.

The influence of the information flow on the effectiveness of boards is often determined in terms of its effect on the board's ability to monitor and control the activities of management. According to research, access to high quality information allows the board to exert more formalised control over management (Rutherford, Buchholtz & Brown, 2007). In this sense, the prototype of an effective board is one that is equipped with all the necessary information that allows members to argue with management when necessary (Adams, 2008). Indeed, anecdotal evidence suggests that many corporate failures witnessed in recent years are partly caused by the board's lack of access to critical information required to question the activities of management. Additionally, increasing calls for boards to become more involved in the

governance of firms through their service and strategic tasks, made the communication and free flow of board information between management and the board even more significant for boards (Harris & Raviv, 2006).

While information flow is undoubtedly significant to the success of boards, different factors can hinder the effective communication and flow of information to boards. A significant one is highlighted in the notion of “information asymmetry”. According to Jensen and Meckling (1976), board members who are uninvolved in the daily operations of the firm are unlikely to benefit from free flow of information because important information and knowledge about the firm rests with management. As noted by Brennan (2006), incompetent and devious managers may seek to conceal the truth by withholding accurate and timely information from board members. Effectively, this creates an imbalance of power in board decisions and transactions (Aboody & Lev, 2000), making it difficult for boards to effectively carry out their duties. Furthermore, Adams and Ferreira (2007) argued that CEOs and management are unlikely to communicate vital information to board members if the role of the board is predominantly to monitor and control management activities. On the other hand, when the role of the board includes value-enhancing functions like service and strategic tasks, the CEO or management are encouraged and motivated to share information with board members. This suggests that the call for boards to perform broader functions beyond mere monitoring and control roles to include service and strategic functions signifies a greater need for the effective free flow of information between management and the board. As stated by Ruigrok *et al.* (2006), the changing nature of board roles now demands that directors have sufficient access to information and the opportunity to discuss critical issues with one another and with senior managers.

In summary, these process factors can influence the ability of boards to effectively carry out their duties in firms. In addition to board process, research shows that board attributes also have a significant influence on the effectiveness of the board of directors. The next section reviews the literature to establish how board attributes relate to board performance.

### **3.6 How board attributes affect board performance**

According to the literature, board attributes such as size, composition, diversity and multiple directorships have significant influence on board performance. Below, the literature is reviewed to explain how each attribute affects the ability of boards to perform their roles.

### 3.6.1 Board size

Board size refers to the number of directors on the board. In theory, the question of what should be an ultimate size for a board of directors may be understood from at least four theories namely the agency theory, the resource-based view, the resource dependency theory, and the stakeholder theory.

The agency theory accounts for the most popular view on board size, which as earlier stated, asserts that the separation of ownership and management in firms leads managers to act contrary to the best interest of shareholders. In this regard, boards may preferably be larger to make it difficult for the CEO from dominating it, and hence, allowing the board to effectively exercise monitoring and control over management (Zahra & Pearce, 1989). This is particularly critical for larger firms which require more directors to monitor and control the activities of the firm (Duncan, 2005; Kiel & Nicholson, 2003). As discussed earlier, this task has become even more salient following the wake of recent corporate scandals and legislations both in developed and developing countries (Finegold *et al.*, 2007). Thus, agency theory implies that larger boards are more likely to be vigilant in performing their monitoring and control functions because more directors are likely to be engaged in the review of management actions (Kiel & Nicholson, 2003).

Board size is also addressed through the two resource perspectives. The resource dependency theory views the board as the most appropriate tool to secure external resources crucial to the realization of its internal objectives on behalf of the firm (Finegold *et al.*, 2007; Gales & Kesner, 1994; Johnson *et al.*, 1996; Levrau & Van Den Berghe, 2007a; Pfeffer & Salancik, 1978). Through its external directors it can provide information, skills, access to key constituents (e.g. suppliers and buyers), capital, and legitimacy that are inevitably critical for the firm's success (Gales & Kesner, 1994; Johnson *et al.*, 1996; Levrau & Van Den Berghe, 2007a). In this regard, firms are likely to appoint more directors given the notion that larger boards brings greater opportunity in co-opting external links and obtaining valuable resources (Kiel & Nicholson, 2003). In this sense, board size may be viewed as a measure of the firm's ability to form environmental linkages (Gales & Kesner, 1994). In addition, the resource-based view also helps us to understand board size in relation to the strategic decision-making activities of the board (Finegold *et al.*, 2007; Johnson *et al.*, 1996). Since the board is commonly viewed as a decision-making group, board size may be regarded as a proxy for director expertise (Levrau & Van Den Berghe, 2007a). This implies that larger boards are

more likely to bring diverse knowledge and skills which gives boards the opportunity to draw on the variety of perspectives available to it, and therefore, it leads to sound quality strategic decisions (Forbes & Milliken, 1999; Levrau & Van Den Berghe, 2007a).

The stakeholder theory promotes the board's responsibility in protecting stakeholders' interests, thus, boards should comprise members that are representative of the different stakeholders of the firm (Ayuso & Argandona, 2007; Kang *et al.*, 2007). By including stakeholders on the board, the firm recognises the importance of stakeholder groups to its success, and this is fulfilled by ensuring that stakeholder and shareholder interests are equally given legitimate consideration in board decisions (Luoma & Goodstein, 1999; Mitchell, Agle & Wood, 1997). As noted by Rose (2007), the decisions of boards and firms influence the welfare of many stakeholders, therefore, board size should be more in line with other institutions in society. Hence, countries that follow the stakeholder model of governance emphasise the equal importance for boards to represent employee and community interests as well as those of the owners (Kang & Shivdasani, 1995; Yoshimori, 2005).

Based on the above views, it is important to determine how board size affects board performance. As noted in Chapter 2, the size of boards in PICs tends to be relatively large, particularly for SoEs, hence one would have hoped that boards would be adequately equipped to effectively perform their roles. However, reports suggest otherwise. Unlike in developed countries, board appointments in PICs are rarely conducted in line with the knowledge and skills requirements of the firm. Instead, the appointment process is prone to political and cultural abuse by politicians and those in authoritative positions by using board seats to reward political cronies, relatives and friends as highlighted in Section of 2.5. This makes empirical investigation into how board size affects board performance in PICs firms an important undertaking.

Evidence from developed countries suggests that large boards can be less effective than small boards in terms of the ability to effectively function as a group (Jensen, 1993). A number of factors were given for this. First, boards are more likely to experience severe agency problems (e.g. director free-riding) as it increases in size (Hermalin & Weisbach, 2003). Not only that, but they are more likely to encounter difficulties in solving agency problems between its members (Jensen, 1993; Lipton & Lorsch, 1992). As a result, boards become passive and less involved in the management of the firm which reduces their ability to effectively carry out their roles. For instance, Hermalin and Weisbach's (2003) study of

market participants suggests that small boards do a better job of monitoring management than larger boards. Similar studies also found that an increase in board size negatively influenced strategic change for larger boards (Golden & Zajac, 2001; Goodstein, Gautam & Boeker, 1994; Judge & Zeithaml, 1992). In this regard, smaller boards are likely to create more value than larger boards (Bennedsen, Kongsted & Nielsen, 2004). Other studies argued that an increase in board size can significantly inhibit the work of the board due to the potential group dynamics associated with larger groups (Forbes & Milliken, 1999; Jensen, 1993). These studies argue that communication and coordination problems associated with larger boards are likely to slow down decision making processes which hamper the board's ability to reach urgent consensus on important decisions, since individuals differ in their abilities to process information (Sah & Stiglitz, 1991). Also, the increase in board size can potentially moderate the extremity of board decisions because it takes more negotiation and compromise for larger boards to reach a final decision (Cheng, 2008). Normally, board decisions require diverse opinions, and therefore, it takes more compromise for larger boards to reach consensus on a final decision reflective of the different opinions expressed (Cheng, 2008; Sah & Stiglitz, 1991). Thus, larger boards are more likely to reject risky projects but with huge potential returns because such projects have to be accepted by several directors before they are accepted by the full board.

Therefore, board size is an important attribute that can potentially determine the effectiveness of board performance. Indeed, indications from the literature suggest that there is a limit to the level whereby board size can positively affect board performance (Forbes & Milliken, 1999; Jensen, 1993). Accordingly, in developed countries firms are becoming aware of the potential effects of board size on board performance and are beginning to take appropriate actions (Hermalin & Weisbach, 2003; Wu, 2000). According to Jensen (1993), when boards have more than seven or eight members, their members are less likely to contribute effectively, subsequently, making it easier for the CEO to assume control over the board.

### 3.6.2 Board composition

Board composition often refers to the proportion of “outside directors” to “inside directors” or “non-executive directors” to “executive directors” (Ayuso & Argandona, 2007; Baysinger & Butler, 1985; Hermalin & Weisbach, 2003). It is the most commonly used indicator for board independence. Given its significance, it has gained publicity through media reports, policy statements by institutional investors, as well as through shareholder proposals from



advocacy groups, mostly in developed countries. Furthermore, it has become a central issue in reports such as OECD (1999), the World Bank Framework for Implementation, as well as in many national and international guidelines and codes for best practices in corporate governance (Ayuso & Argandona, 2007).

Three theories dominate the literature on board composition. The agency theory promotes the need for boards to be independent in order to be effective in monitoring and controlling management (Ayuso & Argandona, 2007; Bonn *et al.*, 2004; Chen, Firth, Gao & Rui, 2006; Davis, 1991; Eisenhardt, 1989; Fama & Jensen, 1983; Jensen & Meckling, 1976), and as protectors of the shareholders' welfare (Fama & Jensen, 1983; Hermalin & Weisbach, 1988; Hill & Snell, 1988). A high proportion of outside directors is therefore viewed as the key to board independence (Bonn *et al.*, 2004; Chen *et al.*, 2006; Johnson *et al.*, 1996). This is because outside directors are normally expected to be respectable peers within the business community who are more likely to ask questions that require managers and insiders to be well prepared for board meetings and discussions (Brennan, 2006; Mace, 1971). Thus, outsider dominated boards are more likely to be effective in monitoring and control since their motivations are not compromised by dependence on the CEO or inside directors (Levrau & Van Den Berghe, 2007a). Contrarily, the dominance of inside directors on boards may increase the positional power of insiders, and consequently, the board's dependence on insiders. This leads to conflicts of interest in board decisions which affect the board's ability to effectively monitor and control management behaviour (Ayuso & Argandona, 2007). Agency theory, therefore, favours outsider dominant boards.

Another is the stewardship theory which argues that managers are motivated by intrinsic satisfaction and challenging tasks (Davis *et al.*, 1997; Donaldson & Davis, 1991), hence they are restrained from misappropriating company resources. This implies that managers are likely to exercise responsibility to gain recognition from their peers and bosses (Davis, 1991), and take responsibility for shareholders' interests and themselves (Donaldson & Davis, 1991). In this regard, managers must be empowered to participate in board activities through inclusion as executive directors. The reallocation of control from shareholders to management is therefore viewed as an important step in maximising shareholder returns. In this sense, stewardship theory promotes insider dominant boards.

The last perspective is the dependency theory which claims that firms need to establish better access to resources required from their external environment, and therefore, they are likely to

add more outside directors on their board to provide this access (Ayuso & Argandona, 2007; Pfeffer & Salancik, 1978). Similarly, inside directors may possess better information on the internal operations of the firm compared to outside directors which helps the board to effectively evaluate managers (Baysinger & Hoskisson, 1990). Thus, the dependency theory promotes an ideal balance by acknowledging the importance of both outside and inside directors in bringing in important links and resources into the firm.

Despite the theoretical emphasis on board composition and board performance, empirical studies have mostly focussed on composition and firm performance (Agrawal & Knoeber, 1996; Barnhart & Rosenstein, 1998; Coles *et al.*, 2001; Dulewicz & Herbert, 2004). Some studies claim that board composition is positively related to firm performance (Baysinger & Butler, 1985; Daily & Dalton, 1993; Pearce & Zahra, 1992; Rosenstein & Wyatt, 1990), and therefore, lower performing firms are more likely to add outside or independent directors to their boards (Bhagat & Black, 2002; Hermalin & Weisbach, 1988; Zahra & Pearce, 1989). In contrast, other studies revealed a negative relationship (Agrawal & Knoeber, 1996; Barnhart & Rosenstein, 1998; Bhagat & Black, 1999; Yermack, 1996), thus some firms may prefer insider-dominated boards (Bhagat & Black, 1999; Kesner, 1987; Westphal, 1999). This inconsistency is, however, expected given the different proxies by which board composition is defined (Jaskiewicz & Klein, 2007) as well as the different indicators used to determine firm performance (Peng *et al.*, 2004). For instance, definitions of board composition include the proportion of inside directors, proportion of outside directors, proportion of affiliated directors, and the ratio of independent directors to interdependent directors (Dalton *et al.*, 1998). Additionally, studies on board composition have mainly focussed on listed firms hence there is little focus on unlisted firms whose circumstances may be different (Shen, 2003). Consequently, these factors preclude finding an overall correlation between board composition and firm performance.

A number of studies, however, have recognised the importance of determining the effect of board composition on board performance (Baysinger, Kosnik & Turk, 1991; Cochran, Wood & Jones, 1985; Hill & Snell, 1988; Johnson *et al.*, 1993; Malette & Fowler, 1992; Weisbach, 1988). But they, too, revealed inconsistent findings. While some provide evidence that outsider-dominated boards are more effective in monitoring management and protecting shareholder interests (Byrd & Hickman, 1992; Johnson *et al.*, 1993; Kosnik, 1987; Weisbach, 1988), others failed to support the notion that outsider-dominated boards are effective

guardians of shareholders' interests (Baysinger *et al.*, 1991; Cochran *et al.*, 1985; Hill & Snell, 1988; Malette & Fowler, 1992). A common limitation in these studies is their over-reliance on agency theory, which led to the examination of board performance purely on the basis of its monitoring and control roles. This implies that the potential effects of board composition on the ability of boards to carry out their service and strategic roles have largely been ignored in board research. Thus, examining how board composition affects board performance not only in terms of the board's ability to perform its monitoring and control roles, but also its service and strategic roles is a significant step forward in corporate governance research.

Earlier, it was discussed that agency theory favours outsider dominant boards to enhance board independence, which is deemed the key requirement for effective monitoring and control of management and the protection of shareholder wealth (Bonn *et al.*, 2004; Johnson *et al.*, 1996). Contrarily, insider dominant boards increase the positional power of inside directors, the board's dependence on inside directors, and conflicts of interest in board decisions which affect the board's effectiveness in monitoring and control (Ayuso & Argandona, 2007; Levrau & Van Den Berghe, 2007a). Also, in dependency theory we note that firms are likely to add more outside directors to their boards to create better access to resources (Pfeffer & Salancik, 1978), but at the same time, the importance of inside directors should not be ignored because of their knowledge on the firm's internal operations (Baysinger & Hoskisson, 1990), both of which are critical for the board's effective performance of its service roles. Similarly, we learned from the stewardship theory the need for boards to actively participate in strategic activities given their broader knowledge, skills and experience, and moreover, the need to empower firm insiders to participate in board activities given their first-hand access to information on the inside of firms (Davis, 1991; Donaldson & Davis, 1991). Overall, the literature implies that there is a limit to the level whereby board composition can positively affect board performance.

In PICs, awareness of the practical significance of board composition is a relatively new concept but one that is increasingly attracting interest, since it reflects the independence and skills capacity of the board. Generally, board composition varies according to the ownership of firms. In SoEs, outside directors normally dominate boards while in private firms boards tend to comprise mainly of inside directors, usually the owners of the firm. For SoEs, often outside directors are appointed by government to safeguard and protect the government's

interest as the owner of the enterprise. On the other hand, owners of private firms feel that their interests in the firm are best served through their participation on the board hence they are often reluctant to invite outsiders to sit on their boards. However, reports highlight that in either case the lack of experienced and qualified directors is a major problem in PICs enterprises which implies that board composition does not necessarily reflect the economic or performance objectives of firms (McKee, 2005, 2007; McMaster, 2004; Pacific Islands Forum Secretariat, 2005).

A number of factors highlighted in Chapter 2 have contributed to this phenomenon. This includes the so-called Pacific culture or the *wantok* system and its associated social norms, the politicisation of board positions in SoEs, the lack of board appointment guidelines in enterprises and the insignificance or lack of consideration for the technical classification of independent or non-independent directors when appointing boards. Subsequently, boards that are entirely comprised of outside directors (as in SoEs) may not be necessarily regarded as truly independent. Therefore, determining how board composition affects board performance in the PICs is a crucially important task.

### 3.6.3 Board diversity

The diversity concept has become a significant issue for boards of directors in modern firms (Kang *et al.*, 2007; Simons, Pelled & Smith, 1999). Board diversity is classified into *observable* or *demographic diversity* which includes gender, race, ethnicity or nationality and age (Milliken & Martins, 1996), and the less visible *functional* or *cognitive diversity* characteristics such as experience, education, occupation, knowledge, values, perception, affection, personality characteristics, and organisational memberships (Erhardt, Werbel & Shrader, 2003; Kang *et al.*, 2007; Milliken & Martins, 1996).

In theory, the importance of diversity to a board of directors can at least be explained from two perspectives. First, stakeholder theory suggests that boards should be sufficiently diverse in their membership to accommodate the interests of different stakeholders (Huse & Rindova, 2001; Mattis, 2000). Through diversity in its membership, boards are able to show loyalty towards stakeholders' interests (Rose, 2007). Second, diversity often correlates to superior decision-making in organisational groups like the board. This is because diversity increases discussion, exchange of new ideas, and different perspectives which enhances group performance and hence organisational value (Barnhart *et al.*, 1994; Carter, Simkins &

Simpson, 2003; Schippers, Den, Koopman & Wienk, 2003; Siciliano, 1996; Watson, Kumar & Michaelsen, 1993). In an increasingly competitive business environment, firms require diversity within their boards to be more responsive, flexible and adaptive to changes (Kang *et al.*, 2007; Simons *et al.*, 1999; Simons & Pelled, 1999).

However, it is often argued that decisions on how diverse the membership of a board should be must be made on the merit of enhancing shareholder value (Carter *et al.*, 2003; Coffey & Wang, 1998). As noted by Carter *et al.* (2003), equity (the emphasis in stakeholder theory) and shareholder value can be two different issues. Hence, having board diversity without the shareholders' value or interest in sight is insufficient and will only promote 'tokenism' on boards (Carter *et al.*, 2003). Perhaps, this explains why board diversity is mostly examined in relation to performance measures that equate to shareholder value. Most studies examined board diversity using different characteristics such as gender, ethnicity, race, culture, occupation, education, experience and other functional backgrounds (Burke, 1995; Erhardt *et al.*, 2003; Rose, 2007; Singh, Vinnicombe & Johnson, 2001). Moreover, the performance criteria against which these diversity characteristics were measured also varied, and they include financial indicators like *return on assets* (ROA), *return on investment* (ROI), *return on equity* (ROE), Tobins Q, productivity, as well as market and group performance indicators. As a result, research outcomes have mostly been inconsistent which makes comparisons difficult to achieve. Moreover, these inconsistencies imply that diversity has both positive and negative consequences for performance, and therefore, a simplistic approach to managing diversity on boards should be avoided (Simons & Pelled, 1999).

In this study, board diversity is considered in terms of the proportion of female to male directors on the board and accordingly, addressed how it affects the ability of boards to perform their roles (Singh *et al.*, 2001). Research shows that there is an increasing interest in gender equality in organisational life. However, evidence reveals that the actual participation of women on corporate boards is still limited in many countries. For instance, Daily *et al.* (1999) examined gender diversity on US boards between 1987 and 1996 and found that women membership was stagnant at only 0.006 percent. Similarly, Singh *et al.* (2001) found that women directors in UK firms are only likely to be found in large firms. Moreover, similar studies on US firms suggest that board diversity is beginning to reflect changes in the workforce on the basis of ethnicity and other diversity characteristics, but not necessarily gender (Burke, 1995; Erhardt *et al.*, 2003).

Similarly, the participation of women on boards of directors in PICs is very minimal since boards are mostly seen as men's clubs. However, a search through annual reports of public sector enterprises in Fiji and Solomon Islands (as part of this study) revealed that female participation on boards has slightly increased in recent years. This may relate to more women obtaining higher education and specialised skills required by boards. It may also be a reflection of the perception in PICs that women are less likely to engage in corrupt practices (McKee, 2005). In this regard, the increase of female directors on boards serves to diffuse male dominance and enhance the scrutiny of the activities and decisions of management and the board. This increase in female participation on boards is therefore seen as a positive development towards the improvement of board performance in PICs.

Research has mostly linked participation of women to firm performance. Some studies revealed a positive relationship (Adams & Ferreira, 2004; Carter *et al.*, 2003; Erhardt *et al.*, 2003; McKee, 2005; Siciliano, 1996), while others failed to show any significant relationship between female board membership and firm performance (Rose, 2007; Singh *et al.*, 2001). More recent studies, however, have focussed on the potential impact of women directorships on board effectiveness (Adams & Ferreira, 2008; Selby, 2000). According to Selby (2000), women directors can positively influence the board's questioning culture which leads to effective disciplining by the board. This is because women are likely to ask questions that would not have come from their male colleagues. Similarly, Adams and Ferreira (2008) observed that women are more likely to join monitoring committees. In this regard, boards with higher proportions of women directors are likely to allocate more effort to monitoring and control activities.

In addition, Adams and Ferreira (2008) observed that women have better attendance records than men, and also, men tend to have fewer attendance problems in more gender diverse boards. This implies that the presence of women on the board raises the overall output of the board. Furthermore, the presence of women on boards may add to the richness of information accessible to boards, and therefore, the variety of perspectives expressed during debate and decision making (Burke, 2000). In effect, a greater knowledge base is created and more creativity and innovation emerge, which is a competitive advantage for boards to effectively execute the roles expected of them (Erhardt *et al.*, 2003; Watson *et al.*, 1993). According to Selby (2000), when firms include women on their boards, they concomitantly include diversity in experience and other values as well.

Nevertheless, there is reason to be cautious about the over promotion of female participation on boards of directors in PICs. As highlighted earlier, the focus on increasing participation by women on boards, without regard for the necessary skills and experience required by the board will only increase tokenism in board appointments, and therefore, is unlikely to increase the ability of boards to effectively perform their roles. Additionally, based on the “social identity” theory, the board can potentially suffer from in-group categorisation which promotes distinct in-group behaviours between female and male groups within the board (Pelled *et al.*, 1999; Westphal & Milton, 2000; Williams & O’Reilly, 1998). When this occurs on boards, female and male groups are likely to show loyalty in terms of information sharing and commitment to their own in-groups rather than the board at large. This suggests that there is a limit on the potential effect of board diversity (in terms of the proportion of female to male directors) on board performance.

#### 3.6.4 Board multiple directorships

Multiple directorships (also known as cross memberships) refer to the number of directorships held by directors across boards in different firms (Frieder & Subrahmanyam, 2007; Jackling & Johl, 2009). This concept is mainly addressed through the resource-based view and the resource dependency theory and it has attracted interest in corporate governance research given its perceived importance for performance (Ferris, Jagannathan & Pritchard, 2003; Fich & Shivdasani, 2006; Harris & Shimizu, 2004).

First, research shows that directors gain knowledge not only from their previous managerial duties but also from their current and previous membership on other boards (Harris & Shimizu, 2004). Consistent with the resource-based view, multiple directorships are perceived as a good thing for boards because it pools together diverse experience and skills which boards can access to their benefit (Ferris *et al.*, 2003; Harris & Shimizu, 2004). Also, through multiple directorships, boards have access to important suppliers and customers, and opportunities to cooperate with other firms and organisations on common areas of interests (Booth & Deli, 1995; Harris & Shimizu, 2004). Hence, consistent with the resource dependency theory, multiple directorships can assist boards to develop high levels of engagement with their external environment in securing important resources required by their firms (Jackling & Johl, 2009). Accordingly, some boards encourage multiple directorships to enhance the diversity of professional knowledge, skills, occupational backgrounds, and industry experience on their boards as well as the organisational contacts and links that

directors bring with them into the boardroom. In this regard, multiple directorships are often associated with reputation, in which the appointment of a person with multiple memberships to a board without an incumbent busy director, brings with it the experience or reputational benefits to the board. This is good news for shareholders (Ferris *et al.*, 2003). In fact, research shows that outside directors who are associated with well-performing firms tend to hold more board seats which imply that well-performing directors are rewarded, by having memberships on other boards offered to them (Fich & Shivdasani, 2006).

However, the investigation of multiple directorships has mostly concentrated on its relationship to firm performance. While some studies claim a positive relationship between multiple directorship and firm performance (Ferris *et al.*, 2003; Harris & Shimizu, 2004; Miwa & Ramseyer, 2000), others failed to establish a significant relationship (Kiel & Nicholson, 2006). Additionally, a few studies examined the effect of multiple directorships on board effectiveness (Fich & Shivdasani, 2006; Jackling & Johl, 2009; Lipton & Lorsch, 1992; Monks & Minor, 1996; Palmer, Barber & Zhou, 1995; Shalley, 1991). Evidence from these studies associates multiple directorships with scheduling difficulties which means directors are more likely to miss meetings (Monks & Minor, 1996). Further studies have associated multiple directorships with inadequate preparation for board meetings (Palmer *et al.*, 1995), lack of time to provide quality and useful advice to management (Lipton & Lorsch, 1992; Shalley, 1991), and lack of time and opportunity to effectively monitor management (Fich & Shivdasani, 2006). These problems become more critical when the majority of outside directors are overcommitted across different boards (Fich & Shivdasani, 2006; Jackling & Johl, 2009). These studies suggest that there is a limit to the level at which multiple directorships can contribute to the effectiveness of boards of directors.

In contrast to the experience of developed countries, multiple directorships in PICs do not necessarily occur by design but are rather forced by unique circumstances. As highlighted in Chapter 2 and later in Chapter 5, 40 per cent of Fiji directors and 32 per cent of Solomon Islands directors hold between two to six directorships on other boards. This can be explained by the inadequacy or lack of sufficient people with appropriate skills to serve on boards of directors, but more seriously, the subjection of board appointments to political patronage in SoEs, in which political associates hold multiple directorships often without the relevant skills and experience. This leads to concerns over the lack of attendance of directors at board



meetings, and hence, the level of commitment that directors with multiple memberships invest in board activities.

Overall, in this section the potential effects of board attributes on board performance were highlighted. In addition, evidence from the literature suggests that board attributes do not only affect the ability of boards to perform their roles but they also affect the processes in which boards are involved in performing their duties.

### **3.7 How board attributes affect board process**

To demonstrate how board attributes influence board process, this section reviews the literature to determine the effect of board size, board composition, board diversity and multiple directorships on the processes of effort norms, cognitive conflict, board cohesiveness and the use of knowledge and skills.

#### **3.7.1 Effect of board size on board process**

First, research suggests that an increase in board size leads to dysfunctional norms of behaviour and agency problems in boardrooms (Cheng, 2008; Lipton & Lorsch, 1992). This implies that larger boards may find it difficult to build the interpersonal relationships necessary for maintaining “high effort” norm behaviours within boards (Forbes & Milliken, 1999). In addition, larger boards are more likely to suffer from “social loafing”, a phenomenon of people making less effort to achieve goals when they work in groups than when they work alone (Latane, Williams & Harkins, 1979; Williams, Harkins & Latané, 1981). As a result, board members often do not criticise the policies of top management or hold candid discussions about the performance of the firm (Lipton & Lorsch, 1992). According to Cheung (2008), this occurs on boards because the cost to any individual director for not performing their role falls in proportion to the total number of directors on the board. Therefore, when boards become too large, the enforcement of expected behaviour or effort norms by board members declines.

Secondly, board size can also influence cognitive conflicts on boards. As highlighted earlier, larger boards are often associated with diverse viewpoints, ideas and opinions, and this may potentially stimulate critical analysis during group discussions (Gales & Kesner, 1994; Johnson *et al.*, 1996; Kiel & Nicholson, 2003). As a result, larger boards are more likely to experience a higher number of individual judgements (Amason & Sapienza, 1997), and

hence, the abundance of perspectives they assemble is likely to increase cognitive conflict which helps to correct errors and refine board decisions (Forbes & Milliken, 1999). Additionally, since larger boards have the capacity to absorb and recall more items during decision-making processes, a greater opportunity for cognitive conflicts on the board is created (Certo *et al.*, 2006). However, since larger boards also face more difficulties in maintaining interpersonal relationships, potential for cognitive conflicts within the board may be limited. This is because the cost of coordination and communication, as well as agency issues associated with larger boards overwhelms the benefit of having more directors to draw on (Jensen, 1993). Furthermore, the negative emotions that result from poor interpersonal relationships in larger boards (Nemeth & Staw, 1989) may suppress the board's ability to engage in critical and investigative interaction processes crucial for board performance (Amason, 1996; Forbes & Milliken, 1999).

Thirdly, board size can influence cohesiveness within boards. Research implies that larger boards encounter more perspectives to consider (McGrath, 1984), more room for dissent due to greater interaction among members (Gladstein, 1984), increased coordination and communication challenges (Cheng, 2008), and therefore, faced with greater hindrance in reaching consensus on decisions (Mueller & Baker, 1997), which affects the cohesiveness within the board (Gales & Kesner, 1994; Goodstein *et al.*, 1994). Additionally, larger boards require more compromise to reach consensus, thus, board decisions tend to be less extreme resulting in less extreme performance (Cheng, 2008). Also, members of larger boards may find it difficult to participate in board discussions, and this affects their motivation and satisfaction levels (Shaw, 1981). Because of this, as board size becomes too large; members are more likely to encounter difficulties in enhancing the cohesiveness that is required to effectively execute their responsibilities (Forbes & Milliken, 1999; Haleblan & Finkelstein, 1993).

Lastly, the increase in board size may also bring in more knowledge and skills into the boardroom, which is likely to increase the board's potential and capacity to apply knowledge and skills to board tasks (Johnson *et al.*, 1996; Kiel & Nicholson, 2003). However, the ability of board members to use knowledge and skills also depends on how their contributions are coordinated and integrated (Forbes & Milliken, 1999) and their ability to cooperate and do things collectively as a group (van Ees *et al.*, 2008). Research suggests that this is a major challenge in larger boards, where communication and coordination difficulties can affect the

boardroom climate required to support constructive criticism and decisions hence the board's ability to use their knowledge and skills (Cohen & Bailey, 1997; Demb & Neubauer, 1992; Gladstein, 1984; Jensen, 1993). In addition, larger boards may encounter difficulties in arranging board meetings, and this reduces the opportunity for members to use their knowledge and skills during critical times (Cheng, 2008). Also, Jensen (1993) argued that since larger boards are less likely to function effectively due to "social loafing" it is easier for CEOs to control the board which limits the opportunity for members to use their knowledge and skills. In effect, even directors who are powerful and effective on other boards may find themselves unable to effectively use their knowledge and skills on larger boards.

### 3.7.2 Effect of board composition on board process

Board composition can also affect board process. First, research on organisational groups strongly links composition to the cognitive abilities of groups. For instance, studies suggest that the presence of outside directors is likely to increase the board's access to external information through the member's outside peer network (Williams & O'Reilly, 1998), and this helps generate different innovative ideas and contributions in dealing with decision-making activities of the board (Hambrick, Li, Xin & Tsui, 2001; Schweiger *et al.*, 1986). In effect, the competing views and information introduced by outside directors into board discussions stimulates cognitive conflicts on boards, leading to creative solutions (Hill & Jones, 1992). Furthermore, outside directors have insightful knowledge on technological, market, and legislative changes across industries (Sundaramurthy & Lewis, 2003), which puts them in the best position to take an overall view of the firm. This enables the board to challenge proposals from insiders by promoting in-depth deliberation and debate on critical issues (Demb & Neubauer, 1992). In addition, outside directors help boards to think more freely without the immediate influence of insiders in their considerations of business goals and alternatives available to the firm (Forbes & Milliken, 1999; Ong & Wan, 2008). However, the increased dominance of outside directors on boards may also imply less access to insightful information on the internal operations of the firm (Ayuso & Argandona, 2007; Baysinger & Hoskisson, 1990), which reduces the ability of boards to engage in cognitive conflicts.

Second, board composition can also affect cohesiveness within the board. According to Goodstein *et al.* (1994), too many outsiders on boards can affect board cohesiveness which further creates coordination and communication difficulties for boards (Cheng, 2008). As a

result, boards encounter more hindrances in reaching consensus on decisions which diminishes the board's effectiveness (Goodstein *et al.*, 1994). Thus, boards dominated by outsiders may find it difficult to build the interpersonal relationships required to enhance the cohesiveness needed between members to effectively execute board responsibilities (Forbes & Milliken, 1999). Hence, while outside directors may bring in significant benefits to the board, too many outsiders can create difficulties for the board to establish cohesion between members.

Lastly, composition is also linked to the process of use of knowledge and skills. Research suggests that outsiders are normally appointed to boards for their knowledge, skills and expertise in specific areas of significance to firms. As such, outside directors often turn out to be lawyers, financial experts, business executives, government officials, community group leaders or important people within the community (Hillman & Dalziel, 2003). Given their profile and the variety of functional knowledge and skills they assemble, the board is positioned to benefit from the appropriate use of these knowledge and skills to improve its performance. Also, because of their profile, outside directors are expected to have good awareness and understanding of the roles expected of them which is a key element to their involvement, commitment, and hence the ability to put knowledge and skills to good use (Gabrielsson & Winlund, 2000). Nevertheless, boards that are overwhelmed with outside directors may potentially suffer from lack of knowledge and skills that are specifically related to the business, and therefore, their ability to apply their broader knowledge and skills to firm-specific situations may be limited.

### 3.7.3 Effect of board diversity on board process

The attribute of board diversity can also affect board process. First, group diversity has important implications for "effort norm" behaviours within groups. On one hand, research suggests that group norms in organisational groups emerge because individuals bring expectations with them based on their previous experience (Bryan, 1995; Feldman, 1984; Westphal & Milton, 2000). Hence, since women are more likely to be appointed on merit compared to men (Rose, 2007), they tend to bring with them valuable experience from past board and business engagements which assists boards to form norms and standards that increase the predictability of members' behaviour and expectations in new board settings (Woodruff, Cadotte & Jenkins, 1983). Even with little previous interaction, over time members in diversified boards can develop understanding of each other's experience and

expectations. Subsequently, their shared expectations develop into norms that guide their collective effort to perform board tasks reducing the uncertainty surrounding what is expected of each member (Feldman, 1984). On the other hand, research shows that members in diversified boards also have the tendency to categorise and organise themselves into smaller social groups within the board (Pelled *et al.*, 1999; Williams & O'Reilly, 1998). According to social identity theory, in-group categorisation may generate distinct group behaviour such as, solidarity within one's group, conformity to in-group norms, in-group preference, discriminations against other groups, and other forms of cognitive biases (Messick & Massie, 1989; Smith *et al.*, 1994; Tajfel, 1982; van der Walt & Ingley, 2003; Williams & O'Reilly, 1997). In board context, in-group categorisation occurs as directors think positively of their own in-group and view other groups or individuals as deficient (Certo *et al.*, 2006; Loden & Rosener, 1991; Williams & O'Reilly, 1998). In effect, board members are more likely to enforce the norms of their in-groups instead of the expectations or standards of the board at large.

Secondly, research also associates the diversity concept with cognitive heterogeneity and cognitive conflicts (Bantel & Jackson, 1989; Hambrick & Mason, 1984; Williams & O'Reilly, 1998). Studies based on the demographic heterogeneity concept, suggest that boards with diverse members are more likely to benefit from multiple perspectives and broader wisdom that are not available to more homogenous boards, and this increases the level of cognitive conflicts on the board (Carver, 2002; Williams & O'Reilly, 1998). On the other hand, diversity is also associated with affective or interpersonal conflicts in organisational groups (Amason, 1996; Forbes & Milliken, 1999; Pelled *et al.*, 1999) because it brings in varieties in terms of director attitudes and values (Bantel & Jackson, 1989). In effect, the board is likely to experience more room for distrust, hostility and reduced motivation which affects its ability to engage in cognitive conflicts (Amason & Sapienza, 1997).

Thirdly, board diversity can also affect the ability of directors to develop the cohesiveness required for the smooth-running of the board (Erhardt *et al.*, 2003; Hambrick, Cho & Chen, 1996; Knight *et al.*, 1999). This is because in highly diverse boards, communication becomes more formal, and therefore, informal methods of coordination become less effective resulting in overall poor communication between board members (Cohen & Bailey, 1997; Smith *et al.*, 1994; Williams & O'Reilly, 1998). As a result, boards experience lower social cohesion

which reduces the likelihood for minority viewpoints to be incorporated into board decisions (Hambrick *et al.*, 1996; Nemeth, 1986; O'Reilly, Caldwell & Barnett, 1989; Smith *et al.*, 1994). In this regard, board diversity brings with it practical challenges to creating the cohesiveness required by boards to effectively perform their roles (Knight *et al.*, 1999; Mueller & Baker, 1997).

Lastly, diversity is also linked to the group's ability to use the knowledge and skills at its disposal (Hambrick *et al.*, 2001). Given women are more likely to be appointed on boards based on their skills and experience (Rose, 2007), boards that are gender diversified are more likely to bring in valuable knowledge and skills into the boardroom, and therefore, promote the effective use of knowledge and skills to improve board effectiveness. In contrast, the increased diversity of boards can affect the board's ability to make speedy and efficient coordination to reach consensus (Carpenter, 2002; Certo *et al.*, 2006; Hambrick *et al.*, 1996; Williams & O'Reilly, 1998). This is because heterogeneity can cause members to disagree with each other, thus, more time and effort is required to make decisions (Erhardt *et al.*, 2003; Knight *et al.*, 1999; Mueller & Baker, 1997). Moreover, diversity can affect social integration among directors (Smith *et al.*, 1994; Williams & O'Reilly, 1998), which reduces the ability of directors in minority in-groups to use their knowledge and skills hence the opportunity to be heard which undermines their contribution to board decisions (Knight *et al.*, 1999; Pelled *et al.*, 1999; van der Walt & Ingley, 2003; Westphal & Milton, 2000).

#### 3.7.4 Effect of multiple directorships on board process

Like the previous attributes, evidence suggests that multiple directorships can affect board process. First, recent studies suggest that multiple directorships can positively affect processes such as effort norms, cognitive conflict and use of knowledge and skills on boards (Ruigrok *et al.*, 2006). Consistent with dependency theory (Pfeffer, 1973; Pfeffer & Salancik, 1978), multiple directorships allow boards to be connected to important information, networks and resources, as well as exposing board members to different leadership styles, management techniques and innovations (Ruigrok *et al.*, 2006; Young, Ahlstrom, Bruton & Chan, 2001). Thus, multiple directorships bring a diversity of experience from various firms in different industries into the boardroom. In effect, these valuable qualities introduced to the board have the potential to increase "effort norm" behaviours, cognitive conflict and the use of knowledge and skills on the board. Moreover, as discussed earlier, firms are likely to appoint directors on the basis of their successful contribution to other boards or firms (Ferris

*et al.*, 2003). In this regard, multiple directorships can be associated with quality and reputation (Fama & Jensen, 1983; Vafeas, 1999). Thus, boards that comprise directors with multiple memberships are likely to benefit from the qualities and reputations that directors bring with them through increased “effort norm” behaviours, cognitive conflict and the use of knowledge and skills to improve board decisions.

Nevertheless, research also suggests that multiple directorships can negatively affect board process as well. As noted by Ruigrok *et al.* (2006), multiple directorships take up too much directors’ time which distracts their attention. This is supported by Lipton and Lorch (1992), who argued that insufficient time is a critical problem faced by directors. Because of this, some directors decline the invitation to sit on additional boards due to time constraints and the excessive burden associated with multiple appointments (Ferris *et al.*, 2003). This implies that multiple directorships can affect the quality of time and attention directors devote to processes such as “effort norms”, cognitive conflicts and the use of knowledge and skills, effectively, reducing the board’s ability to perform its roles.

Moreover, the nature of multiple directorships is such that directors are involved across different firms therefore it is difficult for directors to fairly serve the different boards they sit on due to potential conflicts of interest (Bazerman & Schoorman, 1983). Not only that, but also the commitment of directors to multiple boards and firms can create additional difficulties for boards to schedule regular meetings (Ruigrok *et al.*, 2006), which reduces the opportunity for board members to engage in higher effort norm behaviours, increased levels of cognitive discussions and the application of knowledge and skills to board tasks and decisions.

Overall, the above discussions show that board attributes do not only influence the ability of boards to perform the roles expected of them but also the processes in which boards are involved as they perform their duties. Thus, so far the literature suggests that board performance can be influenced by board attributes and board process, and also board process can be affected by board attributes. But furthermore, recent studies suggest potential causal relationships between different group processes with implications for the group’s performance. In the next section, the literature is reviewed to determine potential inter-process relationships which may affect board performance.

### **3.8 Impact of inter-board process effects on board performance**

Recently, a study by van Ees *et al.* (2008) revealed various correlations between a few observed processes which imply that more complex associations may exist between board processes. Indeed, their study highlights the need to elaborate upon potential interdependencies between different board processes and how these associations affect board performance. Accordingly, this section reviews the literature to show how the processes of CEO/board relationship, board motivation, affective conflict, flow of board information and board cohesiveness affect other processes such as effort norms, cognitive conflicts and use of knowledge and skills.

#### **3.8.1 How CEO/board relationship affects other board processes**

The literature suggests that CEO/board relationships can significantly affect other board processes. First, evidence shows that the ability of boards to engage in high effort norm behaviours can be influenced by social ties between the CEO and the board. The existence of social ties between the CEO and directors is likely to create trust which may induce joint efforts through their willingness to believe and depend on each other (Gambetta, 1988; McKnight, Cummings & Chervany, 1998; Ring & Van de Ven, 1994). This implies that close ties in the CEO/board relationship generate social conformity pressures and harmonise interest between the CEO and directors, and therefore, it encourages board members to collaborate by engaging in similar effort behaviours (Hackman & Morris, 1975). However, as earlier discussed, too much trust associated with overly close social ties between CEO and directors can potentially lead to “social loafing” which reduces effort norm behaviours on the board.

Second, trusting relationships or the ability of CEO and directors to trust each other’s judgement and expertise is crucial to cognitive conflicts. However, without social ties between the CEO and directors, trust will be difficult to sustain on boards (Forbes & Milliken, 1999; Sundaramurthy & Lewis, 2003), which is consistent with the argument that groups composed of friends are likely to exhibit greater cognitive conflict while working on decision tasks than groups of strangers (Shah & Jehn, 1993; Tajfel, 1982). Likewise, groups with members that have greater knowledge about one another are less likely to show bias against sharing unique information than groups in which members knew less about one another (Gruenfeld, Mannix & Williams, 1996). Thus, the trusting relationship generated



from close CEO/board ties is likely to promote cognitive conflicts on boards. Contrastingly, poor social ties in CEO/board relationship create uncertainty within the board, thus, conflicting facts and viewpoints that are required for critical inquiry and analysis in board decisions are more likely to be suppressed.

Third, social ties in CEO/board relationships can also affect board cohesiveness (Carpenter, Geletkanycz & Sanders, 2004; McPherson, Popielarz & Drobnic, 1992). This occurs because social ties are associated with increased interpersonal attraction and trust (Westphal, 1999), which promotes the cohesiveness and comfort needed for open and thoughtful interactions on boards. However, too close social ties in the CEO/board relationship may also lead to extreme cohesiveness which creates “group think” on boards (Sundaramurthy & Lewis, 2003). Conversely, poor social ties in CEO/board relationships increases the social distance between the CEO and directors, as a result, members are no longer bound by the social obligations of personal loyalty and support for each other (Wu, 2008).

Finally, CEO/board relationship can also affect the use of knowledge and skills by boards. Research shows that close social ties between the CEO and directors promotes better awareness of each other’s expertise, and at the same time, it increases the CEO’s access to different knowledge and skills available within the board (Cross & Cummings, 2004). Normally, boards are knowledge-intensive groups and their information networks are often dynamic, thus, a good awareness of each others’ expertise allows the CEO to reach out to the right director at the right time when presented with unique challenges and opportunities (Cross & Cummings, 2004). In this sense, a close social tie in the CEO/board relationship is crucial as it is likely to increase the transfer and use of quality and relevant knowledge and skills on the board (Hansen, 1999). Also, since directors are mostly part-timers that meet only occasionally, a strong social tie between the CEO and the board is critical in enhancing the ability of boards to effectively apply their knowledge and skills to board tasks. On the other hand, too close social ties between the CEO and directors may potentially lead to “social loafing” which reduces use of knowledge and skills by the board.

### 3.8.2 How board motivation affects other board processes

The literature suggests that board motivation affects other board processes as well. For instance, the motivation individuals carry into a group context is being increasingly regarded as a critical element in the enforcement of effort norms within the group. Similarly, how

directors are motivated in joining boards may also determine their contribution to cognitive conflicts, ability to engage in cohesive behaviours, and their willingness to apply knowledge and skills to board tasks. For example, Fehr and Falk (2002) observed that rewarding people monetarily for obeying social norms may weaken norm enforcement which leads to a gradual erosion of norm-guided behaviour. In this sense, extrinsic motivation is less likely to contribute to enforcing the accepted effort norms within the board. On the other hand, research suggests that people engage in tasks and activities because they enjoy them. In other words, individuals view such tasks as inherently satisfying which creates an intrinsic reward in performing them, meaning that people directly derive pleasure from the activity (Fehr & Falk, 2002). Correspondingly, it can be argued that boards that are driven by intrinsic motivation are more likely to increase commitment to effort norms, cognitive discussions, board cohesiveness and the willingness to apply knowledge and skills to board tasks. This implies that intrinsic motivation and extrinsic motivation are expected to have opposing effects on other board processes.

### 3.8.3 How affective conflict affects other board processes

Similarly, evidence suggests that affective conflicts can significantly affect other board processes. First, affective conflict can prevent teams from committing to effort norms hence it undermines the effectiveness of boards. In other words, affective conflict causes directors to disassociate themselves from board norms by acting contrary to board collective efforts which subsequently leads to the deliberate withdrawal of personal commitment from board tasks.

Second, affective conflict may also affect board cohesiveness or the ability of board members to remain united and committed to board tasks to achieve common goals (Carron, 1982; Evans & Jarvis, 1980; Goodman, Ravlin & Schminke, 1987). Research suggests that any form of disagreement over issues that are personal or emotional in nature, is likely to negatively affect the cohesiveness within boards (Evans & Jarvis, 1980).

Lastly, affective conflict can also be associated with the decline in the use of knowledge and skills by boards. According to research, affective conflict creates distrust between members within boards which causes unwillingness in members to engage in discussions necessary to synthesise their different perspectives (Amason, Thompson, Hochwarter & Harrison, 1995). This implies that in affective conflict situations, board members are less likely to carry out

decisions they do not understand or that were made without their participation. Indeed, Amason and colleagues found that personal disagreements resulting from differences of opinion cause team members to simply throw up their hands and walk away from group decisions. Correspondingly, board members who are frustrated in affective conflict environments may cease to be active participants in board decision-making processes, and therefore, a decline in the application of knowledge and skills to board tasks.

#### 3.8.4 How board information affects other board processes

Board information also affects other board processes. First, evidence suggests that the flow of board information can affect the commitment of directors to effort norms (Krizan, Merrier, Logan & Williams, 2005; Larson & Kleiner, 2004). Based on the norm of conformity, adequate flow of board information is likely to enhance member compliance and commitment to effort norms (Chen, Aryee & Lee, 2005). This implies that the increased flow of board information interacts with the influence of compliance norms which shapes behaviour within the board (Marsden, 2000; Stoecker, 1991).

Second, effective flow of information can also affect the ability of boards to engage in cognitive conflicts. According to research, people prefer to work in a task environment that has access to detailed facts and allows for sufficient time to process information (Hayes & Allison, 1988). Thus, inadequate flow of board information is likely to reduce the ability of directors to engage in cognitive conflicts.

Third, the flow of information can be linked to the cohesiveness within groups like boards of directors. Research suggests that an adequate flow of board information promotes interaction and cohesion between management and the board hence it facilitates their knowledge about each other including the areas in which they could assist each other. In contrast, the lack of an adequate flow of information between management and the board may cause directors to work in isolation which is detrimental to the cohesiveness of boards (Vathanophas & Pilunowad, 2008).

Lastly, the flow of board information can affect the ability of board members to apply their knowledge and skills to board tasks. This implies that directors may be able to carry with them valuable knowledge and skills that are useful to the success of the firm, but without the adequate flow of specific firm information from management to the board, board members may find it difficult to apply their knowledge and skills to firm-specific issues.

### 3.8.5 How board cohesiveness affects other board processes

Finally, research shows that board cohesiveness can also affect other board processes. First, cohesiveness between group members can be linked to high effort norm behaviour in groups. Kozlowski and Ilgen (2006) noted that interpersonal cohesiveness enables groups to have less inhibited communication which increases individual effort to group tasks and the coordination of the entire group effort (Hackman, 1976). Similarly, the attraction between members in cohesive boards allows individuals to communicate their expectations or shared beliefs regarding the level of effort each member is expected to contribute toward board tasks (Forbes & Milliken, 1999; van der Walt & Ingley, 2003). Conversely, poor cohesiveness reduces the ability of board members to communicate each other's concern about board issues. This leads to misperception of beliefs between members about board decisions, which exacerbate members' ignorance and lack of commitment to effort norms (Westphal & Bednar, 2005).

Second, cohesiveness can also promote the active participation of directors in board discussions and the sharing of constructive ideas and solutions (Charan, 1998; Forbes & Milliken, 1999; Huse, 2005; Kiel & Nicholson, 2005). When this occurs, it increases the critical and questioning attitude of directors which is an important requirement for cognitive conflicts on boards (Forbes & Milliken, 1999). This implies that through cohesive relationships, directors feel encouraged to find their own information and carefully scrutinise the information provided by the CEO, which is an indication that the board has the integrity to be independent by making decisions independent of the CEO (Gabrielsson, Huse & Minichilli, 2007; Huse, Minichilli & Schønning, 2005). Thus, when the board enjoys a reasonable level of cohesiveness, directors tend to engage in challenging and discerning questions that focus on task-related issues rather than personal matters. In effect, this helps prevent the emergence of "group think" in cohesive boards by fostering an environment characterised by a task-oriented focus and a tolerance of multiple viewpoints and opinions (Forbes & Milliken, 1999). This means that the trust prevalent in cohesive boards does not necessarily insinuate absence of disagreement between board members but rather it connotes the quality of relationships between directors which is strong enough to withstand challenging questions and clashing viewpoints (Sonnenfeld, 2002). This suggests that in cohesive boards, directors increase their trust of one another, through which, they can share

difficult information. As a result, all board members may have the same reasonably complete information which enables them to challenge one another's conclusions (Petrovic, 2008).

Lastly, cohesiveness may also affect the ability of boards to apply their knowledge and skills to board tasks. According to the literature, the extent to which directors have interpersonal attraction and trust in each other's judgement and expertise is important for the effective use of knowledge and skills on boards (Forbes & Milliken, 1999; Pye & Pettigrew, 2005; Sonnenfeld, 2002). This is because the trust that emerges in cohesive boards is likely to increase directors' engagement and commitment (Roberts, 2002) and their openness to dialogue (Kakabadse & Myers, 1996), which allows boards to benefit from the increased ability of board members to use the knowledge and skills they bring with them into the boardroom (Nicholson & Kiel, 2004a; Petrovic, 2008). Moreover, directors feel more comfortable working with and are more likely to trust and cooperate with those with whom they can identify. This implies that board members who are attracted to each other will appreciate coming together for board meetings and are likely to give very high priority to being part of the board (Gabrielsson *et al.*, 2007). As observed by Huse *et al.* (2005), the level of cohesiveness within the board can be reflected through the atmosphere in board meetings and the willingness of members to apply their knowledge and skills to board decisions.

### **3.9 Summary**

Boards of directors play a significant role in the internal governance of enterprises. This role has developed beyond the board's traditional monitoring and control function to include the value-enhanced functions of service and strategic tasks. Enterprises that view their board as a source of professional advice, counselling, and strategic input, are more likely to be competitive compared to enterprises that merely regard their boards as a monitoring device. Hence, the board's ability to effectively perform monitoring and control as well as service and strategic roles is critical to the success of the enterprise. However, this ability is likely to be influenced not only by board attributes but also the processes in which boards involve in carrying out their duties. Further, interrelationships between different board processes may significantly influence the ability of boards to perform their roles. These relationships are critical to the effectiveness of boards in the PICs, and therefore, this study investigates these issues in the context of Fiji and the Solomon Islands. The next chapter presents the conceptual framework and addresses the research methodology employed in this study.

## Chapter 4 RESEARCH METHODOLOGY

This chapter outlines the research methodology adopted in this study. Section 4.1 presents the research framework and describes the research design. The measures for the research variables are outlined in Section 4.2, followed by an explanation of the main research instruments and a description of how these methods are administered in Section 4.3. In Section 4.4, population sampling issues are addressed, which is then followed by a discussion on data management issues in Section 4.5. Key data analysis methods are discussed in Sections 4.6 and 4.7.

### 4.1 Research framework

In Chapter 3, the theoretical support for the causal relationships between board attributes, board process and board performance are discussed, on which basis, the conceptual framework for the analysis in this thesis is grounded. For the convenience of discussions in this chapter, the conceptual framework in Figure 3.2 is reproduced below in Figure 4.1.

As shown in Figure 4.1, three main groups of variables are examined in this study. The first is the independent variables, board attributes, which include *board size*, *board composition*, *board diversity*, and *multiple directorships*. These attributes have been identified as important proxies for understanding board effectiveness. Importantly, these same attributes were highlighted in Chapter 2 as critical factors affecting the effectiveness of boards in PICs. The second group is the mediator variables, board processes, which include *effort norms*, *cognitive conflict*, *board cohesiveness*, *use of knowledge and skills*, *CEO/board relationship*, *board motivation*, *affective conflict* and *board information*. Again, the literature has identified these process concepts as important determinants of board effectiveness. Further, their specific application in this thesis is based on the uniqueness of boards in PICs, as well as the specific criterion of board effectiveness considered in this study. Lastly, the third group is the dependent variables, board performance variables, which serves as the indicator for board effectiveness and it is measured in terms of the board's ability to perform its *monitoring and control roles*, *services roles* and *strategic roles*.

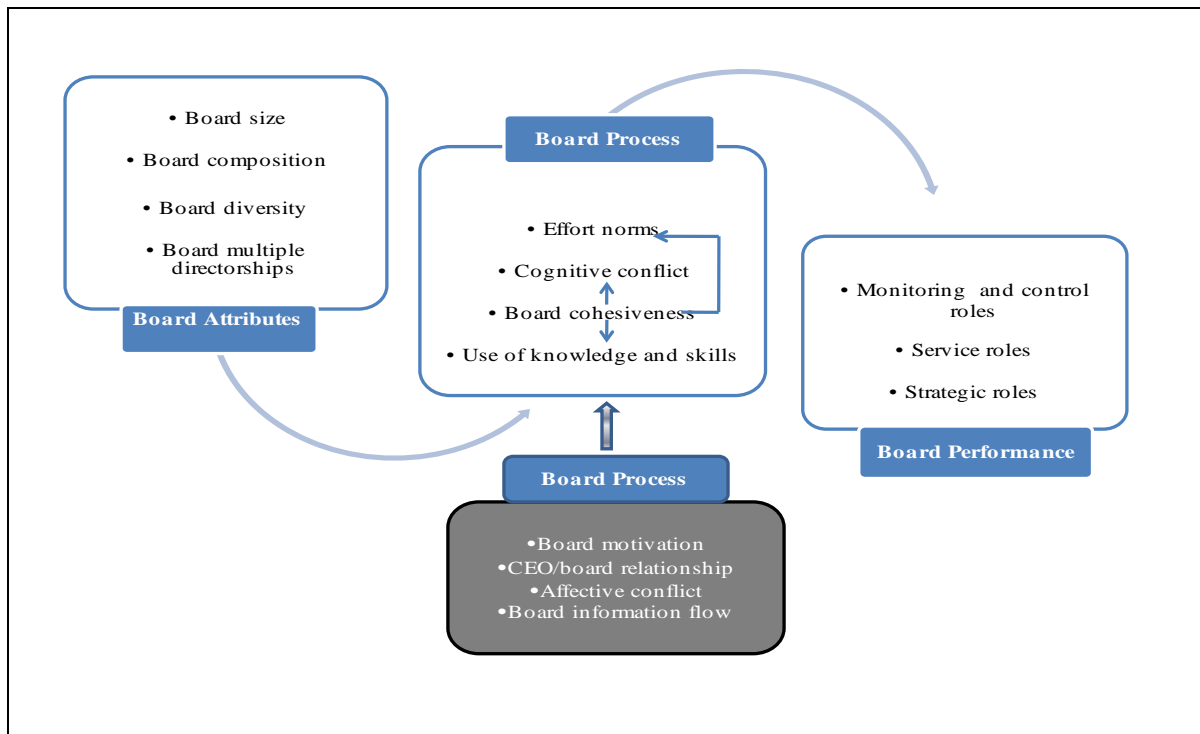


Figure 4.1 Research framework: board attributes, board process and board performance

Overall, based on the discussions in Chapter 3, three important relationships are investigated in this study as portrayed in Figure 4.1. Firstly, board attributes are assumed to have a direct effect on board process. Secondly, board process is assumed to have a direct effect on board performance. Thirdly, different board processes are also assumed to exert influence on each other which then goes on to affect board performance. Accordingly, this thesis investigates the leading research question outlined in Chapter 1 which states:

*Do board attributes affect board performance through the influence of board process in public and private enterprises in Fiji and the Solomon Islands?*

This is the underlying principle in mediation analysis (a concept discussed later in this chapter), which determines how significantly an input variable (board attributes) affects an output variable (board performance) through the influence of a mediator variable (board process). Grounded in the above leading question, this study used mediation analysis to investigate the following specific research questions in the context of Fiji and the Solomon Islands:

- *Is the relationship between board size and board performance affected by board process?*

- *Does board composition indirectly affect board performance through its effect on board process?*
- *Is the relationship between board diversity and board performance indirectly influenced by the effect of board process?*
- *Do multiple directorships affect board performance through the effect of board process?*
- *Are there causal inter-relationships between different board processes that affect board performance?*

To answer these research questions, a combination of quantitative and qualitative research design is adopted. The quantitative research design is grounded in the philosophy of positivism (Bryman & Bell, 2007; Rudestam & Newton, 1992; Saunders, Lewis & Thornhill, 2007), which generates quantifiable data concerned with observable and measurable phenomena involving people, events or things. This design focuses on establishing the strength of the relationship between variables and normally applies statistics and experiments to test propositions (Cavana, Delahaye & Sekaran, 2001; Neuman, 1997). The intention is to uncover common patterns that categorise an entire population or a sample of that population without revealing specific characteristics of individual cases (Bentz & Shapiro, 1998; Owtscharov, 2007). The primary objectivity of quantitative research rests on aggregating numbers into statistics to facilitate the interpretation of data results in reaching conclusions on research questions (Johnson & Harris, 2002).

For this research, quantitative data are required to measure the board attributes (size, composition, diversity and multiple directorships). The method used to obtain these data varied. Some firms such as SoEs and listed-companies normally disclose certain information to the public; hence data on size, composition and diversity are readily available from annual reports and other statements and publications. However, a lot of firms (private or non-listed firms) do not normally practise information disclosure; therefore, this research had to rely on the survey technique to obtain such data which is often not available through other means other than the survey method.

This led to the qualitative design in this study. Based on the philosophy of interpretivism, researchers normally engage in more meaningful examination of social action more than just observing people's behaviour by capturing the complexities of social situations (Bryman & Bell, 2007; Neuman, 1997; Saunders *et al.*, 2007; Siladi, 2006). Through qualitative research



designs, researchers interpret data based on understanding of the situation (Siladi, 2006; Ticehurst & Veal, 1999). In fact, recent studies have called for more qualitative designs in corporate governance research amid increasing criticisms levelled at the use of quantitative designs for typifying a 'numbers' approach to issues or phenomenon of interests (Kakabadse *et al.*, 2001; Neuman, 1997; Siladi, 2006). As noted by Neuman (1997), positivism and quantitative design reduces people to numbers and formulas, making it irrelevant to the real life situations of people. In board specific context, Kakabadse *et al.* (2001) argued that quantitative designs concentrate on database analysis of published sources hence they ignore important issues such as the impact of boardroom dynamics and the interrelationships between directors and managers. In practice, many of the issues of interest in board research may not be so clearly identifiable and quantifiable therefore the generalisations in the positivist approach may not contribute to explaining unique board situations or the dynamics of board process relationships (Sonnenfeld, 2004).

In this study, qualitative data are required to measure board processes, as discussed Chapter 3, which includes *effort norms, cognitive conflict, board cohesiveness, use of knowledge and skills, CEO/board relationship, board motivation, affective conflict* and *board information*. Likewise, qualitative data are required to measure board performance indicators such as *monitoring and control role performance, service role performance* and *strategic role performance*, as outlined in Chapter 3. Obviously, these data are not accessible through company reports or other publications. In fact, the preferred design in studying the internal processes and operations of boards is boardroom observation (Clarke, 1998), since it allows researchers to study the relationships and interactions between board members, the processes they involve, and the overall dynamics of the board. However, the lack of access to the boardroom due to confidentiality of board meetings and the possible consequences of exposing board members to legal action, renders boardroom observation practically unfeasible (Leblanc & Gillies, 2005; Siladi, 2006). Further, a common criticism of boardroom observation is that directors may not be as candid or productive due to the presence of a third party. Therefore, consistent with Clarke (1998), the qualitative design offers the most practical option for gathering data on the board process and board performance variables. In fact, the high degree of representativeness (Gomm, 2004), as well as the ease at which the views and opinions of board members can be obtained through qualitative designs, makes it appropriate for this research. An elaborate discussion on the data collection process is covered later in this chapter.

## 4.2 Key variables operationalised

An important task in defining research concepts is to operationalise variables to enable their measurement. This section outlines the operational measures for the board attributes, board process, and board performance variables used in this study.

### 4.2.1 Measures of board attributes

As discussed in Chapter 3, board attributes examined in this study include size, composition, diversity and multiple directorships. First, board size is defined as the total number of directors on the board. Second, board composition is defined as the proportion of outside (non-executive) to inside (executive) directors on the board. Third, board diversity is defined as the proportion of female to male directors on the board. Lastly, multiple directorships are defined as the number of directorships or memberships a director holds on other boards. Thus, all four attributes hold as scale variables in the subsequent analysis that follows in this thesis. These variables are presented in Appendix 1.

### 4.2.2 Measures of board performance

The strict confidentiality and highly interpretive nature of board activities makes measuring board performance comprehensively, a challenging task (Forbes & Milliken, 1999; Levrau & Van Den Berghe, 2007a). Regardless, board performance should be determined based on how effective boards execute their roles (Johnson *et al.*, 1996; Lipton & Lorsch, 1992). This thesis defines board performance as the degree to which boards effectively perform their monitoring and control roles, service roles, and strategic roles (Levrau & Van Den Berghe, 2007b; Ong & Wan, 2008). These roles together capture the most significant duties or functions of a board member (Johnson *et al.*, 1996).

Table 4.1 outlines the operationalised measures for board performance. First, the measure of monitoring and control role performance was based on the work of Westphal (1999) and Blake (1999), which requires board insiders (directors, CEOs, chairpersons, board secretaries and observers) to indicate how well the board has executed the following tasks listed against BP<sub>1</sub> in Table 4.1. Second, service role performance was measured based on the work by Westphal (1999) and Dulewicz *et al.* (1995), requiring board insiders to rate the degree to which they agree with the statements listed against BP<sub>2</sub>. Finally, strategic role performance was measured using the suggestions by Fama and Jensen (1983) and Tricker (1994), which

were also recommended by Zahra (1990) and Blake (1999), that requires board insiders to indicate the extent to which they agree with the statements listed against BP<sub>3</sub>.

These statements were measured on a five-point Likert scale ranging from 1 which represents “*strongly disagree*” to 5 which represents “*strongly agree*”, using a survey questionnaire. A high score in each of the statements reflects a high degree of board performance in each of the three role sets.

*Table 4.1 Operational measures for board performance variable*

Variable name	Operational statements
<i>Monitoring and control role performance (BP1)</i>	<ul style="list-style-type: none"> <li>• Board ratifies and monitors management’s strategic decision making</li> <li>• Board develops performance objectives for management</li> <li>• Board evaluates performance of company management</li> <li>• Board analyses financial information for important trends and issues</li> <li>• Board analyses budget allocation against performance</li> <li>• Board reviews company performance against strategic plan</li> </ul>
<i>Service role performance (BP2)</i>	<ul style="list-style-type: none"> <li>• CEO and top managers solicit board assistance in the formulation of corporate strategy</li> <li>• The board is an effective checker for management on strategic issues</li> <li>• Directors provide advice and counsel in discussions outside of board and committee meetings</li> <li>• Board takes into account the legitimate interests of organisations, groups and individuals (stakeholders) who have a direct interest in the achievement of company objectives</li> <li>• Board ensures the communications with stakeholders and the general public are effective</li> <li>• Directors actively engage in networking to benefit the company and be involved in securing resources for the company such as assistance from government and donors</li> </ul>
<i>Strategic role performance (BP3)</i>	<ul style="list-style-type: none"> <li>• Board conducts internal analysis of company strengths and weaknesses</li> <li>• Board practises external analysis of opportunities and threats to company</li> <li>• Board is involved in the strategic planning process</li> <li>• Board communicates the strategic direction throughout the company</li> <li>• Board receives a plan for the implementation of strategy from the CEO</li> <li>• Board benchmarks the strategic plan with industry comparative data</li> </ul>

### 4.2.3 Measures of board process

As outlined in Table 4.2 and Appendix 1, the board process variables were effected by identifying aspects related to each process and determining the extent to which these aspects relate to the board of directors (Levrau & Van Den Berghe, 2007a; Levrau & Van Den Berghe, 2007b; Ong & Wan, 2008).

*Table 4.2 Operational measures for board process variables*

Variable name	Operational statements
<i>Effort norms</i> (M1)	<ul style="list-style-type: none"> <li>• Directors carefully scrutinise the information provided by the company prior to meetings</li> <li>• Directors conduct frequent research on issues relevant to the company</li> <li>• Directors take notes during meetings</li> <li>• Directors put effort into the board and company's work</li> <li>• Directors have positive attitudes towards company workload when assigned specific tasks</li> </ul>
<i>Cognitive conflict</i> (M2)	<ul style="list-style-type: none"> <li>• Board considers viewpoints of different members before making final decision</li> <li>• Board decisions are settled amicably</li> <li>• Discussions are open and candid</li> </ul>
<i>Board cohesiveness</i> (M3)	<ul style="list-style-type: none"> <li>• The board obtains feedback from directors for decision-making</li> <li>• The board gets help from directors for decision-making</li> <li>• Directors on the board are cooperative</li> <li>• Members of this board respect and trust each other</li> <li>• Board members socialise with each other outside board meetings</li> </ul>
<i>Use of knowledge and skills</i> (M4)	<ul style="list-style-type: none"> <li>• People on this board are aware of each others' areas of expertise</li> <li>• When an issue is discussed, the most knowledgeable people generally have the most influence</li> <li>• Task delegation on this board represents a good match between knowledge and responsibilities</li> <li>• Important information often gets withheld on this board</li> <li>• Information flows quickly among board members</li> </ul>

(Table 4.2, continued next page)

<i>CEO/board relationship (M5)</i>	<ul style="list-style-type: none"> <li>• CEO and management willingly accept the board's influence</li> <li>• CEO has ability to resist the board's influence</li> <li>• CEO has good social ties with directors</li> <li>• The board has explicitly stated its performance expectation of the CEO and management</li> </ul>
<i>Intrinsic motivation (M6a)</i>	<ul style="list-style-type: none"> <li>• Kindness and desire to help others</li> <li>• Contribution to the country</li> <li>• Interest in company/organisation</li> <li>• Representation of stakeholder interest</li> <li>• Challenge</li> <li>• Opportunity</li> </ul>
<i>Extrinsic motivation (M6b)</i>	<ul style="list-style-type: none"> <li>• Status</li> <li>• Prestige</li> <li>• Fees, allowances, benefits</li> <li>• Means for gaining other appointments</li> </ul>
<i>Affective conflict (M7)</i>	<ul style="list-style-type: none"> <li>• There are personality clashes among directors</li> <li>• Directors do not get along very well</li> <li>• Relationships among directors are best described as "win-lose", that is, if he/she wins, I lose</li> </ul>
<i>Board information (M8)</i>	<ul style="list-style-type: none"> <li>• The board has a clear idea of what information it requires or needs for decision making</li> <li>• Directors receive extensive and timely provision of information from CEO and management</li> <li>• There is effective bottom-up information flow from functional departments to directors</li> <li>• The information received by board is in a form that allows directors to fully comprehend company's position</li> </ul>

First, the effort norm was measured based on the original works of Wageman (1995) and Shanley and Langfred (1998), also recommended by Forbes and Milliken (1999) and Ong and Wan (2008), which required board insiders to rate their support for the statements listed against M1 in Table 4.2. Second, the measure for cognitive conflict was obtained from the work of Smith *et al.* (1994), Jehn (1995) and Charan (1998), and also used by Ong and Wan (2008), in which board insiders were asked to indicate their support for the statements listed against M2. Third, for board cohesiveness, this research adopted the indicators on group

cohesiveness put forward by Shanley and Langford (1998), also recommended by Ong and Wan (2008), including the evaluative statements proposed by Levrau and Van den Berghe (2007b), which require board insiders to evaluate the statements listed against M3. Finally, to measure the use of knowledge and skills, the study adopted the operational measures suggested by Forbes and Milliken (1999) and McGrath *et al.* (1995), which require board insiders to assess the validity of the statements listed against M4, also in Table 4.2.

Similarly, CEO/board relationship was measured based on the work of Song and Thakor (2007) which requires board insiders to rank the extent to which they agree with the statements listed against M5 in Table 4.2. The measure for board motivation was split into intrinsic motivation and extrinsic motivation based on the work by van der Walt and Ingleby (2003), which asked board insiders to indicate the extent to which they feel directors are motivated by the factors listed against M6a and M6b, respectively, in Table 4.2. For affective conflict, measures proposed by Smith *et al.* (1994), which were also used by Ong and Wan (2008), were adopted which require board insiders to rate their opinion against the statements listed against M7. Finally, to measure the flow of board information within the board, respondents were asked to indicate the degree to which they agree with the statements listed against M8.

The statements in Table 4.2 were also measured on a 5 point-item Likert scale, ranging from 1 which represents *strongly disagree* to 5 which represents *strongly agree*. In accordance, a high score in each of the statements reflects a high degree of activity in the respective process. Further, some statements were negatively stated in the questionnaire to probe the right response, for example statement 2 and 4 in Variable M4, but the scores were reversed in the final analysis to be consistent with the rest of the statements. In the next section, the main data collection methods are discussed.

## **4.3 Data acquisition**

### **4.3.1 Secondary data**

Often, board research relies on secondary data like company reports and statements, industry publications and media releases (Leblanc & Gillies, 2005). Secondary data used in this study include: company annual reports, statements and other publications, company websites, government department reports and websites, stock exchange reports and publications, newspaper articles and reports found through different media forms (e.g. internet, database)

and other general industry publications. It is noted, however, secondary sources may contain data such as board attributes and characteristics, but they do not contain data on process and other internal issues that also affect the performance of boards. The latter has to be obtained through other sources or approaches such as questionnaire surveys or personal interviews.

#### 4.3.2 Primary data

Primary data used in this study were obtained through questionnaire surveys in Fiji and the Solomon Islands and personal interviews in Fiji.

##### *Questionnaire survey*

A questionnaire was used to gather data unavailable through the secondary source, which has open-ended and closed-ended items, as well as a rating scale with predetermined response options. The survey questionnaire comprises of four key sections (see Table 4.3). In Section A, nominal and ratio data on the background of the respondents were elicited. Likewise, in Section B, data on board appointment and memberships were sought and gathered in nominal and scale form. The last two sections, Section C and D, obtained data on board process and board performance. As highlighted earlier, the design of questions in these two sections supported an ordinal level of measurement using a Likert scale which requires respondents to indicate their response in a continuum of options ranging from 1 to 5, where 1 = *strongly disagree*, 2 = *disagree*, 3 = *undecided*, 4 = *agree*, 5 = *strongly agree*.

Initially, pre-tests were conducted to determine the feasibility and validity of the survey questionnaire. The pre-test was conducted in the followings stages. First, the supervisors were asked to comment on the draft questionnaire, whose feedback was used to fine-tune the instrument in terms of structure, style, content, language, presentation and general appeal. Second, doctoral student colleagues at James Cook University were asked to complete the questionnaire simulating the role and environment of board of directors and to suggest improvement to the instrument based on a set of evaluation criteria that include *technical soundness*, *item clarity* and *relevance of the items*. The questionnaire was then refined. In the final stage, the questionnaire was administered with 20 individuals who had previous experience on boards of public and private enterprises in Fiji and who did not hold current board positions at the time of research. Feedback was received from 17 individuals and was used to finalise the questionnaire. A copy of the final questionnaire used in the survey is presented in Appendix 2.

Table 4.3 Division of survey questionnaire

Section	No. of items	Level of measurement	Variables covered
<b>Section A</b> Background	7	Nominal Scale	<ul style="list-style-type: none"> <li>• Gender</li> <li>• Age</li> <li>• Nationality</li> <li>• Occupation</li> <li>• Education</li> </ul>
<b>Section B</b> Appointment/ membership	7	Nominal Scale	<ul style="list-style-type: none"> <li>• Board position</li> <li>• Board tenure</li> <li>• Board size</li> <li>• Board composition</li> <li>• Board diversity</li> <li>• Multiple directorships</li> </ul>
<b>Section C</b> Board process	8	Ordinal	<ul style="list-style-type: none"> <li>• Effort norms</li> <li>• Cognitive conflict</li> <li>• Board cohesiveness</li> <li>• Use of knowledge and skills</li> <li>• CEO/board relationship</li> <li>• Board motivation</li> <li>• Affective conflict</li> <li>• Board information</li> </ul>
<b>Section D</b> Board performance	3	Ordinal	<ul style="list-style-type: none"> <li>• Monitoring and control role</li> <li>• Service role</li> <li>• Strategic role</li> </ul>

The questionnaires were administered to board insiders or people who have access to boards of public and private enterprises, both in Fiji and the Solomon Islands. These people include CEOs, chairpersons, directors, board secretaries and board observers. The questionnaire was introduced with a covering letter (see Appendix 3) and was directly distributed through the appointments with the respondents, with one person required to complete the questionnaire for each board. In most cases, the questionnaires were completed during the presence of the researcher which allowed for clarifications to be made to queries by respondents in the process of completing the questionnaire. On average, the questionnaires took 20 minutes to complete. Some respondents, however, did not have the time to complete the questionnaire at the time of appointment but were willing to complete the questionnaire in their own time, which was later returned by mail or personally collected by the researcher.



Upon conclusion of the survey, the ordinal items in Section C and Section D were tested for reliability by calculating the Cronbach's coefficient alpha scores. This is to indicate if these measures accurately reflect the attributes they were initially intended to measure (Ghauri & Gronhaug, 2005; Tharenou, Donohue & Cooper, 2007; Veal, 2005). Cronbach's coefficient alpha was chosen based on evidence that it is the most widely used statistic for evaluating internal consistency and it indicates the reliability of the data (Johnson & Harris, 2002; Schwab, 2005). Cronbach's coefficient alpha measures the extent to which the performance on any one item of an instrument is a good indicator of the performance in any other item in the same instrument (Schwab, 2005).

*Table 4.4 Cronbach's coefficient alpha scores for ordinal variables*

Variable	Cronbach's coefficient	No. of items
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	.904	6
<i>Service role performance (BP<sub>2</sub>)</i>	.882	6
<i>Strategic role performance (BP<sub>3</sub>)</i>	.881	6
<i>Effort norms (M<sub>1</sub>)</i>	.881	5
<i>Cognitive conflict (M<sub>2</sub>)</i>	.874	3
<i>Board cohesiveness (M<sub>3</sub>)</i>	.876	5
<i>Use of knowledge and skills (M<sub>4</sub>)</i>	.765	4
<i>CEO/board relationship (M<sub>5</sub>)</i>	.774	5
<i>Intrinsic motivation (M<sub>6a</sub>)</i>	.841	6
<i>Extrinsic motivation (M<sub>6b</sub>)</i>	.841	4
<i>Affective conflict (M<sub>7</sub>)</i>	.740	3
<i>Board information (M<sub>8</sub>)</i>	.912	4

In Table 4.4, the Cronbach's coefficient alpha scores for each of the ordinal variables included in the questionnaire are presented. Here, if Cronbach's coefficient alpha values are greater than 0.6, data are considered reliable. As shown in Table 4.4, all the measures of the variables obtained from the survey are reliable. A detailed discussion on these reliability scores is covered later in this chapter.

### *Personal interviews*

Semi-structured personal interviews were also used to supplement the data obtained through the questionnaires. The interview creates the opportunity for board insiders to share valuable experience and knowledge by raising and expanding on issues affecting their boards they see as important that were not highlighted by the researcher, and at the same time, it enables the researcher to probe further into issues of specific interest. This allows the researcher to engage in exploratory discussions that lead interviewees to explain not only the “what” and the “how”, but also to emphasise and explore the “why” (Saunders *et al.*, 2007). Moreover, the use of probing questions ensured that the researcher’s interpretation of the comments received is truly reflective of the interviewee’s knowledge, experience and situation. In essence, the use of personal interviews is justified in this research based on the belief that those personally involved in boardroom activities are the best placed people to analyse and describe these activities in their own words.

Initially, the semi-structured questions were pre-tested to ensure that they are appropriately designed and are of good quality that will probe the right response. This test was conducted through informal discussions with fellow research students of the School of Business at James Cook University, and with friends in academia and the public sector in Fiji and the Solomon Islands. Additionally, the questions were tested with a number of colleagues in the private sector in Fiji which created an opportunity to practise interview skills and refine the questions. The pre-tests were vital in shaping the final design of the interview instrument (see Appendix 4).

In total, 88 interviews were conducted in Fiji. Unfortunately, no interviews were conducted in the Solomon Islands due to logistical difficulties. Again, those interviewed include CEOs, chairpersons, directors, board secretaries and observers. In some cases the interview was conducted with more than one person in a firm depending on the availability of board insiders. Mostly, interviews were held at the interviewee’s place of work and the date of appointment varied significantly from the date of the initial contact. Some appointments were confirmed in a matter of days while others took between one to three weeks to confirm. On average, the interviews lasted between 30 to 45 minutes. In each session, interviewees were appropriately introduced to the study and were assured of the confidentiality of their identity and the information they provided. This was administered through a consent note signed by the interviewees to confirm their willingness to participate in the study as well as their

acceptance for the interview to be tape recorded (see Appendix 5). All interviewees agreed to the conditions listed on the consent form except for two who requested the interview not to be recorded on tape.

To ensure the security and quality of data collection, all interviews were recorded using a digital memory voice recorder, except for the two interviewees that declined recording. Additionally, key points were also noted on the interview guide sheet to facilitate a smooth flow of the conversation which served as useful prompts to help address or re-address important issues raised by the interviewees. The key notes and the digital record complement each other because to simply rely on these notes would be considered 'low fidelity' and 'low structure' since important points can be missed when the researcher concentrates on taking notes (Hogan & Roberts, 1996). Thus, the digital record and the guide sheet concomitantly benefited this research, allowing the researcher to go through the transcriptions and the audio records in a methodical manner.

The records were then transcribed word for word into Word files. This task was undertaken to ensure that all data was accounted for despite its time consuming nature. As a result, a large number of pages in transcripts, in addition to the guide sheet of key notes were produced. The data were then reduced into a cohesive and presentable format through an assigned code for each interview. Through this, all interviews were thoroughly examined and the contents deemed irrelevant for the study were removed. A number of challenges were encountered in this process. First, since the flow and sequence of questions were allowed to be influenced by the interviewee, the transcription output did not necessarily follow the guideline. This implies that the data in the transcripts did not consistently appear in the same format for each interview. Second, since the interviews were flexible in allowing interviewees to raise other issues of interest, it demanded a lot of time to sort out the responses and make sense of them. In some cases, the comments were not so clear cut which made the task of comparing and contrasting difficult. Therefore, the data had to be rearranged to ensure that all information regarded important and relevant to the study were accounted for by being consistently summarised and presented in an orderly manner.

Following this, the transcripts were summarised into categories based on the leading questions in the interview. Common ideas and concepts were identified and key words and headings were appropriately developed, under which the data contained in the transcript were appropriately summarised. A summary of the interview data is produced as a result. This

summary presents the data in a systematic format which allowed the researcher to make comparisons between the interviews, draw valid conclusions and take needed action. The summary of the interview data were not coded and presented separately in the analysis in this thesis. However, the key themes identified from the summary were used in subsequent analysis and evaluation to support the interpretation and development of conclusions in the thesis.

#### **4.4 Population sampling**

Sampling is critical for this study given finance and time constraints, as well as the geographical diversity of PICs. To start with, the study focuses on Fiji and the Solomon Islands, and the target population includes public and private enterprises. These two countries were selected in response to increasing concerns about poor corporate governance practices and their effect on their economies. Additionally, the decision to cover public and private enterprises was made in light of evaluating and comparing the performance of boards based on public and private ownership.

In Fiji, 494 enterprises (state and private-owned) were registered in 2004 (Fiji Islands Bureau of Statistics, 2007). While, in the Solomon Islands 255 enterprises (state and private-owned) were registered and considered operational in 2005 (Solomon Islands Registrar of Companies, 2008). Based on this population, probability sampling and snowballing were applied to obtain a feasible sample for the study. Initially, 150 firms in Fiji and 100 firms in the Solomon Islands were selected using probability sampling based on the Registrar of Titles record in each country. Following this, invitation letters were sent to the selected firms seeking their consent to participate in the research. Of 150 firms invited in Fiji, only 38 agreed to participate, 41 rejected the invitation and no response was received from 71 firms. In the Solomon Islands, of the 100 firms invited, only 22 accepted the invitation, 15 declined and no response was received from 63 firms. Overall, the positive response rate generated for Fiji and the Solomon Islands was 25 per cent and 22 per cent, respectively, based on the probability sample. In total, 60 questionnaires were completed for the two countries, yielding a combined positive response rate of 24 per cent (Table 4.5).

To increase the sample, the snowball technique was applied. This involved asking the initial respondents from the probability sample for possible contacts they knew who may be interested in participating in the study. This resulted in a snowball effect which yielded an

additional 12 firms for Fiji and 14 firms for the Solomon Islands. A limit of one referral per respondent was imposed to reduce potential biases associated with snowball sampling. Following the implementation of the snowball technique, ultimately, a total of 50 firms responded for Fiji and 36 firms responded for the Solomon Islands, resulting in a total sample of 86 firms for the study. In Table 4.5 below, the sampling details and the final positive response rates for the two countries are given.

*Table 4.5 Response samples for Fiji and Solomon Islands*

Country	No. of questionnaires distributed	No. of questionnaires completed	Positive response rate (%)
<b>Probability sampling</b>			
Fiji	150	38	25.33
Solomon Islands	100	22	22.00
Total	250	60	24.00
<b>Snowball sampling</b>			
Fiji	12	12	-
Solomon Islands	14	14	-
Total	26	26	-
<b>Country total</b>			
Fiji	50		
Solomon Islands	36		
<b>Total sample</b>	86		

Obviously, the size of the sample may significantly impact research findings. Often, large samples are associated with lower margins of error in the accuracy of the research findings. However, in this study a larger sample of the population was practically difficult to obtain due to (1) the geographical diversity of the two countries studied, (2) financial limitations, (3) reluctance and lack of interest by board members to participate in research (the view of “what is in it for me?”), and (4) the overall difficulty of accessing the boardroom given the confidential nature of board activities. Inevitably, a relatively smaller sample had to be relied on to obtain the required data for the analysis in this study. Nevertheless, there are strong reasons to suggest that the observed sample in this research has a reliable reflection of the target population. First, of 494 companies registered in Fiji in 2004, a sample of 50 companies responded, which represents over 10 per cent of the total population. Also, of 255 companies registered in the Solomon Islands in 2008, 36 responded accounting for over 14 per cent of the total population. Often, samples comprising over 10 per cent of the population

are considered acceptable (Clarke, 1998; Ticehurst & Veal, 1999). Second, of the 25 SoEs in Fiji, 12 were included in the sample yielding approximately 50 per cent of the total SoE population. Similarly, of the 12 SoEs in the Solomon Islands, 10 responded to the study representing 83 per cent of the total SoE population. This shows good probability strength in the sample for SoEs for both countries. Third, of the total of the 16 listed firms in Fiji, 11 participated in the study returning over 68 per cent of listed firms.

In comparing the derived sample in this study to similar research in developed and emerging economies, the sample appears favourable in relation to response rates reported elsewhere. For instance, Uhlaner, Floren and Geerlings (2007) targeted companies established in the Netherlands in their study and their response rate was 13.5 per cent which is about the average for studies of privately-held Dutch firms. Similarly, a survey of companies in the southeast states of the US by Wang and Dewhirst (1992) yielded a total response rate of 24.3 per cent, and according to the authors, this is comparable to similar surveys (Aupperle, 1984; Ford & McLaughlin, 1984). Another study by Levrau and Van den Berghe (2007b) which surveyed directors of Belgian firms obtained a response rate of 21 per cent. For emerging economies, a similar survey by Wu (2008) of Taiwanese firms returned a response rate of 19.8 per cent. Other studies that confined their sample to listed-firms yielded relatively higher response rates. For instance, Tam and Tan (2007)'s survey of listed-firms in Malaysia yielded a response rate of 74 per cent. Similarly, studies of listed Chinese firms by Li, Moshhirian, Nguyen and Tan (2007) and Tian and Lau (2001) returned response rates between 40-50 per cent. This may relate to the increasing obligation on listed firms to divulge more information to the public. Unfortunately, related studies on corporate governance issues in PICs have focussed mainly on specific case studies (Lal, 2006; McMaster, 2005), which makes comparison to this study not possible. But overall, the response sample obtained in this study compares favourably with related surveys that were not restricted to listed firms.

#### **4.5 Data management**

Data obtained from the questionnaires and interviews were managed using the coding system on SPSS for Windows. Each item was allocated a code which represents the item in the data management process and the subsequent analyses (see Appendix 6). As noted earlier, the range of data collected includes scale, nominal and ordinal data. Some scale data items were further categorised into nominal data while others remain as scale in further analyses. The different categories in the nominal data were then each given values (see Table 4.6). These

values, however, do not convey numeric information hence they cannot be used in techniques such as regression modelling. For this reason, dummy variables were created for each value of the nominal items (see Appendix 7). The dummy variables contain only the values of 1 and 0, with a value of 1 indicating that the associated observation has the given categorical value. In effect, the nominal items were then represented in the OLS regression model (discussed later) with the dummy variables.

Table 4.6 Data codes and values for key nominal variables

Code	Categorical /nominal values	Values
W1	Country	0 (Fiji) 1(Solomon Islands)
W2	Industry sector	0 (Public sector) 1(Private sector)
W3	Firm size	1 (1-100), 2 (101-200), 3 (201+) employees
W4	Firm type	1 (SCA), 2 (SCC), 3 (Private company)
W5	Stock market listing	0 (Listed firms) 1 (Non-listed firms)
GEN	Gender	0 (Male) 1(Female)
AGE	Age	1 (21-40), 2 (41-60), 3 (61+) years
NAT	Nationality	0 (Local), 1 (Expatriate)
OCN	Occupation	1 (Business executive) 2 (Professionals) 3 (Public servants and retirees)
POS	Position on the board	1 (Chairman), 2 (CEO), 3(Director), 4 (Secretary/observer)
EDU	Education	1 (Certificate/diploma) 2 (Undergraduate degree) 3 (Postgraduate degree)
EXP	Expertise	0 (Single expertise area), 1 (2 or more expertise areas)
EXY	Experience	1 (1-10), 2 (11-20), 3 (21-30), 4 (31+) years
DIR	Multiple directorships	1 (no other directorship) 2 (1-2 other directorships) 3 (3 or more directorships)

#### 4.6 Categorical Principal Component Analysis (CATPCA)

The ordinal data derived from Sections C and D of the questionnaire cannot be directly used in regressions modelling. Therefore, Categorical Principal Component Analysis (CATPCA) was used to analyse and transform the ordinal data into quantifiable data. CATPCA is a generalised technique of classical Principal Component Analysis (PCA) for categorical data or mixed categorical and interval level data (Theunissen *et al.*, 2003). Thus, it is the nonlinear

equivalent of PCA since it pursues the same objectives (Meulman, van der Kooij & Heiser, 2004). The difference, however, is that CATPCA incorporates nominal and ordinal as well as numeric variables as it deals with possible nonlinear relationships among variables (Lingting, 2007). In this regard, CATPCA is a multivariate technique that has the exploratory ability to uncover the associations among the categories of qualitative variables (Meulman & Heiser, 2005). Hence, its significant advantage over standard PCA is its ability to handle categorical variables and the fact that it does not rely on the classical statistical assumptions of standard PCA.

Mostly, CATPCA is used to reduce the dimensionality of an original set of categorical variables into smaller sets of quantitative variables, which in the end, still account for most of the information or variance in the original data (Krol, Veenman & Voeten, 2001; Werkman, Boonstra & Van der Kloot, 2005; Yamaki & Shoji, 2004). Technically, CATPCA fits the principal components model and finds optimal quantifications (scores) for categorical variables by simultaneously reducing the dimensionality of the data and turning categorical variables into quantitative variables using optimal quantification, also referred to as optimal scaling (Brentari, Golia & Manisera, 2006). CATPCA does this by using a mathematical algorithm known as Alternating Least Squares (ALS) to allocate numerical scores to nominal and ordinal data by providing an optimal quantification to each category of the qualitative variables (Molinero, Portillo & Hayes, 2007). In effect, category labels are transformed into numeric variables in such a way that the strength of the relationships between the quantified variables is optimised, which means that the ordinal or nominal information in the categorical variables is still retained in the optimal quantifications (Brentari *et al.*, 2006). This process of optimal quantification in CATPCA implies that the average proportion of variance accounted for by the transformed variables is as large as possible (Theunissen *et al.*, 2003). Thus, the extracted dimensions in CATPCA correspond to principal components in standard PCA.

The CATPCA technique is therefore applied in this research to explore the relationships between the observed ordinal items for board process and board performance variables. As highlighted above, CATPCA does this by deriving a set of indicators from the original items for each variable and based on these indicators, it then defines each variable by summarising most of the information contained in the original data. The technique also caters for the treatment of missing data. In this thesis, a passive treatment of missing data is specified for each item, which implies that in optimising the quantifications of a variable, only subjects



with valid values on the item are included, which implies that only valid values of an item contribute to the solution (Theunissen *et al.*, 2003).

The results of CATPCA technique are divided into three main parts: (1) the quantifications for the categories of variables, (2) scores for the subjects (with mean of zero and unit variance), and (3) component loadings for the transformed variables (see Appendix 8 for CATPCA output). The CATPCA output includes the eigenvalues associated to each retained dimension and the total amount of explained variance. Each eigenvalue is perceived as a measure of the importance of corresponding dimension in capturing the information provided by the originally observed items. In addition, the total amount of explained variance informs how well the set of retained dimensions, as a whole, captures the initial set of observed items.

To determine the number of dimensions to be retained for each set of observed items, the model summary and component loadings (presented in Table 5.1 of the next chapter and in Appendix 8) were examined. The model summary identifies the dimension(s) represented most by the items considered for each variable and indicates how well the model fits the data. For this research, a two dimension solution was requested for each variable since the number of items considered for each variable only range between three and six. Thus, the model summary gives the Variance Accounted For (VAF) and the Cronbach's Alpha for the two dimension solution retained. Under the VAF column of the model summary, the total eigenvalue and the respective percentage of variance for the two dimensions were given. Accordingly, the decision on which dimension to retain is guided by the number of eigenvalues that take a value higher than unity. This thesis adopted the *Kaiser criterion* which suggests that only dimension(s) with eigenvalues  $\geq 1$  should be retained (Krol *et al.*, 2001; Meulman & Heiser, 2005; Oom do Valle, Silva, Mendes & Guerreiro, 2006; SPSS Inc., 2007; Yamaki & Shoji, 2004). Moreover, in cases where both dimensions satisfy the Keiser criterion, the reliability indicator of Cronbach's Alpha is considered. Normally, measures that are highly reliable have alpha values of 0.9 or greater, while scales that have alphas below 0.7 are normally regarded to have less than fair reliability (Tharenou *et al.*, 2007). Nevertheless, studies have accepted dimensions showing reliability of Cronbach's Alpha values of 0.6 and greater for newly developed scales (Pestana & Gageiro, 2005 ; Santos, Silva, Santos, Ribeiro, & Mota, 2008). Hence, to ensure the reliability of the variables included in the analysis in this research, only dimensions showing Cronbachs' Alpha values of 0.7 and above are included.

Furthermore, the component loadings were inspected to interpret the dimensions derived for each variable (Appendix 8). Usually, CATPCA includes only the items that have a high loading on a given component or dimension to avoid the contribution of an item to more than one resultant dimension (Lingting, 2007). In cases where an item has a relatively high loading on both dimensions, the highest loading was chosen. Normally, component or dimension loadings  $\geq 0.4$  are considered significant (Meulman & Heiser, 2005). Therefore, this thesis considered items with component loadings  $\geq 0.4$  as significant contributors for that dimension. Moreover, a positive component loading on the first dimension or component in all items considered for a given variable is an indication of a common factor that correlates positively with all items considered (Lingting, 2007).

Upon deciding which dimension or component to retain as representative of the characteristics for each variable, CATPCA then calculates the object scores for these variables. The object scores serve as summary variables and are computed from the quantified variables and the component loadings for the retained dimension in each variable (Krol *et al.*, 2001). These object scores are standardised scores and their values are typically in the range of -3 to 3. Scores that fall outside of this range are considered outliers (Lingting, 2007). Object scores were then saved as the new representative or summary variable for each variable which were then used in later analyses to test the propositions in this thesis, as outlined later in Chapters 6 and 7.

In summary, the decision on which CATPCA dimension or component should be included in the analysis of a given variable depends on its total eigenvalue which must satisfy Keiser's criterion of eigenvalues  $\geq 1$ , its Cronbach's Alpha value which should be  $\geq 0.7$ , and its percentage of variance accounted for (PVAF) which must be at least 50 per cent or higher. When a dimension or component satisfies these criteria(s), it can be concluded that this dimension represents the general characteristics of the original items considered for the variable. The CATPCA solutions for all ordinal variables are presented in Chapter 5.

#### **4.7 Mediation analysis**

The literature is littered with models demonstrating how a particular independent variable explains the variations in a dependent variable, and often, bivariate correlation analysis is applied to address such direct relationships. However, a bivariate correlation model does not adequately describe the nature of the relationship between two variables, and therefore, it

may not be a sufficient condition for claiming causal relationships (Preacher & Hayes, 2008). This shortfall motivates this thesis to go beyond the description of the causal relationship between two variables by explaining how or by what means a causal effect occurs, particularly when more than two variables are involved. In this regard, a more appropriate explanatory model is required to develop a better understanding of the relationship between board attributes, board process and board performance.

Mediation analysis goes beyond mere description of the relationship between two variables to explain process and causality in that it raises questions about cause-effect relationships by invoking the idea of “mediation” (MacKinnon, Fairchild & Fritz, 2007; Mathieu, DeShon & Bergh, 2008; Preacher & Hayes, 2008). In principle, mediation refers to the process by which some variables exert influence on others through intervening or mediator variables (Preacher & Hayes, 2008). The key idea in mediation analysis is to go beyond the question of whether an independent variable causes a change in a dependent variable by addressing the question of how that change occurs (MacKinnon *et al.*, 2007). A variable is considered a mediator ( $M$ ) to the extent to which it carries the influence of a given independent variable ( $X$ ) on a given dependent variable ( $Y$ ) (Lockwood & MacKinnon, 1998; MacKinnon & Dwyer, 1993; MacKinnon, Warsi & Dwyer, 1995). In effect, mediation or an indirect effect is claimed to occur when the causal effect of an independent variable ( $X$ ) on a dependent variable ( $Y$ ) is transmitted by a mediator ( $M$ ) (James & Brett, 1984; Lockwood & MacKinnon, 1998). Thus, mediation analysis refers to the search for intermediate causal variables in the relationship between independent and dependent variables (Lockwood & MacKinnon, 1998). According to Mathieu *et al.* (2008), developing an understanding of the underlying mechanisms or mediators ( $M$ ) through which independent variables ( $X$ ) affect dependent variables ( $Y$ ), is what drives research beyond dust-bowl empiricism and toward a true science.

In essence, the foundation of mediation analysis is that the causal order of the relationship between variable  $X$ , variable  $M$ , and variable  $Y$  should first be established by theory, logic or procedural grounds (Azen, 2003; Mathieu *et al.*, 2008; Wood, Goodman, Beckman & Cook, 2008). This foundation is important as it helps in the specification of variables relevant to the process or relationships being investigated, determining how many variables should be included, and in deciding what their presumed causal sequence should be (Mathieu *et al.*, 2008). Indeed, a strong foundation based on theory or logic paves the way for better justified mediation inference (Wood *et al.*, 2008). In contrast, where a logical ordering of  $X$ - $M$ - $Y$

relationship cannot be established by theory or some logical procedure, alternative methods should be considered to investigate mediation (e.g. Azen, 2003).

Two significant observations can be made from previous studies that used mediation analysis (Mathieu *et al.*, 2008; Miller, Del Carmen Triana, Reutzel & Certo, 2007; Wood *et al.*, 2008). Firstly, a lot of studies failed to recognise the basic causal assumption that underlies mediation analysis (Shaver, 2005). Importantly, mediation analysis is a form of causal analysis (Baron & Kenny, 1986; James & Brett, 1984; Judd & Kenny, 1981), where the parameters of the model give an estimate of a mediated/indirect effect (Kenny, 2008). Hence, mediation models that failed to explicitly acknowledge these assumptions, have indeed examined insufficiently and incorrectly specified models, implying that the outcome is not only meaningless, but more seriously, misleading (Kenny, 2008; Mathieu *et al.*, 2008). Secondly, mediation research has mostly focussed on simple mediation models depicting a basic *X-M-Y* causal relationship. Recent research, however, highlights the need to incorporate more complex and recent depictions of mediation into the development of theory, particularly the need to expand the basic mediation *X-M-Y* paradigm to incorporate claims for multiple mediator effects (Mathieu *et al.*, 2008; Wood *et al.*, 2008). This is because the causal effect of *X* on *Y* is unlikely to be transmitted by only one means but through a number of mediators. This gave rise to multiple mediation models, which posits how or by what means variable *X* affects variable *Y* through more than one mediator variable (Preacher & Hayes, 2008). Correspondingly, the conceptual framework depicted in Figure 4.1, portrays a multiple mediation model, which predicts that board attributes affect board performance through the influence of board process.

#### 4.7.1 Indirect effects in mediation analysis

In Figure 4.2, a diagram showing the causal relationship between board attributes, board process and board performance is presented. Panel A represents the simple relationship between a given board attribute (*X*) and board performance (*Y*), described as the total effect. The estimate of the total effect of a board attribute on board performance is represented by path (coefficient) *c*. Panel B, in contrast, illustrates how the causal effect of a given board attribute can be apportioned into its indirect effect on board performance through a number of mediator variables, as well as the direct effect of the attribute on board performance. The coefficients representing the path relationship between the board attribute (*X*) and the board process mediators (*M*<sub>1</sub>, *M*<sub>2</sub>, *M*<sub>3</sub> and *M*<sub>4</sub>), were marked with the subscripts *a*<sup>1</sup>, *a*<sup>2</sup>, *a*<sup>3</sup> and *a*<sup>4</sup>.

Similarly, subscripts  $b^1$ ,  $b^2$ ,  $b^3$  and  $b^4$  denotes the effect of the board process mediators on board performance ( $Y$ ), partialling out the effect of the board attribute ( $X$ ) (Baron & Kenny, 1986; Preacher & Hayes, 2004, 2008). Additionally, the direct effect of the board attribute ( $X$ ) on board performance ( $Y$ ) is represented by coefficient  $c'$ .

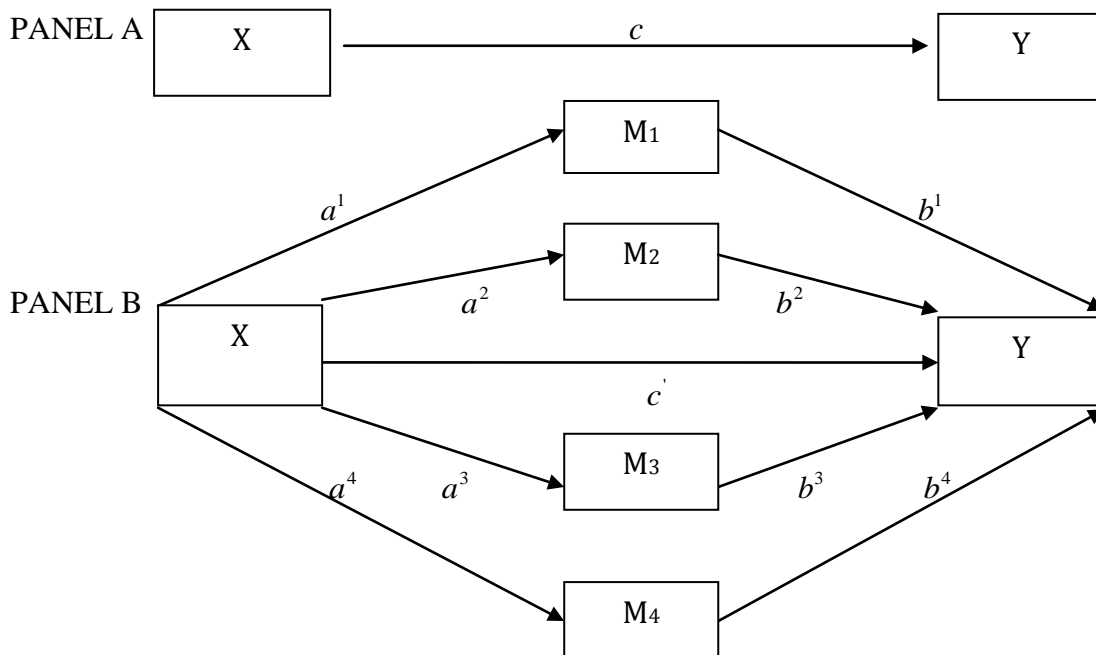


Figure 4.2 Mediation model with multiple mediator variables

Source: Adapted from Preacher & Hayes (2008)

Accordingly, the indirect effect of board attributes on board performance through the board process mediators, can be quantified as the product of each respective  $a$  path and  $b$  path, represented by  $a^1b^1$ ,  $a^2b^2$ ,  $a^3b^3$  and  $a^4b^4$ . Also, the total effect of the board attribute on board performance is quantified by coefficient  $c$ . In effect, the difference between the total effect ( $c$ ) and the indirect effect ( $ab$ ) is the direct effect ( $c'$ ) (Baron & Kenny, 1986; Preacher & Hayes, 2004, 2008). This translates to the simple equation;  $c' = c - ab$ . According to Preacher and Hayes (2008), all path coefficients in the model ( $c$ ,  $a$ ,  $b$ , and  $c'$ ) can be quantified with unstandardised regression coefficients. Moreover, the authors noted that these denoted identities hold in regression and structural equation modelling (SEM), but only when the  $M$  and  $Y$  variables are continuous. In contrast, these identities do not hold in cases where one or more of the dependent variables ( $Y$ ) are binary (Preacher & Hayes, 2008), in which case, logistic or probit regression should be considered (MacKinnon & Dwyer, 1993).

#### 4.7.2 Statistical tests for mediation

To claim mediation, statistical tests are required in determining if the relationship between two variables is partially or totally accounted for by a mediator or a set of mediator variables (MacKinnon *et al.*, 2007; Preacher & Hayes, 2008). A number of techniques were suggested for assessing indirect effects in mediation models including the causal steps approach (Baron & Kenny, 1986), the product of coefficient approach (Sobel, 1982), the test of joint significance (TJS) (MacKinnon, Lockwood, Hoffman, West & Sheets, 2002), and the resampling technique of bootstrapping (Shrout & Bolger, 2002). The literature suggests that the appropriateness of each technique in testing for indirect effects depends on their respective Type I error, statistical power, and coverage.

The causal steps approach appears to be the most frequently used test for indirect effects in simple mediation models. However, this technique relies on the assumption that indirect effects are normally distributed; hence, it has been largely criticised for low statistical power, Type 1 error and the inability to address suppression effects (MacKinnon *et al.*, 2002; Preacher & Hayes, 2004; Shrout & Bolger, 2002). Also, the causal steps approach does not address the question of whether the indirect effect is significantly different from zero and is in the expected direction (MacKinnon *et al.*, 2002; Preacher, Rucker & Hayes, 2007). For multiple mediation models, the product of coefficient tests and TJS are the most commonly applied techniques (Mallinckrodt, Abraham & Russell, 2006). However, these two techniques share the same limitations as the causal steps strategy because the standard errors of parameter estimates are derived based on the assumptions of normality (Lockwood & MacKinnon, 1998). This means that the product-of-coefficient tests and TJS are only useful when the assumption of normality of the sampling distribution of the indirect effect can be reasonably met (i.e. where large samples are available) (Preacher & Hayes, 2008). In this regard, since the model of analysis includes several mediators and the small sample size obtained in the study will lead to lack of normality in the sampling distribution of the indirect effect, alternative tests must be considered.

#### 4.7.3 Limited data problem and bootstrapping

Small samples are often associated with weaker inference compared to large samples. The reality, however, is that both small and large samples have limitations, therefore, small sample inference need not always be so weak as to be useless compared to large samples. For instance, Pruzek (2005) argues that sometimes the increase in sample size may obfuscate

principal comparisons. Because of this, it is crucial to focus on comparisons that are most warranted and to capitalise on virtues afforded by close study of a few sample cases available in order to generate meaningfully interpretable results. Therefore, in circumstances where researchers are forced into small sample analysis due to lack of resources or other difficulties, the use of appropriate concepts and methods may be the best way to make the most of the limited data situation faced (Pruzek, 2005). It is in this regard that bootstrapping offers an alternatively suitable technique to deal with the limitations of other statistical methods that make assumptions about the shape of sampling distributions, such as normality, particularly in designs involving multiple mediators (Shrout & Bolger, 2002).

The bootstrap technique is based on the principle that one available sample gives rise to many others by resampling (a concept that reminisces pulling yourself up by your own bootstrap) (Shrout & Bolger, 2002). Thus, the bootstrap principle implies resampling with replacement of a given sample of independent identically distributed observations (Lockwood & MacKinnon, 1998; Mallinckrodt *et al.*, 2006; Preacher & Hayes, 2008; Shrout & Bolger, 2002). This technique was originally introduced by Efron (1979, 1981, 1982) with inferential purposes and was further expanded in Efron (1990) and Efron and Tibshirani (1993), mainly as a computer-based method for the assessment of estimators. Since then, bootstrapping has gained wider applications, including deriving estimates of standard errors and confidence intervals of population parameters like the mean, median, proportion, odds ratio, correlation coefficient or regression coefficient calculations and testing hypotheses (Efron, 1982; Friedl & Stampfer, 2002; Sahinler & Topuz, 2007).

The underlying principle in bootstrapping is that if a large number of samples are taken from the original sample with replacement, the parameter of interest (i.e. indirect effects) can be computed for each new sample, creating an empirical sampling distribution for that parameter, and subsequently, confidence intervals can be formed to test for mediation (Ivanescu, Bertrand, Fransoo & Kleijnen, 2006; Shrout & Bolger, 2002). In effect, bootstrapping treats an observed sample as a “population reservoir”, from which a large number of random samples can be drawn with continuous replacement, such that the probability of selection from any given case remains equal over every random draw (Lockwood & MacKinnon, 1998; Mallinckrodt *et al.*, 2006). In this regard, the random resample is denned on the set of all variations of the observed sample data with repetitions allowed (Friedl & Stampfer, 2001; Yu, 2003). The technique is based on the assumption that

the originally observed sample is reasonably representative of the population from which it is drawn. Hence, every resample has the same number of observations as the originally observed sample which creates the advantage of modelling the impact of the actual sample size (Fan & Wan, 1996). For this study, as argued in Section 4.5, the response sample is a reasonable representation of public and private enterprises in Fiji and the Solomon Islands.

Unlike the ordinary sampling methods, bootstrapping does not rely on the assumptions related to the form of the estimator distribution because the observed sample is actually treated as the population (Shrout & Bolger, 2002). Thus, the main interest in bootstrapping is to make statistical inference based on bootstrap samples derived from the observed sample rather than to make assumptions about the population (Friedl & Stampfer, 2002; Ivanescu *et al.*, 2006; Sahinler & Topuz, 2007). This makes bootstrapping more trustworthy than, and superior to, the normal theory tests because it requires fewer assumptions (Azen, 2003; Briggs, 2006; Cheung & Lau, 2008; Mathieu *et al.*, 2008; Taylor, MacKinnon & Tein, 2008; Williams & MacKinnon, 2008). Specifically, evidence suggests that bootstrapping serves as the most powerful and reasonable method of obtaining confidence limits for indirect effects in models involving multiple mediators, which is the case in this research (MacKinnon, Lockwood & Williams, 2004; Pituch & Stapleton, 2008; Preacher & Hayes, 2008). It is not surprising that bootstrapping is fast becoming the preferred solution for small sample analysis and non-normal data distribution.

#### 4.7.4 The bootstrapping process

While bootstrapping can be used for any statistic (Lockwood & MacKinnon, 1998; Mallinckrodt *et al.*, 2006), its application in this thesis focuses on the indirect effect, its standard error, and its confidence limits. Earlier, we noted that indirect effects are the cross-products of the coefficients for the *a* paths and the *b* paths, denoted as  $a^1b^1$ ,  $a^2b^2$ ,  $a^3b^3$  and  $a^4b^4$ . Typically, the distributions of these indirect effects are not normal but skewed (Mallinckrodt *et al.*, 2006). If confidence intervals (CIs) are to be formed based on these distributions, the upper and lower bounds will not be equally distant from the mean value of the indirect effects, which means that the CIs are likely to be incorrect as revealed in previous simulation studies (Bollen & Stine, 1990; Lockwood & MacKinnon, 1998; MacKinnon *et al.*, 2002; MacKinnon *et al.*, 1995; Stone & Sobel, 1990). Because of this, the bootstrapping technique was applied to bootstrap the standard error of the indirect effect ( $ab$ ) based on



respective distributions. In Table 4.7, the four steps for bootstrapping indirect effects as implemented in this thesis are outlined.

Table 4.7 Steps in bootstrapping indirect effects

**STEP 1**

The observed sample of 86 cases was used as a population reservoir to create a bootstrap resample of 86 cases by random sampling with replacement. Each observation in the original sample is drawn at random into the resample, but the observation also remains in the pool with the possibility of being drawn again (Mallinckrodt *et al.*, 2006). This implies that a given case can be drawn as part of the bootstrap sample not at all, once, twice, or even multiple times (Preacher & Hayes, 2008). This step results in the construction of an empirical probability distribution from the sample in which the probability of each observation is  $1/n$ , where  $n$  is the sample size (86).

**STEP 2**

The OLS coefficient values for  $a$  paths ( $a^1, a^2, a^3, a^4$ ), the  $b$  paths ( $b^1, b^2, b^3, b^4$ ) and their respective indirect effects ( $a^1b^1, a^2b^2, a^3b^3, a^4b^4$ ), were calculated based on the bootstrap sample created in Step 1. According to research, regression policy that uses parameter estimates based on a bootstrap sample performs better than regressions policy that uses parameter estimates based on the observed sample (Mallinckrodt *et al.*, 2006). The results were then saved to a file.

**STEP 3**

Steps 1 and 2 were repeated a total of 5,000 times to yield 5,000 estimates of the indirect effects. The bootstrap effect makes it possible to draw 5,000 re-samples, on the basis of which, an empirical sampling distribution for the indirect effects were created. Usually, the decision on how large a bootstrap sample should be depends on the results. For instance, Shrout and Bolger (2002) showed that 500 and 1000 bootstrap samples produced similar results. Thus, Preacher and Hayes (2008) recommended at least 1,000 bootstraps for any preliminary analysis. On the other hand, Mallinckrodt *et al.* (2006) recommended at least 10,000 bootstraps since the latest advancement in computer capabilities makes the effort required to run 10,000 bootstrap samples only marginally demanding than that is required for 1,000 bootstraps. In this thesis, a bootstrap sample of 5,000 cases was used; attempts made to increase the bootstrap sample to 10,000 cases only produced similar results.

(Table 4.7, continued next page)

#### STEP 4

Lastly, the distribution of the 5,000 estimates of indirect effects generated in Step 3, were then examined to determine their upper and lower CIs. The CIs for the indirect effects through the mediators (M1, M2, M3, M4) were obtained by ordering the 5,000 values for each indirect effect ( $a^1b^1$ ,  $a^2b^2$ ,  $a^3b^3$ ,  $a^4b^4$ ) from low to high (Briggs, 2006; Preacher & Hayes, 2008). The values defining the lower and upper  $100(\alpha/2)$  of the distribution of  $a^1b^1$ ,  $a^2b^2$ ,  $a^3b^3$  and  $a^4b^4$  were then found and taken as the lower and upper limits of the  $100(1 - \alpha)\%$  CI for each indirect effect, where  $\alpha$  is the desired nominal Type 1 error rate (Preacher & Hayes, 2008). According to Preacher & Hayes (2008), the lower and upper bounds of a  $100(1 - \alpha)$  CI were defined, respectively, as the  $(.5\alpha)k^{\text{th}}$  and  $1 + (1-.5\alpha)k^{\text{th}}$  values of  $a^1b^1$ ,  $a^2b^2$ ,  $a^3b^3$  and  $a^4b^4$  in this ordered distribution. This thesis chose  $\alpha = 0.1$ , thus generating a 90% CI. Since  $k = 5000$  resample, the lower bound of the 90% CI is the 125<sup>th</sup> ordered value of  $a^1b^1$ ,  $a^2b^2$ ,  $a^3b^3$  and  $a^4b^4$ . Likewise, the upper bound is the 4876<sup>th</sup> ordered value in the ordered distribution of  $a^1b^1$ ,  $a^2b^2$ ,  $a^3b^3$  and  $a^4b^4$ . As noted by Briggs (2006), it is possible, and even probable in the case of indirect effects that the 250<sup>th</sup> and 4750<sup>th</sup> ordered values are not equidistant from the mean of the bootstrapped distribution; hence, the assumption that the CI is symmetric is avoided. This procedure yields a percentile bootstrap CI, in which, an indirect effect is claimed to occur if the CI does not contain zero (Preacher & Hayes, 2008; Shrout & Bolger, 2002).

Research, however, demonstrates that percentile bootstrap estimates generated at the end of Step 4 above can be inaccurate at times given its tendency to over or under-estimate the population value (Briggs, 2006; Preacher & Hayes, 2008). This implies that the confidence interval may not be centred on the true parameter value (Fritz & MacKinnon, 2007). Therefore, the percentile bootstrap CIs should be improved by an adjustment to the percentile values of the sorted distribution of the bootstrap estimates used for determining the bounds of the interval (Preacher & Hayes, 2008). In effect, a further bias correction to the percentile CI boundaries is necessary to compensate for asymmetry in the distribution of the bootstrap estimates (Efron & Tibshirani, 1993; Mallinckrodt *et al.*, 2006). To do this, Efron and Tibshirani (1993) proposed the use of bias-corrected (BC) and the bias-corrected and accelerated (BCa) bootstrap estimates, both of which involve using a transformation of the distribution of the indirect effects to avoid the inaccurate estimates provided by the percentile CIs. Research showed that both BC and BCa bootstraps were equally superior when tested

against other methods (Preacher & Hayes, 2008). This research applied the BC bootstrap to establish the confidence intervals around the indirect effects since the formula and procedures involved are relatively easier and less complicated to follow than the BCa bootstrap. Technically, the BC bootstrap is the same as the percentile bootstrap, except that it corrects for skew in the population by correcting potential bias created by the central tendency of the estimate (Efron, 1987; Efron & Tibshirani, 1993). As described by Fritz & MacKinnon (2007), this correction is made under the assumption that there is a monotonically increasing function  $T$  such that  $T(\hat{\theta})$  is normally distributed with:

$$E [T(\hat{\theta})] = T(0) - z_0 \quad (4.1)$$

$$V [T(\hat{\theta})] = 1 \quad (4.2)$$

where  $z_0$  is the bias or the proportion of bootstrap-sample parameter estimates that are below the parameter estimate of the original sample. The resulting upper and lower confidence limits are:

$$z_U = 2z_0 + zp \quad (4.3)$$

$$z_L = 2z_0 - zp \quad (4.4)$$

where  $p = 1 - \alpha/2$  and  $zp = 100 * p$ .

*Source:* Fritz & MacKinnon (2007)

These BC bootstrap CIs were then examined to investigate the indirect effect associated with each putative mediator in the analysis. As noted earlier, the significance of the indirect effects was tested by determining whether or not the BC bootstrap CI contains zero. Where zero does not fall within the BC confidence interval, it is claimed that the indirect effect is statistically different from zero, which implies that a null hypothesis of no mediation is rejected (Mallinckrodt *et al.*, 2006; Preacher & Hayes, 2008).

To implement the bootstrap steps, this thesis followed the procedure for estimating indirect effects described by Preacher and Hayes (2010). Unlike earlier programs developed by Preacher and Hayes (2004, 2008), this procedure caters for both linear and nonlinear functions in an  $X$ - $M$ - $Y$  causal system, which makes it appropriate to estimate the indirect effect of an independent variable ( $X$ ) on a dependent variable ( $Y$ ) through a set of mediator

variables ( $M$ ), as conceptualised in Chapter 3. The indirect effect ( $ab$ ), which is denoted hereafter in the equations to follow as  $\Theta$ , quantifies the rate at which a change in a board attribute ( $X$ ) changes board performance ( $Y$ ) indirectly through changes in a given board process variable ( $M$ ). This effect is estimated using the product of two models, the *M-Model* and the *Y-Model*. The *M-Model* derives the mediator variable ( $M$ ) as a function of the independent variable to yield coefficient  $a$  and the *Y-Model* estimates the dependent variable ( $Y$ ) as a function of the mediator variable ( $M$ ) to yield coefficient  $b$ . This is shown below in Equation 4.5. In effect, the product of the two models,  $\Theta$ , represents the indirect effect of  $X$  on  $Y$  through  $M$ .

$$\theta = \left( \frac{\partial M}{\partial X} \right) \left( \frac{\partial Y}{\partial M} \right) \quad (4.5)$$

where  $\Theta$  denotes the indirect effect.

*Source:* (Preacher & Hayes, 2010)

The entire bootstrap procedure described in this section was implemented using Preacher & Hayes' (2010) SPSS macros (named MEDCURVE). MEDCURVE applies OLS regression for estimation of the coefficients in the *M-Model* and the *Y-Model* and implements the bootstrap technique to obtain confidence intervals around the indirect effect ( $\Theta$ ). In summary, the interpretation of the indirect effect based on the BC bootstrap CIs as discussed here, does not focus at all on the statistical significance of the  $a$  paths and  $b$  paths in the model, instead, the emphasis is entirely on the direction and size of the indirect effects (Preacher & Hayes, 2008). The estimated model coefficients and standard errors based on the SPSS output from the MEDCURVE procedure are presented in Chapters 6 and 7.

In summary, the methodology adopted in this research was implemented in line with ethical standards (refer Appendix 9). Before discussing the key results of the analysis of indirect effects, using the procedure discussed above, the next chapter presents the descriptive results.

This chapter presents preliminary survey results. Solutions derived from the CATPCA procedure as described in Chapter 4 are presented in Section 5.1. Next, descriptive statistics for key variables considered in this study are outlined in Section 5.2. Lastly, Section 5.3 reports correlation analysis of key variables.

### 5.1 CATPCA Solutions

The results for the analysis of the ordinal items (board process and board performance variables) are presented in Table 5.1. These results were derived using the CATPCA technique discussed in Chapter 4. They help to identify the dimension or component that is represented most by the items considered for each variable based on a two-dimension solution.

For instance, in the solution for the performance variable of *Monitoring and control role performance* (BP<sub>1</sub>), the first dimension has a total eigenvalue of 4.05 and it explained 67.5 per cent of the variability in the data while the second dimension has an eigenvalue of 1.65 which accounts for a further 27.5 per cent of variability. Together, the two-dimension model accounts for almost 95 per cent of the variation in the data. Research suggests that this is considered a very large percentage for such applications (Molinero *et al.*, 2007). However, while both dimensions satisfy the Keiser criterion of eigenvalues  $\geq 1$ , only *dimension 1* showed an acceptable and good reliability of Cronbach's Alpha value of 0.904. Therefore, consistent with the recommendation for Cronbach's Alpha values of 0.7 and greater (McMurray, Scoot & Pace, 2004), and the fact that the first dimension already accounts for most of the variance in the data (67.5 per cent), it can be concluded that *dimension 1* represents the general characteristics of the original items considered for variable BP<sub>1</sub>. An inspection of the component loadings for BP<sub>1</sub> (see Appendix 8) also revealed that *dimension 1* has a higher and positive loading for all items, suggestive of a common factor that correlates positively with all items considered (Lingting, 2007). Therefore, *dimension 1* is retained as the representative data for variable BP<sub>1</sub>.

Table 5.1 CATPCA solutions for board process and board performance variables

Variable	Dimension	Cronbach's Alpha	Variance Accounted For (VAF)	
			Total (Eigenvalue)	% of Variance (PVAF)
<i>Effort norms</i> (M1)	1	.881	3.388	67.769
	2	-.427	.746	14.911
	Total	.948 <sup>a</sup>	4.134	82.680
<i>Cognitive conflict</i> (M2)	1	.874	2.398	79.930
	2	-1.812	.452	15.075
	Total	.974 <sup>a</sup>	2.850	95.005
<i>Board cohesiveness</i> (M3)	1	.876	3.343	66.852
	2	-.150	.893	17.854
	Total	.955 <sup>a</sup>	4.235	84.706
<i>Use of knowledge and skills</i> (M4)	1	.765	2.347	58.675
	2	-.148	.900	22.500
	Total	.923 <sup>a</sup>	3.247	81.175
<i>CEO/board relationship</i> (M5)	1	.774	2.628	52.568
	2	.081	1.069	21.381
	Total	.912 <sup>a</sup>	3.697	73.949
<i>Intrinsic motivation</i> (M6a)	1	.841	3.345	55.749
	2	-.016	.987	16.450
	Total	.923 <sup>a</sup>	4.332	72.199
<i>Extrinsic motivation</i> (M6b)	1	.882	2.950	73.757
	2	-.497	.729	18.237
	Total	.971 <sup>a</sup>	3.680	91.994
<i>Affective conflict</i> (M7)	1	.740	1.975	65.825
	2	-.455	.766	25.535
	Total	.953 <sup>a</sup>	2.741	91.360
<i>Board information</i> (M8)	1	.912	3.161	79.027
	2	-.257	.839	20.973
	Total	1.000 <sup>a</sup>	4.000	99.999
<i>Monitoring/control role performance</i> (BP1)	1	.904	4.049	67.481
	2	.473	1.650	27.501
	Total	.989 <sup>a</sup>	5.699	94.982
<i>Service role performance</i> (BP2)	1	.882	3.778	62.968
	2	-.027	.978	16.304
	Total	.948 <sup>a</sup>	4.756	79.272
<i>Strategic role performance</i> (BP3)	1	.881	3.766	62.774
	2	.051	1.045	17.421
	Total	.951 <sup>a</sup>	4.812	80.194

<sup>a</sup> Total Cronbach's alpha is based on the total eigenvalue

As shown in Table 5.1, in the solutions for the rest of the process and performance variables, the first dimension extracted using CATPCA has the largest contribution to the explained variance or the total percentage of variance accounted for (TPAF) in the data. Thus, for all variables, only the first dimension satisfies the Keiser criterion of eigenvalues  $\geq 1$  and has acceptable and good reliability of Cronbach's Alpha values of 0.7 and greater. Therefore, the first dimension is retained as the representative variable for all process and performance

variables considered. Overall, the extraction of a single dimension solution for each variable fulfils the CATPCA objective of reducing the originally observed items into a single dimension or component which still represents most of the information found in the original data. As discussed in Section 4.7 of Chapter 4, the single component solution for each variable was represented by object scores as calculated by CATPCA. In effect, the object scores serve as the summary variable which is then used in the mediation analysis that follows in Chapters 6 and 7. The mean, minimum and maximum values as well as the standard deviation for the object scores are presented in Appendix 10. In the next section, a descriptive analysis of the key variables considered in the study is presented.

## **5.2 Descriptive statistics of key variables**

### **5.2.1 Respondent profile**

In Table 5.2, the frequency and percentage statistics describing the profile of the respondents are outlined. In terms of gender, 78 per cent of the respondents were male and 22 per cent were female. This reflects the dominance of men and the inadequate participation of women in board activities in PICs, as highlighted in Chapter 2. In addition, the age of respondents ranges from 21 to 61+ years. More than 67 per cent of the respondents are aged between 41 to 60 years which implies that boards in Fiji and the Solomon Islands do not necessarily lack experience if age is considered a proxy of the latter. In comparison to developed countries, a similar survey by Anderson, Mansi and Reeb (2003) in the US found that the average director age on boards is 60.3 years. Furthermore, almost 90 per cent of the respondents were locals while only 10 per cent were expatriates. Obviously, this reflects the increasing involvement of locals in board activities. Moreover, almost 80 per cent of the respondents have educational qualifications at bachelor or postgraduate degree levels suggesting that boards in Fiji and the Solomon Islands generally comprise relatively educated members. However, when compared to developed countries, this figure is still low (Singh, Terjesen & Vinnicombe, 2008).

Additionally, in terms of experience and expertise, approximately 85 per cent of the respondents have more than 10 years of professional experience and 64 per cent reported having expertise in two or more fields. These statistics tend to suggest that boards in Fiji and the Solomon Islands are not necessarily lacking in terms of boards experience and expertise.

Table 5.2 Respondent profile

Item	Frequency	Percentage
<b>Gender</b>		
• Male	67	77.9
• Female	19	22.1
Total	86	100
<b>Age</b>		
• 21-30 yrs	4	4.7
• 31-40 yrs	14	16.3
• 41-50 yrs	30	34.9
• 51-60 yrs	28	32.6
• 61+ yrs	10	11.6
Total	86	100
<b>Nationality</b>		
• Local	77	89.5
• Expatriate	9	10.5
Total	86	100
<b>Education</b>		
• Certificate/diploma	18	20.9
• Bachelor degree	35	40.7
• Postgraduate degree	33	38.4
Total	86	100
<b>Experience</b>		
• 1-10 yrs	13	15.1
• 11-20 yrs	33	38.4
• 21-30 yrs	26	30.2
• 31 + yrs	14	16.3
Total	86	100
<b>Expertise</b>		
• Single expertise	31	36.0
• Two or more expertise	55	64.0
Total	86	100
<b>Board Years</b>		
• 1-3 yrs	43	50.0
• 4-6 yrs	24	27.9
• 7+ yrs	19	22.1
Total	86	100
<b>Occupation</b>		
• Business executives	37	43.0
• Professionals	32	37.2
• Public servants and retirees	17	19.8
Total	86	100
<b>Position on the Board</b>		
• Chairman	10	11.6
• CEO	23	26.7
• Director	37	43.0
• Secretary/observers	16	18.6
Total	86	100



However, the question really is about the appropriateness of these experiences and expertise to specific boards or firms and whether board members were able to utilise their experience and expertise to the benefit of the board.

Furthermore, approximately half of the respondents reported having spent three or less years on the board, while another 28 per cent spent between four to six years on the board. Generally, this reflects a high turnover rate in board appointments in the two countries, particularly so in public enterprises, since boards tend to change every time a new government comes into power. In comparison, Anderson et al. (2003) found that the average board tenure in the US is 9.2 year. Another study by Wollan (2007) on publicly-traded US electric utilities between 1988 and 2000, reveal an average tenure of 8.5 years. Clearly, the tenure of directors in Fiji and the Solomon Islands are much lower than in developed countries.

In addition, 43 per cent of the respondents are business executives (for example CEOs, general managers, managing directors, divisional or branch managers), about 37 per cent are professionals (for example lawyers, accountants, engineers, administrators, academics), and 20 per cent are comprised of public servants and retirees. This reflects the wide range of occupational backgrounds available on boards in Fiji and the Solomon Islands. Lastly, in terms of the position of respondents on the board, approximately 12 per cent of respondents were chairpersons, 27 per cent were CEOs, 43 per cent were board directors and 18 per cent were board secretaries or board observers. These individuals are best positioned to give reliable information on the inside activities of the boardroom.

### 5.2.2 Characteristics of firms and industries

According to Table 5.3, approximately 63 per cent of the respondents represent Fiji firms while 37 per cent represent Solomon Island firms. While the response may be related to the fact that more surveys were conducted in Fiji than in the Solomon Islands, indirectly, it may also be a reflection of the size of the business sectors and hence the economies of the two countries. Furthermore, around 52 per cent are public enterprises and 48 per cent are comprised of private sector firms. Sampling wise, this provides a good representation of public and private sector firms for the study. Furthermore, on the basis of firm type, about 32 percent represent state commercial authorities (SCA), 23 percent represent state commercial companies (SCC), and 45 per cent represent private-owned companies (PC). These statistics

confirm the active role that the state continues to play in the economic activities of Fiji and the Solomon Islands.

In addition, with the underdeveloped nature of stock markets in PICs, only 22 per cent of the respondents represent listed-firms while 78 per cent were unlisted. Of the listed firms, five were listed on overseas stock markets while 14 were listed on the South Pacific Stock Exchange in Fiji. The size of the firms in terms of employee numbers also varies with 43 per cent accounting for firms with 1-100 employees, 27 per cent representing firms with 101-200 employees, and 30 per cent having more than 200 employees. Overall, the majority of firms in Fiji and the Solomon Islands can be categorised as small firms on the basis of employee size as the proxy for firm size, which is comparable to other developing countries (Garay & Gonzalez, 2008).

*Table 5.3 Firm and industry characteristics*

Item	Frequency	Percentage
Country (W <sub>1</sub> )		
• Fiji	54	62.8
• Solomon Islands	32	37.2
Total	86	100
Industry sector (W <sub>2</sub> )		
• Public sector	45	52.3
• Private sector	41	47.7
Total	86	100
Firm size (W <sub>3</sub> )		
• 1-100 employees	37	43.0
• 101-200 employees	23	26.7
• 201+ employees	26	30.2
Total	86	100
Firm type (W <sub>4</sub> )		
• State commercial authority (SCA)	27	31.4
• State commercial company (SCC)	20	23.3
• Privately-owned company (PC)	39	45.3
Total	86	100
Stock market listing (W <sub>5</sub> )		
• Listed firms	19	22.1
• Non-listed firms	67	77.9
Total	86	100

### 5.2.3 Board attributes

In Figures 5.1, 5.2 and 5.3, the information concerning relationships between board size and country, firm type and firm size is presented. According to Figure 5.1, the majority of enterprises surveyed for both countries have boards of between five to 10 directors. This finding is consistent with McKee's (2007, 2005) studies which found that board size in Fiji range between five to 12 members. When compared to developed and emerging economies, on average, board size in Fiji and the Solomon Islands are relatively small. For instance, a study by Anderson *et al.* (2003) revealed that the size of boards in the US ranges between six to 24 members with an average size of 12.1 members per board. Comparatively, in European countries, the average board size in Sweden is eight (Adams, 2008); in Turkey, boards range from three to 15 directors, with an average of five members per board (Kula, 2005); in Portugal, the average board size is around 8.2 members (Fernandes, 2008); while in Norway, it is about 7.44 members (Huse, Nielsen & Hagen, 2009). In China, Tian and Lau (2001) found that the average size of boards in listed-firms is 10.13 and this is consistent with Li, Moshirian, Nguyen and Tan (2007), who found that typical Chinese boards consist of nine to 10 directors. In Japan, Tang (2007) reported that boards generally consist of 20 to 35 members with an average of 27 directors on boards. Overall, the relatively larger size of boards in developed and emerging economies, to an extent, reflects the size of firms in these countries.

Figure 5.2 shows board size by firm type. The figure reveals that all of the state commercial authorities (SCA) surveyed for the two countries have board sizes of between six to 12 directors. For state commercial companies (SCC), the figure shows that about half of the firms surveyed have between four to five directors on their board while the rest have board sizes of between six to 10 members. Comparatively, about 40 per cent of privately-owned companies (PC) surveyed for the two countries have five or less directors and approximately 55 per cent have between six to eight members. These figures suggest that SCAs tend to have more directors on their boards compared to SCCs and private-owned companies. In developed countries, board size is more clearly distinguished between financial firms and non-financial firms, with the latter averaging 12 members (Rosenstein & Wyatt, 1997; Vafeas, 1999; Yermack, 1996) and the former averaging between 16-17 members (Andres & Vallelado, 2008).

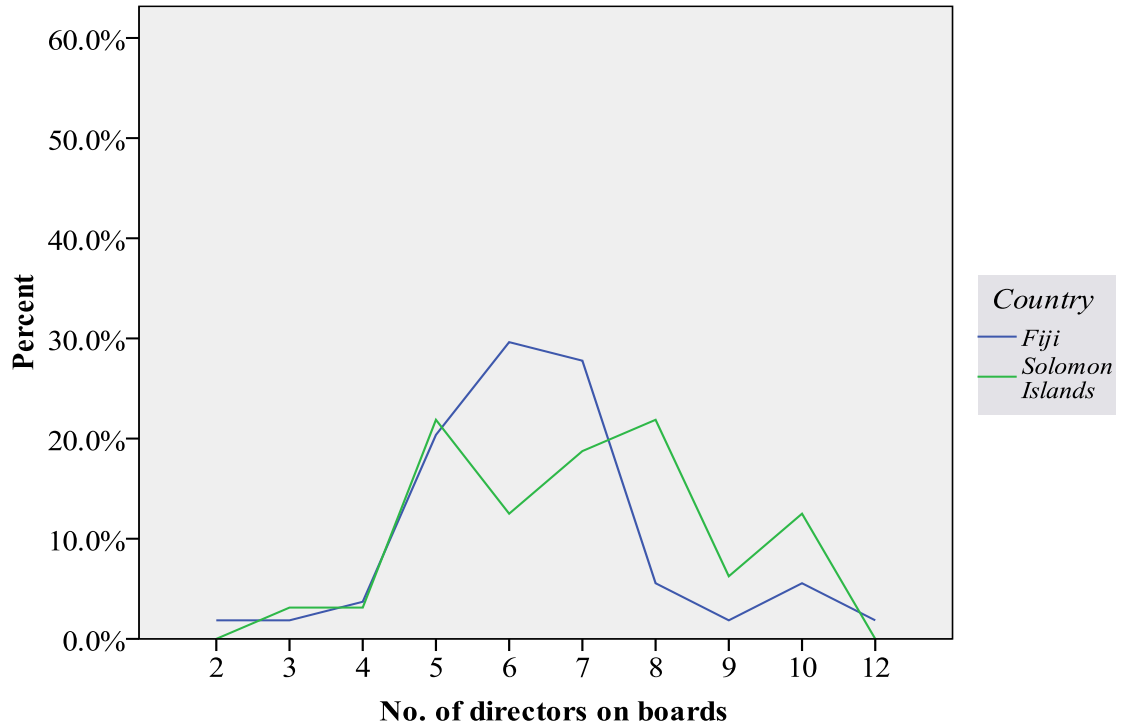


Figure 5.1 Board size by country (Fiji and Solomon Islands)

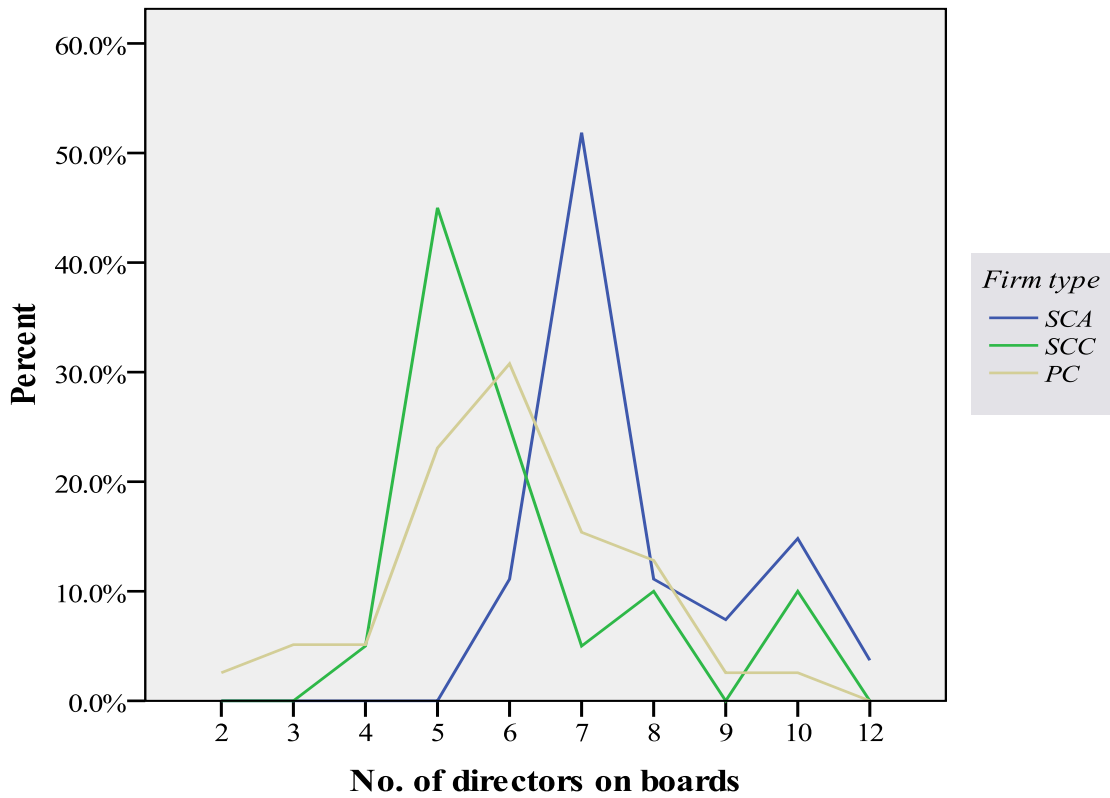


Figure 5.2 Board size by firm type (SCA, SCC and PC)

Figure 5.3 shows board size by firm size. Over 60 per cent of firms with 1-100 employees have between five to eight directors. About 70 per cent of firms with 101-200 employees have between five to eight members. In comparison, all of the firms with more than 200 employees have six or more members on their boards. Thus, in contrast to developed and emerging economies where board size correlates to firm size, this is not necessarily the case in Fiji and the Solomon Islands. As the figures suggest, even relatively smaller enterprises (especially SoEs) can be overloaded with directors given the socio-political influence on board appointments without any regard for skills and expertise required on the board, as highlighted in Chapter 2. Despite this criticism, there is no indication of an optimal number of directors for boards in the PICs. While some prefer relatively smaller boards it may mean insufficient numbers of members to serve on board committees. Thus, while consideration should be given to limiting the size of boards in Fiji and the Solomon Islands (McKee, 2005), this must be done without compromising the size required to cover the kinds of duties boards provide (Duncan, 2005). It is, therefore, important to determine if board size affects the ability of boards to perform their roles, and if so, how this effect occurs in the context of the PICs.

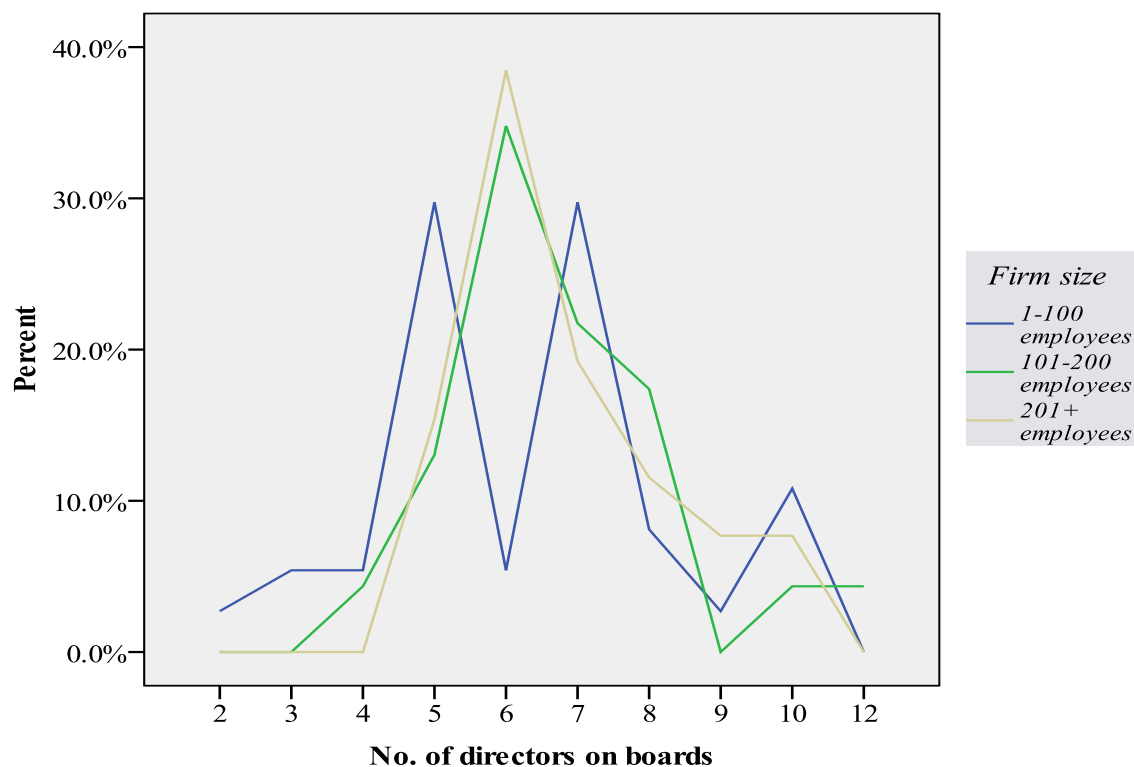


Figure 5.3 Board size by firm size

In addition, evidence from this study suggests that the composition of boards in Fiji and the Solomon Islands depends on the ownership structure of the firm. Figures 5.4 and 5.5 present the board composition data for the two countries. Figure 5.4 shows that 60 per cent of Fiji firms and 50 per cent of Solomon Islands firms surveyed have boards with 100 per cent external directors. As shown in Figure 5.5, this mostly accounts for SoEs whose directors are mainly outsiders.

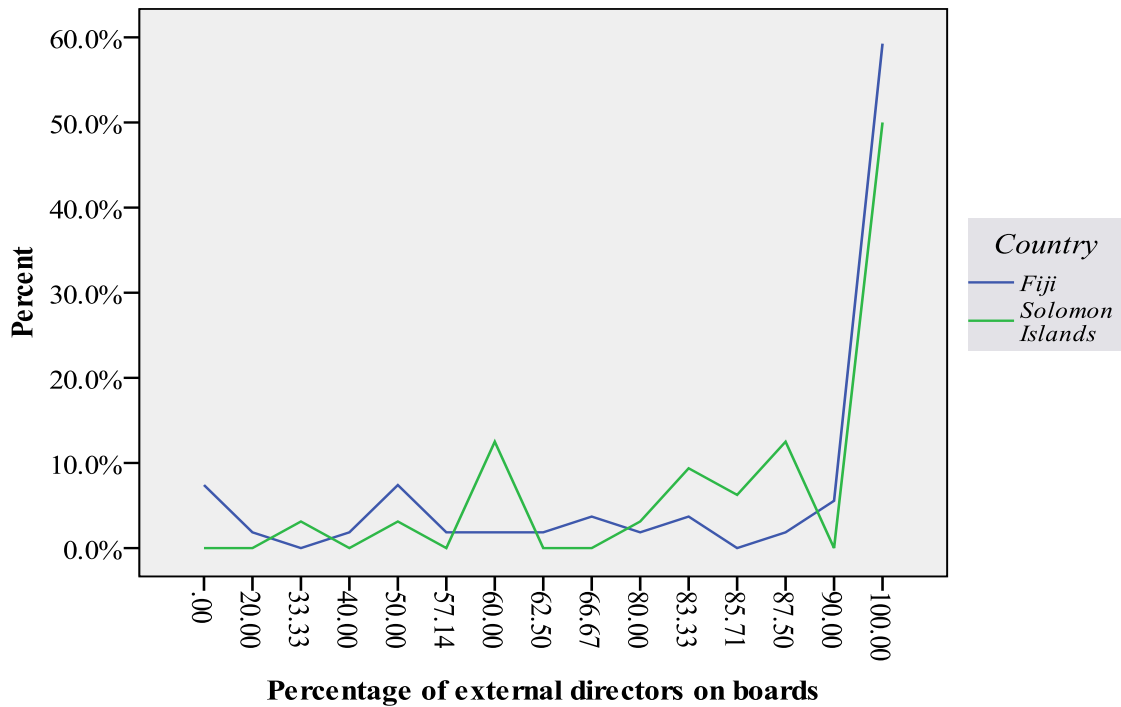


Figure 5.4 Board compositions by country (Fiji and Solomon Islands)

However, in some SoEs the CEO or Managing Director is included on the board as an executive director with full voting rights. Others, however, do not include CEOs on the main board but encourage them to serve on board committees (McKee, 2007). Additionally, less than 20 per cent of the firms have few outside directors on their boards (0-10 per cent) and this represents mainly privately-owned companies (see Figure 5.5). This confirms that in private firms, boards are mostly composed of company insiders, often comprising the majority owners and children of founding owners. Indirectly, these statistics suggest that boards of SoEs (SCA and SCC) have greater independence compared to boards of private companies given the high percentage of external directors in SoEs.

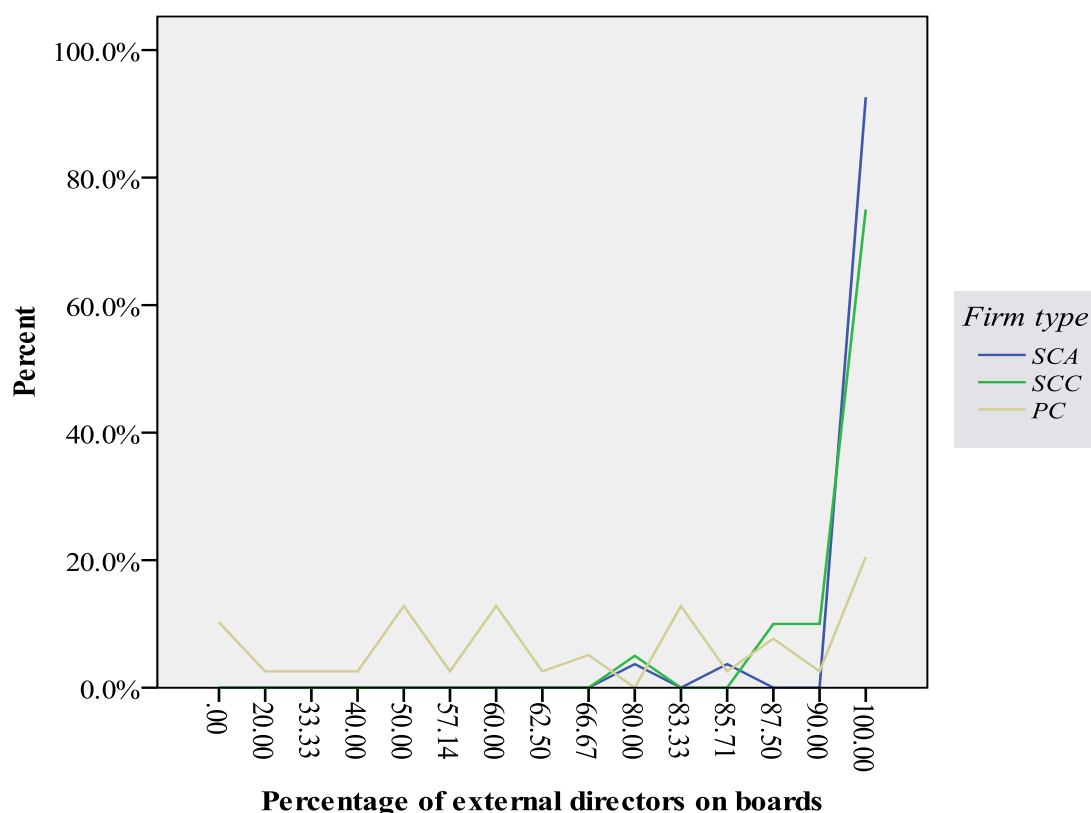


Figure 5.5 Board compositions by firm type (SCA, SCC and PC)

These findings can be compared to boards in developed and emerging economies. For instance, in developed economies, a survey by Anderson et al. (2003) found that in the US the percentage of external directors on US boards range between zero and 92.9 per cent. Similarly, Hillier and McColgan's (2005) survey of UK non-financial firms between 1992 and 1997 found that the percentage of outside directors (both grey and independent) is about 40 per cent. A study by Andres and Vallelado (2006) of OECD countries reported an average of 79-80 per cent of outside directors on boards. In Turkey, Kula (2005) found that the percentage of outside directors goes up to 88 per cent, while a similar survey by Fernandes (2008) on firms listed on the Portuguese Stock Market revealed an average of 33 per cent outside directors, with a maximum of 80 per cent. For emerging economies, Cho and Kim (2007) reported that in Korea, 50 per cent of listed firms had 25 per cent of outside directors following the introduction of a regulation by the government in 1998, which requires that outside directors make up at least 25 per cent of the board in listed-firms on the Korean Stock Exchange. Another survey of listed-firms on the Shanghai Stock Exchange and Shenzhen Stock Exchange in China revealed that the percentage of outside directors on boards (both independent and affiliated) is around 50 per cent (Tian & Lau, 2001). In Japan, out of an

average of 27 members, only two are outside directors, although, there has been a drastic increase to 71 per cent in the firms with an outside director in 2001 compared to 38 per cent which was reported in 1984 (Tang, 2007). Clearly, these studies confirm that the outside director system and the promotion of independent directors, is growing in importance in emerging economies following influence from developed countries.

However, in PICs, evidence suggests that often the calibre and contribution of a director is considered more important than the technical classification of independent or non-independent directors. For instance, McKee (2007) found that in Fiji the notion of an independent director is inconsistently defined, where an independent director for some boards may mean someone that commands less than 10 per cent of the shareholding in the enterprise, while others may regard an independent director as someone with no previous employment with the enterprise. Hence, board composition varies depending on the firm's definition of an independent director and how significantly the firm values the notion of board independence.

No doubt, the debate on board composition is an ongoing one for Fiji and the Solomon Islands. According to Duncan (2005), the use of inside directors should be avoided by boards, if possible, since those in executive roles are more likely to align with management rather than the interests of shareholders. In Fiji, the government has introduced a policy that SoE boards should be comprised of external directors based on the notion that outsider-dominated boards are more effective (Department of Public Enterprises, 2003). This same instrument, however, gives the appointing authority (subject to approval of the Prime Minister) the power to appoint executives as directors or vice versa if deemed necessary.

In fact, Lal's (2006) study on the Fiji Sugar Corporation (FSC) found that outsider-dominant boards do not necessarily fulfil their responsibilities and guarantee effective performance. According to Lal, this can be attributed to two issues. First, the presence of the Managing Director (CEO) as a member of the board allows him/her to influence other directors by easily commanding their support with little challenge to management decisions (Tosi, Shen & Gentry, 2003). Second, the board simply approves the CEO's actions or is uninterested in what the CEO does so long as individual director board positions remain secure (Lal, 2006; Tosi *et al.*, 2003). This happens because in SoE boards, directors owe their positions to the goodwill of the appointing authority or government, which is consistent with earlier discussions in Section 2.5 that board appointments are often seen as payback for political loyalty (Lal, 2006; Pacific Islands Forum Secretariat, 2005). Hence, contrary to the belief that



outsiders add value to the board by critically disciplining managers (Fama & Jensen, 1983), this is unlikely for Fiji and the Solomon Islands. In this regard, it is important to determine how board composition affects the ability of boards to perform their duties in Fiji and the Solomon Islands.

Similarly, board diversity, in terms of the proportion of female to male participation on boards, is an issue for firms in a lot of countries including Fiji and the Solomon Islands. The result in this study confirms that boards of directors in Fiji and the Solomon Islands are dominantly a men’s club (see Figures 5.6. and 5.7). Figure 5.6 shows almost 30 per cent of firms surveyed in Fiji and 50 per cent of firms surveyed in the Solomon Islands have zero per cent of female directors on their board. Of the two countries, Fiji has a relatively higher percentage of female participation on board of directors with about 20 per cent of firms surveyed having 20 per cent female directors and approximately another 20 per cent with about 57 per cent female directors. Possibly, this reflects the fact that more women have achieved higher education and training in Fiji than in the Solomon Islands, or culturally, women command a relatively higher recognition in the former than the latter. But overall, female participation on boards of directors in the two countries is low compared to other countries.

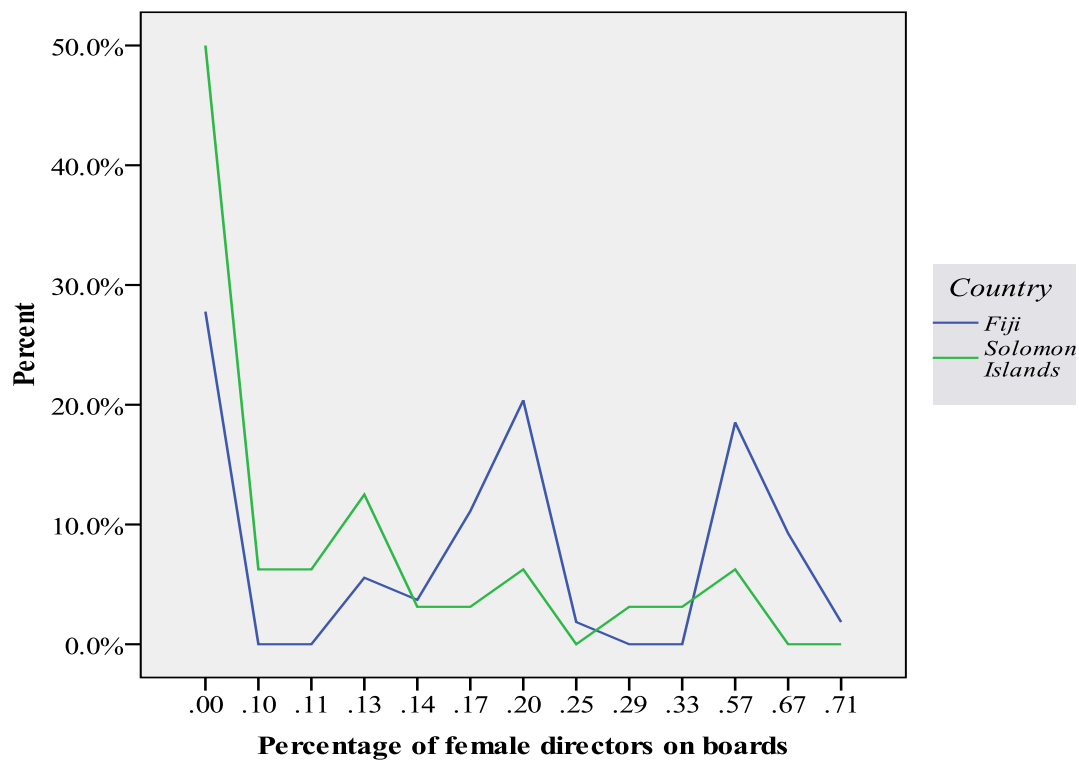


Figure 5.6 Board diversity by country (Fiji and Solomon Islands)

This data can be compared to the boards in developed and emerging economies. In the US, a survey of Fortune 500 revealed that women have assumed a growing share of board seats, reaching 14.8 per cent of seats by 2007 (Catalyst, 2007). Similarly, a survey of corporate boards in New Zealand in 2000 found that women represented 14 percent of directors, which can be attributed to legislative and statutory requirements (van der Walt & Ingley, 2003). In Norway, boards have one of the highest ratios of female directors on boards (32 per cent) following the introduction of a new law which requires that in firms which publicly trade, the board shall have 40 per cent of its makeup as female (Huse *et al.*, 2009). But elsewhere, women hold fewer corporate board seats. For instance, the Equal Opportunity for Women in the Workplace Agency—EOWA (2006) and the European Professional Women’s Network —EPWN (2004) revealed that the percentage of female directors in Australia, Canada, Japan, and Europe is around 8.7, 10.6, 0.4, and 8.0 per cent, respectively.

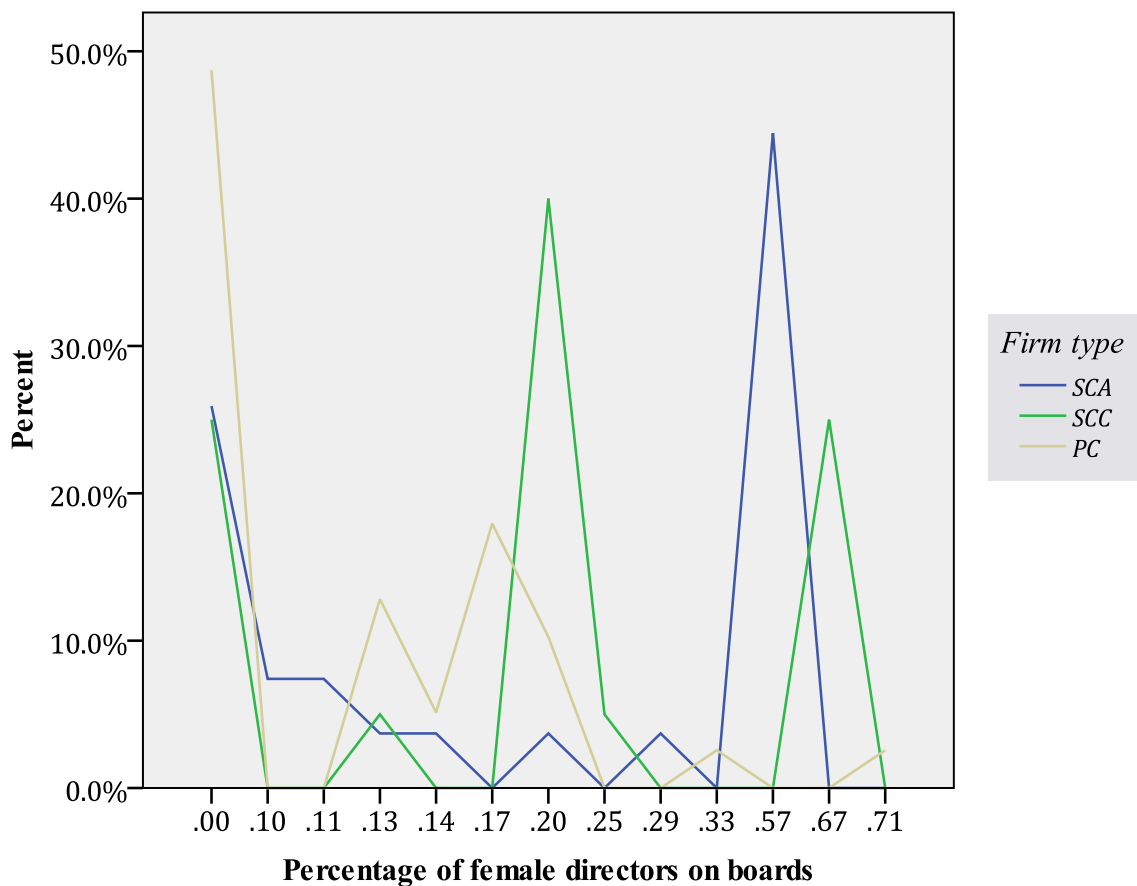


Figure 5.7 Board diversity by firm type (SCA, SCC and PC)

These reports further suggest that the majority of firms with female directors have only one female director. For example, in the top 200 companies in Europe, 62 per cent of companies had at least one female director in 2004, but only 28 per cent have more than one (EPWN, 2004). A study by Bramer, Millington and Pavelin (2007) on UK firms also revealed that 37 per cent of the firms surveyed have female directors on their board but the average percentage of female directors is only 0.5 per cent, although, another study by Singh, Terjesen and Vinnicombe (2008) reported that female directorships in UK has increased to around 10.4 per cent. Another study by Adams and Ferreira (2009) on S&P 1,500 Companies in the US revealed that 65 per cent of firms have at least one female director in 2003, but only 25 per cent have more than one. In Australia, 50 per cent of ASX200 companies have at least one female director in 2006, but only 13.5 per cent have more than one (EOWA, 2006). Clearly, the average percentage of female directors on boards and the percentage of firms with female directors in developed countries are much higher than in Fiji and the Solomon Islands.

Anecdotal evidence suggests that the politics and social connections associated with board appointments appear to be a real hindrance to the participation of women on boards of directors in Fiji, the Solomon Islands and other PICs. Nevertheless, indications are that participation of women on boards has noticeably increased in the two countries in recent years. In fact, the increase in more women receiving higher education and specialised skills, and the perception in PICs that women are less likely to engage in corrupt practices may have contributed to this slight increase in female memberships on boards (McKee, 2005).

Finally, Figures 5.8 and 5.9 presents the data for multiple directorships in Fiji and the Solomon Islands. According to Figure 5.8, approximately 40 per cent and 30 per cent of directors surveyed respectively for Fiji and the Solomon Islands, have no other board membership apart from their current membership. About 37 per cent of the Solomon Islands directors and 20 per cent of Fiji directors hold one other directorship. Additionally, approximately 12 and 11 per cent of directors, respectively for the Solomon Islands and Fiji, hold two other board memberships. Furthermore, 29 per cent of Fiji directors and 21 per cent of Solomon Islander directors holds between three to six other directorships.

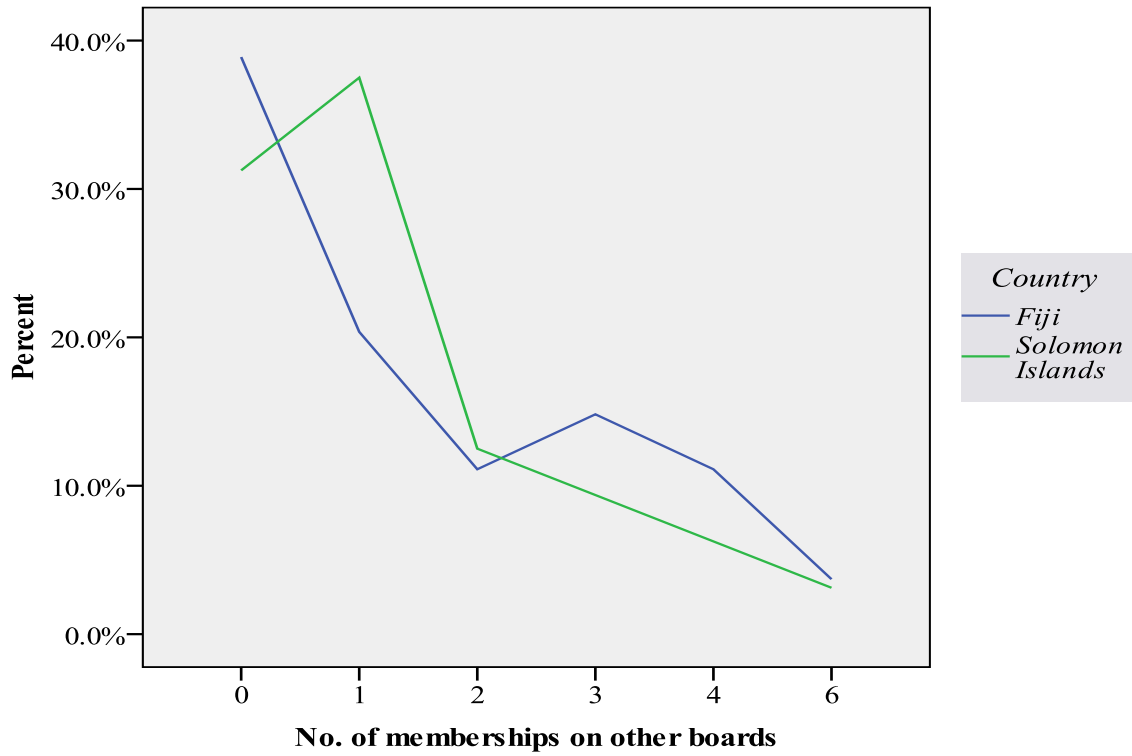


Figure 5.8 Multiple directorships by country (Fiji and Solomon Islands)

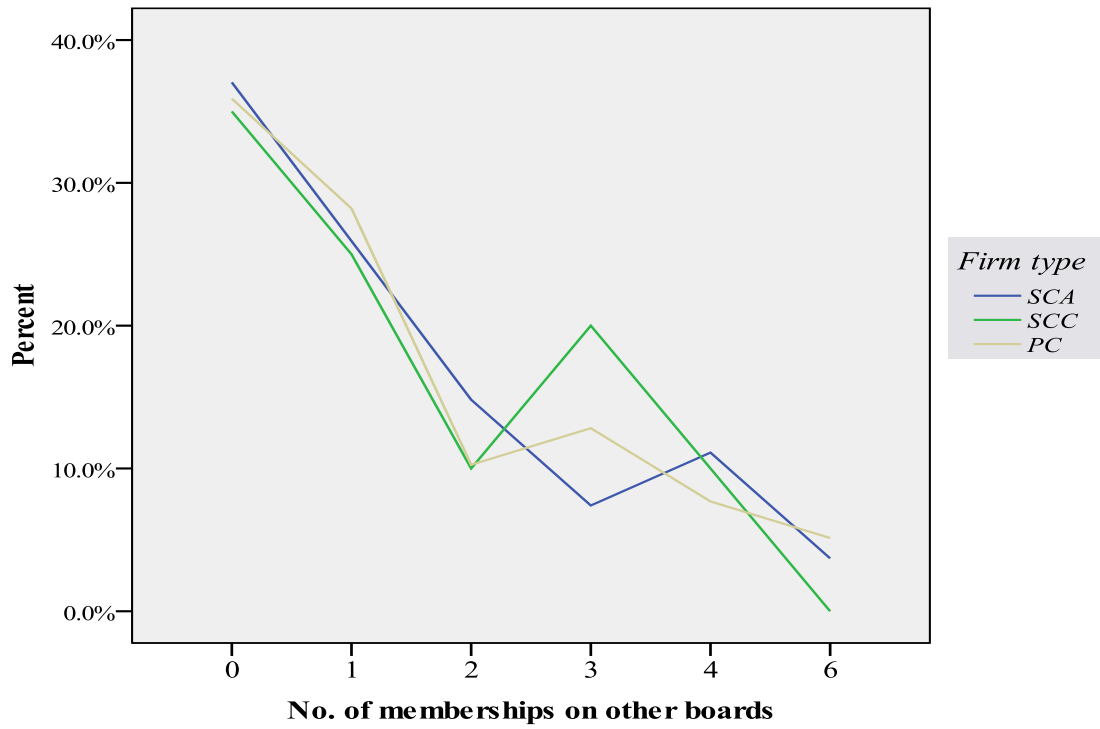


Figure 5.9 Multiple directorships by firm type (SCA, SCC and PC)

Further, Figure 5.9 shows that the issue of multiple directorships is fairly uniform or common across different types of firms. According to this figure, between 35 to 37 per cent of directors in state commercial authorities (SCA), state commercial companies (SCC) and privately-owned (PC) companies have no other memberships apart from their current appointment. About 25 per cent of directors in SCCs, 26 per cent in SCAs and 29 per cent in PCs have one other directorship.

Additionally, approximately 15 per cent of SCA directors and 10 per cent of directors in SCCs and PCs hold two other directorships. Furthermore, about 20 per cent of directors in SCCs, 12 per cent in PCs and eight percent in SCAs have three other memberships on other boards. Moreover, 14 per cent of SCA directors, 10 per cent of SCC directors and 13 per cent of directors in PC boards still hold between four to six directorships on other boards. Clearly, the data suggest that multiple directorships are a common issue across different types of firms in Fiji and the Solomon Islands.

The seriousness of multiple directorships in Fiji and the Solomon Islands becomes more obvious when these data are compared to boards in developed and emerging economies. For instance, a survey of COMPUSTAT firms in the US by Ferris, Jagannathan and Pritchard (2003), found that only 16 per cent of all directors hold two or more board seats, and furthermore, only six percent of the sample of total directorships, are directors holding three or more directorships, with an average of 1.89 directorships per director. Their finding is consistent with another study by Pornsit, Young and Wallace (2008) which concluded that multiple directorships are not typical for COMPUSTAT firms in the US and are primarily limited to large firms. In Sweden, Adams (2008) reported that on average, directors have 1.35 board seats and only 13.15 per cent of directors have more than one directorship in another publicly-traded firm. Also, in Australia, Kiel and Nicholson (2006) found that 81 per cent of directors in the Top 200 companies held only one directorship, 11 per cent held two directorships and eight per cent held three or more board seats. In emerging economies, a study by Au, Peng and Wang (2000) on the Top 200 corporations in pre-1997 Hong Kong, revealed that 65 per cent of the directors held two board seats, 25 per cent held three board seats, while another 14 per cent held four or more seats. In India, Sarker and Sarker (2009) found that multiple directorships are even more common with 28 per cent holding one board seat, 16 per cent held two board seats and about 56 per cent of directors holding three or more directorial positions.

For comparison purposes, if one adopts the benchmark of three directorships to define a busy director (Sarker & Sarker, 2009) or the concern of “over-boarding”, which centres on directors who are perceived as serving on too many board boards (Harris & Shimizu, 2004; Kiel & Nicholson, 2006), then as many as 40 and 33 per cent of directors in Fiji and the Solomon Islands, respectively, can be considered busy and over-boarded, which falls in the same category as emerging economies (India= 56 per cent; Hong Kong= 39 per cent), but much higher than developed countries (Australia= 8 per cent; US= 6 per cent). The lower percentage of over-boarding in developed countries can be attributed to the introduction of limits on the number of directorial positions that a director could accept. For example, in the US, the Council of Institutional Investors (2004) suggests that directors with a full-time job should not sit on more than two other boards and current CEOs should only serve on one other board (Kiel & Nicholson, 2006). In the UK, the Combined Code recommends that full-time executive directors should not take on more than one non-executive directorship in a FTSE 100 company (Adams, 2008; Kiel & Nicholson, 2006). In contrast, the relatively higher percentage of multiple directorships in emerging economies like India, are largely due to the dearth of industrial leadership with adequate experience to serve on company boards (Sarker & Sarker, 2009). Additionally, while a lot of emerging countries have taken steps to address multiple directorships by setting legal limits through the Companies Act, such limits are often too high. In India’s case, the current Act puts this limit at 10, which is obviously too high compared to developed countries. Similarly, as discussed in Chapter 2, multiple directorships in Fiji, Solomon Islands and other PICs in general, reflect the lack of adequately qualified people to serve on boards, which is further exacerbated by the socio-political influence on board appointments especially in SoE boards. Thus, determining how multiple directorships affect the performance of boards of directors is a significant task for firms in Fiji and the Solomon Islands.

Overall, the most obvious criticism of multiple directorships in PICs relates to the lack of commitment of directors to board business and attendance at board meetings. McKee’s (2007) report on Fiji enterprises showed that while many directors are competent, diligent and committed, most of them have found it increasingly difficult to fulfil their roles with other fulltime commitments. According to McKee (2007), a good number of directors were reported to have been overcommitted despite a generally satisfactory attendance at board meetings. In representative boards, when a primary director is unable to attend due to commitment, a junior officer is occasionally sent to board meetings from shareholder

organisations as alternate directors. Unfortunately, junior officers do not have equal competence to the primary director and they lack appreciation of issues discussed at the boardroom level, in effect reducing the effectiveness of boards (McKee, 2007).

Regardless, little has been done in policy and practical terms to address the issue of multiple directorships in many PICs. Only Fiji has taken some steps to address multiple directorships on SoE boards by introducing a policy discouraging appointments beyond two directorships at one time (Department of Public Enterprises, 2003; McMaster, 2005). The policy also restricts civil servants from being appointed as directors on SoE boards. They may only serve as observers merely to provide policy clarifications and advice where required (Department of Public Enterprises, 2003). Even so, since prerogative power rests with the Prime Minister and politicians, this policy is often ignored. Inevitably, multiple directorships remain a significant concern for enterprises in Fiji and the Solomon Islands.

The mean, minimum and maximum values and the standard deviation for the board attribute variables were also presented Appendix 10. Overall, the above descriptive results confirms that the attributes of board size, board composition, board diversity and multiple directorships are indeed issues of significant concern for boards and firms in Fiji and the Solomon Islands. In the next section, the results of the bivariate correlations analysis among the key variables are presented.

### **5.3 Correlation analysis of key variables**

Table 5.4 presents the bi-variate correlation statistics for the key variables considered in the study. As expected, the dependent (board performance) variables, *monitoring and control role performance* (BP<sub>1</sub>), *service role performance* (BP<sub>2</sub>) and *strategic role performance* (BP<sub>3</sub>), do not correlate with each other. However, there are significant correlations between the dependent variables (BP<sub>1</sub>, BP<sub>2</sub> and BP<sub>3</sub>), the board attribute variables (*board size* =BA<sub>1</sub>, *board composition*= BA<sub>2</sub>, *board diversity*= BA<sub>3</sub> and *multiple directorships*=BA<sub>4</sub>), and the board process variables (*effort norms*=M<sub>1</sub>, *cognitive conflict*=M<sub>2</sub>, *board cohesiveness*=M<sub>3</sub>, *use of knowledge and skills*=M<sub>4</sub>, *CEO/board relationship*=M<sub>5</sub>, *Intrinsic motivation*=M<sub>6a</sub>, *extrinsic motivation*= M<sub>6b</sub>, *affective conflict*= M<sub>7</sub>, and *flow of board information*= M<sub>8</sub>).

Table 5.4 Coefficients correlations- dependent variables, mediator variables and independent variables

	BP1	BP2	BP3	BA1	BA2	BA3	BA4	M1	M2	M3	M4	M5	M6a	M6b	M7	M8
Monitoring CR/P (BP1)	1.00															
Service R/P (BP2)	.167	1.00														
Strategic R/P (BP3)	.220**	.666***	1.00													
Board size (BA1)	-.229**	-.139	-.220**	1.00												
Board composition (BA2)	-.067	.116	.180	.420***	1.00											
Board diversity (BA3)	-.039	-.096	-.088	-.103	-.299***	1.00										
M/directorships (BA4)	.028	-.096	.040	-.034	.061	.102	1.00									
Effort norms (M1)	.165	.618***	.374***	-.201	.021	-.031	-.041	1.00								
Cognitive conflict (M2)	.289***	.442***	.571***	-.099	.254**	-.354***	-.057	.383***	1.00							
Board cohesiveness (M3)	.203	.630***	.524***	-.140	.077	-.203	-.146	.583***	.601***	1.00						
U/know & skills (M4)	.729***	.445***	.467***	-.323***	.005	-.219**	-.102	.370***	.507***	.484***	1.00					
CEO/board relate (M5)	.119	.614***	.429***	-.018	.098	-.127	-.164	.482***	.421***	.661***	.316***	1.00				
Int/ motivation (M6a)	.172	.623***	.526***	-.166	.064	-.150	-.013	.626***	.375***	.543***	.477***	.534***	1.00			
Ext/ motivation (M6b)	-.081	-.031	-.137	.078	.019	.103	.117	-.150	-.120	-.042	-.117	-.006	-.146	1.00		
Affective conflict (M7)	-.084	-.303***	-.324***	.118	.038	.274**	-.064	-.173	-.334***	-.526***	-.264**	-.333***	-.278***	.159	1.00	
Board information (M8)	.992***	.154	.226**	-.241**	-.055	-.052	.033	.191	.301***	.217**	.734***	.121	.188	-.109	-.091	1.00

\*\* . Pearson correlation is significant at the 0.05 level (2- tailed)

\*\*\*. Pearson correlation is significant at the 0.01 level (2-tailed)



First, there is a significant negative correlation between board size (BA<sub>1</sub>) and the performance variables of BP<sub>1</sub> and BP<sub>3</sub>, which is supportive of the literature and discussions in Chapter 3. Contrarily, there is no significant correlation between each of the board attributes of BA<sub>2</sub>, BA<sub>3</sub> and BA<sub>4</sub> and the performance variables which were inconsistent with the expectations derived based on the discussions in Chapter 3.

Second, there is a significantly positive correlation between all three performance variables (BP<sub>1</sub>, BP<sub>2</sub> and BP<sub>3</sub>) and each of the board process variables (M<sub>1</sub>, M<sub>2</sub>, M<sub>3</sub>, M<sub>4</sub>, M<sub>5</sub>, M<sub>6a</sub>, and M<sub>8</sub>) which is in line with the literature discussed in Section 3.5. Similarly, the negative correlations between the processes of M<sub>6b</sub> and M<sub>7</sub> and the board performance variables are consistent with the discussions in Sections 3.5.6 and 3.5.7.

Third, there are correlations between different board attributes. For instance, there is a significant positive correlation between BA<sub>1</sub> and BA<sub>2</sub> which implies that an increase in board size correlates to the increase in board composition. In contrast, there is a significantly negative correlation between BA<sub>2</sub> and BA<sub>3</sub> which indicates that an increase in board composition correlates to a decline in board diversity. On the other hand, there are no significant correlations between BA<sub>1</sub>, BA<sub>3</sub> and BA<sub>4</sub> or between BA<sub>2</sub> and BA<sub>4</sub>.

Fourth, as expected, there are significant correlations between board attribute variables and the board process variables. For instance, BA<sub>1</sub> has a significant negative correlation to the processes of M<sub>4</sub> and M<sub>8</sub> which gives the impression that an increase in board size may negatively impact the board's ability to apply knowledge and skills to board tasks as well as the board's ability to effectively disseminate board information between board members for decision-making purposes. Likewise, the significant positive correlation between BA<sub>2</sub> and M<sub>2</sub> implies that an increase in board composition corresponds to an increase in the level of cognitive conflicts and disagreements within the board. Furthermore, BA<sub>3</sub> has a significant negative correlation to M<sub>2</sub> and M<sub>4</sub>. Further, there is a significant positive correlation between BA<sub>3</sub> and M<sub>7</sub> which is consistent with the argument that as boards become more gender diverse, the tendency to focus on personality issues emerges hence the decline in the board's ability to engage in cognitive conflicts and apply knowledge and skills to board tasks. Contrarily, BA<sub>4</sub> did not have any significant correlation to the board process variables, which is not in line with expectations.

Lastly, there are correlations between the different board process variables considered in this study. For instance, M<sub>1</sub> has a significant positive correlation with M<sub>2</sub>, M<sub>3</sub>, M<sub>4</sub>, M<sub>5</sub> and M<sub>6a</sub>. Similarly, M<sub>2</sub> positively and significantly correlates to M<sub>3</sub>, M<sub>4</sub>, M<sub>5</sub>, M<sub>6a</sub> and M<sub>8</sub>, which is consistent with the discussions in Section 3.8. As expected, M<sub>2</sub> has a significant negative correlation with M<sub>7</sub>. Furthermore, M<sub>3</sub> has a significant positive correlation with M<sub>4</sub>, M<sub>5</sub>, M<sub>6a</sub> and M<sub>8</sub> and in line with expectations it has a significant negative correlation with M<sub>7</sub>. Likewise, M<sub>4</sub> also has a significant positive correlation with M<sub>5</sub>, M<sub>6a</sub> and M<sub>8</sub> and a significant negative correlation with M<sub>7</sub>, which is also consistent with the literature discussed in Section 3.8. These correlation statistics strongly suggest that the different processes considered are interrelated, which is indicative of the interdependence of these working processes, thus, more complex relationships between board processes and board performance may exist. In fact, these results support the observations by van Ees *et al.* (2008), who specifically called for more complex methodologies to test the causal effect of board attributes on board performance through board processes, and the effect of potential interrelationships between different board processes on board performance.

Overall, the above correlations statistics suggest potential associations between the board attributes, board processes and board performance variables considered in the study. Nevertheless, these correlations statistics cannot be used to claim that there are causal relationships between them. In the next two chapters, results from mediation analysis are reported and discussed so as to determine if causal relationships exist between board attributes, board processes and board performance.

## Chapter 6 CAUSAL EFFECTS OF BOARD ATTRIBUTES ON BOARD PERFORMANCE THROUGH BOARD PROCESS

In this chapter, the test results for the causal relationship between board attributes, board process and board performance are presented. Section 6.1 outlines the technical procedures used in examining how board performance (dependent variable) has been influenced indirectly through the effect of board attributes (independent variables) on board processes (mediator variables). Section 6.2 reports the results for the indirect effect of board size on board performance through board process. Section 6.3 presents the results for the indirect effect of board composition on board performance. The results for the indirect effect of board diversity on board performance are given in Section 6.4 and the results for the indirect effect of board multiple directorships on board performance are discussed in Section 6.5. The last section, Section 6.6, concludes the chapter.

### 6.1 Technical procedures

The test for the indirect effect of board attributes on board performance through board process involves the two functions discussed in Section 4.8.4: the *M-Function* and the *Y-Function*.

First, in the tests for the propositions in this chapter, the specification of the *M-Function* is the same. Each respective mediator variable ( $M_1$ = *effort norms*,  $M_2$ = *cognitive conflict*,  $M_3$ = *board cohesiveness* and  $M_4$ = *use of knowledge and skills*) is specified as a quadratic function of the board attribute (e.g. board size or  $BA_1$ ) after statistically controlling the effects of the remaining board attribute variables ( $BA_2$ = *board composition*,  $BA_3$ = *board diversity* and  $BA_4$ = *multiple directorships*) as well as the effects of the control variables ( $W_1$  = *country*,  $W_2$ = *industry sector*,  $W_3$  = *firm size*,  $W_4$  = *firm type* and  $W_5$  = *listing status*). The quadratic specification of the *M-function* in these tests is based on discussions in Section 3.7. The *M-function* is given in Equation 6.1 below.

$$\hat{M} = i_1 + a_1X + a_2X^2 + BA_2 + BA_3 + BA_4 + W_1 + W_2 + W_3 + W_4 + W_5 + \varepsilon \quad (6.1)$$

Second, for the *Y-Function*, the specification varies according to the mediator or process variables considered. For propositions that include *effort norms* ( $M_1$ ) and *the use of knowledge and skills* ( $M_4$ ) as potential mediators, the dependent variable which is board

performance (measured in terms of *monitoring and control role performance-BP1*, *service role performance-BP2* and *strategic role performance-BP3*) is modelled as a linear function of the two mediator variables, respectively, after controlling for the effect of the board attribute considered as the independent variable, as well as the remaining board attributes and control variables. This specification is consistent with the literature discussed in Sections 3.5.1 and 3.5.4. This function is represented in Equation 6.2 below.

$$\hat{Y} = i_2 + bM + c_1'X + c_2'X^2 + BA_2 + BA_3 + BA_4 + W_1 + W_2 + W_3 + W_4 + W_5 + \varepsilon \quad (6.2)$$

For propositions that considered *cognitive conflict* (M2) and *board cohesiveness* (M3) as potential mediators, board performance was estimated as a quadratic function of both mediators, which is in line with the discussion in Sections 3.5.2 and 3.5.3. This function is given in Equation 6.3 below:

$$\hat{Y} = i_2 + b_1M + b_2M^2 + c_1'X + c_2'X^2 + BA_2 + BA_3 + BA_4 + W_1 + W_2 + W_3 + W_4 + W_5 + \varepsilon \quad (6.3)$$

In the above equations:

$\hat{M}$  = the direct effect of the board attribute (considered as the independent variable) on the mediator variable after controlling the effects of the remaining board attributes and control variables;

$\hat{Y}$  = the direct effect of the mediator variable on board performance, controlling for the effect of the board attribute (considered as the independent variable), the remaining board attributes and control variables;

$X$  = the board attribute treated as the independent variable;

$M$  = the mediator variable;

$c'$  = the direct effect of the board attribute (considered as the independent variable) on board performance, holding  $M$  constant;

$BA_2$ ,  $BA_3$  and  $BA_4$  = the remaining board attributes, and;

$W_1$  to  $W_5$  = the control variables.

In each proposition test, the product of the *M-function* and the *Y-Function*,  $\Theta$ , quantifies how much board performance changes at a specific point of the board attribute (considered the independent variable) indirectly through its effect on the mediator variables. As discussed in Chapter 4, the indirect effect was estimated at the mean, as well as at plus and minus one

standard deviation from the mean value of the board attribute. For example, in Proposition 1, these points represent *small-sized boards* ( $\theta x=4.79$ ), *medium-sized boards* ( $\theta x=6.58$ ) and *larger-sized boards* ( $\theta x=8.37$ ). In Proposition 2, the same points represent *relatively low-composed boards* ( $\theta x=56.7$ ), *moderate-composed boards* ( $\theta x=83.16$ ) and *high-composed boards* ( $\theta x=109.6$ ). Similarly, in Proposition 3, the points represent *relatively low-diverse boards* ( $\theta x=-.0260$ ), *moderate-diverse boards* ( $\theta x=.2008$ ) and *relatively high-diverse boards* ( $\theta x=.4275$ ), while for Proposition 4, they reflect *low-multiple directorships* ( $\theta x=-.1194$ ), *moderate-multiple directorships* ( $\theta x=1.4651$ ) and *high-multiple directorships* ( $\theta x=3.0496$ ). The coefficients of the control variables in the tests for Propositions 1 to 4 are examined and they are insignificant, suggesting these control variables do not significantly affect board performance. The following sections present the results for these tests.

## 6.2 Effects of board size on board performance through board process

This section reports test results for Proposition 1 to determine whether board size affects board performance through its effect on each of the processes of *effort norms*, *cognitive conflict*, *board cohesiveness* and *the use of knowledge and skills*. The inclusion of the four process mediators in the tests is based on discussions in Sections 3.6.1 and 3.7.1.

*Proposition 1(a): Board size affects board performance through effort norms*

The result for Proposition 1(a) presented in Table 6.1 shows that the increase in board size (BA<sub>1</sub>) for *small-sized* ( $\theta x=4.7961$ ) and *medium-sized* ( $\theta x=6.5814$ ) boards does not significantly affect board performance through its effect on effort norms (M<sub>1</sub>). As discussed in Section 4.8, where zero appears in the confidence intervals, the effect is insignificant. Thus, this result implies that the increase of board size for *small-sized* and *medium-sized boards* would not have a statistically discernable effect on board performance (in all three performance variables) through changes in M<sub>1</sub>. In contrast, the increase in board size for *relatively large-sized boards* ( $\theta x=8.3667$ ) results in a significantly negative indirect effect of “-.0252” for BP<sub>1</sub>, “-.1546” for BP<sub>2</sub>, and “-.0850” for BP<sub>3</sub>, with respective confidence intervals of “-.0764 to -.0100”, “-.3164 to -.0660”, and “-.1800 to -.0273”. This means that increasing board size for *relatively large-sized boards* significantly reduces board performance through changes in effort norms (M<sub>1</sub>). Overall, the result supports Proposition 1(a), that is, board size indirectly affects board performance through its effect on effort norms.

Table 6.1 Effect of board size on board performance through effort norms

Board performance (Y)	Board size value ( $\theta x$ )	Indirect effect estimate ( $\theta$ )	90% BC bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	4.7961	.0088	-.0055 to .0671
	6.5814	-.0082	-.0416 to .0011
	8.3667	-.0252	-.0764 to -.0100*
<i>Service role performance (BP<sub>2</sub>)</i>	4.7961	.0540	-.0935 to .2453
	6.5814	-.0503	-.1420 to .0411
	8.3667	-.1546	-.3164 to -.0660*
<i>Strategic role performance (BP<sub>3</sub>)</i>	4.7961	.0297	-.0373 to .1670
	6.5814	-.0276	-.0789 to .0194
	8.3667	-.0850	-.1800 to -.0273*

\* Significant indirect effect (90% BC-CIs)

This finding indicates that as board size increases beyond eight members, directors are likely to experience dysfunctional norms of behaviour and agency problems in the boardroom. As a result, directors face difficulty in building the interpersonal relationships necessary for maintaining high effort norm behaviours. Furthermore, the result is consistent with the notion that large boards are likely to suffer from “social loafing” whereby individual directors fail to give their maximum effort given the tendency to rely on others to put more effort into board tasks (Forbes & Milliken, 1999; Latane *et al.*, 1979; Williams *et al.*, 1981).

Specifically, in PICs context, since the appointment of boards were normally influenced by government politics and socio-cultural connections through the *wantok* system, boards tend to be relatively large in size. This is because those who sit in authority positions (often politicians in the case of SoEs) use board positions as avenues to reward constituency loyalty or repay political debts and other forms of political correctness. These interests result in more appointments to the board, beyond the size appropriately required by the enterprise. In effect, those who are appointed to the board may not necessarily share the same interests or purpose in accepting board appointments, hence, the lack of common norms to pursue the interests of the enterprise.

*Proposition 1(b): Board size affects board performance through cognitive conflict*

Table 6.2 presents the results for Proposition 1(b). The increase in board size for *small-sized boards* does not significantly affect board performance through its effect on cognitive conflicts (M<sub>2</sub>). However, the increase in board size for *medium-sized* and relatively *large-sized boards* significantly reduces board performance through changes in M<sub>2</sub>. This negative indirect effect is significant for all three board performance variables as determined by their respective confidence intervals. Hence, board size indirectly affects board performance through its effect on cognitive conflict.

In particular, the result implies that larger boards are likely to experience communication and coordination difficulties which in turn affect the potential for cognitive conflicts on boards. It further supports the view that larger boards are likely to face difficulties in solving agency problems amongst members and negative emotions among directors. Therefore, the ability of directors to engage in critical and investigative interaction processes required to stimulate cognitive conflicts can be significantly suppressed, which then affect board performance.

*Table 6.2 Effect of board size on board performance through cognitive conflict*

Board performance (Y)	Board size value ( $\theta x$ )	Indirect effect estimate ( $\theta$ )	90% BC bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	4.7961	-.0176	-.0876 to .0018
	6.5814	-.0399	-.1735 to -.0066*
	8.3667	-.0661	-.3427 to -.0041*
<i>Service role performance (BP<sub>2</sub>)</i>	4.7961	-.0824	-.3164 to .0351
	6.5814	-.0835	-.1813 to -.0152*
	8.3667	-.0839	-.2293 to -.0162*
<i>Strategic role performance (BP<sub>3</sub>)</i>	4.7961	-.1279	-.3979 to .0778
	6.5814	-.1174	-.2227 to -.0162*
	8.3667	-.1034	-.2514 to -.0222*

\* Significant indirect effect (90% BC-CIs)

In the PICs context, the finding confirms that the increase in board size driven by politics and the *wantok* system is detrimental to the ability of boards to engage in cognitive conflicts required for effective board performance. Since directors were appointed without matching

their credentials to the requirements of the board, the increase in board size does not reflect the economic interests of the board and the enterprise. As a result, board members tend to pursue conflicting interests often at the expense of the enterprise. This is further exacerbated by the lack of clarity in board appointments which means that directors lack understanding of the role they play as board members. Enterprises in the PICs should avoid increasing the size of their boards beyond six directors because such an increase can significantly increase cognitive conflicts on boards which then reduce the effective performance of boards.

*Proposition 1(c): Board size affects board performance through board cohesiveness*

Table 6.3 shows that an increase in board size for *small-sized boards* does not significantly affect board performance (for all three performance variables) through its effect on board cohesiveness (M<sub>3</sub>). However, the increase in board size for *medium-sized boards* significantly and negatively affects board performance in terms of BP<sub>1</sub> through its effect on M<sub>3</sub>. Further, board size increase for *large-sized boards* significantly affects board performance in terms of the monitoring and control role (BP<sub>1</sub>), service roles (BP<sub>2</sub>) and strategic role performance (BP<sub>3</sub>) through changes in M<sub>3</sub>. Overall, the result supports Proposition 1(c) that board size affects board performance through its effect on board cohesiveness.

*Table 6.3 Effect of board size on board performance through board cohesiveness*

Board performance (Y)	Board size value ( $\theta x$ )	Indirect effect estimate ( $\theta$ )	90% BC bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	4.7961	-.0075	-.1405 to .0338
	6.5814	-.0307	-.2076 to -.0021*
	8.3667	-.0679	-.3588 to -.0045*
<i>Service role performance (BP<sub>2</sub>)</i>	4.7961	-.0141	-.1751 to .1163
	6.5814	-.0465	-.1283 to .0178
	8.3667	-.0660	-.1978 to -.0023*
<i>Strategic role performance (BP<sub>3</sub>)</i>	4.7961	-.0139	-.1523 to .1280
	6.5814	-.0498	-.1237 to .0232
	8.3667	-.0863	-.2386 to -.0012*

\* Significant indirect effect (90% BC-CIs)

This finding suggests that larger boards may find it more difficult to build the interpersonal relationships required to bring about the cohesiveness required to enable directors to



effectively execute board tasks. This is because in larger boards more perspectives are likely to arise hence more room for dissent which increases the severity of coordination and communication problems within boards (McGrath, 1984). Moreover, some directors may find it difficult to participate in larger boards, thus, they become less motivated and satisfied which diminishes cohesiveness between directors on boards (Shaw, 1981). Consequently, the decline in interpersonal attraction and cohesiveness within the board affects the board's ability to effectively perform the roles that are expected of it (Isbella & Waddock, 1994; Williams & O'Reilly, 1998). Simultaneously, the result confirms that board cohesiveness is a reflection of the affective dimension of the inclusion of directors on the board, hence, the ability of directors to continue working together as a team (Forbes & Milliken, 1999; Williams & O'Reilly, 1998).

In the PICs context, the findings confirm that relatively larger boards are more likely to experience lack of cohesiveness because they comprise individuals with varyingly different interests and motives. Some members are purposely appointed to represent and protect the specific economic interests of politicians. Others come into the board to represent the interests of different stakeholder groups such as trade unions, provincial governments, chambers of commerce, and industry groups. On the other hand, a few individuals may be appointed for their specific skills and expertise, and hence, may have a genuine interest in assisting the board to contribute to the success of the enterprise. Inevitably, the board of directors consists of individuals who have different interests and motives, and therefore, it is unlikely for the board to experience the cohesiveness required to perform its roles. Furthermore, the fact that Pacific people rely a lot on social (*wantok*) networks defined by family and connections means that individual directors are more likely to show commitment on the basis of these networks rather than the economic interests of the enterprise, which reduces the cohesiveness required by boards to effectively carry out their roles.

*Proposition 1(d): Board size affects board performance through the use of knowledge and skills*

Table 6.4 presents test results for Proposition 1(d). The results were consistently similar to the previous analysis, which shows that the increase in board size for *small-sized* boards does not significantly affect board performance through its effect on the use of knowledge and skills (M4), given the presence of zero within its confidence interval. On the other hand, the increase in board size for *medium-sized* and *large-sized* boards significantly reduces board

performance (for all three performance variables) through changes in M4. It can be concluded that board size indirectly affects board performance through its effect on the use of knowledge and skills.

Table 6.4 Effect of board size on board performance through the use of knowledge and skills

Board performance (Y)	Board size value ( $\theta x$ )	Indirect effect estimate ( $\theta$ )	90% BC bootstrap confidence intervals
<i>Monitoring and control role performance (BP1)</i>	4.7961	-.0973	-.5194 to .0001
	6.5814	-.1457	-.4077 to -.0044*
	8.3667	-.1940	-.6489 to -.0059*
<i>Service role performance (BP2)</i>	4.7961	-.0516	-.1777 to .0617
	6.5814	-.0787	-.1514 to -.0214*
	8.3667	-.1057	-.2199 to -.0349*
<i>Strategic role performance (BP3)</i>	4.7961	-.0494	-.1604 to .0526
	6.5814	-.0740	-.1393 to -.0217*
	8.3667	-.0986	-.2071 to -.0335*

\* Significant indirect effect (90% BC-CIs)

This finding confirms the difficulties inherent in coordinating the contribution of directors in large boards which makes it difficult for them to apply their knowledge and skills effectively to board tasks. Furthermore, the inconvenience in organising board meetings in larger boards reduces the opportunity for directors to use their knowledge and skills on the board. Additionally, the result highlights the problem of “social loafing” in relatively larger boards which makes it easier for CEOs to control the board, and therefore, limiting the opportunity for directors to use their knowledge and skills.

For PICs, the result confirms that the increase in board size does not necessarily relate to an increase in appropriate knowledge and skills on boards. In fact, since most boards do not have clear guidelines for the appointment of board members, the process is often exposed to manipulation by those responsible for board appointments. This means that in most cases, directors are appointed on the basis of their political and *wantok* system affiliations without considering the skills and expertise required by the board. As a result, too many board members sit on boards without the possession of the required skills to effectively carry out the duties expected of boards of directors.

### 6.3 Effects of board composition on board performance through board process

Based on discussions in Sections 3.6.2 and 3.7.2, Proposition 2 was tested to determine if board composition affects board performance through board process. The inclusion of the three process mediators, *cognitive conflict*, *board cohesiveness*, *the use of knowledge and skills*, in the test is based on discussions in Section 3.7.2. To avoid repetition and improve readability, from this section on, the test results will not be reported with all testing details as in the previous section. Instead, only a summary of the results is shown. For all the testing details, they can be found in Appendix 11. Testing results for Proposition 2 are summarised in Table 6.5.

Table 6.5 Effect of board composition on board performance through board process

Proposition	Accept or Reject	Comments
Proposition 2:(a) <i>Board composition affects board performance through cognitive conflicts</i>	Accept	<ul style="list-style-type: none"> <li>Increase of outside directors on relatively <i>low-composed</i> boards significantly improves BP1, BP2 and BP3 through M2.</li> </ul>
Proposition 2:(b) <i>Board composition affects board performance through board cohesiveness</i>	Accept	<ul style="list-style-type: none"> <li>Increase of outside directors on relatively <i>low-composed</i> board significantly improves BP1 and BP2 through M3.</li> </ul>
Proposition 2:(c) <i>Board composition affects board performance through the use of knowledge and skills</i>	Accept	<ul style="list-style-type: none"> <li>Increase of outside directors on relatively <i>low-composed</i> boards significantly improves BP1 through M4.</li> <li>Increase of outside directors on relatively <i>high-composed</i> boards significantly reduces BP1, BP2 and BP3 through M4.</li> </ul>

#### *Proposition 2(a): Board composition affects board performance through cognitive conflicts*

An increase of outside directors for relatively *low-composed boards* ( $\theta_x=56.7$ ) significantly increases board performance in all three performance variables through its effect on cognitive conflicts (M2). This implies that when outside directors are added to relatively *low-composed boards* (where approximately 55 per cent are outside directors), the board's performance in terms of its monitoring and control roles, services roles and strategic roles significantly

improves. However, the increase of outside directors on relatively *moderate* or *high-composed* boards does not have a discernable effect on board performance. Overall, the result supports Proposition 2(a) that board composition indirectly affects board performance through its effect on cognitive conflict.

This finding highlights a number of significant issues relative to the relationship between board composition, board process and board performance. First, the result confirms the important contribution of outside directors in assisting boards to access the information required by firms through their peer networks. Information facilitates critical and investigative interaction processes on boards hence it contributes to effective monitoring and control by boards. Also, the information that outside directors bring with them into the boardroom based on their contacts and connections supports careful consideration and evaluation of decision alternatives which allows boards to effectively perform their service role tasks (Eisenhardt *et al.*, 1997; Milliken & Vollrath, 1991). Moreover, since outside directors bring in differences in opinions that promote task-related disagreements, they are likely to engage in critical investigations that require CEOs and insiders to explain and justify important strategic issues through modification and improvement. Second, the result suggests that outside directors are more likely to induce task-related differences, and therefore, they serve the board with diverse inputs to board solutions which enhances the effectiveness and quality of strategic decisions made by the board. However, the result also suggests that increasing outside directors on boards that already have a high percentage of outsiders does not necessarily improve board performance through its effect on cognitive conflicts.

In the PICs context, the result suggests the need to draw attention to a number of key issues related to board composition. First, the technical classification of independent or non-independent directors is often considered less important than the calibre and the potential skills that an individual may bring into the boardroom. In this regard, the increase of outsiders on the board may not necessarily lead to greater board independence, which is important for cognitive conflicts on boards. Second, although outside directors may bring in functional knowledge and skills, the lack of clarity in board appointments and the absence of induction programs, does not enhance their ability to engage in cognitive conflicts. Third, the result supports the earlier argument by Lal (2006) that some outside directors are uninterested in what the CEO or management does hence they are unlikely to engage in cognitive conflicts, so long as their individual positions are secured. Finally, the result highlights the

fact that outside directors lack specific knowledge and skills on the business, which does not allow them to engage meaningfully in cognitive conflicts and discussions required for effective board performance. In effect, it can be concluded that boards in PICs enterprises should avoid outsider-dominant boards but instead, promote the equal representation of outside and inside directors on their boards.

*Proposition 2(b): Board composition affects board performance through board cohesiveness*

The increase of outside directors for *low-composed boards* has a significantly positive effect on board performance through its effect on board cohesiveness (M<sub>3</sub>), but only in terms of *monitoring and control performance* (BP<sub>1</sub>). This means increasing outside directors on a relatively *low-composed board* leads to positive effects on the board's performance of its monitoring and control and service roles through changes in board cohesiveness. In contrast, the increase of outside directors to already *moderate* or *high-composed boards* has no discernable effect on board performance through its effect on board cohesiveness. Therefore, the result only partially supports Proposition 2(b) that board composition affects board performance through its effect on board cohesiveness.

To an extent, this result confirms the importance of board cohesiveness in mediating the effect of board composition on board performance. Indeed, the result indicates that there is a limit to the point at which board composition can positively influence board performance through changes in board cohesiveness. Specifically, the result suggests that board composition positively affects board performance through its effect on board cohesiveness when the proportion of outside directors is approximately 55 per cent. However, the increase of outside directors on boards that were already high on outside directors (> 55 per cent) does not necessarily increase board performance as a result of changes in board cohesiveness. In a way, this implies that too many outside directors may affect board cohesiveness due to coordination and communication difficulties (Cheng, 2008; Goodstein *et al.*, 1994), which prevent boards from reaching consensus on decisions, and therefore, it reduces their ability to effectively perform their roles (Goodstein *et al.*, 1994). The result further implies that outsider dominated boards are more likely to experience serious difficulties in building the interpersonal relationships needed to create the level of cohesiveness required between directors to positively influence board performance (Forbes & Milliken, 1999). Furthermore, the result highlights the negative effects of excessive cohesiveness on board performance as a

result of “group think” (Janis, 1983) and perceptual biases (Westphal & Bednar, 2005) among directors in highly cohesive boards.

In PICs specifically, the findings highlight important issues regarding the composition of boards in relation to the processes that boards are involved in carrying out their duties. First, the appointment of outside directors is temporary in nature and in PICs board tenure is often short, in some cases less than 12 months, due to political influence. This makes it difficult for boards to become acquainted with their roles and the nature of the business, retain institutional knowledge, and build the cohesiveness required to maintain continuity of business and board performance. Second, since board appointment procedures are often exposed to politics and the *wantok* system, outside directors enter the boardroom with different interests and backgrounds which make it challenging for boards to promote cohesiveness. In this regard, there is little doubt that the part-time nature of board appointments, the contrasting interests and the different socio-cultural affiliations of board members, which is intensified by the complexity, ambiguity and interactive nature of board tasks, mean that boards require some degree of cohesiveness if they are to effectively perform their roles. Thus, firms in PICs should promote the equal representation of outside and inside directors on their boards to enhance the cohesiveness required to effectively perform their roles.

*Proposition 2(c): Board composition affects board performance through the use of knowledge and skills*

The increase of outside directors on *low-composed* boards leads to a significant increase in board performance through its effect on the use of knowledge and skills (M4), for monitoring and control performance (BP<sub>1</sub>) but not for service role performance (BP<sub>2</sub>) and strategic role performance (BP<sub>3</sub>). The increase of outside directors on already *high-composed* boards leads to a significant decline in board performance (in all three performance variables) through its effect on M4. The result therefore supports Proposition 2(c) that board composition affects board performance through its effect on the use of knowledge and skills.

This result confirms the importance of the *use of knowledge and skills* as a mediator in the relationship between board composition and board performance. Importantly, the result indicates that there is a limit to the point whereby the increase of outside directors can positively influence board performance through changes in the use of knowledge and skills.

While outside directors brings in important functional knowledge and skills to the boardroom, too many of them means that the board may lack firm-specific knowledge and skills. In this regard, the board is better off when directors with functional and firm-specific knowledge and skills complement each other to maximise the use of knowledge and skills. As the above result suggests, the use of knowledge and skills is best achieved when there is equal representation of outside and inside directors on the board.

For PICs, this result confirms the lack of experienced and qualified directors with the right kind of skills on boards of directors. This problem is rooted in the failure of enterprises and appointment authorities to evaluate the skills needs of their boards and making appointments decisions based on these needs. It further highlights the difficulty faced by enterprises in the PICs in attracting the services of experienced and skilled individuals given the modest remuneration of board positions. Often, the liability risks involved in board appointments and the time demanded of such positions are seen as discouraging factors when taken against the modest remuneration offered in board positions. The result also suggests the general shortage of people with professional skills in most PICs to serve on board positions. In some cases, the few individuals with appropriate knowledge and skills decline board invitations due to conflicts of interest (in the case of auditors) and travel ban restrictions imposed by foreign countries (in Fiji's case). Inevitably, these factors made the increase of outside directors on the board unlikely to result in increasing the board's ability to apply knowledge and skills to enhance board performance.

#### **6.4 Effects of board diversity on board performance through board process**

In line with the discussion in Sections 3.6.3 and 3.7.3, Proposition 3 is tested to determine if board diversity affects board performance through its effect on various processes. The results for these tests are summarised in Table 6.6 on the next page.

*Proposition 3(a): Board diversity affects board performance through effort norms*

For *highly-diverse* boards, board diversity (BA<sub>3</sub>) has a significant positive effect on board performance in terms of monitoring and control performance (BP<sub>1</sub>) and strategic role performance (BP<sub>3</sub>), through its effect on effort norms (M<sub>1</sub>). This result suggests that when the proportion of female directors on the board increases to approximately 40 per cent, it results in the improvement of board performance through its effect on M<sub>1</sub>. This means that boards with a relatively high percentage of female directors are more likely to be effective in the

execution of their monitoring and control roles as well as their strategic roles due to changes in effort norm behaviours within the board. Therefore, Proposition 3(a) is partially supported that board diversity affects board performance through its effect on effort norms.

*Table 6.6 Effect of board diversity on board performance through board process*

Proposition	Accept or Reject	Comments
Proposition 3(a): <i>Board diversity affects board performance through effort norms</i>	Accept	<ul style="list-style-type: none"> <li>• Increase of female directors to around 40 per cent leads to improvements in BP1 and BP3 through M1. Proposition partly supported.</li> </ul>
Proposition 3(b): <i>Board diversity affects board performance through cognitive conflicts</i>	Accept	<ul style="list-style-type: none"> <li>• Increase of female directors to 40 per cent improves BP1 through M2. Proposition partly supported.</li> </ul>
Proposition 3(c): <i>Board diversity affects board performance through board cohesiveness</i>	Accept	<ul style="list-style-type: none"> <li>• Absence of female directors significantly reduces BP1, BP2 and BP3 through M3.</li> <li>• Increase of female directors to 40 per cent significantly improves BP1, BP2 and BP3 through M3.</li> </ul>
Proposition 3(d): <i>Board diversity affects board performance through the use of knowledge and skills</i>	Accept	<ul style="list-style-type: none"> <li>• Absence and low levels of female directors significantly reduces BP1 through M4.</li> <li>• Increase of female directors to 40 per cent significantly improves BP1, BP2 and BP3 through M4.</li> </ul>

This result supports the argument that the inclusion of female directors on boards concomitantly included other values such as experience, knowledge and skills that are required by the board. Since women are more likely to be appointed on merit, the breadth of experience they bring in helps boards to form norms and standards that increase the predictability of member behaviour and expectations in new board settings (Woodruff *et al.*, 1983). In effect, this increases effort norm behaviours on boards which then enhance the board's ability to perform its monitoring and control, and strategic roles. Furthermore, the result confirms the observation of Adams and Ferreira (2008) that women directors are more



likely to join monitoring committees hence boards with higher proportions of female directors tend to allocate more effort to monitoring and control activities.

Likewise, in the PICs context, the result confirms that boards of directors are still very much a “men’s club”, hence very few women find their way into board directorships. Qualified and experienced female candidates should be appointed to boards. The increase of female directors brings the much needed experience into the boardroom; through interaction and sharing, their experiences help male directors to be committed to commonly accepted norms and standards for the board which improves the board’s ability to effectively carry out its roles. Hence, enterprises in PICs should actively promote the appointment of women on their boards to at least 40 per cent, or even higher.

*Proposition 3(b): Board diversity affects board performance through cognitive conflicts*

The increase of female directors (BA<sub>3</sub>) to around 40 per cent of the board has a significantly positive effect on board performance in terms of monitoring and control performance (BP<sub>1</sub>) through its effect on cognitive conflict (M<sub>2</sub>). Contrarily, board diversity does not create a discernable effect on board performance in terms of service role performance (BP<sub>2</sub>) and strategic role performance (BP<sub>3</sub>). Therefore, the result only partly supports Proposition 3(b) that board diversity affects board performance through cognitive conflicts.

To an extent, this result supports the “demographic heterogeneity” concept which states that boards with diverse members are likely to benefit from multiple perspectives and broader wisdom that are not available to homogenous boards (Carver, 2002; Williams & O’Reilly, 1998). In this case, the increase of female directors to at least 40 per cent leads to higher levels of cognitive conflict on boards which significantly improves board performance in terms of the monitoring and control role. This finding is consistent with Selby’s observation that the increase of female directors influences the questioning culture of the board in a positive way, and therefore, it makes the board an effective disciplining mechanism (Selby, 2000).

Correspondingly, in the PICs context, the result confirms the hindrance that politics and social connections associated with board appointments can cause by suppressing female participation on boards. Nonetheless, recent evidence suggests that there has been an increase in women directorships in Fiji and the Solomon Islands in recent years. This can be attributed to the fact that more women are receiving better and high education and qualifications and

the perception in the PICs that women are less likely to engage in corrupt practices since they are often not part of the men's established networks. Based on the experience of the PICs, cognitive conflict is a significant process as a mediator in the effect of board diversity on the board's ability to perform its monitoring and control roles.

*Proposition 3(c): Board diversity affects board performance through board cohesiveness*

When there are no female directors on the board, board performance significantly declines (in all three performance variables) as a result of changes in board cohesiveness ( $M_3$ ). When the proportion of female director increases to around 20 per cent, board performance in terms of monitoring and control performance ( $BP_1$ ) significantly reduces with a decreasing effect compared with the case when there are no female directors on the board. Further, the result reveals that when board diversity ( $BA_3$ ) increases to approximately 40 per cent, board performance (in all three variables) significantly improves through its effect on  $M_3$ . The result implies that the lack of or low percentage of female directors (20 per cent and below) significantly contributes to the decline in board performance, while the increase of female directors to approximately 40 per cent, significantly improves board performance. Thus, the result supports Proposition 3(c) that board diversity affects board performance through its effect on board cohesiveness.

In a sense, the result confirms that in boards with relatively low proportions of female directors, the few women tend to depend more on formal methods of communications. Informal communication becomes less effective for them because of the little cohesion that exists between them and the majority of male directors (Cohen & Bailey, 1997; Smith *et al.*, 1994; Williams & O'Reilly, 1998). In effect, the likelihood that the views of minority female directors will be incorporated into board decisions is limited (Hambrick *et al.*, 1996; Nemeth, 1986; O'Reilly *et al.*, 1988; Smith *et al.*, 1994). However, as the proportion of female director increases to a level that nearly matches the number of male directors, informal methods of communications become more effective. In effect, female directors may find more opportunity to express and share their viewpoints with colleagues which increases their influence on board decisions. Moreover, as female directors' confidence to contribute to the board increases, they are more likely to ask questions that would not have come from their male colleagues. Thus, they can positively influence the questioning culture within boards (Selby, 2000).

Specifically, in the PICs context, the relatively low proportion of female directors on boards is unlikely to generate their confidence to fully interact with male colleagues and create the cohesiveness required to effectively discharge board responsibilities. This is because, generally, women do not necessarily hold equal status to men and are often looked down upon by their male counterparts. In this regard, an increase in the proportion of female directors on the board is vital in enhancing the confidence among female directors hence the ability to foster cohesiveness within the board as a result of increased interaction between board members.

*Proposition 3(d): Board diversity affects board performance through the use of knowledge and skills*

Board diversity (BA<sub>3</sub>) significantly reduces board performance in terms of monitoring and control performance (BP<sub>1</sub>) through its effect on the use of knowledge and skills (M<sub>4</sub>). On the other hand, the increase in female directors to around 40 per cent leads to a significant increase in board performance (for all three performance variables) through its effect on M<sub>4</sub>. Therefore, this result supports Proposition 3(d) that board diversity affects board performance through its effect on the use of knowledge and skills.

This result highlights the importance of the use of knowledge and skills as a mediator in the relationship between board diversity and board performance. First, as argued in the previous analysis, the result confirms the view that women directors add to the richness of information accessible to boards. This enhances the variety of perspectives expressed during debate and decision making, meaning that the board is able to benefit from the increased use of knowledge and skills available to it (Burke, 2000; Selby, 2000). Second, the result supports the notion that since women are more likely to be appointed on the basis of their expertise, an increase in female memberships implies access to a greater knowledge pool, on which basis increased creativity and innovation can emerge, enabling the board to effectively execute its role (Erhardt *et al.*, 2003; Watson *et al.*, 1993). Finally, the result is consistent with Adams and Ferreira's (2008) finding that women tend to have better attendance records at board meetings, and also, men in boards with women directors tend to have fewer attendance problems. Therefore, it can be concluded that the increased presence of women directors is strongly associated with the use of knowledge and skills on boards, which raises the overall ability of boards of directors to perform their roles.

Again, in the PICs context, the result confirms that since women are more likely to be appointed for their experience and expertise, their increased presence on the board enhances the board's ability to use knowledge and skills to effectively perform the roles expected of them. Otherwise, lower proportion of female directors reduces the pool of expertise available to the board. Thus, in the PICs, the increase in the proportion of female directors can be associated with the increased ability of boards to apply their functional knowledge and skills to specific situations of the firm and should be promoted.

## 6.5 Effects of multiple directorships on board performance through board process

Proposition 4 is tested to find out if multiple directorships affect board performance through the effect of board process. The selection of the process mediators in the tests is based on discussions in Sections 3.6.4 and 3.7.4. The results are summarised below in Table 6.7.

*Table 6.7 Effect of multiple directorships on board performance through board process*

Proposition	Accept or reject	Comments
Proposition 4(a): <i>Multiple directorships affect board performance through effort norms</i>	Reject	<ul style="list-style-type: none"> <li>All insignificant</li> </ul>
Proposition 4(b): <i>Multiple directorships affect board performance through cognitive conflicts</i>	Reject	<ul style="list-style-type: none"> <li>All insignificant</li> </ul>
Proposition 4(c): <i>Multiple directorships affect board performance through the use of knowledge and skills</i>	Accept	<ul style="list-style-type: none"> <li>Increase of multiple directorships beyond one and three memberships significantly reduces BP1 through M4. Proposition partly supported.</li> </ul>

### *Proposition 4(a): Multiple directorships affect board performance through effort norms*

Overall, the result reveals that multiple directorships (BA4) do not have a significant effect on board performance (in all three performance variables) through its effect on effort norms (M1). Therefore, there is no sufficient evidence to support Proposition 4(a).

While multiple directorships are often viewed as a way of bringing experience into the board, in the case of the PICs, this result implies that multiple directorships do not necessarily enhance effort norm behaviours hence the improvement of board performance. Two factors may provide the explanation. First, board appointments in many PICs, particularly in SoE boards, were often not based on the experience and skills characteristics requirement of the enterprise. Second, even if some directors may possess the required experience, the problem of lack of time associated with multiple directorships reduces their commitment to enforce effort norms within the board. Hence, the result confirms that lack of time is a key problem faced by directors with multiple directorships.

*Proposition 4(b): Multiple directorships affect board performance through cognitive conflict*

The result suggests that multiple directorships (BA4) do not significantly affect board performance (in all three performance variables) through its effect on cognitive conflict (M2). Hence, the test results fail to support Proposition 4(b).

In most PICs, the few same people sit on too many boards but without the required qualifications and experiences. Cognitive discussions and conflicts on boards are likely to be quite limited or even non-existent, and therefore, the expected improvement in the board's ability to perform its role is not realised. Furthermore, the conflicts of interests arising from multiple directorships on seemingly competing enterprises means that directors are less likely to engage in cognitive conflicts and discussions, thus, the expected improvement in board performance is unlikely. The result further confirms the lack of commitment by directors to board business and board meetings in the PICs. Therefore, multiple directorships in the PICs do not necessarily generate the level of cognitive conflict required to enhance board performance.

*Proposition 4(c): Multiple directorships affect board performance through the use of knowledge and skills*

Multiple directorships have a significantly negative effect on board performance in terms of monitoring and control performance (BP<sub>1</sub>) through its effect on the use of knowledge and skills (M4). This implies that the increase in multiple directorships beyond one ( $\theta x=1.4651$ ) or three ( $\theta x=3.0496$ ) significantly reduces the ability of boards to perform their monitoring and control roles. However, multiple directorships do not seem to have a discernable effect on the board's ability to perform its service and strategic role tasks through its effect on the

use of knowledge and skills. The result therefore partly supports Proposition 4(c) that multiple directorships affect board performance through its effect on the use of knowledge and skills.

Contrary to the experience in developed countries where multiple memberships are often associated with the availability of greater knowledge and skills on the board, this result reveals that multiple directors in PICs do not necessarily introduce the knowledge and skills required by boards. In fact, the result confirms earlier reports that showed the lack of technical expertise on boards of directors in the PICs (McKee, 2005; Pacific Islands Forum Secretariat, 2007). The failure of authorities to consider the skill needs of boards of directors when making board appointments means that directors sit on too many boards without possessing the skills required. Limited professional development opportunities for directors in the PICs also partially explain why directors are lacking in appropriate board skills (McKee, 2007). Moreover, even if multiple directorships may bring in the required knowledge and skills, on their own, these knowledge and skills alone, do not guarantee usefulness to boards. In fact, directors must be committed and involved in board activities to be able to apply their knowledge and skills to enhance board performance. However, as the above result suggests, multiple memberships in PICs do not enable directors to apply their knowledge and skills to improve board performance due to over-commitment and lack of time.

Despite the insignificance in most of the results for the indirect effect of multiple directorships on board performance through the process variables considered, the negative direction of the indirect effects indeed supports previous studies that claimed that the lack of commitment from directors as they accumulate directorships is a significant constraint on board effectiveness (Fich & Shivdasani, 2006; Lipton & Lorch, 1992; Ruigrok *et al.*, 2006). Overall, it can be claimed that the excessive burden associated with multiple appointments reduces the quality of time and attention directors devote to board issues, which diminishes effort norm behaviours, cognitive conflicts and the use of knowledge and skills, and therefore, the overall performance of boards.

## 6.6 Summary

This chapter provides evidence confirming the causal effect of board attributes on board performance through the influence of board processes. More specifically, findings derived from the analyses in this chapter include:

- When board size increases beyond six members, board performance significantly declines through the influence of cognitive conflicts, board cohesiveness and the use of knowledge and skills, respectively. Also, in the case of PICs, when board size is beyond eight members, it significantly reduces board performance as a result of its effect on effort norms;
- If the number of outside directors is increased to be around 50 per cent, it then significantly improves board performance through its effect on cognitive conflicts, board cohesiveness and the use of knowledge and skills. However, increasing outside directors beyond this level is likely to significantly reduce board performance, particularly, through its effect on the use of knowledge and skills;
- Increase of female directors to a level that closely matches the number of male directors (at least 40 per cent), leads to a significant improvement in board performance through effort norms, cognitive conflicts, board cohesiveness and the use of knowledge and skills;
- When a board member holds more than one directorship, it significantly reduces the monitoring and control performance of boards through the use of knowledge and skills. Also, multiple directorships do not necessarily improve board performance through its effect on effort norms and cognitive conflicts in the context of PICs.

Overall, the findings confirm that the relationships between board attributes and board performance are not necessarily direct as often assumed. Instead, this relationship is often indirect, influenced by the processes that boards go through in carrying out their duties. The next chapter presents the results of the analysis on inter-relationships between different board processes and how these relationships affect board performance.

## Chapter 7 EFFECTS OF PROCESS-TO-PROCESS RELATIONSHIPS ON BOARD PERFORMANCE

The descriptive statistical analysis of key variables in Chapter 5 suggested the existence of process-to-process correlations. In this chapter, we go one step further to test for potential causal relationships between different board processes and examine if such relationships influence board performance. Section 7.1 outlines the technical procedures used in this chapter to examine the effects of process-to-process relationships on board performance. Section 7.2 presents the results for the analysis of the indirect effect of board motivation (intrinsic and extrinsic) on board performance through other board processes (hereafter, “other processes”). Section 7.3 reports the results for the indirect effect of CEO/board relationships on board performance through “other processes”. This is followed by the results for the indirect effect of affective conflict on board performance in Section 7.4 and the indirect effect of board information on board performance in Section 7.5. Section 7.6 presents the indirect effect of board cohesiveness on board performance. Lastly, Section 7.7 concludes the chapter.

### 7.1 Technical procedures

The procedure used for calculating and interpreting indirect effects in this chapter is similar to that used in Chapter 6. The only difference lies in the specifications of the *M-Function* and the *Y-Function*.

For the *M-Function* in Sections 7.2 to 7.5, involving Propositions 5 to 9, each mediator variable considered ( $M_1$ =*effort norms*,  $M_2$ =*cognitive conflict*,  $M_3$ =*board cohesiveness*,  $M_4$ =*use of knowledge and skills*) was specified as a linear function of the process variables treated as the independent variable ( $X$ ) ( $M_5$ =*CEO/board relationship*,  $M_{6a}$ =*intrinsic motivation*,  $M_{6b}$ =*extrinsic motivation*,  $M_7$ =*affective conflict*,  $M_8$ =*board information*,  $M_3$ =*board cohesiveness*), respectively, after statistically controlling for the effects of the board attributes and control variables. This specification is in line with discussions in Section 3.8. The function is represented in Equation 7.1 below.

$$\hat{M} = i_1 + aX + BA_1 + BA_2 + BA_3 + BA_4 + W_1 + W_2 + W_3 + W_4 + W_5 + \varepsilon \quad (7.1)$$



The *Y-Function*, however, varied for each test in Sections 7.2 to 7.5. For tests that considered *effort norms* and *the use of knowledge and skills* as potential mediators, board performance (in terms of *monitoring and control role performance-BP1*, *service role performance-BP2* and *strategic role performance-BP3*) was estimated as a linear function of the mediator variable, after controlling for the linear effect of the process variable considered as *X*, as well as the effect of the board attributes and the control variables, which is consistent with discussions in Sections 3.5.1 and 3.5.4. This function is represented in Equation 7.2 below.

$$\hat{Y} = i_2 + bM + c'X + BA_1 + BA_2 + BA_3 + BA_4 + W_1 + W_2 + W_3 + W_4 + W_5 + \varepsilon \quad (7.2)$$

For the tests that treated *cognitive conflict* and *board cohesiveness* as potential mediators, board performance was estimated as a nonlinear quadratic function of each mediator variable, having controlled for the linear effect of *X*-variable, including the board attributes and the control variables. This is in line with discussions in Sections 3.5.2 and 3.5.3. This function is shown below in Equation 7.3.

$$\hat{Y} = i_2 + b_1M + b_2M^2 + c'X + BA_1 + BA_2 + BA_3 + BA_4 + W_1 + W_2 + W_3 + W_4 + W_5 + \varepsilon \quad (7.3)$$

In Section 7.6, the specifications of the *M-Function* and the *Y-Function* in the tests for Proposition 10 are similar to the tests outlined in Section 6.1. For the *M-Function*, each mediator variable was estimated as a quadratic function of the *X*-variable, which is  $M_3 = \text{board cohesiveness}$ , after statistically controlling for board attributes (*board size-BA1*, *board composition-BA2*, *board diversity-BA3*, and *multiple directorships-BA4*) and the control variables ( $W_1, W_2, W_3, W_4$  and  $W_5$ ). This is in line with discussions in Section 3.8.5. The *M-Function* is the same as expressed in Equation 6.1.

For the *Y-Model*, in Propositions 10(a) and 10(c), board performance was estimated as a linear function of effort norms ( $M_1$ ) and the use of knowledge and skills ( $M_4$ ), respectively, controlling for the *X*-variable ( $M_3$ ), board attributes and control variables. This specification is consistent with discussions in Sections 3.5.1 and 3.5.4 and the function is the same as in Equation 6.2 in Chapter 6. For Proposition 10(b), board performance was estimated as a quadratic function of cognitive conflict ( $M_2$ ), again, controlling for the *X*-variable ( $M_3$ ), board attributes and control variables, which is in line with discussions in Section 3.5.2. This function is also the same as in Equation 6.3 in the previous chapter.

Similar with the analysis in Chapter 6, the product of the *M-function* and the *Y-Function* ( $\Theta$ ) quantifies how much board performance is changing at specific points of the *X-variables*, indirectly through each mediator variable. None of the control variables were found to have significantly influenced board performance. Testing details are shown in Appendix 12.

## 7.2 Effects of board motivation on board performance through “other processes”

This section tests Propositions 5 and 6 to determine the effect of board motivation on board performance through “other process” variables. In Proposition 5, *intrinsic motivation* was tested to determine if it affects board performance through “other processes”. Proposition 6 tests if *extrinsic motivation* affects board performance through “other processes”.

### 7.2.1 Intrinsic motivation, “other processes” and board performance

Table 7.1 summarises the results on how intrinsic motivation affects board performance through various “other processes”, i.e., *effort norms*, *cognitive conflicts*, *board cohesiveness*, and *the use of knowledge and skills*.

Table 7.1 Effect of intrinsic motivation on board performance through “other processes”

Proposition	Accept or Reject	Comments
Proposition 5 (a): <i>Intrinsic motivation affects board performance through effort norms</i>	Accept	<ul style="list-style-type: none"> <li>Intrinsic motivation significantly improves BP<sub>1</sub> and BP<sub>2</sub> through M<sub>1</sub>. Proposition partly supported.</li> </ul>
Proposition 5(b): <i>Intrinsic motivation affects board performance through cognitive conflicts</i>	Accept	<ul style="list-style-type: none"> <li>Intrinsic motivation significantly increases BP<sub>1</sub>, BP<sub>2</sub> and BP<sub>3</sub> through M<sub>2</sub>.</li> </ul>
Proposition 5 (c): <i>Intrinsic motivation affects board performance through board cohesiveness</i>	Accept	<ul style="list-style-type: none"> <li>Intrinsic motivation significantly improves BP<sub>1</sub>, BP<sub>2</sub> and BP<sub>3</sub> through M<sub>3</sub>.</li> </ul>
Proposition 5 (d): <i>Intrinsic motivation affects board performance through the use of knowledge and skills</i>	Accept	<ul style="list-style-type: none"> <li>Intrinsic motivation has a significant positive effect on BP<sub>1</sub>, BP<sub>2</sub> and BP<sub>3</sub> through M<sub>4</sub>.</li> </ul>

*Proposition 5(a): Intrinsic motivation affects board performance through effort norms*

Intrinsic motivation ( $M_{6a}$ ) has a significant positive effect on board performance in terms of BP<sub>1</sub> and BP<sub>2</sub> through its effect on effort norms ( $M_1$ ). Thus, when directors are motivated by intrinsic-motivational factors, they are more likely to enforce effort norms within the board which then improves board performance in terms of BP<sub>1</sub> and BP<sub>2</sub>, but not BP<sub>3</sub>. Nonetheless, in balance, intrinsic motivation is a significant determinant of board performance through its effect on effort norms.

*Proposition 5(b): Intrinsic motivation affects board performance through cognitive conflict*

Intrinsic motivation has a consistently significant positive effect on board performance through its effect on cognitive conflict ( $M_2$ ). This effect is uniformly significant when the indirect effect is estimated for all three levels of intrinsic motivation. This result implies that the increase of directors who are motivated by intrinsic factors is a good thing because they are more likely to engage in cognitive discussion or task-related disagreement which increases the boards' abilities to perform their roles. Proposition 5(b) is supported by the test results.

*Proposition 5(c): Intrinsic motivation affects board performance through board cohesiveness*

An increase from *low* to *moderate* and from *moderate* to *high* levels of intrinsic motivation ( $M_{6a}$ ) significantly improves board performance through its effect on board cohesiveness ( $M_3$ ). The only exception is the insignificant effect for relatively *low* levels of  $M_{6a}$  on board performance in terms of BP<sub>2</sub>. Directors who are intrinsically motivated are more likely to promote board cohesiveness and this prevents the possibility of "group think", which in effect increases their contribution to the overall effectiveness of the board. Therefore, the results support Proposition 5(c).

*Proposition 5(d): Intrinsic motivation affects board performance through the use of knowledge and skills*

Intrinsic motivation ( $M_{6a}$ ) has a significantly positive effect on board performance through its effect on the use of knowledge and skills ( $M_4$ ). Intrinsic motivation increases the board's ability to use its knowledge and skills which then enables the board to effectively perform its role. This result supports earlier studies which suggest that people engage in tasks and

activities from which they derive enjoyment, pleasure and personal satisfaction (Fehr & Falk, 2002; Malhorta & Gallette, 2003; Wenger *et al.*, 2002). Proposition 5(d), is therefore, supported.

### 7.2.2 Extrinsic motivation, “other processes” and board performance

Table 7.2 summarises the results on how extrinsic motivation affects board performance through various “other processes”.

*Table 7.2 Effect of extrinsic motivation on board performance through “other processes”*

Proposition	Accept or Reject	Comments
Proposition 6(a): <i>Extrinsic motivation affects board performance through effort norms</i>	Accept	<ul style="list-style-type: none"> <li>Extrinsic motivation significantly reduces BP<sub>1</sub> through M<sub>1</sub>. Proposition partly accepted.</li> </ul>
Proposition 6(b): <i>Extrinsic motivation affects board performance through cognitive conflicts</i>	Accept	<ul style="list-style-type: none"> <li>Extrinsic motivation significantly reduces BP<sub>1</sub>, BP<sub>2</sub> and BP<sub>3</sub> through M<sub>2</sub>.</li> </ul>
Proposition 6(c): <i>Extrinsic motivation affects board performance through board cohesiveness</i>	Reject	<ul style="list-style-type: none"> <li>All insignificant</li> </ul>
Proposition 6(d): <i>Extrinsic motivation affects board performance through the use of knowledge and skills</i>	Reject	<ul style="list-style-type: none"> <li>All insignificant</li> </ul>

*Propositions 6(a): Extrinsic motivation affects board performance through effort norms.*

Extrinsic motivation ( $M_{6b}$ ) negatively affects board performance (for all three performance variables) through its effect on effort norms ( $M_1$ ). However, test results reveal that this effect is only significant for the indirect effect of  $M_{6b}$  on monitoring and control performance ( $BP_1$ ) through its effect on  $M_1$ . This result suggests that a board that is extrinsically motivated is unlikely to enforce effort norms which reduce its ability to perform monitoring and control activities. Given that the effect of  $M_{6b}$  on  $BP_2$  and  $BP_3$  is not statistically significant, Proposition 6(a) is only partially supported.

*Proposition 6(b): Extrinsic motivation affects board performance through cognitive conflicts*

Extrinsic motivation ( $M_{6b}$ ) has a consistently significant negative effect on board performance in terms of BP<sub>1</sub>, BP<sub>2</sub> and BP<sub>3</sub> through its effect on cognitive conflict ( $M_2$ ). This result suggests that extrinsic motivation has a negative effect on the board's ability to engage in cognitive conflicts which reduces board performance. Proposition 6(b), is therefore, supported.

*Proposition 6(c): Extrinsic motivation affects board performance through board cohesiveness*

Extrinsic motivation ( $M_{6c}$ ) did not seem to have a significant effect on board performance through changes in board cohesiveness ( $M_3$ ). This result implies that an extrinsically motivated board does not necessarily lead to poor cohesiveness and thus reduced board performance. Therefore, Proposition 6(c) is not supported by the test results.

*Proposition 6(d): Extrinsic motivation affects board performance through the use of knowledge and skills*

Extrinsic motivation ( $M_{6d}$ ) does not significantly affect board performance through its effect on the use of knowledge and skills ( $M_4$ ). Hence, extrinsic motivation is not necessarily a significant deterrent on board performance through changes in the use of knowledge and skills. Proposition 6(d), is therefore, not supported by the test results.

To sum up, these findings confirm that intrinsic motivation has a significant positive effect on board performance through "other processes". In contrast, although some of the test results are not significant, overall, extrinsic motivation has a negative effect on board performance through various "other processes". In PICs, numerous appointments on SoE boards are difficult to explain without the suspicion that constituency loyalty is being repaid or other political debts have been discharged. The motivation of directors appointed under such circumstances is highly likely to be extrinsic in nature. Even where appointment guidelines exist, the abuse of these instruments by governments (e.g., the mass resignation of Fijian Holdings Ltd (FHL) board due to pressure from the military government in 2008 to appoint people loyal to the regime) raises serious concerns over their real motivations in accepting board positions. Hence, in the PICs, extrinsically motivated persons should be removed from boards and avoided when making new appointments.

### 7.3 Effects of CEO-board relationship on board performance through “other processes”

This section tests Proposition 7 to determine if CEO/board relationship affects board performance through “other processes”, namely *effort norms*, *cognitive conflicts*, *board cohesiveness* and *the use of knowledge and skills*. The selection of these process variables are based on discussions in Sections 3.5 and 3.8. Table 7.3 summarises the test results.

*Proposition 7(a): CEO-board relationship affects board performance through effort norms*

CEO/board relationship (M<sub>5</sub>) has a significant positive effect on board performance through its effect on effort norms (M<sub>1</sub>). This result confirms that social ties between the CEO and directors promote trust within the boardroom which further induces joint effort by the board as a group through their willingness to believe and depend on each other. Further, a close tie in the CEO/board relationship generates social conformity pressures and harmonises potential interests between CEO and directors. As a result, they drive board members to collaborate by engaging in similar effort behaviours. Hence, Proposition 7(a) is supported by the test results.

*Proposition 7(b): CEO-board relationship affects board performance through cognitive conflicts*

CEO/board relationship significantly improves board performance as a result of changes in cognitive conflict (M<sub>2</sub>). But when CEO/board relationship increases to a relatively *higher* level, there is no discernable effect on board performance in terms of BP<sub>1</sub> and BP<sub>2</sub>. This implies that maintaining the CEO/board relationship at relatively *lower* and *moderate* levels enhances the ability of boards to engage in cognitive conflicts and discussions which further leads to a significant improvement in board performance. But, as the level of the CEO/board relationship increases to a relatively higher level, it does not significantly improve the board’s performance in terms of BP<sub>1</sub> and BP<sub>2</sub>, although it does help with BP<sub>3</sub>. The result, therefore, supports Proposition 7(b).

Table 7.3 Effect of CEO/board relationship on board performance through “other processes”

Proposition	Accept or Reject	Comments
Proposition 7(a): CEO/board relationship affects board performance through effort norms	Accept	<ul style="list-style-type: none"> <li>Increase of CEO/board relationship to a moderate level significantly improves BP1, BP2 and BP3 through M1.</li> </ul>
Proposition 7(b): CEO/board relationship affects board performance through cognitive conflicts	Accept	<ul style="list-style-type: none"> <li>Increase of CEO/board relationship from relatively low and moderate levels significantly improves BP1, BP2 and BP3 through M2.</li> <li>Increase of CEO/board relationship to relatively high levels improves BP3 through M2.</li> </ul>
Proposition 7(c): CEO/board relationship affects board performance through board cohesiveness	Accept	<ul style="list-style-type: none"> <li>Increase of CEO/board relationship from relatively low levels significantly improves BP1 through M3.</li> <li>Increase of CEO/board relationship from moderate levels improves BP1, BP2 and BP3 through M3.</li> <li>Increase of CEO/board relationship to relatively high levels improves BP2 and BP3 through M3.</li> </ul>
Proposition 7(d): CEO/board relationship affects board performance through the use of knowledge and skills	Accept	<ul style="list-style-type: none"> <li>Increase of CEO/board relationship to a moderate level significantly improves BP1, BP2 and BP3.</li> </ul>

*Proposition 7(c): CEO/board relationship affects board performance through board cohesiveness*

CEO/board relationship significantly improves board performance through its effect on board cohesiveness (M3), with the exception of BP2. When the level of the CEO/board relationship increases to a relatively higher (1.0059) level, it leads to a significant improvement in board performance (in terms of BP2 and BP3) through its effect on board cohesiveness. However,

when the CEO/board relationship becomes too close, it failed to have a discernable effect on the monitoring and control performance of the board. Perhaps, this relates to the potential for “group think” in highly cohesive boards where members have the tendency to subconsciously censor or suppress less favoured viewpoints and other information seen as inconsistent with what is generally preferred (Janis, 1982), which eventually affects the board’s diligence in monitoring and control.

*Proposition 7(d): CEO-board relationship affects board performance through the use of knowledge and skills*

CEO/board relationship has a positively significant effect on board performance through its effect on the use of knowledge and skills (M<sub>4</sub>). A good relationship between the CEO and the board increases the board’s ability to apply its knowledge and skills to perform board tasks, thus, confirming the role of the use of knowledge and skills as a significant mediator in the effect of the CEO/board relationship on board performance. This result supports the idea that close social ties between the CEO and directors facilitate better awareness of the expertise available within the board, and subsequently, it increases the CEO’s access to different knowledge and skills (Cross & Cummings, 2004). Boards are knowledge intensive groups and their information networks are often dynamic hence good CEO/board relationships are critically important to facilitate the transfer and use of knowledge and skills on boards (Hansen, 1999). Also, because board members are mostly part-timers, strong relationships between CEO and the board are crucial. The results, therefore, support Proposition 7(d).

Overall, the results suggests that while CEO/board relationships is critical for the effective performance of boards in the PICs, too close social relationships between the CEO and board members can reduce the effectiveness of boards. The revelation of high level corruption in Post Fiji Limited (PFL) in 2007, involving abuse of office and collusion between the board and senior managers, demonstrates how “too close” CEO/board relationships can be harmful for boards and firms. Likewise, collusions between board members and senior bank officers led to inappropriate excessive lending by the Development Bank of Solomon Islands (DBSI) to board members, politicians and individuals closely associated with board members, which eventually resulted in the bank’s closure in 2005. Clearly, too close relationships between board members and managers have compromised the ability of either party to take appropriate actions in maximising the commercial interests of the bank (Gibson, 2002). Good relationships should be promoted between the CEO and the board, but such relationships



should not be allowed to develop to a level whereby the diligence of members in performing their roles is compromised.

#### 7.4 Effects of affective conflict on board performance through “other process”

This section tests Proposition 8 to determine if affective conflict affects board performance through the effect of “other processes”, namely *effort norms*, *board cohesiveness* and *the use of knowledge and skills*. The selection of the process variables in this test is consistent with discussions in Sections 3.8 and 3.5. Table 7.4 below summarises these test results.

Table 7.4 Effect of affective conflict on board performance through “other processes”

Proposition	Accept or Reject	Comments
Proposition 8(a): <i>Affective conflict affects board performance through effort norms</i>	Accept	<ul style="list-style-type: none"> <li>Affective conflict has a significantly negative effect on BP1 through M1. Proposition partially supported.</li> </ul>
Proposition 8(b): <i>Affective conflict affects board performance through board cohesiveness</i>	Accept	<ul style="list-style-type: none"> <li>Affective conflict significantly reduces BP1, BP2 and BP3 through M3.</li> </ul>
Proposition 8(c): <i>Affective conflict affects board performance through the use of knowledge and skills</i>	Accept	<ul style="list-style-type: none"> <li>Affective conflict has a significant negative effect on BP1, BP2, and BP3 through M4.</li> </ul>

##### *Proposition 8(a): Affective conflict affects board performance through effort norms*

Affective conflict (M7) has a negatively significant effect on board performance in terms of monitoring and control role performance (BP1) through its effect on effort norms (M1). This result suggests that affective conflict reduces the monitoring and control ability of boards as a result of low effort norm behaviours by members. The result supports the notion that affective conflict causes directors to disassociate themselves from board norms by acting contrary to board collective efforts which subsequently leads to the deliberate withdrawal of personal commitment from board tasks. However, affective conflict does not seem to have a discernible effect on board performance in terms of BP2 and BP3 through its effect on effort norms. Thus, Proposition 8(a) is partially supported.

*Proposition 8(b): Affective conflict affects board performance through board cohesiveness*

Affective conflict (M7) has a significantly negative effect on board performance through its effect on board cohesiveness (M3). This result implies affective conflict reduces board cohesiveness and the ability of directors to remain united and committed to board tasks to achieve common goals. Further, any form of disagreement over issues that are personal or emotional in nature is likely to negatively affect board cohesiveness, and subsequently, board performance. Accordingly, Proposition 8(b) is supported by the test results.

*Proposition 8(c): Affective conflict affects board performance through the use of knowledge and skills*

Affective conflict (M7) significantly reduces board performance through its effect on the use of knowledge and skills (M4). This result shows that the distrust associated with affective conflict in boards cause unwillingness among board members to engage in discussions necessary to synthesise their different perspectives on important issues. Subsequently, members become less likely to be committed to carrying out decisions they do not understand or those that were made without their participation. Therefore, Proposition 8(c) is supported.

Overall, these findings confirm that affective conflict reduces the effectiveness of boards of directors. In PICs, the political and socio-cultural influence on board appointments means that members come in with different interests, and often, these interests contradict the economic interests of the firm. Hence, affective conflicts are inevitable. Therefore, the introduction of programs and measures to address affective conflicts on boards should be a priority for enterprises in the PICs.

## **7.5 Effects of board information on board performance through “other processes”**

This section tests Proposition 9 to determine whether the flow of board information affects board performance through the processes of *effort norms*, *cognitive conflicts* and *the use of knowledge and skills*. The three mediator variables were selected in line with discussions in Sections 3.8.4 and 3.5. Table 7.5, on the next page, provides a summary of these results.

*Proposition 9(a): Board information affects board performance through effort norms*

Board information flow (M8) has a significantly positive effect on board performance through changes in effort norms (M1), but only in terms of service role performance (BP2).

Nonetheless, this result highlights the importance of the effective flow of board information in enhancing the commitment of directors to effort norms. In line with the norm of conformity, the result indicates that adequate flow of board information can enhance director compliance and commitment to effort norms by shaping positive behaviours within boards, which is critical for effective board performance (Marsden 2000). Hence, Proposition 9(a) is partly supported.

*Table 7.5 Effect of board information on board performance through “other processes”*

Proposition	Accept or Reject	Comments
Proposition 9(a): <i>Board information flow affects board performance through effort norms</i>	Accept	<ul style="list-style-type: none"> <li>Board information flow has a significantly positive effect on BP2 through M1. Proposition partially supported.</li> </ul>
Proposition 9(b): <i>Board information flow affects board performance through cognitive conflicts</i>	Accept	<ul style="list-style-type: none"> <li>Increase of board information flow to a <i>moderate</i> level significantly improves BP2 and BP3 through M2.</li> <li>Increase of board information flow to relatively <i>high</i> levels improves BP3 through M2.</li> </ul>
Proposition 9(c): <i>Board information flow affects board performance through the use of knowledge and skills</i>	Accept	<ul style="list-style-type: none"> <li>Board information flow significantly improves BP2 and BP3 through M4.</li> </ul>

*Proposition 9(b): Board information affects board performance through cognitive conflicts*

Board information flow has a significant positive effect on board performance in terms of BP2 and BP3 through M2, when the effect was estimated at a *moderate* level of Ms. Further, the increase of board information flow to relatively *higher* levels significantly improves board performance in terms of BP3 through cognitive conflict (M2). Overall, this result supports the notion that directors prefer to work in a board environment that has access to detailed facts and gives members sufficient time to process information (Hayes & Allison, 1988). Thus, Proposition 9(b) is supported.

*Proposition 9(c): Board information affects board performance through the use of knowledge and skills*

Board information flow (M<sub>8</sub>) has a significant positive effect on board performance in terms of BP<sub>2</sub> and BP<sub>3</sub> through its effect on the use of knowledge and skills (M<sub>4</sub>). This result suggests that good flow of board information increases the board's ability to apply their knowledge and skills to board tasks, and hence, the improved performance of boards. Effective flow of board information enhances the interaction and cohesion within boards, as a result, members develop better knowledge about each other and better awareness of how members could be of assistance to each other. Hence, Proposition 9(c) is supported by the test results.

These findings confirm that, in PICs, the effects of board information flow on board performance through "other processes" depend on the performance variable considered. Overall, the effect of board information flow on board performance through the processes considered is more significantly critical for service role and strategic role performance compared to the monitoring and control activities of the board. In fact, this finding supports the view that the CEO and inside directors are more likely to facilitate the free flow of board information to the board if the role of the board includes value-enhancing tasks such as the service and strategic roles rather than just to exercise monitoring and control over the activities of management.

## **7.6 Effects of board cohesiveness on board performance through "other processes"**

This section tests Proposition 10 to determine if board cohesiveness affects board performance through the influence of "other processes", *effort norms*, *cognitive conflicts* and *the use of knowledge and skills*. The results are summarised in Table 7.6 on the next page.

*Proposition 10(a): Board cohesiveness affects board performance through effort norms*

The increase in board cohesiveness (M<sub>3</sub>) to relatively *moderate* or *high* levels significantly improves board performance in terms of BP<sub>1</sub> and BP<sub>2</sub> through its effect on effort norms (M<sub>1</sub>). When boards enjoy relatively *moderate* or *higher* levels of cohesiveness, the commitment of directors in enforcing effort norms increases, which increases the board's performance of its monitoring and control roles and service roles. This finding is consistent with Kozlowski and Ilgen's (2006) argument, that board cohesiveness enables directors to experience less

communication difficulties which makes it easier to coordinate the entire effort of members to perform delegated tasks. Further, the result concurs with the notion that cohesiveness promotes attraction between board members which enables individuals to communicate their expectations or shared beliefs regarding the level of effort each member is expected to contribute toward board tasks. This reduces room for misperception of each other's belief about board decisions and the potential detriment to member's commitment to effort norms. Hence, Proposition 10(a) is supported by the test results.

*Table 7.6 Effect of board cohesiveness on board performance through “other processes”*

Proposition	Accept or Reject	Comments
Proposition 10(a): <i>Board cohesiveness affects board performance through effort norms</i>	Accept	<ul style="list-style-type: none"> <li>• Increase of board cohesiveness to relatively <i>moderate</i> and <i>high</i> levels significantly improves BP<sub>1</sub> and BP<sub>2</sub> through M<sub>1</sub>.</li> </ul>
Proposition 10(b): <i>Board cohesiveness affects board performance through cognitive conflicts</i>	Accept	<ul style="list-style-type: none"> <li>• Increase of board cohesiveness from relatively <i>low</i> levels significantly improves BP<sub>1</sub>, BP<sub>2</sub> and BP<sub>3</sub> through M<sub>2</sub>.</li> <li>• Increase of board cohesiveness to a relatively <i>moderate</i> level significantly improves BP<sub>1</sub> and BP<sub>3</sub> through M<sub>2</sub>.</li> <li>• Increase of board cohesiveness to <i>higher</i> levels significantly improves BP<sub>3</sub> through M<sub>2</sub>.</li> </ul>
Proposition 10(c): <i>Board cohesiveness affects board performance through the use of knowledge and skills</i>	Accept	<ul style="list-style-type: none"> <li>• Increase of board cohesiveness from <i>low</i> to <i>moderate</i> and from <i>moderate</i> to <i>high</i> levels significantly improves BP<sub>1</sub>, BP<sub>2</sub> and BP<sub>3</sub> through M<sub>4</sub>.</li> </ul>

*Proposition 10(b): Board cohesiveness affects board performance through cognitive conflicts*

The increase of cohesiveness (M<sub>3</sub>) for relatively *low-cohesive* boards leads to a significant improvement in board performance as a result of changes in cognitive conflicts (M<sub>2</sub>). Also, the increase of board cohesiveness for relatively *moderate-cohesive* boards has a significantly positive effect on board performance in terms of BP<sub>1</sub> and BP<sub>3</sub> through M<sub>2</sub>. Further, the increase of board cohesiveness for relatively *high-cohesive* boards has a significant positive

effect on board performance in terms of BP<sub>3</sub> through M<sub>2</sub>. This suggests that cohesiveness encourages directors to actively participate in board discussions and share constructive ideas and solutions which promote critical and questioning attitudes on boards. Further, when boards experience reasonable levels of cohesiveness, directors are more likely to engage in challenging and discerning questions that focus on task-related issues rather than matters of a personal nature which improves board performance. Also, cohesiveness allows directors to search and obtain information from each other which enables them to scrutinize the information provided by CEOs with close diligence. This creates a task-oriented environment within the board where multiple viewpoints and opinions are tolerated, reducing the potential for “groupthink” on boards (Forbes & Milliken, 1999; Sonnenfeld, 2002). Therefore, Proposition 10(b) is supported.

*Proposition 10(c): Board cohesiveness affects board performance through the use of knowledge and skills*

Increase in board cohesiveness (M<sub>3</sub>), either from *low* to *moderate* or *moderate* to *high* levels of cohesiveness, significantly improves board performance through the use of knowledge and skills (M<sub>4</sub>). The result confirms the notion that board cohesiveness facilitates interpersonal attraction between directors by promoting trust in each other’s judgment and expertise. Further, cohesiveness increases directors’ commitments to board activities and openness to dialogue. Boards then benefit from the increased ability of directors to use the knowledge and skills that they bring into the boardroom. The test results, therefore, support Proposition 10(c).

Overall, the findings in this section highlight the importance of board cohesiveness to the effectiveness of boards in the PICs. The appointment of board chairpersons by the Minister is often based on a special relationship, thus, their accountability is often held to the minister rather than the board. Inevitably, cohesiveness can become an issue between the chairperson and the board at large. Further, the influence of politics and socio-cultural interests on board appointments means that directors are not necessarily appointed for their expertise and genuine interest to serve the board. Given their varying interests, it becomes a challenge to build cohesiveness within the board. Similarly, in boards of organisations such as the national provident funds, which emphasise membership on the basis of stakeholder representation, directors show loyalty to those they represent rather than the board. Hence, board discussions may no longer be conducted in confidence due to divergence in loyalty which affects the

unity and cohesiveness within the board, and hence, the performance of boards. These findings show that, without cohesiveness, boards are unable to experience high effort norm behaviours, increased involvement in cognitive conflicts and discussions, and the enhanced use of knowledge and skills of board members that are required for effective board performance.

## **7.7 Summary**

While the results in Chapter 6 confirm a causal relationship between board attributes, board process and board performance, this chapter reveals that different board processes also influence each other which then affects board performance. Thus, in PICs, board performance is not only causally influenced by the effect of board attributes on board process, but also by the effect of process-to-process relationships. These findings confirm the complexity and dynamism in board processes and behaviour, hence the mixed implications such processes may have for the performance of boards of directors. Further, these findings represent significant additions to the body of corporate governance literature; to the author's knowledge empirical studies that examine process-to-process relationships on board performance are scarce and this study is probably the first. The implications of the findings from this study are drawn in the next chapter.

This final chapter is organised as follows. Section 8.1 summarises key findings of the study and draws conclusions. In Section 8.2, the significance and contributions of the study are highlighted. This is followed by a discussion on the implications of the findings of the study in Section 8.3. Finally, in Section 8.4, the limitations of the study are discussed and distinctive avenues for future empirical research are pointed out.

## **8.1 Key findings and conclusions**

Contrary to most studies that examined the direct link between the board of directors and firm performance, this thesis was directed towards the development of a mediation model to empirically test if board attributes affect board performance through the influence of board process in public and private enterprises in Fiji and the Solomon Islands. Presented below are key findings and conclusions derived from this study.

### **8.1.1 Board size, board process and board performance**

In Chapter 3, we note that most studies claimed a direct relationship between board size and board performance or firm performance. However, this study, based on the results presented in Chapter 6, found that the effect of board size on board performance may not be necessarily direct, but instead, it occurs through the influence of the different processes in which boards involve in carrying out their duties. Specifically, the study found that when board size increases beyond six members, board performance (in terms of monitoring control roles, services roles and strategic roles) declines, due to reduced involvement of directors in the processes of cognitive conflict and the use of knowledge and skills. The increase of board size beyond eight directors will further lead to the reduction in board performance. Accordingly, it is concluded that in Fiji and the Solomon Islands, board size affects board performance through its effect on various board processes.

### **8.1.2 Board composition, board process and board performance**

Earlier, studies on the composition of boards have mostly examined its direct effect on performance outcomes such as board performance and firm performance. This study suggests that board composition does not necessarily directly affect board performance, but through the influence of the processes of cognitive conflict, board cohesiveness and the use of



knowledge and skills. When board composition (proportion of outside directors to inside directors) increases to around 55 per cent, board performance improves as a result of increasing involvement of directors in the processes of cognitive conflict and board cohesiveness. Conversely, increasing board composition beyond 55 per cent does not necessarily lead to improvements in board performance due to changes in the processes of cognitive conflict, board cohesiveness, and the use of knowledge and skills. This study shows that having a board completely comprised of outside directors leads to significant decline in board performance as a result of the reduced ability of directors to use their knowledge and skills to firm specific tasks. This study believes that an equal representation of outside and inside directors is of crucial importance for the effective performance of boards in the case of Fiji and the Solomon islands.

### 8.1.3 Board diversity, board process, board performance

Unlike previous studies that claim a direct relationship between board diversity (in terms of proportion of female to male directors) and board performance, this study found that board diversity indirectly affects board performance through its effect on the processes of effort norms, cognitive conflict, board cohesiveness and the use of knowledge and skills. Specifically, the study found boards with relatively low proportions of female directors (20 per cent or below), are likely to perform poorly as a result of the decline in the processes of board cohesiveness and the use of knowledge and skills. This supports earlier evidence that female directors in male dominant boards face communication difficulties (Cohen & Bailey, 1997; Smith *et al.*, 1994; Williams & O'Reilly, 1998), which means their views are unlikely to be heard and incorporated into board decisions (Nemeth, 1986; O'Reilly *et al.*, 1988; Smith *et al.*, 1994; Hambrick *et al.*, 1996). However, the study found that when the proportion of female directors increases to a level that matches male directors, board performance tends to reach an optimal level. Overall, these findings are consistent with Adams & Ferreira's (2008) research which claimed that the increased presence of women directors raises the overall performance of boards. Therefore, based on the data collected from Fiji and the Solomon Islands, it is concluded that board diversity affects board performance through its effect on the processes of effort norms, cognitive conflict, board cohesiveness and the use of knowledge and skills.

#### 8.1.4 Multiple directorships, board process, board performance

This study found that multiple directorships do not necessarily lead to improvements in board performance. Possibly, this relates to the common practice in many PICs, where board appointments (particularly in SoEs) are often not based on the needs of the enterprise, but on the political and socio-cultural (*wantok system*) affiliations of individuals, which is made worse by the lack of policy and control over multiple appointments in many of these countries. As a result, people sit on more than one or two boards but without the needed qualifications, skills and experience. Consequently, the experience, quality, reputation and availability of increased expertise that is often associated with multiple directorships in developed countries (Fama & Jensen, 1983; Gilson, 1990; Kaplan & Reishus, 1990; Vafeas, 1999) is not necessarily present in the PICs. These results are consistent with earlier reports that highlight the lack of technical expertise as a major problem for boards of directors in the PICs (McKee, 2005; Pacific Islands Forum Secretariat, 2007). Furthermore, the findings corroborate McKee's (2007) report on Fijian boards which highlight the lack of commitment by directors to board business and board meetings as a significant difficulty in fulfilling board duties along with other fulltime responsibilities. In addition, this evidence supports the notion that conflicts of interest arising from multiple directorships on seemingly competing boards are a major hindrance to effective board performance in the PICs (McKee, 2007). Clearly, multiple directorships do not necessarily lead to improvements in board performance in the case of Fiji and the Solomon Islands.

#### 8.1.5 Process-to-process relationships and board performance

In addition to the indirect causal effect of board attributes on board performance through board process, this study also found that, in PICs, different elements of board process influence each other, which then affects board performance.

It was shown that the process of CEO/board relationship affects board performance through its effect on the processes of effort norms, cognitive conflict, board cohesiveness and the use of knowledge and skills. Close CEO/board relationships promote active participation of directors in board activities. This finding is consistent with evidence from developed countries which suggests that close CEO/board relationships promote trust within boards (Gambetta, 1988), increase directors' knowledge of each other, thus, directors are less likely to show bias against sharing unique information (Gruenfeld *et al.*, 1996), generate social

conformity pressures (McKnight *et al.*, 1998; Ring & Van de Ven, 1994), and harmonise potential interests between CEO and directors, which drives members to collaborate by engaging in similar effort behaviours (Chen, 2005; Hackman, 1992).

However, it seems that too close CEO/board relationships do not necessarily lead to increased cognitive conflict, and thus, better board performance in terms of the board's monitoring and control and service role activities in the context of PICs. Likewise, the cohesiveness that results from too close CEO/board relationships does not necessarily lead to improvements in the monitoring and control performance of boards. This finding is consistent with the view that too close CEO/board relationships can promote "group think" on boards (Janis, 1982), and therefore, it reduces the board's precision in information seeking and willingness to objectively participate in cognitive conflicts and discussions, which in effect, diminishes the board's vigilance as effective monitors of CEO and management. The result of this study also supports the notion that too close CEO/board relationships can promote "social loafing" within boards, thus, CEOs are unlikely to seek the board's advice given the existence of loyalty norms, effectively reducing the service role performance of boards (Kang *et al.*, 2007).

This study found that boards with directors who are intrinsically motivated are more likely to contribute to the effective performance of boards as a result of their increased participation in the processes of effort norms, cognitive conflict, board cohesiveness and the use of knowledge and skills. This finding supports the notion that people engage in tasks and activities because they value the satisfaction derived from contributing for reasons of professional affiliation or commitment to a larger cause, and not because they are motivated by financial rewards (Malhotra & Gallette, 2003; Wenger *et al.*, 2002). Specifically, the result is consistent with McKee's (2007) report which found that some Fijian enterprises were able to attract qualified directors mainly as a result of personal relationships and affiliations with the founder of the enterprise and the general interest to contribute to the development of the country (in the case of SoEs). On the other hand, directors who are extrinsically motivated are less likely to engage in effort norm behaviours and participate in cognitive conflicts and discussions, which reduce their ability to effectively carry out their duties with the diligence and scrutiny required. Hence, offering monetary reward to people for obeying social norms actually weakens norm enforcement and it further leads to the gradual erosion of norm-guided behaviours (Fehr & Falk, 2002). In fact, this result highlights the gravity of extrinsic

motivation associated with board positions in the PICs, where the lack of clear appointment guidelines has exposed board positions to political patronage, *wantok* affiliations and other forms of political and socio-cultural correctness (Bosch, 2008; Duncan, 2005; McMaster, 2004; Tuhaika, 2006).

It is confirmed that the process of affective conflict affects board performance through its effect on the processes of effort norms, board cohesiveness and the use of knowledge and skills. Affective conflict reduces the ability of directors to enforce effort norms, engage in board cohesiveness, and apply their knowledge and skills to board tasks, which in effect, affects board performance. The study, therefore, supports earlier research which argued that affective conflict causes directors to act contrary to board collective efforts, encourages director withdrawal from board tasks, and thereby, it reduces the cohesiveness within the board and the ability of directors to remain united and committed to achieve common goals (Carron, 1982; Evans & Jarvis, 1980; Goodman *et al.*, 1987). Overall, the study finds that any form of disagreement or conflict over issues that are personal or emotional in nature, is likely to reduce the ability of boards to be committed to effort norms, engage in cohesive behaviours and apply knowledge skills to board activities, which subsequently leads to a decline in the overall performance of boards.

This study also reveals that the process of board information flow indirectly affects board performance through its effect on other processes such as effort norms, cognitive conflicts and the use of knowledge and skills. Consistent with the norm of conformity, this finding supports the view that adequate flow of board information enhances director compliance and commitment to effort norms (Chen, 2005) and shapes positive behaviour within boards (Krizan *et al.*, 2005; Larson & Kleiner, 2004; Marsden 2000), which enhances the board's ability to effectively perform its roles. Furthermore, this finding suggests that adequate flow of board information enhances the interaction and cohesion within the board, as a result, members develop better knowledge about each other and better awareness on how members could be of assistance to each other, avoiding any room for management and the board to work in isolation (Vathanophas & Pilun-owad, 2008). Moreover, the study supports earlier research evidence which claims that directors prefer to work in environments with access to detailed facts and where members are given sufficient time to process information (Hayes & Allison, 1988).

Board cohesiveness is found to influence other processes such as effort norms, cognitive conflict and the use of knowledge and skills, which in turn affects board performance. Boards with *moderate* and *higher* levels of cohesiveness are likely to be effective in the performance of their monitoring and control roles, as well as their service roles, as a result of increased commitment of directors to effort norms. Likewise, the study found that board cohesiveness encourages directors to participate in cognitive conflicts and apply their knowledge and skills to board tasks which leads to better board performance. These findings support earlier research which claims that cohesiveness promotes attraction between directors allowing them to communicate expectations regarding contributions towards board tasks (Forbes & Milliken, 1999; van der Walt & Ingley, 2003; Westphal & Bednar, 2005), thus, it increases directors' trust in each other's judgment and expertise (Pye & Pettigrew, 2005; Sonnenfeld, 2002). Furthermore, the study supports the argument that cohesiveness promotes active participation by directors in board discussions and the sharing of constructive ideas, information and solutions, which enhances critical questioning on boards (Charan, 1998; Forbes & Milliken, 1999; Gabrielsson *et al.*, 2007; Huse, 2005; Nicholson & Kiel, 2005). Overall, these findings are consistent with the view that board members are more likely to cooperate and work with people that they can identify with, in respect of being part of one group with a common purpose.

## **8.2 Significance and contributions**

This study makes a significant contribution to the development of corporate governance literature and theory, methodological approaches in corporate governance research, and in particular, to the understanding of corporate governance issues and challenges in the PICs.

### **8.2.1 Contribution to corporate governance literature and theory**

The study contributes to theory development in corporate governance literature. As discussed in Chapter 3, the competing theoretical perspectives on corporate governance (agency theory, stewardship theory, resource perspectives, and stakeholder theory) offer different specifications on how boards should be organised or structured in terms of attributes such as size, composition, diversity and multiple directorships. Not only that, but also the inconclusive findings in board research evident in the literature suggest that there is no clear relationship between the decisions related to the structural design of boards based on these theoretical perspectives and performance outcomes like board and firm performance. In a

way, this implies that there is no standard and perfect structure for boards of directors. Instead, as argued in previous studies, the different theoretical perspectives on how boards of directors should be organised and structured will depend on situational factors peculiar to individual firms (Davis *et al.*, 1997; Maassen, 1999; Muth & Donaldson, 1998).

On this basis, it may be argued that the organisation of boards in terms of size, composition, diversity and multiple directorships must be tailored to fit the firm's legal environment, its size and possibly its current development stage. Consistent with the arguments by Donaldson (1990) and Maassen (1999), each of agency theory, stewardship theory, the resource perspectives and stakeholder theory, may hold validity within their respective domains. For instance, according to Donaldson (1990) and Donaldson and Davis (1991), the stewardship perspective may be proved correct as long as the working relationship or coalition between the managers and the owners of the business is cordially persisting and is perceived by the managers as mutually beneficial. Conversely, in the event where this working relationship or coalition comes into question, the interest of the parties may diverge, which supports the assumptions of agency theory. This means that the different perspectives of stewardship theory and agency theory may hold under different circumstances. In this sense, the different perspectives offered by each of the theories mentioned above are not necessarily non-complimentary as we attempt to understand the potential causal relationship between the formal organisation of boards of directors (through board attributes) and board performance (in terms of the ability of boards to effectively execute their roles). It is in this context that Maassen (1999) challenged future research to focus on determining the contingency factors which make these perspectives to hold and be relevant.

This thesis has gone beyond the recommendation by Maassen (1999) to improvise on the direct approach found in most studies on boards of directors, which is based on the view that these researches have implicitly regarded board process as a "black box", thereby ignoring the potential impact of board process on board performance. Rather than to simply investigate the conditions under which the different theories may hold in a direct approach framework as suggested by Maassen (1999), this thesis agrees with Pearce and Zahra (1992) and Pettigrew (1992), that the complexities in organisational groups like boards of directors make causal relationships between board attributes and performance outcomes difficult to be reliably claimed and supported, in spite of which theoretical framework is used, without considering the processes in which boards involve in the execution of the roles expected of them.

Therefore, alternative models based on additional theories that recognise the influence of board processes are crucial to our understanding of the contribution of boards of directors to firm performance.

Accordingly, this thesis extended prior research by adopting the process approach to investigate the causal relationship between board attributes, board process and board performance, grounded on the argument that our knowledge of what boards should look like must be supplemented with evidence of what boards actually do, how they behave and how their activities affect performance. While popular theories such as agency theory, stewardship theory, the resource perspectives and stakeholder theory have been used to address the direct relationship between board attributes and performance outcomes like board performance or firm performance, additional theories are required to help us understand the processes in which boards involve, how processes are affected by board attributes, and how these processes in turn may affect the ability of boards to perform their roles. In this context, this thesis consulted the contemporary literature and theories on organisational groups to introduce group process variables necessary for the effective performance of groups like boards of directors.

As the findings in this thesis suggest, the board attributes of size, composition, diversity and multiple directorships do not necessarily have a direct effect on board performance, but that they affect board performance indirectly through their effects on the processes of effort norms, cognitive conflict, board cohesiveness and the use of knowledge and skills. In addition, the study provides further evidence showing process-to-process effects, in which the processes of CEO/board relationships, board motivation, affective conflict, flow of board information and board cohesiveness were found to have influenced the other processes such as effort norms, cognitive conflicts and the use of knowledge skills, which then affects board performance. Hence, the application of contemporary theories on organisational groups in conjunction with popular theories such as agency theory, stewardship theory, resource perspectives and stakeholder theory in this thesis, has contributed to our better understanding of the factors that affect board performance in firms. This thesis, therefore, contributes to the advancement of knowledge on corporate governance problems and challenges in developing economies, particularly in the PICs. In fact, this thesis is one of the few studies (Ong & Wan, 2008; van Ees *et al.*, 2007) that empirically examined the role of board process mediators in

the relationship between board attributes and board performance and possibly the first from a developing economy perspective.

### 8.2.2 Contribution to corporate governance research methodology

To the author's knowledge, two previous studies (Ong & Wan, 2008; van Ees *et al.*, 2007) have empirically investigated the role of board process in mediating the effects of board attributes on board performance. Both studies claimed mediated effects in their findings. The tests used in their analysis, causal steps strategy and regression analysis, are more appropriate for relatively larger samples which is generally not a problem in developed and emerging economies. However, in developing economies like the PICs, obtaining large samples in corporate governance research is most challenging, if possible at all. These tests used by Ong and Wan (2008) and van Ees *et al.* (2007) may not be appropriate for investigating mediation hypotheses in board research for the PICs given the small population of enterprises and the likelihood that response samples may even be limited. Encouragingly, this study demonstrates the usefulness of the bootstrap technique as a useful tool for dealing with the statistical problem of small sample limitation commonly associated with corporate governance research in developing economies like the PICs. Further, in business management research, the application of bootstrapping is still rare, particularly in corporate governance research. The most likely reason is that researchers knew little about how to apply bootstrapping as a test for mediation or researchers are basically uncomfortable using them (Fritz & MacKinnon, 2007). Perhaps, this is why only a handful of studies have investigated the performance of bootstrapping in a multiple mediator contexts.

### 8.2.3 Contribution to the understanding of corporate governance issues in the PICs

This study contributes to a better understanding of corporate governance issues and challenges in developing economies like the PICs, particularly regarding the role and contribution of boards of directors in enterprises. While previous reports and studies have highlighted the lack of good corporate governance practices as a major hindrance to the success of business enterprises and industries in the PICs, little has been done to understand the factors that influence the ability of boards (arguably the most crucial corporate governance mechanism in firms) to effectively perform their roles in enterprises. Furthermore, much of the blame has been levelled at the influence of government politics, socio-cultural factors and the *wantok system* on board appointment procedures, and hence, the



poor performance boards of directors, without explaining how this effect occurs. Because of this, though there are speculations that the politics and the *wantok system* negatively affects the structural make-up of boards, there is indeed a real knowledge gap on how the resulting structure affects the processes boards go through in the execution of their roles, and eventually, their performance. In this regard, this study significantly contributes to our understanding of corporate governance in the PICs by establishing the causal relationship between board structural attributes such as size, composition, diversity and multiple directorships, the processes in which boards involve in carrying out their duties and their ability to perform the roles expected of them. These contributions present important implications for corporate governance developments in the PICs which will be addressed in the next section.

### **8.3 Implications**

#### 8.3.1 Government policy

This study highlights the need to address board appointment and decision making procedures to improve board performance in the PICs. In particular, the politicisation of board appointments as well as the intrusion of the *wantok system* in corporate appointments in SoEs must be discouraged or eliminated through appropriate legislations by governments and their holding companies to ensure the appointment of the right people on boards. Such policies should be geared towards the improvement of the structural design of boards of directors in the following areas:

##### *(a) Controlling the size of boards*

The size of boards in the PICs does not necessarily reflect the needs of the board or enterprise, and hence, it has a negative bearing on the effectiveness of boards. Thus, efforts must be taken to control the size of boards of directors, especially on SoEs through appropriate regulations, to prevent those in authority positions like Ministers from abusing appointment responsibilities. The optimal size for boards of directors in the PICs is between six and eight members. While it can be argued that board size may correlate with firm size, hence larger firms may opt for relatively larger boards, such assertions may not be relevant for the PICs since an overwhelming majority of firms are relatively small. Even in cases where such arguments may be justified, the findings of this study suggest that caution must be exercised in appointing large boards.

*(b) Promoting better composition of boards*

In the PICs, boards of directors of SoEs tend to be dominated by outside directors while in privately-owned firms; the board tend to be inside-dominant. If we use the simple ratio of outside-to-inside directors as an indicator of board independence, one would claim that boards of SoEs enjoy a greater degree of independence compared to boards of privately-owned firms. However, this may not be the case for the PICs, since the technical classification of independent and non-independent directors is still not well developed, meaning that board members can be classified as outside directors, but because of their political and socio-cultural affiliations with the CEO, management or those responsible for board appointments, their membership does not technically constitute real independence. Unsurprisingly, this study found that the composition of boards in the PICs has a significant effect on the processes in which boards involve and hence their effectiveness. Indeed, the results confirm that there is a limit to the level whereby board composition can positively affect board performance through its effect on board processes. According to the findings of this study, board performance is maximised when the proportion of outside and inside directors closely matches each other. This implies that governments should introduce regulatory measures that define the technical classification between independent and non-independent directors to promote the equal representation of outside and inside directors on SoE boards in the PICs.

*(c) Encouraging gender diversity on boards*

Board diversity (in terms of the proportion of female directors to male directors) is very low in Fiji and the Solomon Islands compared to the developed countries, which is evident of the fact that boards of directors are still very much a *big men's club* in the PICs. This reflects the culture-based inequality in many Pacific island communities where men are generally viewed as superior to women, and possibly because less women are educated than men. Since boards are mostly a *big men's club*, the inclusion of women directors on boards is more likely to be justified in terms of skills and experience compared to men, many of whom depend on their political and socio-cultural affiliations for their appointment, without the qualities that boards require. As found in this study, the increase of female directors to a level that matches the number of male directors on the board increases the board's involvement in critical processes, which leads to overall improvements in board performance. This finding implies that the representation and participation of women on boards of directors should be promoted and

encouraged in the PICs through appropriate regulations as in Norway, which had clear provisions that at least 40 per cent of the board is made up of women. However, caution should be exercised to ensure that such provisions are not abused through “token appointments”. To achieve this, such a regulatory provision should also define the skills, qualifications and experience required. This will ensure that efforts to promote gender diversity on boards in the PICs are made in recognition of the unique qualities that women bring into the boardroom and the contribution they make to board performance.

*(d) Controlling multiple directorships on boards*

Multiple directorships in Fiji, the Solomon Islands and other PICs generally reflect the lack of adequately qualified people to serve on boards, exacerbated by political and socio-cultural influences on board appointments, especially on boards of SoEs. Unlike in developed countries where multiple directorships are associated with the profile, reputation and the past successes of a director, this is not necessarily the case in the PICs. As discussed in this thesis, multiple directorships are being criticised in the PICs given the lack of commitment to board tasks and board meetings by those who hold too many appointments in addition to their full-time responsibilities, which hinders the effective performance of boards. For the PICs, this implies that practical steps need to be taken to limit and control the number of directorships a person can hold through appropriate regulations. The recent policy initiative taken by the Fiji government in 2005 to discourage appointments beyond two directorships at one time is a step in the right direction. However, it is advisable that such policies be properly monitored to ensure they are not ignored and by-passed but fully implemented by authorities responsible for board appointments, especially in SoE boards.

### 8.3.2 Business and industry development

The findings of this study also have important implications for corporate governance developments at the business and industry levels in the PICs. This includes implications for key stakeholders such as directors and boards, regulators and self-regulatory bodies, for promoting public-private sector collaboration, and for Development Partner Organisations (DPOs) in supporting economic growth in the PICs.

*(a) Directors and boards*

Evidence from developed countries suggests that directors are increasingly adhering to new corporate governance standards and practices given the significance of corporate governance to the success of enterprises (Maassen, 1999). Hence, there is little doubt that directors in the PICs must appreciate and fully embrace their role in helping boards adopt new standards and practices aimed at improving governance within their firms. They must recognise that corporate governance is not only a matter of interest to institutional investors, stock exchanges and regulators but boards of directors as well, and must understand the importance in complying with new corporate governance standards. As noted by Maassen (1999), the globalisation of governance standards, the internationalisation of corporations and the harmonisation of equity markets mean that directors must make efforts to understand the subtle differences in boardroom cultures, working methods and board organisation in different country circumstances. Inevitably, new corporate governance developments will lead to changes in the way boards of directors are formally organised in the PICs. In particular, self-regulation in corporate governance will become increasingly important for boards of directors in the PICs as firms strive to attract investment capital. This means directors will be increasingly confronted with the need to generate more openness, disclosure, transparency on their working methods and the responsibility to voluntarily comply with new corporate governance standards. Further, directors of boards in the PICs must be cautious that wholesale applications of corporate governance standards and practices designed for developed countries may not necessarily work given the unique political and socio-cultural circumstances in the PICs. Therefore, any attempt by boards of directors to adopt and adhere to new standards and practices must be harmonised to the specific context of the PICs.

*(b) Regulators and self-regulatory bodies*

The findings of this study have practical implications for public regulators and enforcement institutions in the PICs. In Fiji, for example, such institutions may include the Capital Markets Development Authority (CMDA) and the Fiji Independent Commission Against Corruption (FICAC), and self-regulatory bodies such as the South Pacific Stock Exchange (SPSE), and professional associations like the Fiji Institute of Directors (FID). For instance, the progress made by FICAC in bringing corrupt CEOs and directors of SoE boards before the courts has been applauded by some people, but at the same time, concerns have been raised over the political influence on the activities of FICAC, claiming that CEOs and

directors who actively support the government are not equally subjected to the same scrutiny as those perceived to non-government supporters. No doubt, the independence of FICAC and its ability to carry out its functions without external influence is of paramount significance to the promotion of good corporate governance in Fiji.

Furthermore, recent international developments in corporate governance have increasingly put pressure on industry regulators such as the SPSE and CMDA to introduce new corporate governance standards and rules by way of self-regulation. Generally, in the PICs including Fiji and the Solomon Islands, company law dictates the governance structure for enterprises. However, company law in these countries (in the form of the Companies Act) is too broad and does not address some of the specific areas of corporate governance weaknesses in firms. Thus, for industry regulators, self-regulation (in the form of the listing rules for SPSE and codes of best practice for CMDA), is seen as a mechanism to regulate the activities and structure of listed firms and industry players, when these institutions have the power and the will to penalise offenders of these rules and codes. In this context, changes occurring in the governance structure of the enterprise in response to the requirements of listing rules and codes of best practice may be an indication that directors understand the potential benefits of self-regulation to meet specific demands and needs not foreseen or catered for by the Companies Act. It may also portray the awareness of the board of the need to comply with international standards to attract investments and to build investor confidence (Maassen, 1999). In effect, SPSE and CMDA depend on self-regulation through listing rules and codes of best practices and rely on the professional discipline of directors to comply with new or changing corporate governance standards to promote good corporate governance. Having said that, concerns have been raised over potential enforcement problems in self-regulation where new standards may conflict with the interests of parties involved. However, evidence in developed countries suggests that self-regulation in conjunction with other pressures, positively contributes to the introduction of international corporate governance standards (Cadbury, 1995).

*(c) Public-private sector collaboration*

Also, this study found that the issues and challenges that influence the performance of boards of directors in Fiji, the Solomon Islands and most of the PICs, are of equal concern in both public and private sector enterprises. Because of this, efforts to introduce and improve corporate governance practices in the PICs, particularly in respect to the contribution of

boards of directors to firm performance, may take a holistic approach by encouraging joint public-private sector collaboration in such programs and activities. For instance, in Fiji and Solomon Islands, private sector institutions such as the chamber of commerce, employer's federations, institute of directors, other professional bodies, financial institutions, and industry associations or bodies, can collaborate with public regulators such as the capital markets authority and the government to establish corporate governance codes of best practice. Similarly, models based on public-private sector collaboration can be adopted in efforts to create training and development opportunities for directors in the PICs. Specifically, key conclusions on how the role of boards of directors are impacted by processes such as effort norms, board conflicts, cohesiveness, the use of knowledge and skills, information flow and board relationships could form the main attributes in developing a professional training and development program for directors. Indeed, the public-private partnership approach is a very useful way of mobilising and utilising the limited resources available in PICs to develop such programs.

*(d) Development Partner Organisations (DPOs)*

Lastly, the study has important implications for the involvement of DPOs and their contribution to the development of the business sector, industries and the economies of the PICs. A successful business sector is crucial to economic growth, and hence, the improvement of standards of living and the livelihoods of people in the Pacific islands. Indeed, past and current efforts and involvement of DPOs in the PICs recognise this important link. Nevertheless, much of this effort is focussed on improving the business environment through structural adjustments and changes to investment regulations to ensure that the environment is conducive to attracting foreign and domestic investment. On the other hand, little has been done to address internal corporate governance weaknesses in both public and private sector enterprises. This study, therefore, informs DPOs that unless the internal governance systems in enterprises such as boards of directors are strengthened, their ability to attract investment capital will be limited, which affects their performance and capacity to drive economic growth in the PICs.

### 8.3.3 Research methodology

The study found that accessing information and gaining insight knowledge into the boardroom activities of boards of directors in the PICs is a notoriously challenging task. The

confidentiality of internal board activities and information as well as the reluctance of directors to cooperate with studies of this nature are a real hindrance to the success of board research. In Fiji and the Solomon Islands, the fear by directors of being reprimanded by government appointing authorities and from losing their board seats makes the task of convincing directors to participate in board research even more difficult. Consequently, this study relied mostly on questionnaire surveys and personal interviews to gain insight knowledge of the activities of boards of directors. Obviously, these instruments have their own limitations, therefore, new research techniques aimed at improving access to boardroom activities will provide better opportunity to describe the internal activities of boards of directors.

#### **8.4 Limitations and future research**

The lack of good corporate governance practices, the ineffectiveness of boards of directors, and hence, poor firm performance, is a widespread phenomenon in the PICs. In spite of the fact that the PICs have a lot in common, there are obvious differences in cultural practices, political and legal systems, historical background and economic capabilities which may have important implications on governance in these countries. However, due to time and resource constraints the empirical investigations in this study are restricted to only two countries of the PICs region, Fiji and the Solomon Islands. Future research that considers these differences, specifically between countries in Melanesia, Polynesia and Micronesia, should be useful in understanding how such differences relate to corporate governance practices.

The lack of good governance in the PICs is not only restricted to the corporate sector but is also a major problem across the spectrum of many important institutions which include government departments, statutory institutions, non-government organisations (NGOs), community institutions and other important public and private organisations. Since many of these institutions play a significant role in governance and the establishment of an environment conducive to the growth of the business sector, it is difficult to understand the corporate governance problems faced by businesses and the corporate sector without knowledge of the role of these institutions. Nevertheless, an in-depth analysis of the role of these institutions in governance and how their performance relates to the growth of the business sector is beyond the scope of this thesis but warrant future research.

In terms of data collection, this thesis relied on a cross-sectional data set collected through the survey of a sample of 86 firms in Fiji and the Solomon Islands between 2008 and 2009. The obvious disadvantages of cross-sectional data such as the inability to show differences and changes over a period of time and the tendency to under-represent the population are concerns in studies such as this. In this respect, while the decision to adopt a cross-sectional study is dictated by the resource limitations and the time-frame to complete a PhD study, future research aided with the availability of time-series data may be useful in capturing the dynamics in the causal relationships between board attributes, board process and board performance.

This research heavily relied on the self-report of the respondents through the use of questionnaire surveys and interviews. The accuracy of self-reporting depends on a number of factors, including the respondent's motivation to participate in the research, as well as their ability to communicate and articulate views. Adequate measures were taken in this study to address these concerns. This includes efforts made to establish rapport between the researcher and the respondents which was further reinforced by ensuring full confidentiality on the information provided and anonymity, by not disclosing the names of the respondents. Still, for future research, innovative research techniques that complement the use of questionnaire surveys and personal interviews may be developed to improve access to the internal activities of the board.

From a pragmatic viewpoint, this thesis could not consider many of the issues considered in the corporate governance literature that relate to the role of boards of directors in firms. Fundamentally, the thematic focus of this thesis on the role of boards of directors does not in any way promote the misguided approach that corporate governance debate is primarily about corporate entities and the duties of directors. There are equally important mechanisms in corporate governance apart from the boards of directors, but they are beyond the scope of this thesis. As such, the conceptual framework adopted in this thesis should not be interpreted to mean that other corporate governance issues not investigated are of less significance to the PICs. Instead, the specific focus on board attributes, board processes and board performance is dictated by the research problem which involves determining how different board attributes and board processes influence the ability of boards to perform their governance duties in firms, in the hope of improving decisions regarding what can be done to improve board performance in the PICs, and hence, the contribution of boards of directors to firm



performance and the economy. On that note, while this study focussed on the mediation relationship between board attributes, board process and board performance, future research that relates measures of board performance to firm performance should enhance our knowledge of the real contributions of boards of directors to firm performance in the PICs.

## BIBLIOGRAPHY

- Aboody, D., & Lev, B. (2000). Information asymmetry, R&D, and insider gains. *Journal of Finance*, 55(6), 2747-2766.
- Adams, R., & Ferreira, D. (2004). Gender diversity in the boardroom. *ECGI Working Paper Series in Finance*, 57.
- Adams, R. B. (2008). *Communication in the boardroom*. Stockholm: Swedish Institute for Financial Research.
- Adams, R. B., & Ferreira, D. (2008). Women in the boardroom and their impact on governance and performance. Retrieved from <http://ssrn.com/abstract=1107721> or [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1107721](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1107721)
- Agrawal, A., & Knoeber, C. R. (1996). Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis*, 31(3), 377-397.
- Amason, A. (1996). Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams. *Academy of Management Journal*, 39, 123-148.
- Amason, A., & Sapienza, H. (1997). The effects of top management team size and interaction norms on cognitive and affective conflict. *Journal of Management*, 23, 495-516.
- Amason, A. C., Thompson, K. R., Hochwarter, W. A., & Harrison, A. W. (1995). Conflict: An important dimension in successful management teams. *Organizational Dynamics*, 24(2), 20-35.
- Amosa, D. U. (2007a). The challenges to sustaining and public sector reform in Samoa. *Pacific Economic Bulletin*, 22(3), 173-182.
- Amosa, D. U. (2007b). Public sector reform in Tonga- the show must go on. *Pacific Economic Bulletin*, 22(3), 183-190.
- Ancona, D., & Caldwell, D. (1988). Beyond task and maintenance: Defining external functions in groups. *Group & Organization Studies*, 13, 468-494.
- Anderson, S. E., & Williams, L. J. (1996). Interpersonal, job, and individual factors related to helping processes at work. *Journal of Applied Psychology*, 81, 282-296.
- Andres, P., & Vallelado, E. (2008). Corporate governance in banking: The role of boards of directors. *Journal of Banking & Finance*, 32(12), 2570-2580.
- Andrews, K. R. (1980). Director's responsibility for corporate strategy. *Harvard Business Review*, 58, 30-42.
- Anere, R., Crocombe, R., Horoi, R., Huffer, H., Tuimaleali'ifano, M., VanTrease, H., et al. (2001). *Security in Melanesia: A report prepared for the Pacific Islands Forum Secretariat*. Suva: Pacific Islands Forum Secretariat.
- Anonymous. (2007). Fiji's SOE directors commended amidst sanctions. *Press Release* Retrieved January 1, 2010, from <http://www.scoop.co.nz/stories/WO0712/S00953.htm>
- Appana, S. (2003). New Public Management and Public Enterprises Restructuring in Fiji. *Fijian Studies*, 1(1), 51-73.
- Asian Development Bank. (2005). *Toward a New Pacific Regionalism*. Manilla: Asian Development Bank.
- Asian Development Bank. (2006). *Republic of the Fiji Islands: Macroeconomic Assessment*. Suva: Asian Development Bank- Pacific Subregional Office.
- Asian Development Bank. (2009). ADB support for public sector reforms in the Pacific: Enhancing results through ownership, capacity, and continuity. Asia Development Bank.

- Asian Development Bank. (2009, August 19). ADB warns Solomon Islands economy will not grow. *Radio New Zealand International*. Retrieved from <http://www.rnzi.com/pages/news.php?op=read&id=48556>
- Auditor General. (2006). *Report of the Auditor General of the Republic of the Fiji Islands*. Retrieved from [www.oag.gov.fj/reports.../43%20Public%20Enterprise%20&%20Public%20Sector%20Reform.pdf](http://www.oag.gov.fj/reports.../43%20Public%20Enterprise%20&%20Public%20Sector%20Reform.pdf).
- Aupperle, K. E. (1984). An empirical measure of corporate social orientation In L. E. Preston (Ed.), *Research in corporate social performance policy* (Vol. 6, pp. 27-54). Greenwich:CT: JAI Press.
- AusAID. (2004). *Solomon Islands: Rebuilding an Island Economy*. Retrieved from [http://www.dfat.gov.au/publications/rebuilding\\_solomon/si\\_rebuilding\\_an\\_island\\_economy.pdf](http://www.dfat.gov.au/publications/rebuilding_solomon/si_rebuilding_an_island_economy.pdf).
- AusAID. (2006). *Pacific 2020: challenges and opportunities for growth*. Canberra: Australian Agency for International Development.
- AusAID. (2009). *Pacific Economic Survey: engaging with the world*. Canberra: Australian Agency for International Development.
- Austin, J. R. (1997). A cognitive framework for understanding demographic influences in groups. *International Journal of Organizational Analysis*, 5(4), 342-359.
- Australian Business Volunteers. (2004a). A Country Strategy for the period 2004-2007. Republic of the Fiji Islands and Australian Business Volunteers.
- Australian Business Volunteers. (2004b). *Republic of Fiji Islands and Australian Business Volunteers: A Country Strategy for the Period 2004-2007*. Suva: Australian Business Volunteers.
- Ayuso, S., & Argandona, A. (2007). Responsible corporate governance: towards a stakeholder board of directors?". IESE Business School,.
- Azen, R. (2003). *Multiple Mediator Models: A comparison of testing approaches*. Paper presented at the the 111th Annual Convention of the American Psychological Association.
- Babbie, E., & Mouton, J. (2001). *The practice of social research*. Cape Town: Oxford University Press,.
- Baek, J. S., Kang, J. K., & Park, K. S. (2004). Corporate governance and firm value: evidence from the Korean financial crisis. *Journal of Financial Economics*, 71, 265-313.
- Baliga, B. R., Moyer, R.C., & Rao, R. S. (1996). CEO Duality and Firm Performance: What's the Fuss? *Strategic Management Journal*, 17(1), 41-53.
- Banerji, K., & Sambharya, R. B. (1996). Vertical keiretsu and international market entry: the case of the Japanese automobile ancillary industry. *Journal of International Business Studies*, 27(1), 89-114.
- Bantel, K. A., & Jackson, S. E. (1989). Top management and innovations in banking: Does the composition of the top team make a difference?., *Strategic Management Journal*, 10, 107-124.
- Barnhart, S., Marr, M., & Rosenstein, S. (1994). Firm performnace and and board composition: Some new evidence. *Managerial and Decision Economics*, 15, 329-340.
- Barnhart, S. W., & Rosenstein, S. (1998). Board composition, managerial ownership, and firm performance: An empirical analysis. *The Financial Review*, 33, 1-16.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Batley, J. (2007, September, 28). Keynote address at the CMDA Conference "Effective

- Governance: Attracting Long-term Investment at the Radisson Resort, Denarau [press release]. Retrieved from <http://www.fiji.embassy.gov.au/suva/governance.html>
- Baysinger, B. D., & Butler, H. N. (1985). Corporate governance and the board of directors: Performance effects of changes in board composition. *Journal of Law, Economics and Organisation*, *1*, 101-124.
- Baysinger, B. D., & Hoskisson, R. E. (1990). The composition of board of directors and strategic control: Effects on corporate strategy. *Academy of Management Review* *15*, 72-87.
- Baysinger, B. D., Kosnik, R. D., & Turk, T. A. (1991). Effects of board and ownership structure on corporate R&D strategy. *Academy of Management Journal*, *34*, 205-214.
- Bazerman, M. H., & Schoorman, F. D. (1983). A Limited Rationality Model of Interlocking Directorates. *Academy of Management Review*, *8*, 206-217.
- Bennedsen, M., Kongsted, H. C., & Nielsen, K. M. (2004). Board size effects in closely held corporations. Unpublished Working Paper. Department of Economics, Copenhagen Business School.
- Bentz, V. M., & Shapiro, J. J. (1998). *Mindful Inquiry in Social Research*. London: Sage Publications.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New York: Macmillan.
- Bhagat, S., & Black, B. (1999). The uncertain relationship between board independence and firm performance. *Business Lawyer*, *54*, 921-963.
- Bhagat, S., & Black, B. (2002). The non-correlation between board independence and long-term firm performance. *Journal of Corporation Law*, *27*(2), 231.
- Bhagat, S., Brickley, J. A., & Coles, J. L. (1987). Managerial Indemnification and Liability Insurance: The Effect on Shareholder Wealth. *Journal of Risk and Insurance*, *55*, 721-736.
- Boeker, W., & Goodstein, J. (1991). Organizational performance and adaptation: Effects of environment and performance on changes in board composition. *Academy of Management Journal*, *34*, 805-826.
- Boeker, W., & Goodstein, J. (1993). Performance and successor choice: The moderating effects of governance and ownership. *Academy of Management Journal*, *36*, 172-186.
- Bollen, K. A., & Stine, R. A. (1990). Direct and indirect effects: Classical and bootstrap estimates of variability. *Sociological Methodology*, *20*, 115-140.
- Bonn, I., Yoshikawa, T., & Phan, P. H. (2004). Effects of Board Structure on Firm Performance: A Comparison Between Japan and Australia. *Asian Business & Management*, *3*(1), 105.
- Booth, J., & Deli, D. (1995). Factors affecting the number of outside directorships held by CEOs. *Journal of Financial Economics*, *40*, 81-104.
- Bosch, H. (2008). *Accountability in the Public Sector*.
- Boyd, B. (1990). Corporate Linkages and Organizational Environment: A Test of the Resource Dependence Model. *Strategic Management Journal*, *11*(6), 419-430.
- Boyd, B. K. (1995). CEO Duality and Firm Performance: A Contingency Model. *Strategic Management Journal* *16*(4), 301-312.
- Boyd, D. P. (2003). Chicanery in the corporate culture: Worldcom or WorldCom. *Corporate Governance*, *39*(1), 83-85.
- Brennan, N. (2006). Boards of Directors and Firm Performance: Is there an expectations gap? *Corporate Governance: An International Review*, *14*(6), 577-593.
- Brentari, E., Golia, S., & Manisera, M. (2006). Analysing ordinal data to measure customer satisfaction: a comparasion between the Rasch Model and CatPCA. 1-5. Retrieved

- from:[http://mtisd06.unior.it/collegamenti/MTISD%202006/Abstracts/03\\_Brentari%20\\_1\\_.pdf](http://mtisd06.unior.it/collegamenti/MTISD%202006/Abstracts/03_Brentari%20_1_.pdf)
- Briggs, N. (2006). Estimation of the standard error and confidence interval of the indirect effect in multiple mediator models. *Dissertation Abstracts International*, 37, 4755B.
- Brown, L. D., & Caylor, M. L. (2004). Corporate governance and firm performance. Georgia State University.
- Bryan, J. H. (1995). Allegiance to a diverse board. *Directors and Boards*, 19(3), 6-8.
- Bryman, A., & Bell, E. (2007). *Business Research Methods* (Second ed.). New York: Oxford University Press.
- Buchanan, D., & Hucznski, A. (1997). *Organisational Behaviour: an introductory text*. London: Prentice Hall.
- Burke, R. (1995). Do Women on Corporate Boards Make a Difference? Views of Women Directors. *Corporate Governance*, 3, 138-143.
- Burke, R. (2000). Women on Canadian Corporate Boards of Directors: Still a Long Way to Go. In R. Burke & M. Mattis (Eds.), *Women on Corporate Boards of Directors* (pp. 97-109). Netherlands: Kluwer Academic.
- Burrough, B., & Helyar, J. (1990). *Barbarians at the gate: The fall of RJR Nabisco*. London: Jonathan Cape.
- Burt, R. S. (1983). *Corporate Profits and Cooptation: Networks of Market Constraints and Directorate Ties in the American Economy*. New York: Academic Press.
- Byrd, J. W., & Hickman, K. A. (1992). Do outside directors monitor managers? Evidence from tender offer bids. *Journal of Financial Economics*, 32, 195-221.
- Capital Markets Development Authority. (2006). *Corporate Governance Policy*. Fiji Islands.
- Carpenter, M. A. (2002). The implications of strategy and social context for the relationship between top management team heterogeneity and firm performance. *Strategic Management Journal*, 23(3), 275-284.
- Carpenter, M. A., Geletkanycz, M. A., & Sanders, W. G. (2004). Upper Echelons Research Revisited: Antecedents, Elements, and Consequences of Top Management Team Composition. *Journal of Management*, 30(6), 749-778.
- Carpenter, M. A., & Westphal, J. D. (2001). The Strategic Context of External Network ties: Examining the impact of director appointments on board involvement in strategic decision making. *Academy of Management*, 44(4), 639-660.
- Carron, A. V. (1982). Cohesiveness in sport groups: Interpretations and considerations. *Journal of Sport Psychology*, 4, 123-138.
- Carter, C. B., & Lorsch, J. W. (2004). *Back to the Drawing Board: Designing Corporate Boards for a Complex World*. Boston: Harvard Business School Press.
- Carter, D. A., Simkins, B. J., & Simpson, W. G. (2003). Corporate Governance, Board Diversity, and Firm Value. *Financial Review*, 38(1), 33-53.
- Carver, J. (2002). *On Board Leadership*. San Francisco, CA: Jossey-Bass.
- Catalyst. (2007). *The bottom line: Corporate performance and women's representation on boards*.
- Cavana, R. Y., Delahaye, B. L., & Sekaran, U. (2001). *Applied Business Research: Quantitative and Qualitative Methods*. New York: John Wiley & Sons.
- Central Bank of Solomon Islands. (2005). *A report into the operations of the Development Bank of Solomon Islands*. Honiara: Central Bank of Solomon Islands.
- Central Bank of Solomon Islands. (2006). *Annual Report*. Honiara: Central Bank of Solomon Islands.
- Central Bank of Solomon Islands. (2007). *Annual Report*. Honiara: Central Bank of Solomon Islands.

- Central Bank of Solomon Islands. (2008). *Annual Report*. Honiara: Central Bank of Solomon Islands.
- Certo, S. T., Lester, R. H., Dalton, C. M., & Dalton, D. R. (2006). Top Management Teams, Strategy and Financial Performance: A Meta-Analytic Examination. *Journal of Management Studies*, 43(4), 813-839.
- Chaganti, R., Mahajan, V., & Sharma, S. (1985). Corporate board size, composition and corporate failures in retailing industry. *Journal of Management Studies*, 22, 400-416.
- Chand, S. (1999). The public sector and development in the Pacific islands. *Pacific Economic Bulletin*, 14(1), 14-22.
- Chand, S. (2007). Swim or sink: the predicament of the Fiji economy. *Pacific Economic Bulletin*, 22(2), 1-21.
- Charan, R. (1998). *Boards at work: How corporate boards create competitive advantage*. San Francisco: Jossey-Bass Publishers.
- Charkham, J. (1994). *Keeping Good Company, A Study of Corporate Governance in Five Countries*. Oxford: Oxford University Press.
- Chen, D. (2005). Understanding CEO-Board Collaboration from a Social Perspective. *Chinese Public Affairs Quarterly* 1(3), 193-209.
- Chen, G., Firth, M., Gao, D. N., & Rui, O. M. (2006). Ownership structure, corporate governance, and fraud: Evidence from China. *Journal of Corporate Finance*, 12(3), 424-448.
- Chen, Z. X., Aryee, S., & Lee, C. (2005). Test of a mediation model of perceived organisational support. *Journal of Vocational Behaviour*, 66, 457-470.
- Cheng, S. (2008). Board size and the variability of corporate performance. *Journal of Financial Economics* 87, 157-176.
- Cheung, G. W., & Lau, R. S. (2008). Testing Mediation and Suppression Effects of Latent Variables: Bootstrapping with Structural Equation Models. *Organisational Research Methods*, 11(2), 296-325.
- Cho, D., & Kim, J. (2007). Outside directors, ownership structure and firm profitability. *Corporate Governance*, 15(2).
- Choi, J. J., Park, S. W., & Yoo, S. (2005). Do outside directors enhance firm performance?: Evidence from an emerging market. Temple University, Changwon National University.
- Claessens, S., & Fan, J. P. H. (2002). Corporate Governance in Asia: A Survey. *International Review of Finance*, 3(2), 71-103.
- Clarke, T. (1998). Research on corporate governance. *Corporate Governance*, 6(1), 57-66.
- Cochran, R. L., Wood, R. A., & Jones, R. B. (1985). The composition of boards of directors and the incidence of golden parachutes. *Academy of Management Journal*, 28(3), 664-671.
- Coffey, B. S., & Wang, J. (1998). Board diversity and managerial control as predictors of corporate social performance. *Journal of Business Ethics*, 17(14), 1595-1603.
- Cohen, S., & Bailey, D. (1997). What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of Management* 23, 239-290.
- Coles, J. W., McWilliams, V. B., & Sen, N. (2001). An examination of the relationship of governance mechanisms to performance. *Journal of Management*, 27(1), 23-50.
- Conger, J. A., Lawler, E. E., & Finegold, D. L. (2001). *Corporate Boards. New Strategies for Adding Value at the Top*. California: Jossey-Bass Inc.
- Conyon, M. J., & Peck, S. I. (1998). Board size and corporate performance: evidence from European countries *The European Journal of Finance*, 4(3), 291-304.
- Cooper, D. R., & Schindler, P. S. (1998). *Business Research Methods* (Sixth edition ed.). Boston: McGraw-Hill.

- Cross, R., & Cummings, J. N. (2004). Tie and network correlates of individual performance in knowledge-intensive work. *Academy of Management Journal*, 47, 928-937.
- D'Aunno, T., Sutton, R. I., & Price, R. H. (1991). Isomorphism and external support in conflicting institutional environments: A study of drug abuse treatment units. *Academy of Management Journal* 34, 636-661.
- Daily, C., & Dalton, D. (1993). Board of directors leadership and structure: control and performance implications. *Entrepreneurship Theory and Practice*, 17(3), 65-81.
- Daily, C. M., & Dalton, C. R. (1994). Bankruptcy and corporate governance: The impact of board composition and structure. *Academy of Management Journal*, 37, 1603-1617.
- Daily, C. M., & Dalton, D. R. (1992). The Relationship Between Governance Structure and Corporate Performance in Entrepreneurial Firms. *Journal of Business Venturing*, 7(5), 375.
- Daily, C. M., Dalton, D. R., & Cannella Jr., A. A. (2003). Corporate governance: Decades of dialogue and data. *Academy of Management Review*, 28(3), 371-382.
- Daily, C. M., Certo, S. T., & Dalton, D. R. (1999). A Decade of Corporate Women: Some Progress in the Boardroom, None in the Executive Suite. *Strategic Management Journal*, 20(1), 93-100.
- Dalton, D. R., & Daily, C. M. (1999). What's Wrong With Having Friends on the Board. *Across the Board*, 36(3), 28-32.
- Dalton, D. R., Daily, C. M., Ellstrand, A. E., & Johnson, J. L. (1998). Meta-analytic reviews of board composition leadership structure and financial performance. *Strategic Management Journal*, 19(3), 269-290.
- Davis, D. H., Schoorman, D. F., & Donaldson, L. (1997). Toward s stewardship theory of management. *Academy of Management Review*, 22(1), 20-47.
- Davis, G. (1991). Agents without principles? The spread of the poison pill through the intercorporate network. *Administrative Science Quarterly*, 36, 583-613.
- de Haas, M., & Algera, J. A. (2002). Demonstrating the effect of the strategic dialogue: participation in designing the management control system. *Management Accounting Research*, 13, 41- 69.
- DeDreu, C. K. W. (2008). The virtue and vice of workplace conflict: food for (pessimistic) thought. *Journal of Organizational Behavior*, 29, 5-18.
- DeDreu, C. K. W., & Weingart, L. R. (2003). Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *Journal of Applied Psychology*, 88(4), 741-749.
- Demb, A., & Neubauer, F. (1992). The Corporate Board, Confronting the Paradoxes. *Long Range Planning*, 25, 9-20.
- Department of Public Enterprises. (2003). *Corporate Governance Policy Framework: Enhancing shareholder value through increased accountability*. Fiji Islands.
- DiMaggio, P. D., & Powell, W. W. (1983). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, 147-160.
- Donaldson, L., & Davis, J. (1991). Stewardship theory or Agency theory: CEO governance and shareholder returns. *Australian Journal of Management*, 16(1), 49-64.
- Donaldson, P., & Preston, L. E. (1995). The stakeholder theory of the corporation: concepts, evidence, and implications. *The Academy of Management Review*, 20(1), 65-91.
- Dulewicz, V., & Herbert, P. (2004). Does the composition and practice of boards of directors bear any relationship to the performance of their companies? *Corporate Governance: An International Review*, 12(3), 263-280.

- Duncan, R. (2005). *Fiddling the books: Where does the buck stop?* Paper presented at the Prime Minister's Corporate Governance Summit. Retrieved from [http://www.usp.ac.fj/index.php?id=piasdg\\_downloads\\_gov](http://www.usp.ac.fj/index.php?id=piasdg_downloads_gov).
- Duncan, R. (2008). Governance and development. 111-128. Retrieved from <http://hdl.handle.net/123456789/1413>.
- Duncan, R., & Chand, S. (2002). The Economics of the 'Arc of Instability'. *Asian- Pacific Economic Literature*, 16, 1-9.
- Duncan, R., & Nakagawa, H. (2006). Obstacles to economic growth in six Pacific island countries. Pacific Institute of Advanced Studies in Development and Governance, The University of the South Pacific.
- Duncan, R., & Toatu, T. (2004). *Measuring improvements in governance in the Pacific island countries*. Paper presented at the A conference on Financing Development organised by the Foundation for Development Cooperation (Brisbane). Retrieved from [http://www.usp.ac.fj/fileadmin/files/Institutes/piasdg/governance\\_papers/duncan\\_toatu\\_measuring\\_improv\\_governance.pdf](http://www.usp.ac.fj/fileadmin/files/Institutes/piasdg/governance_papers/duncan_toatu_measuring_improv_governance.pdf).
- Dutton, J., & Jackson, S. (1987). Categorizing strategic issues: Links to organizational action. *Academy of Management Review*, 12, 76-90.
- Efron, B. (1982). The jackknife, the bootstrap, and other resampling plans. *Society of Industrial and Applied Mathematics CBMS-NSF Monographs*, 38.
- Efron, B. (1987). Better Bootstrap Confidence Intervals (with discussion). *Journal of American Statistical Association*, 82, 171-200.
- Efron, B., & Tibshirani, R. (1993). *An introduction to the bootstrap*. New York: Chapman & Hall/CRC.
- Eisenberg, T., Sundgren, S., & Wells, M. T. (1998). Larger board size and decreasing firm value in small firms. *Journal of Financial Economics*, 48, 35-54.
- Eisenhardt, K., Kahwajy, J., & Bourgeois, L. (1997). How management teams can have a good fight. *Harvard Business Review*, 75 (July-August), 77-85.
- Eisenhardt, K. M. (1989). Agency Theory: An assessment and review. *Academy of Management Review*, 14(1), 57-74.
- Ensley, M. D., Pearson, A. W., & Amason, A. C. (2002). Understanding the dynamics of new venture top management teams: cohesion, conflict and new venture performance. *Journal of Business Venturing*, 17, 365-386.
- EOWA. (2006). *2006 Equal Opportunity for Women in the Workplace Agency (EOWA) Australian Census of Women in Leadership*.
- EPWN. (2004). *The European Professional Women's Network (EPWN) board women monitor 2004*.
- Erhardt, N. L., Werbel, J. D., & Shrader, C. B. (2003). Board of Directors and Firm Financial Performance. *Corporate Governance: An International Review*, 11, 102-111.
- ESCAP. (2006). *Least developed countries, landlocked developing countries and small island developing states: Economic and Social Commission for Asia and the Pacific*.
- Evan, W. F., & Freeman, R. E. (1993). A Stakeholder Theory of the Modern Corporation: Kantian Capitalism. In T. Beauchamp & N. Bowie (Eds.), *Ethical Theory and Business* (pp. 75-84). Englewood Cliffs, NJ: Prentice Hall.
- Evans, N. J., & Jarvis, P. A. (1980). Group cohesion: A review and reevaluation. *Small Group Behavior*, 11, 359-370.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26, 301-325.
- Fan, X., & Wan, L. (1996). Comparability of jackknife and bootstrap results: An investigation for a case of canonical analysis. *Journal of Experimental Education*, 64, 173-189.



- Farjoun, M. (1994). Beyond industry boundaries: Human expertise, diversification and resource-related industry groups. *Organization Science*, 5, 185-199.
- Fehr, E., & Falk, A. (2002). Psychological foundations of incentives. *European Economic Review* 46, 687-724.
- Feldman, D. C. (1984). The development and enforcement of group norms. *The Academy of Management Review*, 9(1), 47-53.
- Fernandes, N. (2008). EC: Board compensation and firm performance: The role of independent board members. *Journal of Multinational Financial Management* 18, 30-44.
- Ferris, S. P., Jagannathan, M., & Pritchard, A. C. (2003). Too Busy to Mind the Business? Monitoring by Directors with Multiple Board Appointments. *The Journal of Finance*, 58(3), 1087-1112.
- Fich, E., & Shivdasani, A. (2006). Are busy boards effective monitors? *Journal of Finance*, 61, 689-724.
- Fiji Daily Post. (2008, June 5). FICAC a success says Sayed-Khaiyum. *Fiji Daily Post*, pp. 2.
- Fiji Islands Bureau of Statistics. (2007). *Census of 2007 Population and housing*. Retrieved from [www.stats.fiji.gov.au](http://www.stats.fiji.gov.au).
- Fiji Islands Registrar of Companies. (2005). *Improving the system for lodging, processing, storing and providing business registration information in the Fiji Islands: Final Report*. Suva: Office of the Registrar of Companies.
- Fiji Sun. (2008, August 2). YGL de-listed from stock market. *Fiji Sun*, pp. 5.
- Filatotchev, I., Lien, Y.-C., & Piesse, J. (2005). Corporate Governance and Performance in Publicly Listed, Family-Controlled Firms: Evidence from Taiwan. *Asia Pacific Journal of Management*, 22(3), 257.
- Finegold, D. L., Benson, G. S., & Hecht, D. (2007). Corporate Boards and Company Performance: review of research in light of recent reforms. *International Journal of Corporate Governance*, 15(5), 865- 878.
- Finkelstein, S., & D'Aveni, R. A. (1994). CEO duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command. *Academy of Management Journal*, 37, 1079-1108.
- Finkelstein, S., & Hambrick, D. (1996). *Strategic leadership: Top executives and their effects on organizations*. Minneapolis/St. Paul:: West Pub. Co.
- Finkelstein, S., & Hambrick, D. C. (1988). Chief executive compensation: a synthesis and reconciliation. *Strategic Management Journal*, 9, 543-558.
- Finkelstein, S., & Mooney, A. C. (2003). Not the usual suspects: How to use board process to make boards better. *Academy of Management Executive*, 17(2), 101-113.
- Firth, M., Fung, P. M. Y., & Rui, O. M. (2006). Firm Performance, Governance Structure, and Top Management Turnover in a Transitional Economy. *Journal of Management Studies*, 43(6), 1289-1330.
- Fisher, C. (2004). *Researching and writing a dissertation for business students*. Harlow: Prentice Hall.
- Forbes, D. P., Korsgaard, M. A., & Sapienza, H. J. (2009). Financing decisions as a source of conflict in venture boards. *Journal of Business Venturing*, 1-14.
- Forbes, D. P., & Milliken, F. (1999). Cognition and corporate governance: Understanding board of directors as strategic decision- making groups. *Academy of Management Review*, 24(3), 489-505.
- Ford, R., & McLaughlin, F. (1984). Perceptions of Socially Responsible Activities and Attitudes: A Comparison of Business School Deans and Corporate Chief Executives. *Academy of Management Journal*, 27, 666-674.

- Fredrickson, J. W., Hambrick, C. D., & Baumrin, S. (1988). A model of CEO dismissal. *Academy of Management Review*, *13*, 255-270.
- Freeman, E. R., Wicks, A. C., & Parmar, B. (2004). Stakeholder Theory and "The Corporate Objective Revisited". *Organisation Science* *15*(3), 364-369.
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Boston: Pitman
- Freeman, R. E. (1994). The politics of stakeholder theory. *Business Ethics Quarterly*, *4*(4), 409-421.
- Freeman, R. E., & Evan, W. M. (1990). Corporate governance: A stakeholder interpretation. *The Journal of Behavioural Economics*, *19*(4), 337-359.
- Fried, V. H., Bruton, G. D., Hisrich, R., & Dalton, D. (1998). Strategy and the board of directors in venture capital-backed firms. *Journal of Business Venturing*, *13*, 493-503.
- Frieder, L., & Subrahmanyam, A. (2007). Executive compensation and investor clientele. Purdue University.
- Friedl, H., & Stampfer, E. (2001). Resampling Methods. In A. El-Shaarawi & W. Piegorsch (Eds.), *Encyclopedia of Environmetrics* (pp. 1768-1770). Chichester: Wiley.
- Friedl, H., & Stampfer, E. (2002). Jackknife Resampling. In A. El-Shaarawi & W. Piegorsch (Eds.), *Encyclopedia of Environmetrics* (pp. 1089-1098). Chichester: Wiley.
- Friedrichs, J., & Blasius, J. (2006). *Attitude of Owners and Renters in a Deprived Neighbourhood*. Paper presented at the ENHR Conference "Housing in an expanding Europe: theory, policy, participation and implementation". Retrieved from [http://194.249.154.23/publish/W12\\_Friedrichs\\_Blasius.pdf](http://194.249.154.23/publish/W12_Friedrichs_Blasius.pdf)
- Fritz, M. S., & MacKinnon, D. P. (2007). Required Sample Size to Detect the Mediated Effect. *Psychological Science* *18*(3), 233-239.
- Frooman, J. (1999). Stakeholder influence strategies. *Academy of Management Review*, *24*(2), 191-205.
- Gabrielsson, J., & Huse, M. (2005). Outside directors in SME boards: A call for theoretical reflections *Virtus Interpress: A Corporate Governance Publisher*, *1*(1), 28-37.
- Gabrielsson, J., Huse, M., & Minichilli, A. (2007). Understanding the leadership role of the board chairperson through a team production approach. *International Journal of Leadership Studies*, *3*(1), 21-39.
- Gabrielsson, J., & Winlund, H. (2000). Boards of directors in small and medium-sized industrial firms: examining the effects of the board's working style on board task performance. *Entrepreneurship and Regional Development*, *12*, 311-330.
- Gales, L. M., & Kesner, I. F. (1994). An analysis of board of director size and composition in bankrupt organizations. *Journal of Business Research*, *30*(3), 271-282.
- Gambetta, D. (1988). Can we trust trust? In D. Gambetta (Ed.), *Trust: Making and breaking cooperative relationships* (pp. 213-237). New York: Blackwell.
- Garay, U., & Gonzalez, M. (2008). Corporate Governance and Firm Value: The Case of Venezuela. *Corporate Governance: An International Review*, *16*(3), 194-209.
- Ghauri, P., & Gronhaug, K. (2005). *Research Methods in Business Studies: A Practical Guide* (Third ed.). Harlow: Prentice Hall.
- Gibson, M. S. (2002). Is corporate governance ineffective in emerging markets? Unpublished Finance and Economics Discussion Series. Divisions of Research & Statistics and Monetary Affairs.
- Gillan, S. L. (2006). Recent Developments in Corporate Governance: An Overview. *Journal of Corporate Finance*, *12*(3), 381-402.
- Gillan, S. L., & Starks, L. T. (1998). A survey of shareholder activism: motivation and empirical evidence. *Contemporary Finance Digest*, *2*(3), 10-34.
- Gilson, S. C. (1989). Management turnover and financial distress. *Journal of Financial Economics*, *25*, 241-262.

- Gilson, S.C. (1990). Bankruptcy, boards, banks and blockholders: Evidence on changes on corporate ownership and control when firms default. *Journal of Financial Economics*, 27, 355-387.
- Gladstein, D. (1984). A model of task group effectiveness. *Administrative Science Quarterly*, 29, 499-517.
- Golden, B. R., & Zajac, E. J. (2001). When will boards influence strategy? Inclination x power= strategic change. *Strategic Management Journal*, 22(12), 1087-1111.
- Gomm, R. (2004). *Social Research Methodology: a critical introduction*. New York: Palgrave Macmillan.
- Gonzalez, M., & Garay, U. (2003). Research Proposal for Corporate Governance in Latin America and the Caribbean: The case of Board of Directors in Venezuela. Instituto de Estudios Superiores de Administration.
- Goodman, P. (1986). *Designing effective work groups*. San Francisco: Jossey-Bass Publishers.
- Goodman, P. S., Ravlin, E., & Schminke, M. (1987). Understanding groups in organizations. *Research in Organizational Behavior*, 9, 121-173.
- Goodstein, J., Gautam, K., & Boeker, W. (1994). The effects of board size and diversity on strategic change. *Strategic Management Journal*, 15(3), 241-250.
- Gopinath, C., Siciliano, J. I., & Murray, R. L. (1994). Changing role of the board of directors: in search of a new strategic identity. *The Mid-Atlantic Journal of Business*, 30(2), 175-185.
- Gruenfeld, D. H., Mannix, E. A., & Williams, K. (1996). Group composition and Decision Making: How Member Familiarity and Information Distribution Affect Process and Performance. *Organisational behaviour and human decision processes*, 67(1), 1-15.
- Guth, W., & MacMillan, I. (1986). Strategy implementation versus middle management self-interest. *Strategic Management Journal*, 7, 313-327.
- Hackman, J., & Morris, C. (1975). Group tasks, group interaction process, and group performance effectiveness. A review and proposed integration. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 8, pp. 45- 99). New York: Academic Press.
- Hackman, J. R. (1976). Group influences on individuals. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1455-1525). Chicago: Rand McNally.
- Hackman, J. R. (1992). Group influence on individuals in organizations. In Dunnette & Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol. 3, pp. 199-267). Palo Alto, CA: Consulting Psychologists Press.
- Haleblian, J., & Finkelstein, S. (1993). Top Management Team Size, CEO Dominance, and Firm Performance: The Moderating Roles of Environmental Turbulence and Discretion. *The Academy of Management Journal* 36(4), 844-863.
- Haleblian, J., & Rajagopalan, N. (2006). A Cognitive Model of CEO Dismissal: Understanding the Influence of Board Perceptions, Attributions and Efficacy Beliefs. *Journal of Management Studies*, 43(5), 1009-1026.
- Hambrick, D. C., Cho, T. S., & Chen, M. (1996). The influence of top management team heterogeneity on firms' competitive moves. *Administrative Science Quarterly*, 41(4), 659-684.
- Hambrick, D. C., Li, J., Xin, K., & Tsui, A. (2001). Compositional gaps and downward spirals in international joint venture management groups. *Strategic Management Journal*, 22 1033-1053.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9, 193-206.

- Hansen, M. (1999). The Search-transfer Problem: The Role of Weak Ties in Sharing Knowledge across Organization Subunits. *Administrative Science Quarterly*, 44, 82-111.
- Harrigan, K. R. (1983). Research Methodologies for Contingency Approaches to Business Strategy. *The Academy of Management Review*, 8(3), 398-405.
- Harris, M., & Raviv, A. (2006). A theory of board control and size. University of Chicago, Northwestern University.
- Harris, M., & Shimizu, K. (2004). Too Busy To Serve? An Examination of the Influence of Overboarded Directors. *Journal of Management Studies*, 41(5), 775-798.
- Hayes, J., & Allison, C. (1988). Cultural differences in the learning styles of managers. *Management International Review*, 28(3).
- Hayward-Jones, J. (2008). *Beyond Good Governance: Shifting the Paradigm for Australian Aid to the Pacific Islands Region*. Retrieved from <http://www.lowyinstitute.org/Publication.asp?pid=894>.
- Hendry, K., & Kiel, G. C. (2004). *The role of the board in firm strategy: Integrating agency and organizational control perspectives*. Paper presented at the International Conference on Corporate Governance and Board Leadership.
- Hermalin, B. E., & Weisbach, M. S. (1988). The determinants of board composition. *RAND Journal of Economics*, 19(4), 589-606.
- Hermalin, B. E., & Weisbach, M. S. (2003). Board of Directors as an endogenously determined institution: A survey of the economic literature *Federal Reserve Bank of New York Economic Policy Review*, 9(1), 7(20).
- Herman, E. S. (1981). *Corporate control, Corporate power*. Cambridge, U.K: Cambridge University Press.
- Hill, C. W., & Jones, T. M. (1992). Stakeholder-- Agency Theory. *Journal of Management Studies*, 29, 134-154.
- Hill, C. W. L., & Snell, S. A. (1988). External control, corporate strategy and firm performance on research intensive industries. *Strategic Management Journal*, 9, 577-590.
- Hillman, A., Zardkoohi, A., & Bierman, L. (1999). Corporate political strategies and firm performance: Indications of firm specific benefits from personal service in the US government. *Strategic Management Journal*, 20, 67-81.
- Hillman, A. J., Cannella, A. A., & Paetzold, R. L. (2000). The Resource Dependence Role of Corporate Directors: Strategic Adaptation of Board Composition in Response to Environmental Change. *Journal of Management Studies*, 37(2), 235-256.
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383-396.
- Hogan, J., & Roberts, B. W. (1996). Issues and Non-Issues in the Fidelity-Bandwidth Trade-Off. *Journal of Organisational Behaviour*, 17(6), 627-637.
- Holden, P., Bale, M., & Holden, S. (2004). *Swimming Against the Tide?, An Assessment of the Private Sector in the Pacific* Available from [http://www.adb.org/Documents/Books/Swimming\\_Against\\_Tide/swimming\\_against\\_tide.pdf](http://www.adb.org/Documents/Books/Swimming_Against_Tide/swimming_against_tide.pdf)
- Hoskisson, R. E., Johnson, R. A., & Moesel, D. D. (1994). Corporate Divestiture Intensity in Restructuring Firms: Effects of Governance, Strategy, and Performance. *Academy of Management Journal*, 37(5), 1207-1251.
- Hung, H. (1998). A typology of the theories of the roles of governing boards. *Corporate Governance: An International Review*, 6(1), 101-111.

- Hunt, C., & Stocker, G. S. (2004). Facilitating commerce in Papua New Guinea: A submission to the inquiry into Australia's relationship with Papua New Guinea and other Pacific island countries.
- Huse, M. (1995). Boards of Directors in Europe: Scandinavian Experiences. In M. Huse (Ed.), *Stakeholder Perspectives on Corporate Governance: A Sample of Scandinavian contributions*. Bodø: Nordland Research Institute.
- Huse, M. (1998). Researching the Dynamics of Board-Stakeholder Relations. *Long Range Planning*, 31, 218-226.
- Huse, M. (2000). Boards of directors in SMEs: a review and research agenda. *Entrepreneurship & Regional Development*, 12, 271-290.
- Huse, M. (2005). Accountability and creating accountability: a framework for exploring behavioural perspectives of corporate governance. *British Journal of Management*, 16(s1), S65-S79.
- Huse, M., Minichilli, A., & Schøning, M. (2005). Corporate boards as assets for operating in the new Europe: The value of process-oriented boardroom dynamics. *Organizational Dynamics*, 34, 285-297.
- Huse, M., Nielsen, S. T., & Hagen, I. M. (2009). Women and employee-elected board members, and their contributions to board control tasks. *Journal of Business Ethics* 89(4), 581-597.
- Huse, M., & Rindova, V. P. (2001). Stakeholders' expectations of boards of directors: the case of subsidiary boards. *Journal of Management and Governance* 5(2), 153-178.
- Ingle, C. B., & van der Walt, N. T. (2001). The Strategic Board: The Changing Role of Directors in Developing and Maintaining Corporate Capability. *Corporate Governance: An International Review* 9(3), 174-185.
- Isbella, L. A., & Waddock, S. A. (1994). Top management team certainty: environmental assessments, teamwork, and performance implications. *Journal of Management*, 20, 835-858.
- Ivanescu, V. C., Bertrand, J. W. M., Fransoo, J. C., & Kleijnen, J. P. C. (2006). Bootstrapping to solve the limited data problem in production control: an application in batch process industries. *Journal of the Operational Research Society*, 57, 2-9.
- Jackling, B., & Johl, S. (2009). Board Structure and Firm Performance: Evidence from India's Top Companies. *Corporate Governance: An International Review*, 17(4), 492-509.
- Jackson, S. (1992). Consequences of group composition for the interpersonal dynamics of strategic issue processing. In J. Dutton, A. Huff & P. Shrivastava (Eds.), *Advances in strategic management* (Vol. 8, pp. 345-382). Greenwich, CT: JAI Press.
- James, L. R., & Brett, J. M. (1984). Mediators, moderators, and tests for mediation. *Journal of Applied Psychology*, 69, 307-321.
- Janis, I. (1983). *Groupthink: Psychological studies of policy decisions and fiascoes* (2nd ed.). Boston: Houghton Mifflin.
- Jaskiewicz, P., & Klein, S. (2007). The impact of goal alignment on board composition and board size in family businesses. *Journal of Business Research*, 60, 1080-1089.
- Jehn, K. (1995). A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly*, 40, 256-282.
- Jehn, K. A., & Bendersky, C. (2003). Intragroup conflict in organizations: A contingency perspective on the conflict outcome relationship. *Research in Organizational Behavior*, 25, 187-243.
- Jehn, K. A., & Mannix, E. (2001). The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of Management Journal*, 44, 238-251.

- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48, 831-880.
- Jensen, M. C., & Meckling, W. (1976). Theory of the firm: managerial behaviour, agency costs, and ownership structure. *Journal of Financial Economics*, 3, 305-360.
- Joh, S. (2003). Corporate Governance and Firm Profitability: evidence from Korea before the economic crisis *Journal of Financial Economics*, 287-322.
- Johnson, Daily, C., & Ellstrand, A. E. (1996). Board of Directors: A Review and Research Agenda. *Journal of Management*, 22, 409-438.
- Johnson, P., & Harris, D. (2002). Qualitative and Quantitative Issues in Research Design. In D. Partington (Ed.), *Essential Skills for Management Research* (pp. 99-115). London: Sage Publications.
- Johnson, R. A., Hoskisson, R. E., & Hitt, M. A. (1993). Board of director involvement in restructuring: the effects of board versus managerial controls and characteristics. *Strategic Management Journal*, 14(4), 33-50.
- Judd, C. M., & Kenny, D. A. (1981). Process analysis: Estimating mediation in treatment evaluations *Evaluation Review*, 5, 602-619.
- Judge, W. Q., & Zeithaml, C. P. (1992). Institutional and strategic choice perspectives on board involvement in the strategic decision process. *Academy of Management Journal*, 35(4), 766-794.
- Kakabadse, A., & Myers, A. (1996). Boardroom skills for Europe. *European Management Journal*, 14(2), 189-200.
- Kakabadse, N. K., Kakabadse, A. K., & Kouzmin, A. (2001). Board governance and company performance: any correlations? *Corporate Governance: The International journal of Effective Board Performance*, 1(1), 24-30.
- Kanfer, R. (1992). Motivation theory and industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol. 3, pp. 75-170). Palo Alto, CA: Consulting Psychologists.
- Kang, H., Cheng, M., & Gray, S. J. (2007). Corporate Governance and Board Composition: diversity and independence of Australian boards. *Corporate Governance: An International Review*, 15(2), 194-207.
- Kang, J., & Shivdasani, A. (1995). Firm performance, corporate governance and top executive turnover in Japan. *Journal of Financial Economics*, 38, 29-58.
- Kaplan, S., & Reishus, D. (1990). Outside Directorships and Corporate Performance. *Journal of Financial Economics*, 27(2), 389-410.
- Kenny, D. A. (2008). Reflections on Mediation. *Organisational Research Methods*, 11(2), 353-358.
- Kesner, I. F. (1987). Directors' stock ownership and organizational performance: An investigation of Fortune 300 companies. *Journal of Management*, 12, 499-508.
- Khan, H. A. (1999). *Corporate governance of family-based businesses in Asia: Which road to take?* Paper presented at the Paper prepared for the 2nd anniversary symposium of ADBI. Retrieved from [http://www.du.edu/korbel/hkhan/pdf\\_files/2002julyFamily.pdf](http://www.du.edu/korbel/hkhan/pdf_files/2002julyFamily.pdf)
- Khan, H. A. (2001). Corporate Governance: The limits of the principal-agent approach in light of the family-based corporate governance system in Asia.
- Kiel, G. C., & Nicholson, G. J. (2003). Board composition and corporate performance: How the Australian experience informs contrasting theories of corporate governance. *Corporate Governance*, 11(3), 189-205.
- Kiel, G. C., & Nicholson, G. J. (2005). Evaluating boards and directors. *Corporate Governance*, 13 (5), 613-631.

- Kiel, G. C., & Nicholson, G. J. (2006). Multiple directorships and corporate performance in Australian Listed Companies *Corporate Governance: An International Review*, 14(6), 530-546.
- Kimber, D., & Lipton, P. (2005). Corporate governance and business ethics in the Asia-Pacific region. *Business & Society*, 44(2), 178-210.
- Kimberly, J. R., & Zajac, E. J. (1988). The dynamics of CEO-board relations. In D. C. Hambrick (Ed.), *The Executive Effect: Concepts and Methods for Studying Top Managers* (pp. 179-204). Greenwich: JAI Press.
- Knight, D., Pearce, C. L., Smith, K. G., Olian, J. D., Sims, H. P., Smith, K. A. (1999). Top management team diversity, group processes, and strategic consensus. *Strategic Management Journal*, 20(5), 445-465.
- Kosnik, R. D. (1987). Greenmail: a study of board performance in corporate governance *Administrative Science Quarterly*, 32(2), 163-185.
- Kozlowski, S.W., & Ilgen, D.R. (2006). Enhancing the effectiveness of work groups and teams. *Psychological Science*, 7, 77-124.
- Krizan, A. C., Merrier, P., Logan, J. P., & Williams, K. S. (2005). *Business Communication* (7th ed.). Mason, OH: Thomson Higher Education.
- Krol, K., Veenman, S., & Voeten, M. (2001). *First-year Implementation Effects of a Staff Development Program on Cooperative Learning*. Paper presented at the European Conference for Research on Learning and Instruction.
- Kula, V. (2005). The impact of the roles, structure and process of boards on firm performance: evidence from Turkey. *Corporate Governance*, 13(2), 265-276.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and Finance. *Journal of Political Economy*, 106, 1113-1150.
- Lal, P. (2006). Agency costs, corporate governance and the Fiji Sugar Corporation. *Pacific Economic Bulletin*, 21(2), 70-93.
- Larmour, P. (2009). From clean up to FICAC: Anti-corruption in Fiji's post coup politics. *Crime Law and Social Change*, 1-12.
- Larson, J., & Kleiner, B. H. (2004). How to Read Non Verbal Communication in Organizations. *Management Research News*, 27(4/5), 17-22.
- Latane, B., Williams, K., & Harkins, S. (1979). Many hands make light the work: The causes and consequences of social loafing. *Journal of Personality and Social Psychology*, 37, 822-832.
- Lawler, E. E., Benson, G. S., Finegold, D. L., & Conger, J. A. (2002). Corporate boards: Key to effectiveness. *Organisational Dynamics*, 30(4), 310-324.
- Lawrence, B. (1997). The black box of organizational demography. *Organization Science*, 8, 1-22.
- Learmount, S. (2002). Theorizing corporate governance: New organisational alternatives. Unpublished Working Paper. ESRC center for Business Research, University of Cambridge.
- Leblanc, R. W., & Gillies, J. (2005). *Inside the Boardroom: How Boards Really Work and the Coming Revolution in Corporate Governance*. Mississauga, Ontario: John Wiley.
- Levrau, A., & Van Den Berghe, L. (2007a). Corporate Governance and Board Effectiveness: Beyond Formalism. *The Icfai Journal of Corporate Governance*, VI(4), 58-85.
- Levrau, A., & Van Den Berghe, L. (2007b). Identifying key determinants of effective boards of directors. *Vlerick Leuven Gent Working Paper Series, Vlerick Leuven Gent Management School*, 2007(11), 1-58.
- Li, J., & Hambrick, D. C. (2005). Factional groups: a new vantage on demographic faultlines, conflict, and disintegration in work teams. *Academy of Management Journal*, 48(5), 794-813.

- Lingting, M. (2007). *Nonparametric Inference in Nonlinear Principal Component Analysis: Exploration and Beyond*. Leiden University.
- Lipton, M., & Lorsch, J. W. (1992). A modest proposal for improved corporate governance. *Business Lawyer*, 48(1), 59-77.
- Lockwood, C. M., & MacKinnon, C. L. (1998). *Bootstrapping the standard error of mediated effects*. Paper presented at the 23rd Annual Meeting of SAS Users Group International, Cary, NC: SAS Institute, Inc.
- Loden, M., & Rosener, J. B. (1991). *Workforce America, Managing Employee Diversity as a Vital Resource*. Homewood: IL: Irwin.
- Luoma, P., & Goodstein, G. (1999). Stakeholders and corporate boards: Institutional influences on board composition and structure. *Academy of Management Journal*, 42(5), 553-563.
- Lyon, B. (2005, October 17). Opening statement at the commencement of the 18<sup>th</sup> Australia Fiji Business Forum at the Shangri La's The Fijian Resort [press release]. Retrieved from <http://www.afbc.org.au/Executive%20Committee.pdf>
- Maassen, G. F. (1999). *An International Comparison of Corporate Governance Models* (Third ed.). Amsterdam: Spencer Stuart.
- Mace, M. L. (1971). *Directors: Myth and Reality*. Boston, MA: Harvard Business Review.
- Mace, M. L. (1986). *Directors: Myth and reality* (2nd ed.). Boston: Harvard Business School Press.
- MacKinnon, C. L., Fairchild, A. J., & Fritz, M. S. (2007). Mediation Analysis. *The Annual Review of Psychology*, 58, 593-614.
- MacKinnon, C. L., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A Comparison of Methods to Test Mediation and Other Intervening Variable Effects. *Psychological Methods*, 7(1), 83-104.
- MacKinnon, C. L., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: distribution of the product and resampling methods. *Multivariate Behavioural Research*, 39, 99-128.
- MacKinnon, D. P., & Dwyer, J. H. (1993). Estimating mediated effects in prevention studies. *Evaluation Review*, 17(2), 144-158.
- MacKinnon, D. P., Warsi, G., & Dwyer, J. H. (1995). A simulation study of mediated effect measures. *Multivariate Behavioural Research*(31), 41-62.
- Maher, M., & Anderson, T. (1999). *Corporate governance: Effects on firm performance and economic growth*
- Malette, P., & Fowler, K. L. (1992). Effects of board composition and stock ownership on the adoption of poison pills. *Academy of Management Journal*, 35(5), 1010-1035.
- Malhotra, Y., & Galletta, D. (2003). *Role of Commitment and Motivation in Knowledge Management Systems Implementation: Theory, Conceptualisation, and Measurement of Antecedents of Success*. Paper presented at the 36th Annual Hawaii International Conference on Systems Sciences, January 6-9, 2003, IEEE, Pages 1-10.
- Mallinckrodt, B., Abraham, W. T., & Russell, D. W. (2006). Advances in Testing the Statistical Significance of Mediation Effects. *Journal of Counselling Psychology*, 53(3), 372- 378.
- Mamu, M. (2011, March 11). Legal action against Kemakeza. *Solomon Star*. Retrieved from <http://www.solomonstartnews.com/news/national/10308-legal-action-against-kemakez>
- Marsden, C. T. (2000). Not so special? Merging media pluralism with competition and industrial policy. *info*, 2(1), 5-13.
- Matau, R. (2007, November 16). Journo for top radio post. *The Fiji Times*. Retrieved from <http://www.fijitimes.com/story.aspx?id=74426>



- Mathieu, J. E., DeShon, R. P., & Bergh, D. D. (2008). Mediation Inferences in Organisational Research: Then , Now and Beyond. *Organisational Research Methods, 11*, 203-223.
- Mattis, M. C. (1993). Women Directors: Progress and Opportunities for the Future. *Business & the Contemporary World 5*, 140-156.
- Mattis, M. C. (2000). Women Corporate Directors in the United States. In R. Burke & M. Mattis (Eds.), *Women on Corporate Boards of Directors* (pp. 239-251, 243-256). Netherlands: Kluwer Academic.
- McGrath, J. E. (1984). *Groups: Interaction and Performance*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- McGregor, J. (2000). Stereotypes and symbolic annihilation: press constructions of women at the top. *Women in Management Review, 15*(5/6), 290-298.
- McKee, J. (2005). *Enhancing Shareholder Value: Report on Board Assessment Workshop for GCCs and CSAs*.
- McKee, J. (2007). *CMDA Corporate Governance Project Report Phases I and II*. Suva.
- McKnight, D. H., Cummings, L. L., & Chervany, N. L. (1998). Initial trust formation in new organizational relationships. *Journal of Academic Management Review, 23*, 473-490.
- McMaster, J. (2004). Governance of Public Enterprises in the Pacific Islands. Pacific Institute of Advanced Studies in Development and Governance, University of the South Pacific, Fiji.
- McMaster, J. (2005). Is there a profitable future for public enterprises in the Pacific islands? The case of Food Processors (Fiji) Ltd. Pacific Institute of Advanced Studies in Development and Governance, University of the South Pacific.
- McMurray, A. J., Scoot, D. R., & Pace, R. W. (2004). The relationship between organizational commitment and organizational climate in manufacturing. *Human Resource Development Quarterly, 15* (4), 473-488.
- McNulty, T., & Pettigrew, A. (1996). The contribution, power and influence of part-time board members. *Corporate Governance: An International Review, 3*(2), 160-179.
- McNulty, T., & Pettigrew, A. (1999). Strategists on the board. *Organisation Studies, 20*, 47-74.
- McPherson, J. M., Popielarz, P. A., & Drobnic, S. (1992). Social Networks and Organizational Dynamics. *American Sociological Review, 57*, 153-170.
- Mellor, T., & Jabes, J. (2004). Governance in the Pacific, Focus for Action Available from <http://www.adb.org/Documents/Books/Governance-in-the-Pacific/Governance-In-The-Pacific.pdf>
- Melone, N. (1994). Reasoning in the executive suite: The influence of role/experience-based expertise on decision processes of corporate executives. *Organization Science, 5*, 438-455.
- Messick, D., & Massie, D. (1989). Intergroup relations. *Annual Review of Psychology, 40*, 45-81.
- Meulman, J. J., & Heiser, W. J. (2005). *Categorical Principal Components Analysis (CATPCA)*. USA: SPSS Inc.
- Meulman, J. J., van der Kooij, A. J., & Heiser, W. J. (2004). Principal Component Analysis with nonlinear optimal scaling transformations for ordinal and nominal data. In D. Kaplan (Ed.), *The SAGE Handbook of Quantitative Methodology for the Social Sciences*. Sage, London.
- Meyer, J. W., & Rowan, B. (1977). Institutionalised organizations: Formal structure as myth and ceremony. *American Journal of Sociology, 83*, 340-363.
- Miller-Millesen, J. L. (2003). Understanding the behaviour of nonprofit Boards of Directors: A theory based approach. *Nonprofit and Voluntary Sector Quarterly, 32*, 521-547.

- Miller, T. L., Del Carmen Triana, M., Reutzell, C. R., & Certo, S. T. (2007). Mediation in strategic management research: Conceptual beginning, current publication, and future recommendation. In D. Ketchen & D. D. Bergh (Eds.), *Research Methods in Strategy and Management* (Vol. 4, pp. 295-318). London: Elsevier.
- Milliken, F., & Martins, L. (1996). Searching for Common Threads: Understanding the Multiple Effects of Diversity in Organizational Groups. *Academy of Management Review*, 21, 402-434.
- Milliken, F., & Vollrath, D. (1991). Strategic decision-making tasks and group effectiveness: Insights from theory and research on small group performance. *Human Relations*, 44, 1-25.
- Mintzberg, H. (1983). *Power in around organisations*. Englewood Cliffs: Prentice-Hall Inc.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22, 853-886.
- Mitton, T. (2002). A Cross-Firm Analysis of the Impact of Corporate Governance on the East Asian Financial Crisis. *Journal of Financial Economics*, 64, 215-241.
- Miwa, Y., & Ramseyer, J. M. (2000). Corporate governance in transitional economies: Lessons from the pre-war Japanese cotton textile industry. *Journal of Legal Studies* 29, 171-204.
- Mizruchi, M. S. (1983). Who controls whom? An examination of the relation between management and boards of directors in large American corporations. *Academy of Management Review*, 8, 426-435.
- Mizruchi, M. S., & Stearns, L. B. (1988). A longitudinal study of the formation of interlocking directorates. *Administrative Science Quarterly*, 33, 194-210.
- Mohrman, S. A., Cohen, S. G., & Mohrman, A. M. (1995). *Designing Team-based Organizations: New forms of knowledge work*. San Francisco, CA: Jossey-Bass.
- Molinero, C., Portillo, F., & Hayes, R. (2007). Analysing the success of a MBA Programme. Kent Business School.
- Monks, R., & Minor, N. (1996). *Watching the Watchers: Corporate governance for the 21st century*. Cambridge, MA: Blackwell.
- Monks, R., & Minow, N. (Eds.). (1995). *Corporate governance*. Cambridge, MA: Blackwell Business.
- Mooney, C. Z., & Duval, R. D. (1993). *Bootstrapping: A nonparametric approach to statistical inference* Newbury Park, CA: Sage Publications.
- Mueller, G. C., & Baker, V. L. I. (1997). Upper echelons and board characteristics of turnaround and nonturnaround declining firms. *Journal of Business Research*, 39, 119-134.
- Muth, M. M., & Donaldson, L. (1998). Stewardship theory and board structure: a contingency approach. *Corporate Governance- An International Review*, 6(1), 5-27.
- Nadler, D.A. (May, 2004). Building better boards. *Harvard Business Review*, 82(5), 102-111.
- Nawaikama, S. (2008, June 21). Storck quits: NZ ban forces FHL chairman's resignation. *The Fiji Times*, pp. 1.
- Nemeth, C. (1986). Differential contributions of majority and minority influence. *Psychological Review*, 93, 23-32.
- Nemeth, C., & Staw, B. (1989). The tradeoffs of social control and innovation in groups and organizations. *Advances in Experimental Social Psychology*, 22, 175-210.
- Neuman, W. (1997). *Social research methods: Qualitative and quantitative approaches* (Third ed.). Needham Heights, MA: Allyn & Bacon.

- Nicholson, G. J., & Kiel, G. C. (2004a). Breakthrough Board Performance: How to Harness Your Board's Intellectual Capital. *Corporate Governance: The International Journal of Business in Society*, 4(1), 5-23.
- Nicholson, G. J., & Kiel, G. C. (2004b). A framework for diagnosing board effectiveness. *Corporate Governance*, 12(4), 442-460.
- Nicholson, G. J., & Kiel, G. C. (2007). Can Directors Impact Performance? A case-based test of three theories of corporate governance. *Corporate Governance*, 15(4), 585.
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5, 14-37.
- O'Reilly, C., Caldwell, D., & Barnett, W. (1989). Work group demography, social integration and turnover. *Administrative Science Quarterly*, 34, 21-37.
- OECD. (1999). *Principles of Corporate Governance, Adhoc Task Force on Corporate Governance*. Paris.
- Ong, C. H., & Lee, S. H. (2000). Board functions and firm performance: A review and directions for future research. *Journal of Comparative International Management*, 3, 3-24.
- Ong, C. H., & Wan, D. T. W. (2008). Three conceptual models of board role performance. *Corporate Governance: An International Review*, 8(3), 317-329.
- Oom do Valle, P., Silva, J. A., Mendes, J., & Guerreiro, M. (2006). Tourist satisfaction and destination loyalty: a structural and categorical analysis. *International Journal of Business Science and Applied Management*, 1(1), 25-44.
- Orlegge, W. T. (2005). Public enterprise in Papua New Guinea: the need for strategic management. *Pacific Economic Bulletin*, 20(1), 162-167.
- Owtscharov, A. (2007). *The German system of finance and corporate governance: Gateways to change and implications for firm performance*. University of St. Gallen, Studentendruckerei, Zürich.
- Pacific Islands Forum Secretariat. (2005). *Public Enterprises- National Stocktake Reports* (No. PIFS(05)FEMF.04): Pacific Islands Forum Secretariat.
- Pacific Islands Forum Secretariat. (2007). *The Pacific Plan for strengthening regional cooperation and integration*. Suva: Pacific Islands Forum Secretariat.
- Palmer, D., & Barber, B. M. (2001). Challengers, elites, and owning families: A social class theory of corporate acquisitions in the 1960s. *Administrative Science Quarterly*, 46, 87-120.
- Palmer, D. A., Barber, B. M., & Zhou, X. (1995). 'The finance conception of control: "The theory that ate New York?" Reply to Fligstein'. *American Sociological Review*, 60, 508-508.
- Panasian, C. (2003). *The impact of the 1995 TSE Corporate Governance Guidelines on the performance of Canadian companies: A simultaneous equation approach*. Unpublished M.Sc., Concordia University (Canada), Canada.
- Park, J. (1995). Reengineering boards of directors. *Business Horizons*, (March-April), 63-69.
- Pathiban, D., & Rahul, K. (1996). Barriers to Effective Corporate Governance by Institutional Investors: Implications for Theory and Practice. *European Management Journal*, 14(5), 457-466.
- Payne, G. T., Benson, G. S., & Finegold, D. L. (2009). Corporate Board Attributes, Team Effectiveness and Financial Performance. *Journal of Management Studies* 46(4), June 2009.
- Pearce, J. A., & Zahra, S. A. (1992). Board composition from a strategic contingency perspective. *Journal of Management Studies*, 29, 411-438.

- Pelled, L. H., Eisenhardt, K. M., & Xin, K. R. (1999). Exploring the black box: An analysis of work group diversity, conflict, and performance. *Administrative Science Quarterly*, 44(1), 1-28.
- Peng, M. W., Tan, J., & Tong, T. W. (2004). Ownership Types and Strategic Groups in an Emerging Economy. *Journal of Management Studies*, 41(7), 1105-1129.
- Pestana, M., & Gageiro, J. (2005 ). *Análise de Dados para Ciências Sociais, A Complementaridade do SPSS. [Data Analysis for Social Sciences with SPSS].*, Edições Sílabo, Lisboa
- Petrovic, J. (2008). Unlocking the role of a board director: A review of the literature. *Management Decision*, 46(9), 1373-1392.
- Pettigrew, A., & McNulty, T. (1998). Sources and uses of power in the boardroom. *European Journal of Work and Organizational Psychology*, 7(2), 197-214.
- Pettigrew, A. M. (1992). On Studying managerial elites. *Strategic Management Journal*, 13, 163-182.
- Pfeffer, J. (1973). Size composition and function of hospital boards of directors: the organization and its environment. *Administrative Science Quarterly*, 18, 349-364.
- Pfeffer, J. (1991). Organisational theory and structural perspectives on management. *Journal of Management*, 17, 789-803.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organisations: A resource dependency perspective*. New York: Harper & Row.
- Phan, P. H. (1998). Effective cooperate governance in Singapore: Another look. *Singapore Management Review*, 20, 43-61.
- Pituch, K. A., & Stapleton, L. M. (2008). The performnace of methods to test upper-level mediation in the presence of non-normal data. *Multivariate Behavioural Research*, 43(2), 237-267.
- Plumtree, T. (2004). The new rules of the board game: The changing world of corporate governance and its implications for multilateral development institutions. 1-20.
- Post Fiji Ltd. (2008). *History*. Retrieved from <http://www.postfiji.com.fj/pages.cfm/about-us/history.html>
- Powell, W. W. (1991). Expanding the scope of institutional analysis. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 183-203). Chicago: the University of Chicago Press.
- Prasad, B. C., & Narayan, P. K. (2008). Reviving growth in the Fiji islands: are we swimming or sinking? *Pacific Economic Bulletin*, 23(2), 5-26.
- Prasad, S. (1999). Tensions between economic reform and good governance in Fiji. University of the South Pacific and Fiji Citizens Constitutional Forum.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behaviour Research Methods, Instruments & Computers*, 36(4), 717-731.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behaviour Research Methods*, 40(3), 879- 891.
- Preacher, K. J., & Hayes, A. F. (2010). Quantifying and Testing Indirect Effects in Simple Mediation Models when the Constituent Paths are Nonlinear. *in press, Multivariate Behavioural Research*, 1-51.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing Moderated Mediation Hypothesis: Thoery, Methods, and Prescriptions. *Multivariate Behavioural Research*, 42(1), 185-227.

- Priem, R., Lyon, D. W., & Dess, G. (1999). Inherent Limitations of Demographic Proxies in Top Management Team Heterogeneity Research. *Journal of Management*, 25( 6), 935-953.
- Priem, R. L. (1990). Top Management Team Group Factors, Consensus, and Firm Performance. *Strategic Management Journal*, 11, 469-478.
- Prime Minister's Office. (2007, August 22). Statement from PM's Office- Findings into Post Fiji Limited. *Fiji Government Online*. Retrieved from [http://www.fiji.gov.fj/publish/page\\_9851.shtml](http://www.fiji.gov.fj/publish/page_9851.shtml)
- Provan, K. G. (1980). Board power and organisational effectiveness among human service agencies. *Academy of Management Journal*, 23, 221-236.
- Pruzek, R. M. (2005). Some guidelines for small sample research: dependent samples to the rescue. Retrieved October 2008, from <http://www.rmpruzek.com/Guidelines.SallSample.Research.pdf>.
- Pye, A. (2002). Corporate Directing: governing, strategising and leading in action, *Corporate Governance An International Review*, 9, 153-162.
- Pye, A., & Pettigrew, A. M. (2005). Studying Board Context, Process and Dynamics: Some Challenges for the Future. *British Journal of Management*, 16, S27-S38.
- Radio Fiji. (2008, April 8). Move politically motivated says Jattan. *Radio Fiji*. Retrieved from <http://www.radiofiji.com.fj/fullstory.php?id=10250>
- Radio New Zealand International. (2008, February 6). Former chairman of Post Fiji Limited's board of directors face charges in court. *Radio New Zealand International*, Retrieved from <http://www.rnzi.com/pages/news.php?op=read&id=37875>
- Radio New Zealand International. (2008, August 22). High level corruption and abuse at Post Fiji Limited. *Radio New Zealand International*. Retrieved from <http://www.rnzi.com/pages/news.php?op=read&id=34621>
- Raicola, V. (2008, July 10). Fijian businesses lack oversight, Ratu Joni. *The Fiji Times*. Retrieved from <http://www.fijiancustomculture.blogspot.com/2008/07/fijian-businesses-lack-oversight>
- Ralogaivau, T. (2008, July 25). Rewa Rice seeks write-off. *The Fiji Times*. Retrieved from <http://www.fijitimes.com/story.aspx?id=95998>
- Reddy, N. (2006). Public sector reform and its impact on employment: A comparative study of Fiji, Samoa and Tonga. University of South Pacific.
- Reserve Bank of Fiji. (2006). *Annual Report*. Suva: Reserve Bank of Fiji.
- Reserve Bank of Fiji. (2007). *Annual Report*. Suva: Reserve Bank of Fiji.
- Reserve Bank of Fiji. (2008). *Annual Report*. Suva: Reserve Bank of Fiji.
- Ring, P. S., & Van de Ven, A. (1994). Development Processes of Cooperative Interorganizational Relationships. *Academy of Management Review*, 19(1), 90-118.
- Roberts, J. (2002). Building the complementary board: the work of the plc Chairman. *Long Range Planning*, 35(5), 493-520.
- Rose, C. (2007). Does Female Board Representation Influence Firm Performance? The Danish Evidence. *Corporate Governance: An International Review*, 15(2), 404-413.
- Roseman, I., Wiest, C., & Swartz, T. (1994). Phenomenology, behaviours and goals differentiate emotions. *Journal of Personality and Social Psychology*, 67, 206-221.
- Rosen, S. (1983). Perceived inadequacy and help-seeking. In B. DePaulo, A. Nadler & J. Fisher (Eds.), *New directions in helping* (Vol. 2, pp. 3-12). New York: Academic Press.
- Rosenstein, S., & Wyatt, J. G. (1990). Outside directors, board independence and shareholder wealth. *Journal of Financial Economics*, 26, 175-191.
- Rosenstein, S., & Wyatt, J. G. (1997). Inside directors, board effectiveness, and shareholder wealth. *Journal of Financial Economics*, 44(2), 229-250.

- Rudestam, K. E., & Newton, R. R. (1992). *Surviving Your Dissertation: A Comprehensive Guide to Content and Process*. Newbury Park, California: Sage.
- Ruigrok, W., Peck, S. I., & Keller, H. (2006). Board Characteristics and Involvement in Strategic Decision Making: Evidence from Swiss Companies. *Journal of Management Studies*, 43(5), 1201-1226.
- Rutherford, M. A., Buchholtz, A. K., & Brown, J. A. (2007). Examining the Relationships Between Monitoring and Incentives in Corporate Governance. *Journal of Management Studies*, 44(3), 414-430.
- Sadtler, D. R. (1993). How venture capitalists add value. *Journal of General Management*, 19(1), 1-16.
- Sah, R. K., & Stiglitz, J. (1991). The quality of managers in centralized versus decentralized organizations. *Quarterly Journal of Economics*, 106, 289-295.
- Sahinler, S., & Topuz, D. (2007). Bootstrap and jackknife sampling algorithms for estimation of regression parameters. *Journal of Applied Quantitative Methods*, 2(2), 188-199
- Saldanha, C. (2004). Strategies for Good Governance in the Pacific. *Asian-Pacific Economic Literature*, 18(2), 30-43.
- Santos, R., Silva, P., Santos, P., Ribeiro, J. C., & Mota, J. (2008). Physical activity and perceived environmental attributes in a sample of Portuguese adults: Results from the Azorean Physical Activity and Health. *Preventive Medicine*, 47, 83-88.
- Sarker, J., & Sarker, S. (2009). Multiple board appointments and firm performance in emerging economies: Evidence from India. *Pacific- Basin Finance Journal* 17, 271-293.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research Methods for Business Students* (Fourth ed.). Essex: Prentice-Hall.
- Schippers, M. C., Den, H. D. N., Koopman, P. L., & Wienk, J. A. (2003). Diversity and team outcomes: the moderating effects of outcome interdependence and group longevity and the mediating effect of reflexivity. *Journal of Organisational Behaviour*, 22, 779-802.
- Schwab, D. P. (2005). *Research methods for organisational studies* (2nd ed.). New Jersey: Lawrence Erlbaum Associates.
- Schweiger, D., & Sandberg, W. (1989). The utilisation of individual capabilities in group approaches to strategic decision-making. *Strategic Management Journal*, 10, 31-43.
- Schweiger, D. M., Sandberg, W. R., & Ragan, J. W. (1986). Group approaches for improving strategic decision-making: A comparative analysis of dialectical inquiry, devils advocacy, and consensus. *The Academy of Management Journal*, 29(1), 51-71.
- Scott, W. R. (2000). *Institutions and organisations* (2 ed.). CA: Sage: Thousand Oaks.
- Seashore, S. E. (1977). *Group Cohesiveness in the Industrial Work Group*. New York: Arno.
- Selby, C. C. (2000). From Male Locker room to Co-ed Board Room: A Twenty-five Year Perspective. In R. Burke & M. Mattis (Eds.), *Women on Corporate Boards of Directors* (pp. 239-251). Netherlands: Kluwer Academic.
- Serelini, K. (2008, June 16). Shock move by FHL board: Fijian Holdings directors resign. *Fiji Sun*, pp. 1.
- Serelini, K. (2008, June 21). Newly appointed FHL chairman resigns. *Fiji Sun*, pp. 3.
- Shah, P. P., & Jehn, K. A. (1993). Do friends perform better than acquaintances? The interaction of friendship, conflict, and task. *Group Decision and Negotiation*, 2(2), 149-165.
- Shalley, C. E. (1991). Effects of productivity goals, creativity goals, and personal direction on individual creativity. *Journal of Applied Psychology*, 76, 179-185.
- Shao, J., & Tu, D. (1995). *The Jackknife and Bootstrap*. New York: Springer.

- Shaver, J. M. (2005). Testing for mediating variables in management research: Concerns, implications, and alternative strategies. *Journal of Management*, 31, 330-353.
- Shaw, M. (1981). *Group dynamics: The psychology of small group behavior* (Third ed.). New York: McGraw-Hill.
- Shen, W. (2003). The dynamics of the CEO-board relationship: An evolutionary perspective. *Academy of Management Review*, 28, 466-476.
- Sheridan, T., & Kendall, N. (1992). *Corporate Governance, An action Plan for Profitability and Business Success*. London: Financial Times/Pitman Publishing.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *Journal of Financial Economics*, 52(2), 737-783.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: new procedures and recommendations. *Psychological Methods*, 7, 422-445.
- Siciliano, J. I. (1996). The Relationship of Board Member Diversity to Organizational Performance. *Journal of Business Ethics*, 15, 1313-1321.
- Siladi, B. (2006). *The role of non-executive directors in corporate governance: An evaluation*. Swinburne University of Technology, Ballarat.
- Simons, T., Pelled, L. H., & Smith, K. A. (1999). Making use of difference: Diversity, debate, and decision comprehensiveness in top management teams *Academy of Management Journal* 42(6), 662-673.
- Simons, T. L., & Pelled, L. H. (1999). Understanding executive diversity: More than meets the eye. *Human Resource Planning*, 22(2), 49-51.
- Simons, T. L., & Peterson, R. S. (2000). Task conflict and relationship conflict in top management teams: The pivotal role of intragroup trust. *Journal of Applied Psychology*, 85(1), 102-111.
- Singh, R. (2007). A re-examination of private investment in Fiji. *Pacific Economic Bulletin*, 22(2), 63-73.
- Singh, R. D., & Reddy, M. (2007). Corporate Governance in Fiji's Native Land Trust Board. *Pacific Economic Bulletin*, 22(2), 36-52.
- Singh, V., Terjesen, S., & Vinnicombe, S. (2008). Newly appointed directors in the boardroom: How do women and men differ? *European Management Journal*, 26, 48-58.
- Singh, V., Vinnicombe, S., & Johnson, P. (2001). Women Directors on Top U.K. Boards. *Corporate Governance: An International Review*, 9 (3), 206-216.
- Sirower, M. (1997). *The synergy trap: How companies lose the acquisition game*. New York: Free Press.
- Smith, K., Smith, K., Olian, J., Sims, H., O'Bannon, D., & Scully, J. (1994). Top Management Team Demography and Process: The Role of Social Intergration and Communication. *Administrative Science Quarterly*, 40, 145-180.
- So, J., & Shin, B. (1995). *The private infrastructure industry- a global market of US\$60 billion a year*. World Bank.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S. Leinhardt (Ed.), *Sociological Methodology* (pp. 290-312). Washington DC: American Sociological Association.
- Solomon Islands National Census Office. (1999). *Solomon Islands 1999 Census Cross - Tabulations*. Honiara: Solomon Islands National Statistics Office.
- Solomon Islands Registrar of Companies. (2008). *List of Registered Companies*. Honiara.
- Sonnenfeld, J. (2004). Good governance and the misleading myths of bad metrics. *Academy of Management Executive*, 18(1), 108-113.
- Sonnenfeld, J. A. (2002). What makes great boards great? *Harvard Business Review*, 80, 106-113.



- South Pacific Stock Exchange. (2008). *Annual Report 2008*. Suva: South Pacific Stock Exchange.
- South Pacific Stock Exchange. (2009). *Annual Report 2009*. Suva: South Pacific Stock Exchange.
- Spencer, A. (1983). *On the edge of organisation: the role of outside director*. New York: Wiley.
- SPSS Inc. (2007). CATPCA algorithm (Tech. Rep.). Retrieved July 22, 2009, from <http://support.spss.com/Tech/Products/SPSS/Documentation/Statistics/agorithms/index.html>; Use "guest" as user-id and password.
- Stearns, L. B., & Mizruchi, M. S. (1993). Board composition and corporate financing: The impact of financial institution representation on borrowing. *Academy of Management Journal*, 36(3), 603-618.
- Steiner, I. D. (1972). *Group Processes and Productivity*. New York: Academic Press.
- Sternberg, E. (1997). The defects of stakeholder theory. *Corporate Governance*, 5(1), 3-10.
- Stiles, P. (2001). The Impact of the Board on Strategy: An Empirical Examination. *Journal of Management Studies*, 38(5), 627-650.
- Stiles, P., & Taylor, A. B. (1996). The strategic role of the board. *Corporate Governance: An International Review*, 4, 3-10.
- Stine, R. (1989). An Introduction to Bootstrap Methods: Examples and Ideas. *Sociological Research Methods*, 18(2-3), 243-291.
- Stoecker, R. (1991). Evaluating and Rethinking the Case Study. *Sociological Review*, 39, 88-112.
- Stone, C. A., & Sobel, M. E. (1990). The robustness of estimates of total indirect effects in covariance structure models estimated by maximum likelihood. *Psychometrika*, 55, 337-352.
- Storey, D. (1994). *Understanding the small business sector*. New York: Routledge.
- Suchman, M. C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *Academy of Management Journal*, 20(3), 571 - 610.
- Summers, I., Coffelt, T., & Horton, R. (1988). Work group cohesion. *Psychological Reports*, 63, 627-636.
- Sundaramurthy, C., & Lewis, M. (2003). Control and collaboration: Paradoxes of governance. *Academy of Management Review*, 28(3), 397-415.
- Tabalujan, B. S. (2002). Family capitalism and corporate governance of family-controlled listed companies in Indonesia. *University of NSW Law Journal*, 25(2), 1-39.
- Tajfel, H. (1982). *Social identity and intergroup relations*. Cambridge: Cambridge University Press.
- Tang, L. (2007). *A simultaneous approach to analysing the relation between board structure, corporate governance mechanisms and performance of Japanese firms (1989-2001)*. University of Saskatchewan, Saskatoon.
- Taylor, A. B., MacKinnon, D. P., & Tein, J.-Y. (2008). Tests of the Three-Path Mediated Effect. *Organisational Research Methods*, 11(2), 241- 269.
- Tharenou, P., Donohue, R., & Cooper, B. (2007). *Management Research Methods*. New York: Cambridge University Press.
- The Fiji Times. (2008, June 17). FHL stays quite on resignations. *The Fiji Times*, pp. 3.
- The Fiji Times. (2008, June 18). Qarase warns of unsure FHL future. *The Fiji Times*. Retrieved from <http://www.fijitimes.com/story.aspx?id=92462>
- The Fiji Times. (2008, July 19). Rice man quits. *The Fiji Times*, pp. 8.
- The Fiji Times. (2008, June 26). Former FHL boss in court. *The Fiji Times*, pp. 4.
- The Fiji Times. (2008, July 2). USP academic criticises FICAC. *The Fiji Times*. Retrieved from [www.fijitimes.com/story.aspx%3Fid%3D8](http://www.fijitimes.com/story.aspx%3Fid%3D8)



- The Fiji Times. (2008, September 3). Company waits on state's promise. *The Fiji Times*. Retrieved from <http://www.fijitimes.com/story.aspx?ref=archive&id=99582>
- The Fiji Times. (2008, October 30). Vuetaki denies abuse of office charge. *The Fiji Times*. Retrieved from <http://www.fijitimes.com/story.aspx?id=104867>
- The Fiji Times. (2008, November 19). Former Ports Authority board chairman faces charge. *The Fiji Times*. Retrieved from <http://www.fijitimes.com/story.aspx?id=106546>
- The Fiji Times. (2007, November 21). Radio called to explain chief. *The Fiji Times*. Retrieved from <http://www.fijitimes.com/story.aspx?id=74756>
- The World Bank. (2010). *Solomon Islands Growth Prospects: Constraints and Policy Priorities*. New York.
- Theunissen, N. C. M., Meulman, J. J., den-Ouden, A. L., Koopman, H. M., Verrips, G. H., Verloove-Vanhorick, S. P., et al. (2003). Changes can be studied when the measurement instrument is different at different time points. , . *Health Services and Outcomes Research Methodology*, 4, 109-126.
- Tian, J. J., & Lau, C. M. (2001). Board composition, leadership structure and performance in Chinese shareholding companies *Asia Pacific Journal of Management*, 18, 245-263.
- Ticehurst, G. W., & Veal, A. J. (1999). *Business research methods: a managerial approach*. Australia: Longman.
- Tosi, H. L., Shen, W., & Gentry, R. J. (2003). Why outsiders on boards can't solve the corporate governance problem. *Organisational Dynamics*, 32(2), 180-192.
- Tuhaika, J. (2007). State-owned enterprises and the principal-agent problem: A case study of the Solomon Islands Water Authority. *Pacific Economic Bulletin*, 22 (2 ), 131-139.
- Vafeas, N. (1999). Board meeting frequency and firm performance. *Journal of Financial Economics*, 53(1), 113.
- Vagliasindi, M. (2008). *The Effectiveness of Boards of Directors of State Owned Enterprises in Developing Countries*.
- van der Walt, N. T., & Ingley, C. B. (2003). Board dynamics and the influence of professional background, gender and ethnic diversity of directors. *Corporate Governance, An International Review*, 11(3), 218-234.
- van Ees, H., van Der Laan, G., & Postma, T. J. B. M. (2008). Effective board behaviour in the Netherlands. *European Management Journal*, 26, 84-93.
- Vance, S. C. (1983). *Corporate leadership: boards, directors, and strategy* New York: McGraw-Hill
- Vathanophas, V., & Pilun-owad, O. (2008). *Information flow between organisational levels in teamwork discussion* Paper presented at the International Conference on Business and Information (BAI2008). Retrieved from [academic-papers.org/ocs2/session/Papers/A6/674-1603-1-DR.doc](http://academic-papers.org/ocs2/session/Papers/A6/674-1603-1-DR.doc)
- Veal, A. J. (2005). *Business Research Methods: A Managerial Approach* (Second ed.). Frenchs Forest, NSW: Pearson Education Australia.
- Wade, J. B., O'Reilly, C. A., & Chandratat, I. (1990). Golden parachutes: CEOs and the exercise of social influence. *Administrative Science Quarterly*, 35, 587-603.
- Wageman, R. (1995). Interdependence and group effectiveness. *Administrative Science Quarterly*, 40(1), 145-180.
- Walsh, J. P. (1988). Top management turnover following mergers and acquisitions. *Strategic Manage Journal* 9, 173-183.
- Walsh, J. P., & Seward, J. K. (1990). On the efficiency of Internal and external corporate control mechanisms. *Academy of Management Review*, 15, 421-456.
- Wan, D., & Ong, C. (2005). Board structure, process and performance: evidence from public-listed companies in Singapore. *Corporate Governance: An International Review*, 13(2), 277-290.

- Wan, D. T. W. (2001). Board structure, board process and board performance: A review and research agenda. *Journal of Comparative International Management*(June 1), 1-29.
- Wanous, J., & Youtz, M. (1986). Solution diversity and the quality of group decisions. *Academy of Management Journal*, 29, 149-159.
- Watson, E., Kumar, K., & Michaelsen, L. (1993). Cultural Diversity's Impact on Interaction Process and Performance: Comparing Homogeneous and Diverse Task Groups. *Academy of Management Journal*, 36, 590-603.
- Watson, W., & Michaelsen, L. (1988). Group interaction behaviors that affect group performance on an intellectual task. *Group & Organization Studies*, 13, 495-516.
- Weick, K. (1979). *The social psychology of organizing*. Reading, MA: Addison-Wesley.
- Weick, K. E., & Roberts, K. H. (1993). Collective mind in organizations: Heedful interrelating on flight decks. *Administrative Science Quarterly*, 38, 357-381.
- Weisbach, M. S. (1988). Outside Directors and CEO turnover. *Journal of Financial Economics*, 20, 431-460.
- Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating Communities of Practice: A Guide to Managing Knowledge*. Boston: Harvard Business School Press.
- Werkman, R. A., Boonstra, J. J., & Van der Kloot, W. (2005). *Changing organisations: Understanding complexity, not denying it*. Paper presented at the Academy of Management Annula Meeting. Retrieved from <http://www.jaapboonstra.nl/publicaties/engelstalig/changing%20organizations%20-%20understanding%20complexity.pdf>
- Westphal, J. D. (1998). Board games: How CEOs adapt to increases in structural board independence from management. *Administrative Science Quarterly*, 43, 511-537.
- Westphal, J. D. (1999). Collaboration in the boardroom: Behavioural and performance consequences of CEO-board social ties. *Academy of Management Journal*, 42, 7-24.
- Westphal, J. D., & Bednar, M. K. (2005). Pluralistic ignorance in corporate boards and firms' strategic persistence in response to low firm performance. *Administrative Science Quarterly*, 50 (2), 262-298.
- Westphal, J. D., & Milton, L. P. (2000). How experience and network ties affect the influence of demographic minorities on corporate boards. *Administrative Science Quarterly*, 45(2), 366-398.
- Westphal, J. D., & Zajac, E. J. (1995). Who shall govern? CEO/board power, demographic similarity, and new director selection. *Administrative Science Quarterly*, 40, 60-83.
- Westphal, J. D., & Zajac, E. J. (1998). Symbolic Management of Stockholders: Corporate Governance Reforms and Shareholder Reactions. *Administrative Science Quarterly*, 43, 127-153.
- White, M. (2008). Fiji embraces international financial reporting standards. *Pacific Economic Bulletin*, 23(2), 203-206.
- White, S. (2004). Stakeholders, Structure and the Failure of Corporate Governance Reform Initiatives in Post-Crisis Thailand. *Asia Pacific Journal of Management*, 21(1-2), 103-122.
- Williams, J., & MacKinnon, D. P. (2008). Resampling and distribution of the product methods for testing indirect effects in complex models. *Structural Equation Modeling*, 15, 23-51.
- Williams, K., Harkins, S. G., & Latané, B. (1981). Identifiability as a deterrent to social loafing: Two cheering experiments. *Journal of Personality and Social Psychology* 40(2), 303-311.
- Williams, K. Y., & O'Reilly, C. A., III (1997). The complexity of diversity: A review of forty years of research, , : . In D. Gruenfeld & M. Neale (Eds.), *Research on Managing in Groups and Teams* (pp. 3-28). CA, United States of America: Sage, Thousand Oaks.

- Williams, K. Y., & O'Reilly, C. A. (1998). Demography and diversity in organizations: A review of 40 years of research. In S. B. M. & L. L. Cummings (Eds.), *Research in organizational behavior* (pp. 77-140). Greenwich, CT: JAI Press.
- Wilson, C. (2008, July 22). Board explains Bovoro's sacking. *Fiji Sun*, pp. 1.
- Wilson, D., Butler, R., Cray, D., Hickson, D., & Mallory, G. (1986). Breaking the bounds of organization in strategic decision making. *Human Relations*, 39, 309-332.
- Wise, M. (2008, June 25). Down the drain: \$4m swims away from State, bank. *The Fiji Times*, pp. 1.
- Wood, R. E., Goodman, J. S., Beckman, N., & Cook, A. (2008). Mediation Testing in Management Research. *Organisational Research Methods*, 11(2), 270-295.
- Woodruff, R. B., Cadotte, E. R., & Jenkins, R. L. (1983). Modeling consumer satisfaction processes using experience-based norms. *Journal of Marketing Research*, 20(3), 296-304.
- Wu, H. L. (2008). How do board-CEO relationships influence the performance of new product introduction? Moving from single to interdependent explanations. *Corporate Governance*, 16(2), 77-89.
- Wu, Y. (2000). Honey, I Shrunk the Board. University of Chicago.
- Yamaki, K., & Shoji, Y. (2004). Classification of trail settings in an alpine national park using the Recreation Opportunity Spectrum approach. *Working Papers of the Finnish Forest Research Institute 2*.
- Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 40(2), 185-211.
- Yoshimori, M. (2005). Does Corporate Governance Matter? Why the Corporate Performance of Toyota and Canon is Superior to GM and Xerox. *Corporate Governance: An International Review*, 13(3), 447-457.
- Young, M., Ahlstrom, D., Bruton, G., & Chan, E. (2001). The Resource Dependence, Service and Control Functions of Board of Directors in Hong Kong and Taiwanese Firms. *Asian Pacific Journal of Management*, 18(Special Issue), 223-244.
- Yu, C. H. (2003). Resampling Methods: Concepts, Applications, and Justifications. *Practical Assessment, Research & Evaluation*, 8(19), 1-32.
- Zahra, S. A. (1990). Increasing the Board's Involvement in Strategy. *Long Range Planning*, 23, 109-117.
- Zahra, S. A., & Filatotchev, I. (2004). Governance of the Entrepreneurial Threshold Firm: A Knowledge-based Perspective. *Journal of Management Studies*, 41(5), 885-897.
- Zahra, S. A., & Pearce, J. (1990). Determinants of Board Directors' Strategic Involvement. *European Management Journal*, 8, 164-173.
- Zahra, S. A., & Pearce, J. A. (1989). Boards of Directors and Corporate financial performance: A review and integrative model. *Journal of Management*, 15(2), 291-334.
- Zucker, L. (1983). Organizations as Institutions. In S. Bacharach (Ed.), *Research in sociology of organizations* (pp. 1-47). Greenwich, CT: JAI Press.
- Zucker, L. (1987). Institutional theories of organization. *Annual Review of Sociology*, 13, 443-464.

## APPENDICES

### Appendix 1 *Summary of variables and operational measures*

Variable	Operational measure
Board size (BA1)	<ul style="list-style-type: none"> <li>• Number of directors on the board</li> </ul>
Board composition (BA2)	<ul style="list-style-type: none"> <li>• Proportion of outside (non-executive) to inside (executive) directors</li> </ul>
Board diversity (BA3)	<ul style="list-style-type: none"> <li>• Proportion of female to male directors</li> </ul>
Multiple directorships (BA4)	<ul style="list-style-type: none"> <li>• Number of memberships a director holds on other boards (Supporting theories: <i>agency theory, stewardship theory, resource-based view, dependency theory, stakeholder theory</i>)</li> </ul>
Effort norms (M1)	<ul style="list-style-type: none"> <li>• Directors carefully scrutinize the information provided by the company prior to meetings</li> <li>• Directors conduct frequent research on issues relevant to the company</li> <li>• Directors take notes during meetings</li> <li>• Directors put effort into the board and company's work</li> <li>• Directors have positive attitude towards company workload when assigned specific tasks</li> </ul>
Cognitive conflict (M2)	<ul style="list-style-type: none"> <li>• Board considers viewpoints of different members before making final decision</li> <li>• Board decisions are settled amicably</li> <li>• Discussions are open and candid (Supporting theory: <i>Group theory</i> - Smith <i>et al.</i>, 1994; Jehn, 1995; Charan, 1998)</li> </ul>
Board cohesiveness (M3)	<ul style="list-style-type: none"> <li>• Members of this board respect and trust each other</li> <li>• Board members socialise with each other outside board meetings</li> <li>• Board obtains feedback from directors for decision-making</li> <li>• Board gets help from directors for decision-making</li> <li>• Cooperativeness of directors is present (Supporting theory: <i>Group theory</i> - Shanley &amp; Langford, 1998)</li> </ul>
Use of knowledge and skills (M4)	<ul style="list-style-type: none"> <li>• People on this board are aware of each others' areas of expertise</li> <li>• When an issue is discussed, the most knowledgeable people generally have the most influence</li> <li>• Task delegation on this board represents a good match between knowledge and responsibilities</li> <li>• Important information often gets withheld on this board</li> <li>• Information flows quickly among board members (Supporting theory: <i>Group theory</i> - Forbes &amp; Milliken, 1999; McGrath <i>et al.</i>, 1995)</li> </ul>
CEO/board relationship (M5)	<ul style="list-style-type: none"> <li>• CEO and management willingly accepts the board's influence</li> <li>• CEO has ability to resist the board's influence</li> <li>• CEO has good social ties with directors</li> <li>• The board has explicitly stated its performance expectation of the CEO and management</li> <li>• Once policies and strategic decisions are agreed, the board leaves the CEO to go about his business</li> </ul>
Intrinsic motivation (M6a)	<ul style="list-style-type: none"> <li>• Kindness and desire to help others</li> <li>• Contribution to the country</li> <li>• Interest in company/organization</li> <li>• Representation of stakeholder interest</li> <li>• Challenge</li> <li>• Opportunity</li> </ul>

Extrinsic motivation (M6b)	<ul style="list-style-type: none"> <li>• Status</li> <li>• Prestige</li> <li>• Fees, allowances, benefits</li> <li>• Means for gaining other appointments</li> </ul>
Affective conflict (M7)	<ul style="list-style-type: none"> <li>• There are personality clashes among directors</li> <li>• Directors do get along very well</li> <li>• Relationships among directors are best described as “win-lose”, that is, if he/she wins, I lose.</li> </ul>
Board information (M8)	<ul style="list-style-type: none"> <li>• The board has a clear idea of what information it requires or needs for decision making</li> <li>• Directors receive extensive and timely provision of information from CEO and management</li> <li>• There is effective bottom-up information flow from functional departments to directors</li> <li>• The information received by board is in a form that allows directors to fully comprehend company’s position</li> </ul>
Monitoring and control role performance (BP1)	<ul style="list-style-type: none"> <li>• Board monitors top management strategic decision- making</li> <li>• Board formally evaluates the performance of top executives</li> <li>• Board developed performance objectives</li> <li>• Board required information showing progress against corporate objectives</li> <li>• Board analysed budget allocation against performance</li> <li>• Board reviewed firm performance against strategic plans (Supporting theories: <i>Agency theory and legalistic approach</i> –Westphal, 1999; Blake, 1999; Maassen, 1999)</li> </ul>
Service role performance (BP2)	<ul style="list-style-type: none"> <li>• CEO and top managers solicit board assistance in the formulation of corporate strategy,</li> <li>• External/outside directors perform a task of ‘sounding board’ on strategic issues,</li> <li>• Directors provide advice and counsel in discussions outside of board and committee meetings,</li> <li>• Board takes into account the legitimate interests of organisations, groups and individuals (stakeholders) who have a direct interest in the achievement of company objectives,</li> <li>• Board ensures the communications with stakeholders and the general public are effective,</li> <li>• Board promotes the goodwill and support of relevant stakeholders. (Supporting theories: <i>Resource-based view, dependency theory and stakeholder theory</i>- Westphal, 1999; Dulewich <i>et al.</i> 1995)</li> </ul>
Strategic role performance (BP3)	<ul style="list-style-type: none"> <li>• Board articulates a company mission,</li> <li>• Board conducts internal analysis,</li> <li>• Board practices external analysis,</li> <li>• Board is involved in the strategic planning process,</li> <li>• Board communicates the strategic direction throughout the company,</li> <li>• Board receives plan for the implementation of strategy from the CEO,</li> <li>• Board benchmarks the strategic plan with industry comparative data. (Supporting theory: <i>Stewardship theory</i>- Fama &amp; Jesen, 1985; Tricker, 1994; Zahra, 1990; Blake, 1999).</li> </ul>
<i>Control variables</i>	
Country (W1)	<ul style="list-style-type: none"> <li>• Fiji/Solomon Islands</li> </ul>
Industry sector (W2)	<ul style="list-style-type: none"> <li>• Public/Private sector</li> </ul>
Firm size (W3)	<ul style="list-style-type: none"> <li>• Number of employees</li> </ul>
Firm type (W4)	<ul style="list-style-type: none"> <li>• State commercial authority/ State commercial company/ Private company</li> </ul>
Listed/Non-listed firm (W5)	<ul style="list-style-type: none"> <li>• Listed firms/Non-listed firms</li> </ul>

## Appendix 2 Survey questionnaire

Please reflect on your personal experience on a company board of which you are/were a member and answer the following questions. Mark your choice with an 'X' or where appropriate, write your answers in the spaces provided.

### JUST YOUR BACKGROUND DETAILS

1. Gender?       Male       Female
2. Age?     21-30       31-40       41-50       51-60       61 over
3. Nationality?     Local       Expatriate
4. Current occupation? \_\_\_\_\_
5. What is the highest level of education you have obtained?  
 Certificate/diploma     Degree       Postgraduate  None
6. What is your area (s) of expertise? \_\_\_\_\_
7. Your no. of years of professional experience? \_\_\_\_\_ years

### BOARD APPOINTMENT AND MEMBERSHIP DETAILS

1. What is/was your position on this board?  Director       Chairperson     CEO
2. How long have you been on this position?    \_\_\_\_\_ [years]    \_\_\_\_\_ [months]
3. No. of directors on the board?    \_\_\_\_\_ members
4. No. of executive directors (*directors who are part of management*) \_\_\_\_\_
5. No. of men directors? \_\_\_\_\_      No. of women directors? \_\_\_\_\_
6. Are you a member on other company boards?       Yes       No  
If yes, please indicate how many other boards?    \_\_\_\_\_
7. How would you rate your own attendance on board meetings?  
 Excellent     Very Good     Good     Satisfactory     Unsatisfactory

PLEASE NOTE: The rest of the questions require you to reflect on your experience on the board, NOT what you wish your board should be like.

### THINK ABOUT THE USE OF KNOWLEDGE AND SKILLS BY DIRECTORS ON THE BOARD

To what extent do you agree with the following statements	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
<i>People on this board are aware of each other's areas of expertise</i>					
<i>When an issue is discussed, the most knowledgeable people generally have the most influence</i>					
<i>Task delegation on this board presents a good match between knowledge and responsibilities</i>					
<i>Board information flows quickly among board members</i>					

### THINK ABOUT DIRECTORS' UNDERSTANDING OF THEIR ROLES AND RESPONSIBILITIES

To what extent do you agree with the following statements?	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
<i>Board adopted statements spelling out the company's purpose, values, strategic direction and priorities</i>					

<i>Board has adopted policies spelling out its role and responsibilities and defines how it will operate</i>					
<i>Board has clear criteria for deciding which matters justify its time and attention</i>					
<i>The company has orientation programme to assist new directors introduced to the company</i>					
<i>Directors understand the role they play in the success of the company</i>					

**THINK ABOUT WHAT MOTIVATES DIRECTORS**

To what extent do you think directors are motivated by the following factors in accepting board positions?	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
<i>Status</i>					
<i>Prestige</i>					
<i>Fees, allowances, benefits</i>					
<i>Kindness and love to help others</i>					
<i>Contribution to the country</i>					
<i>Opportunity</i>					
<i>Representation of stakeholder interest</i>					
<i>Challenge</i>					
<i>Interest in Company/organisation</i>					
<i>Means for gaining other appointments</i>					

**THINK ABOUT THE FLOW OF BOARD INFORMATION**

To what extent do you agree with the following statements?	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
<i>The board has a clear idea of what information it requires or needs for decision making</i>					
<i>Directors receive extensive and timely provision of information from CEO and management</i>					
<i>There is effective bottom-up information flow from functional departments to directors</i>					
<i>The information received by board is in a form that allows directors to fully comprehend company's position</i>					

**THINK ABOUT THE PERFORMANCE OF BOARD TASKS**

To what extent do you agree with the following statements?	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
<i>Directors carefully scrutinize the information provided by the company prior to meetings</i>					
<i>Directors conduct frequent research on issues relevant to the company</i>					
<i>Directors take notes during meetings</i>					
<i>Directors puts effort into the board and company's work</i>					
<i>Directors have positive attitude towards company workload when assigned specific tasks</i>					

THINK ABOUT THE BOARD'S ROLE IN MONITORING AND CONTROL

To what extent do you agree with the following statements?	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
<i>Board ratify and monitors top management strategic decision making</i>					
<i>Board develops performance objectives for management</i>					
<i>Board formally evaluates the performance of top company executives</i>					
<i>Board analyses financial information for important issues and trends</i>					
<i>Board analyses budget allocation against performance</i>					
<i>Board reviews company performance against strategic plan</i>					

THINK ABOUT THE BOARD'S SERVICE ROLE

To what extent do you agree with the following statements?	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
<i>CEO and managers solicit board assistance in the formulation of corporate strategy</i>					
<i>The board is an effective "checker" for management on strategic issues</i>					
<i>Directors provide advice and counsel to management in discussions outside board/committee meetings</i>					
<i>Board takes into account the legitimate interests of other stakeholders' interest in the company</i>					
<i>Board ensures the communications with stakeholders and the general public are effective</i>					
<i>Board promotes the goodwill and support of relevant stakeholders</i>					

THINK ABOUT THE BOARD'S STRATEGIC ROLE

To what extent do you agree with the following statements?	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
<i>Board articulates a company mission</i>					
<i>Board conducts internal analysis of company strengths and weaknesses</i>					
<i>Board practices external analysis of opportunities and threats to the company</i>					
<i>Board is involved in the company's strategic planning process?</i>					
<i>Board communicates the company's strategic direction throughout the company</i>					
<i>Board receives plans for the implementation of strategy from the CEO</i>					
<i>Board benchmarks the strategic plan with industry comparative data</i>					



**THINK ABOUT THE BOARD AS A DECISION MAKING GROUP**

To what extent do you agree with the following statements?	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
<i>Board considers viewpoints of different members before making final decision</i>					
<i>Board decisions are settled amicably</i>					
<i>Board discussions are open and candid</i>					
<i>There are personality clashes among directors</i>					
<i>Directors do not get along very well</i>					
<i>Relationships among directors are best described as "win-lose", that is, if he/she wins, I lose.</i>					

**THINK ABOUT THE COHESIVENESS WITHIN THE BOARD**

To what extent do you agree with the following statements?	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
<i>Members of this board respect and trust each other</i>					
<i>Board members also socialise with each other outside board meetings.</i>					
<i>Board obtains feedback from directors for decision-making</i>					
<i>Board gets help from directors for decision-making</i>					
<i>Cooperativeness of directors is present</i>					

**THINK ABOUT THE RELATIONSHIP BETWEEN CEO AND THE BOARD**

To what extent do you agree with the following statements?	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
<i>CEO and management willingly accepts the board's influence</i>					
<i>CEO has ability to resist the board's influence</i>					
<i>CEO has good social ties with directors</i>					
<i>The board has explicitly stated its performance expectation of the CEO and management</i>					
<i>Once policies and strategic decisions are agreed, the board leaves the CEO to go about his business</i>					

31 May 2008

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

Re: **RESEARCH STUDY ON CORPORATE GOVERNANCE AND BOARD OF DIRECTORS**

I write to kindly seek your support given your capacity as someone with valuable experience and knowledge on the operations of boards of directors on private and state-owned enterprises in Solomon Islands.

I am a research scholar of James Cook University in Australia and my research is based on issues related to corporate governance and board processes with particular focus on Solomon Islands, Vanuatu and Fiji. The purpose of this research is to study characteristics of the board and to examine its influence on board performance which in turn, affects company performance. The findings of this study are expected to be of great relevance and value for policy prescriptions for Solomon Islands, Vanuatu and Fiji as well as other developing countries in the South Pacific.

To obtain the required data, your response to my research questions will be of great value. I therefore kindly seek your support in completing the attached questionnaire which should take you no more than 20 minutes to complete. No attempt will be made to identify you. Your anonymity is assured and all responses will be treated in the strictest confidence.

Thank you in advance for your support and contribution to the success of this important research project.

Yours faithfully,

Morris O. Namoga

Researcher

Email: [Morris.namoga@jcu.edu.au](mailto:Morris.namoga@jcu.edu.au)

Phone: (07) 4781 6369 Fax: (07) 4781 4019

## Appendix 4 *Interview guide sheet*

### BACKGROUND DATA

- 1/ Name of Company: \_\_\_\_\_
- 2/ Type of Company:      100% State-Owned Company  
                           Partly Private and Partly State-owned Company  
                           State- Statutory Company  
                           Private Listed Company  
                           Private Non-Listed
- 3/ Year of Incorporation: \_\_\_\_\_
- 4/ Total Number of Employees: \_\_\_\_\_
- 5/ Who appoints the Board? \_\_\_\_\_
- 6/ How is the board appointed?  
\_\_\_\_\_

7/ What are the criteria(s) for board appointment? And what is their relative importance?  
\_\_\_\_\_

8/ Is the CEO involved in the nomination of directors and to what extent?  
\_\_\_\_\_

9/ Is it easy to recruit people with the right knowledge, experience and skills? Explain.  
\_\_\_\_\_

### MEMBERSHIP, COMMITTEES AND MEETINGS

- 10/ How long is the tenure of the board? \_\_\_\_\_
- 11/ Average amount of time per meeting? \_\_\_\_\_
- 12/ Board Sub-committees and Members?  
(Independent nomination, remuneration, audit committees, others)  
\_\_\_\_\_

### BOARD COMPENSATION

- 13/ Who approves the board's compensation and incentives? \_\_\_\_\_
- 14/ Form of compensation structure?  Fixed structure  Non-fixed structure
- 15/ Compensation Cash Benefit (Methods) \_\_\_\_\_ Compensation Amounts \_\_\_\_\_

Compensation Non-Cash benefits  
\_\_\_\_\_

### BOARD INDEPENDENCE

- 16/ Have you ever felt external pressure when decisions on company issues?  
 Yes  No

If yes, elaborate?

---

PERSONAL OPINION ON IMPORTANCE OF FOLLOWING BOARD ASPECTS TO YOUR COMPANY

17/ Representation of women on boards

---

18/ Multiple directorship

---

19/ Separation of Chairman/CEO roles

---

20/ Who do you think the board is mainly accountable to?

---

21/ Can you define the company Objectives:

Financial Objectives

---

Social Objectives

---

Ethical and Other Objectives

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Appendix 5 *Consent note*

**INFORMED CONSENT FORM**

**PRINCIPAL INVESTIGATOR** Morris Otto Namoga

**PROJECT TITLE:** Corporate Governance and Board Performance: Empirical evidence from Pacific Island Countries

**SCHOOL** School of Business, JCU

**CONTACT DETAILS** Morris Otto Namoga

Ph: (07) 4781 6369  
Mobile: 0432422849

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This study investigates the contribution of boards of directors to firm performance in Pacific Island Countries by examining the relationship between board attributes, board process and board performance. To obtain the necessary data for the study, CEOs, board chairpersons, directors, board secretaries and board observers will be asked to share their experience on boards. This research is undertaken towards my PhD study at James Cook University.

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By signing this consent form, I agree to take part in an interview which will last for about 20-30 minutes. I also understand that:

- The interview will be audio-taped to help data analysis
- My name will not be recorded in any transcripts or publications from the study
- I am free to withdraw from the study at anytime, and can ask to have my interview excluded from the data analysis
- The results of the study will be used in academic publications (PhD thesis and international journal articles)

The aims of this study have been clearly explained to me and I understand what is wanted on me. I know that taking part in this study is voluntary and I am aware that I can stop taking part in it at any time and may refuse to answer any questions.

I understand that any information I give will be kept strictly confidential and that no names will be used to identify me with this study without my approval.

<b>Name:</b>	
<b>Signature:</b>	<b>Date:</b>

Appendix 6 SPSS coding system

Code	Variable	Values
<b>Categorical/nominal variables</b>		
W1	Country	0 (Fiji) 1(Solomon Islands)
W2	Industry sector	0 (Public sector) 1(Private sector)
W3	Firm size	1 (1-100 employees) 2 (101-200 employees) 3 (201+ employees)
W4	Firm type	1 (Commercial statutory authority) 2 (State-owned company) 3 (Private company)
W5	Stock market listing	0 (Listed firms) 1 (Non-listed firms)
GEN	Gender	0 (Male) 1 (Female)
AGE	Age	1 (21-40 years) 2 (41-60 years) 3 (61+ years)
NAT	Nationality	0 (Local) 1 (Expatriate)
OCN	Occupation	1 (Business executive) 2 (Professionals) 3 (Public servants/retirees)
POS	Position on the board	1 (Chairman) 2 (CEO) 3 (Director) 4 (Secretary/observer)
EDU	Education	1 (Certificate/diploma) 2 (Undergraduate degree) 3 (Postgraduate degree)
EXP	Expertise	0 (Single expertise) 1 (2 or more expertise)
EXY	Experience	1 (1-10 years) 2 (11-20 years) 3 (21-30 years) 4 (31+ years)
DIR	Multiple directorships	1 (No other memberships) 2 (1-2 other memberships) 3 (3 or more memberships)
<b>Scale variables</b>		
EXD	No. of executive directors	-
NXD	No. of non-executive directors	-
BCN	Percentage of non-executive to executive directors	-
MDR	No. of male directors	-
WDR	No. of female directors	-
BDY	Percentage of female to male directors	-
BSZ	No. of directors on the board	-
<b>Categorical ordinal variables</b>		
UKS1	Directors awareness of each other's expertise	-
UKS2	The most knowledgeable directors influence board discussions	-
UKS3	Task delegation present good match between knowledge and responsibility	-
UKS4	Board Information flows quickly among board members	-
URR1	Board adopt statements on company purpose, values, strategic direction and priorities	-
URR2	Board adopt policies on its roles and responsibilities and how it will	-

	operate	
URR3	Board has clear criteria for deciding what matters justify its time and attention	-
URR4	Company has orientation programs to introduce new directors	-
URR5	Board understand its role in the success of company	-
NMO1	Status	-
NMO2	Prestige	-
NMO3	Board fees and benefits	-
NMO4	Means for gaining other appointments	-
PMO1	Kindness and love to help others	-
PMO2	Contribution to the country	-
PMO3	Opportunity	-
PMO4	Representation of stakeholder interests	-
PMO5	Challenge	-
PMO6	Interest in the company and business	-
EBM1	Directors are committed to attending board meetings	-
EBM2	Directors are diligent and well-prepared for meetings	-
EBM3	Sufficient and timely delivery of board papers and information to directors	-
EBM4	Company matters discussed in a structured manner	-
EBM5	All board directors actively participate in board discussions	-
EBM6	Board directors show constructive critical attitude	-
EBM7	Divergent opinions tolerated with social acceptance of each member ideas	-
EBM8	Presence of trust between CEO, management and directors	-
BIF1	Board has clear idea of its information needs	-
BIF2	Extensive and timely provision of information by CEO to external directors	-
BIF3	Effective bottom-up information flow from functional departments to external directors	-
BIF4	Board information allows directors comprehend company position	-
ENS1	Directors scrutinise information prior to board meetings	-
ENS2	Directors conduct frequent research on issues related to the company	-
ENS3	Directors take notes during board meetings	-
ENS4	Directors put effort into the board and company's work	-
ENS5	Directors have positive attitude towards board tasks when assigned	-
MCR1	Board ratify and monitor management strategic decision-making	-
MCR2	Board develops performance objectives for management	-
MCR3	Board evaluates performance of company management	-
MCR4	Board analyses financial information for important trends and issues	-
MCR5	Board analyses budget allocation against performance	-
MCR6	Board reviews company performance against strategic plan	-
SVR1	CEO solicit board assistance in the formulation corporate strategy	-
SVR2	External directors are effective 'sounding board' for management on strategic issues	-
SVR3	Directors provide advice and counsel to management outside board meetings	-
SVR4	Board considers stakeholder interests in decision-making	-
SVR5	Board ensures effective communication with stakeholders and the public	-
SVR6	Directors actively network to help company secure valuable resources	-
STR1	Board conducts internal analysis of company strengths and weaknesses	-
STR2	Board practices external analysis of opportunities and threats to company	-
STR3	Board involved in company's strategic planning process	-
STR4	Board communicates strategic direction throughout company	-

STR5	Boards receives plan for implementation of strategy from CEO	-
STR6	Board benchmarks strategic plan with industry comparative data	-
CCT1	Board considers all member viewpoints before making decision	-
CCT2	Board decisions are settled amicably	-
CCT3	Board discussions are open and candid	-
ACT1	Board experience personality clashes among directors	-
ACT2	Directors do not get along well with each other	-
ACT3	Relationship among directors described as win-lose	-
PCT1	Directors argue on way things are done	-
PCT2	Directors often differ on resource allocation	-
PCT3	Directors frequently argue about who should do what on the board	-
PCT4	External directors are dissatisfied with lack of impact on policy and strategy	-
BCO1	Directors respect and trust each other	-
BCO2	Directors socialise with each other outside board meeting	-
BCO3	Board obtains feedback from directors on decision making	-
BCO4	Board receives help from directors for decision making	-
BCO5	The cooperativeness of directors to board and company is present	-
BRP1	CEO and management willingly accepts board influence	-
BRP2	CEO has ability to resist board influence	-
BRP3	CEO has good social ties with external directors	-
BRP4	Board explicitly states performance expectations of CEO	-
BRP5	Policy and strategic decisions agreed and board leaves CEO alone	-



## Appendix 7 *Dummy variables*

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PUBSEC	Public sector	Scale
PRISEC	Private sector	Scale
SMALLFIRM	Firm size (up to 200 employees)	Scale
BIGFIRM	Firm size (more than 200 employees)	Scale
LISTFIRM	Listed firms	Scale
NLISTFIRMS	Non-listed firms	Scale
LOWAGE	21-40 Years	Scale
MIDAGE	41-60 Years	Scale
HIGHAGE	61+ Years	Scale
LOC	Local directors	Scale
EXPAT	Expatriate directors	Scale
COMEXEC	Business executives & private business persons	Scale
PROF	Professionals (lawyers, accountants, academics, etc)	Scale
PSRETIRE	Public servants & retirees	Scale
BCHAIR	Board chairman	Scale
COMPCEO	CEO	Scale
BDIR	Director	Scale
BSOBSER	Secretary/observer	Scale
LBYEARS	1-3 Years	Scale
MBYEARS	4-6 Years	Scale
HBYEARS	7 + Years	Scale
LEDUCATE	Certificate and diploma	Scale
MEDUCATE	Undergraduate degree	Scale
HEDUCATE	Postgraduate degree	Scale
LEXPERT	Single area expertise	Scale
HEXPERT	Two or more area expertise	Scale
LOWEXP	1-10 years	Scale
MIDEXP	11-20 years	Scale
HMEXP	21-30 years	Scale
HEXP	31+ years	Scale
NIL	Nil directorship	Scale
LOWMEM	1-2 directorship	Scale
HMEMB	3+ directorship	Scale
SBOD	Board size (1-6 Directors)	Scale
BBOD	Board size (7-12 Directors)	Scale
CFJ	Fiji	Scale
SSBD	Solomon Islands	Scale
LBS	1-100 employee	Scale
MBS	101-200 employees	Scale
HBS	201 + employees	Scale
MALE	Male	Scale
FEMALE	Female	Scale
SCA	State commercial authority	Scale
SCC	State commercial company	Scale
PC	Private company	Scale
ONEAGE	21-30 Years	Scale
TWOAGE	31-40 Years	Scale
THREEAGE	41-50 Years	Scale
FOURAGE	51-60 Years	Scale
FIVEAGE	61+ Years	Scale

Appendix 8 CATPCA component loadings for ordinal variables

Variable	Items	Dimension	
		1	2
<i>Monitoring and control role performance</i> (BP1)	• Board ratify and monitor management strategic decision-making	.201	.900
	• Board develops performance objectives for management	.996	-.093
	• Board evaluates performance of company management	.207	.898
	• Board analyses financial information for important trends and issues	.996	-.092
	• Board analyses budget allocation against performance	.996	-.093
	• Board reviews company performance against strategic plan	.996	-.093
<i>Service role performance</i> (BP2)	• CEO solicit board assistance in the formulation corporate strategy	.781	.510
	• External directors are effective 'sounding board' for management on strategic issues	.691	.542
	• Directors provide advice and counsel to management outside board meetings	.861	-.314
	• Board considers stakeholder interests in decision-making	.804	-.461
	• Board ensures effective communication with stakeholders and the public	.871	-.292
	• Directors actively network to help company secure valuable resources	.737	.166
<i>Strategic role performance</i> (BP3)	• Board conducts internal analysis of company strengths and weaknesses	.805	-.519
	• Board practices external analysis of opportunities and threats to company	.851	-.438
	• Board involved in company's strategic planning process	.805	.370
	• Board communicates strategic direction throughout company	.677	.659
	• Boards receives plan for implementation of strategy from CEO	.712	.109
	• Board benchmarks strategic plan with industry comparative data	.884	-.036
<i>Effort norms</i> (M1)	• Directors scrutinise information prior to board meetings	.837	.394
	• Directors conduct frequent research on issues related to the firm	.786	.533
	• Directors take notes during board meetings	.841	-.307
	• Directors put effort into the board and company's work	.849	-.178
	• Directors have positive attitude towards board tasks when assigned	.800	-.424
<i>Cognitive conflict</i> (M2)	• Board considers all member viewpoints before making decision	.877	-.440
	• Board decisions are settled amicably	.951	-.048
	• Board discussions are open and candid	.851	.506
<i>Board cohesiveness</i> (M3)	• Directors respect and trust each other	.822	.204
	• Directors socialise with each other outside board meetings	.494	.840
	• Board obtains feedback from directors on decision-making	.893	-.210
	• Board receives help from directors for decision-making	.903	-.269
	• Cooperativeness of directors to the board and company is present	.899	.170
<i>Use of knowledge and skills</i> (M4)	• Directors aware of each other's expertise	.869	-.251
	• Knowledgeable directors influence board discussions	.443	.892
	• Task delegation present good match between knowledge and responsibility	.751	-.199
	• Board information flows quickly among board members	.912	-.030

<i>CEO/board relationship (M5)</i>	<ul style="list-style-type: none"> <li>• CEO and management willingly accepts board influence</li> <li>• CEO has ability to resist board influence</li> <li>• CEO has good social ties with external directors</li> <li>• Board explicitly states performance expectations of CEO</li> <li>• Policy and strategic decisions agreed and board leaves CEO alone</li> </ul>	.781 .689 .758 .687 .706	-.126 .614 .450 -.566 -.391
<i>Intrinsic motivation (M6a)</i>	<ul style="list-style-type: none"> <li>• Kindness and love to help others</li> <li>• Contribution to the country</li> <li>• Opportunity</li> <li>• Representation of stakeholder interests</li> <li>• Challenge</li> <li>• Interest in the company and business</li> </ul>	.727 .803 .660 .563 .840 .844	-.529 -.164 -.405 .619 .271 .244
<i>Extrinsic motivation (M6b)</i>	<ul style="list-style-type: none"> <li>• Status</li> <li>• Prestige</li> <li>• Board fees and benefits</li> <li>• Means for gaining other appointments</li> </ul>	.842 .909 .777 .900	.360 -.383 .533 -.411
<i>Affective conflict (M7)</i>	<ul style="list-style-type: none"> <li>• Board experience personality clashes among directors</li> <li>• Directors do not get along well with each other</li> <li>• Relationship among directors described as win-lose</li> </ul>	.850 .646 .914	-.414 .756 -.149
<i>Board information (M8)</i>	<ul style="list-style-type: none"> <li>• Board has clear idea of its information needs</li> <li>• Extensive and timely provision of information by CEO to external directors</li> <li>• Effective bottom-up information flow from functional departments to external directors</li> <li>• Board information allows directors comprehend company position</li> </ul>	.469 .991 .990 .991	.883 -.141 -.139 -.140
<i>Variable principal normalisation</i>			

## Appendix 9 *Ethical issues and considerations*

This research complied with the ethical guidelines established by the Australian University Ethics Committee and adopted by James Cook University to protect the rights of the institutions and participants involved. Research permits were obtained from the department responsible for education and research in Fiji and Solomon Islands. Additionally, the informed consent of the participants was sought and this was administered through the consent form (Appendix 5) which introduces the research by explaining its nature and purpose. The consent form also assured participants that their involvement in the study was voluntary and their anonymity and confidentiality will be maintained throughout the research and in the final report. In particular, this is crucial for Fiji participants given the fear of victimisation as a result of the political situation in the country at the time of the research. Furthermore, this research observed important principles of scientific integrity related to data processing, plagiarism, contributions and the treatment of respondent opinions. In this regard, readers are assured that the conduct of the activities in this research was undertaken with a reasonable degree of integrity to address the research question.

Appendix 10 *Descriptive statistics for key attributes, process and performance variables*

<b>Variable</b>	<b>Mean</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Standard Deviation</b>
Board size (BA1)	6.6	2	12	1.79
Board composition (BA2)	83.2	0.00	100	26.5
Board diversity (BA3)	0.20	0.00	0.71	0.23
Multiple directorships (BA4)	1.5	0	6	1.60
Effort norms (M1)	0.00	-1.03	3.19	1.00587
Cognitive conflict (M2)	0.00	-2.27	1.33	1.00587
Board cohesiveness (M3)	0.00	-1.80	2.32	1.00587
Use of knowledge and skills (M4)	0.00	-6.43	1.20	1.00587
CEO/board relationship (M5)	0.00	-.66	3.80	1.00587
Intrinsic motivation (M6a)	0.00	-1.54	2.70	1.00587
Extrinsic motivation (M6b)	0.00	-3.03	0.85	1.00587
Affective conflict (M7)	0.00	-2.82	1.05	1.00587
Board information (M8)	0.00	-9.13	.31	1.00587
Monitoring and control role performance (BP1)	0.00	-9.18	.29	1.00587
Service role performance (BP2)	0.00	-1.12	2.59	1.00587
Strategic role performance (BP3)	0.00	-1.42	2.45	1.00587

Appendix 11

A11.1 Test for Proposition 2(a)

Board performance variables ( $Y$ )	Board composition values ( $\theta x$ )	Indirect effect estimate ( $\theta$ )	90% BC bootstrap confidence intervals
<i>Monitoring and control role performance (BP1)</i>	56.6587	.0026	.0004 to .0162*
	83.1617	.0003	-.0018 to .0056
	109.6646	-.0016	-.0335 to .0012
<i>Service role performance (BP2)</i>	56.6587	.0053	.0009 to .0105*
	83.1617	.0008	-.0079 to .0103
	109.6646	-.0039	-.0197 to .0123
<i>Strategic role performance (BP3)</i>	56.6587	.0071	.0018 to .0126*
	83.1617	.0011	-.0132 to .0124
	109.6646	-.0054	-.0224 to .0176

A11.2 Test for Proposition 2(b)

Board performance variables ( $Y$ )	Board composition values ( $\theta x$ )	Indirect effect estimate ( $\theta$ )	90% BC bootstrap confidence intervals
<i>Monitoring and control role performance (BP1)</i>	56.6587	.0035	.0003 to .0265*
	83.1617	.0018	-.0005 to .0234
	109.6646	.0007	-.0098 to .0072
<i>Service role performance (BP2)</i>	56.6587	.0037	.0003 to .0090*
	83.1617	.0027	-.0051 to .0108
	109.6646	.0012	-.0105 to .0210
<i>Strategic role performance (BP3)</i>	56.6587	.0045	-.0005 to .0113
	83.1617	.0029	-.0061 to .0117
	109.6646	.0012	-.0142 to .0147

A11.3 Test for Proposition 2(c)

Board performance variables ( $Y$ )	Board composition values ( $\theta x$ )	Indirect effect estimate ( $\theta$ )	90% BC bootstrap confidence intervals
<i>Monitoring and control role performance (BP1)</i>	56.6587	.0069	.0002 to .0242*
	83.1617	-.0068	-.0298 to .0001
	109.6646	-.0205	-.0660 to -.0004*
<i>Service role performance (BP2)</i>	56.6587	.0039	-.0019 to .0099
	83.1617	-.0039	-.0127 to .0026
	109.6646	-.0117	-.0300 to -.0001*
<i>Strategic role performance (BP3)</i>	56.6587	.0034	-.0013 to .0083
	83.1617	-.0033	-.0107 to .0018
	109.6646	-.0100	-.0253 to -.0007*

\* Significant indirect effect (90% BC-CIs)

A11.4 Test for Proposition 3(a)

Board performance variables ( $Y$ )	Board diversity values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% BC bootstrap confidence intervals
<i>Monitoring and control role performance (BP1)</i>	-.0260	-.2339	-1.3456 to .0912
	.2008	-.0399	-.4119 to .1511
	.4275	.1540	.0274 to .6010*
<i>Service role performance (BP2)</i>	-.0260	-1.2559	-3.8666 to 1.3673
	.2008	-.2143	-1.5179 to .9518
	.4275	.8273	-.0884 to 1.8129
<i>Strategic role performance (BP3)</i>	-.0260	-.7315	-2.5210 to .7012
	.2008	-.1248	-.9320 to .5936
	.4275	.4818	.0011 to 1.2295*

A11.5 Test for Proposition 3(b)

Board performance variables ( $Y$ )	Board diversity Values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% BC bootstrap confidence intervals
<i>Monitoring and control role performance (BP1)</i>	-.0260	-.0317	-1.0501 to 1.0925
	.2008	.1509	-.0537 to .8141
	.4275	.2249	.0463 to 1.7027*
<i>Service role performance (BP2)</i>	-.0260	-.0514	-1.9729 to 1.3396
	.2008	.2675	-.3777 to 1.1779
	.4275	.6106	-.1223 to 1.7075
<i>Strategic role performance (BP3)</i>	-.0260	-.0694	-2.8679 to 1.5282
	.2008	.3673	-.5136 to 1.4859
	.4275	.8947	-.1807 to 2.2237

A11.6 Test for Proposition 3(c)

Board performance variables ( $Y$ )	Board diversity values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% BC bootstrap confidence intervals
<i>Monitoring and control role performance (BP1)</i>	-.0260	-1.3989	-4.3650 to -.2564*
	.2008	-.6013	-4.3890 to -.0228*
	.4275	1.3573	.1269 to 4.9784*
<i>Service role performance (BP2)</i>	-.0260	-2.9936	-7.1697 to -.7194*
	.2008	-.3791	-1.3725 to .0691
	.4275	1.2050	.2932 to 2.5335*
<i>Strategic role performance (BP3)</i>	-.0260	-3.0420	-5.7090 to -1.2128*
	.2008	-.6879	-2.2277 to .2026
	.4275	1.7912	.8043 to 2.9970*

\* Significant indirect effect (90% BC-CIs)

A11.7 Test for Proposition 3(d)

Board performance variables ( $Y$ )	Board diversity value ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% BC bootstrap confidence intervals
<i>Monitoring and control role performance (BP1)</i>	-.0260	-2.4357	-7.8938 to -.2662*
	.2008	-.3730	-2.4991 to -.0421*
	.4275	1.6898	.0775 to 3.7571*
<i>Service role performance (BP2)</i>	-.0260	-1.2697	-4.4323 to .3228
	.2008	-.1944	-1.4948 to .5914
	.4275	.8809	.3617 to 1.6369*
<i>Strategic role performance (BP3)</i>	-.0260	-1.2734	-4.2211 to .2526
	.2008	-.1950	-1.4402 to .5320
	.4275	.8834	.3608 to 1.5270*

A11.8 Test for Proposition 4(a)

Board performance variables ( $Y$ )	Multiple directorship values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% BC bootstrap confidence intervals
<i>Monitoring and control role performance (BP1)</i>	-.1194	-.0250	-.1451 to .0106
	1.4651	-.0130	-.0680 to .0017
	3.0496	-.0010	-.0252 to .0331
<i>Service role performance (BP2)</i>	-.1194	-.1400	-.4833 to .1388
	1.4651	-.0728	-.2188 to .0361
	3.0496	-.0055	-.1434 to .1626
<i>Strategic role performance (BP3)</i>	-.1194	-.0809	-.3236 to .0595
	1.4651	-.0420	-.1480 to .0162
	3.0496	-.0032	-.0786 to .0967

A11.9 Test for Proposition 4(b)

Board performance variables ( $Y$ )	Multiple directorship values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90 % BC bootstrap confidence intervals
<i>Monitoring and control role performance (BP1)</i>	-.1194	-.0180	-.1026 to .0697
	1.4651	-.0048	-.0915 to .0214
	3.0496	.0024	-.0289 to .0660
<i>Service role performance (BP2)</i>	-.1194	-.0237	-.2268 to .1335
	1.4651	-.0094	-.0878 to .0660
	3.0496	.0046	-.0724 to .0764
<i>Strategic role performance (BP3)</i>	-.1194	-.0335	-.3094 to .1767
	1.4651	-.0131	-.1093 to .0948
	3.0496	.0064	-.0983 to .1008

\* Significant indirect effect (90% BC-CIs)



A11.10 *Test for Proposition 4(c)*

Board performance variables ( <i>Y</i> )	Multiple directorship values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% BC bootstrap confidence intervals
<i>Monitoring and control role performance (BP1)</i>	-.1194	-.1004	-.6691 to .0050
	1.4651	-.0685	-.2879 to -.0029*
	3.0496	-.0366	-.2753 to -.0007*
<i>Service role performance (BP2)</i>	-.1194	-.0557	-.2366 to .0878
	1.4651	-.0380	-.1281 to .0203
	3.0496	-.0203	-.1174 to .0424
<i>Strategic role performance (BP3)</i>	-.1194	-.0521	-.2189 to .0749
	1.4651	-.0355	-.1181 to .0150
	3.0496	-.0190	-.1017 to .0387

\* Significant indirect effect (90% BC-CIs)

Appendix 12

A12.1 Test for Proposition 5(a)

Board performance variables (Y)	Intrinsic motivation values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	.0000	.0410	.0124 to .1670*
<i>Service role performance (BP<sub>2</sub>)</i>	.0000	.2366	.0857 to .4390*
<i>Strategic role performance (BP<sub>3</sub>)</i>	.0000	.0483	-.0733 to .1918

A12.2 Test for Proposition 5(b)

Board performance variables (Y)	Intrinsic motivation values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	-1.0059	.1018	.0079 to .3777*
	.0000	.0660	.0095 to .2175*
	1.0059	.0301	.0093 to .1200*
<i>Service role performance (BP<sub>2</sub>)</i>	-1.0059	.0769	.0312 to .1484*
	.0000	.0885	.0309 to .1904*
	1.0059	.1000	.0293 to .2429*
<i>Strategic role performance (BP<sub>3</sub>)</i>	-1.0059	.1299	.0626 to .2263*
	.0000	.1645	.0673 to .3044*
	1.0059	.1991	.0750 to .4032*

A12.3 Test for Proposition 5(c)

Board performance values (Y)	Intrinsic motivation values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	-1.0059	.2526	.0147 to .9388*
	.0000	.1514	.0181 to .5296*
	1.0059	.0502	.0183 to .2414*
<i>Service role performance (BP<sub>2</sub>)</i>	-1.0059	.0903	-.0545 to .2299
	.0000	.1613	.0578 to .2901*
	1.0059	.2323	.1014 to .4178*
<i>Strategic role performance (BP<sub>3</sub>)</i>	-1.0059	.2344	.0991 to .4468*
	.0000	.2075	.1007 to .3547*
	1.0059	.1807	.0751 to .3443*

\* Significant indirect effect (90% BC-CIs)

A12.4 Test for Proposition 5(d)

Boards performance variables ( $Y$ )	Intrinsic motivation values ( $\theta_x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	.0000	.3432	.0107 to .6145*
<i>Service role performance (BP<sub>2</sub>)</i>	.0000	.0753	.0183 to .1744*
<i>Strategic role performance (BP<sub>3</sub>)</i>	.0000	.0894	.0338 to .1886*

A12.5 Test for Proposition 6(a)

Board performance variables ( $Y$ )	Extrinsic motivation values ( $\theta_x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	.0000	-.0144	-.0636 to -.0006*
<i>Service role performance (BP<sub>2</sub>)</i>	.0000	-.0814	-.1990 to .0264
<i>Strategic role performance (BP<sub>3</sub>)</i>	.0000	-.0430	-.1403 to .0055

A12.6 Test for Proposition 6(b)

Board performance variables ( $Y$ )	Extrinsic motivation values ( $\theta_x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	-1.0059	-.0229	-.0901 to -.0050*
	.0000	-.0304	-.1379 to -.0040*
	1.0059	-.0379	-.1991 to -.0039*
<i>Service role performance (BP<sub>2</sub>)</i>	-1.0059	-.0651	-.1782 to -.0104*
	.0000	-.0641	-.1628 to -.0095*
	1.0059	-.0630	-.1542 to -.0092*
<i>Strategic role performance (BP<sub>3</sub>)</i>	-1.0059	-.0957	-.2360 to -.0104*
	.0000	-.0888	-.2014 to -.0104*
	1.0059	-.0820	-.1687 to -.0110*

\* Significant indirect effect (90% BC-CIs)

A12.7 Test for Proposition 6(c)

Board performance variables ( <i>Y</i> )	Extrinsic motivation values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	-1.0059	.0030	-.0425 to .1394
	.0000	.0030	-.0514 to .1136
	1.0059	.0030	-.0593 to .0900
<i>Service role performance (BP<sub>2</sub>)</i>	-1.0059	.0043	-.0909 to .0837
	.0000	.0043	-.0817 to .1011
	1.0059	.0043	-.0723 to .1180
<i>Strategic role performance (BP<sub>3</sub>)</i>	-1.0059	.0048	-.0962 to 1.097
	.0000	.0048	-.1418 to 1.108
	1.0059	.0048	-.1527 to 1.120

A12.8 Test for Proposition 6(d)

Board performance variables ( <i>Y</i> )	Extrinsic motivation values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	.0000	-.0466	-.3047 to .0063
<i>Service role performance (BP<sub>2</sub>)</i>	.0000	-.0261	-.1110 to .0516
<i>Strategic role performance (BP<sub>3</sub>)</i>	.0000	-.0238	-.1016 to .0454

A12.9 Test for Proposition 7(a)

Board performance variables ( <i>Y</i> )	CEO/board relationship values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	.0000	.0278	.0083 to .1272*
<i>Service role performance (BP<sub>2</sub>)</i>	.0000	.1959	.0723 to .3721*
<i>Strategic role performance (BP<sub>3</sub>)</i>	.0000	.0729	.0059 to .2077*

\* Significant indirect effect (90% BC-CIs)

A12.10 Test for Proposition 7(b)

Board performance variables ( $Y$ )	CEO/board relationship values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	-1.0059	.1304	.0092 to .3649*
	.0000	.0731	.0113 to .2020*
	1.0059	.0159	-.0705 to .0526
<i>Service role performance (BP<sub>2</sub>)</i>	-1.0059	.0763	.0249 to .1431*
	.0000	.0734	.0100 to .1615*
	1.0059	.0705	-.0143 to .1892
<i>Strategic role performance (BP<sub>3</sub>)</i>	-1.0059	.1563	.0884 to .2419*
	.0000	.1985	.1098 to .3211*
	1.0059	.2408	.1270 to .4210*

A12.11 Test for Proposition 7(c)

Board performance variables ( $Y$ )	CEO/board relationship values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	-1.0059	.3301	.0184 to 1.0673*
	.0000	.1685	.0234 to .5470*
	1.0059	.0069	-.2863 to .0435
<i>Service role performance (BP<sub>2</sub>)</i>	-1.0059	.0699	-.1127 to .2300
	.0000	.1773	.0321 to .3266*
	1.0059	.2847	.0827 to .5073*
<i>Strategic role performance (BP<sub>3</sub>)</i>	-1.0059	.2945	.1298 to .5134*
	.0000	.2562	.1263 to .4121*
	1.0059	.2180	.0662 to .4377*

A12.12 Test for Proposition 7(d)

Board performance variables ( $Y$ )	CEO/board relationship values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	.0000	.2564	.0084 to .4867*
<i>Service role performance (BP<sub>2</sub>)</i>	.0000	.0721	.0250 to .1621*
<i>Strategic role performance (BP<sub>3</sub>)</i>	.0000	.0830	.0304 to .1581*

\* Significant indirect effect (90% BC-CIs)

A12.13 Test for Proposition 8(a)

Board performance variables ( $Y$ )	Affective conflict ( $\theta x$ )	Indirect effect estimate ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	.0000	-.0179	-.0823 to -.0001*
<i>Service role performance (BP<sub>2</sub>)</i>	.0000	-.0941	-.2544 to .0345
<i>Strategic role performance (BP<sub>3</sub>)</i>	.0000	-.0481	-.1496 to .0108

A12.14 Test for Proposition 8(b)

Board performance variables ( $Y$ )	Affective conflict values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	-1.0059	-.0854	-.2501 to -.0328*
	.0000	-.1906	-.5702 to -.0281*
	1.0059	-.2958	-.9653 to -.0222*
<i>Service role performance (BP<sub>2</sub>)</i>	-1.0059	-.3699	-.5480 to -.2345*
	.0000	-.2642	-.3908 to -.1638*
	1.0059	-.1585	-.2941 to -.0384*
<i>Strategic role performance (BP<sub>3</sub>)</i>	-1.0059	-.2537	-.4050 to -.1343*
	.0000	-.2656	-.3797 to -.1710*
	1.0059	-.2775	-.4458 to -.1617*

A12.15 Test for Proposition 8(c)

Board performance variables ( $Y$ )	Affective conflict ( $\theta x$ )	Indirect effect ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	.0000	-.1753	-.4487 to -.0112*
<i>Service role performance (BP<sub>2</sub>)</i>	.0000	-.0810	-.2129 to -.0192*
<i>Strategic role performance (BP<sub>3</sub>)</i>	.0000	-.0737	-.1812 to -.0153*

\* Significant indirect effect (90% BC-CIs)

A12.16 Test for Proposition 9(a)

Board performance variables ( <i>Y</i> )	Board information ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	.0000	-.0022	-.0103 to .0002
<i>Service role performance (BP<sub>2</sub>)</i>	.0000	.0810	.0208 to 2.7263*
<i>Strategic role performance (BP<sub>3</sub>)</i>	.0000	.0433	-.1782 to .8985

A12.17 Test for Proposition 9(b)

Board performance variables ( <i>Y</i> )	Board information values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	-1.0059	-.0019	-.2231 to .0777
	.0000	-.0002	-.0116 to .0936
	1.0059	.0016	-.0109 to .2558
<i>Service role performance (BP<sub>2</sub>)</i>	-1.0059	.1277	-1.2601 to 1.8589
	.0000	.1336	.0336 to 1.0028*
	1.0059	.1395	-.9958 to 2.5815
<i>Strategic role performance (BP<sub>3</sub>)</i>	-1.0059	.1556	-.7803 to 1.0242
	.0000	.1850	.0796 to 1.1838*
	1.0059	.2145	.0889 to 4.4509*

A12.18 Test for Proposition 9(c)

Board performance variables ( <i>Y</i> )	Board information ( $\theta x$ )	Indirect effect estimate ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	.0000	.0095	-.0334 to .0962
<i>Service role performance (BP<sub>2</sub>)</i>	.0000	.4865	.1936 to .9766*
<i>Strategic role performance (BP<sub>3</sub>)</i>	.0000	.4033	.1409 to .8056*

\* Significant indirect effect (90% BC-CIs)

A12.19 Test for Proposition 10(a)

Board performance variables ( <i>Y</i> )	Board cohesiveness values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	-1.0059	-.0021	-.0935 to .0298
	.0000	.0394	.0057 to .1495*
	1.0059	.0809	.0134 to .3229*
<i>Service role performance (BP<sub>2</sub>)</i>	-1.0059	-.0072	-.2050 to .1135
	.0000	.1360	.0472 to .2944*
	1.0059	.2792	.0873 to .5638*
<i>Strategic role performance (BP<sub>3</sub>)</i>	-1.0059	-.0019	-.0828 to .0422
	.0000	.0348	-.0275 to .1395
	1.0059	.0714	-.0676 to .2741

A12.20 Test for Proposition 10(b)

Board performance variables ( <i>Y</i> )	Board cohesiveness values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	-1.0059	.4523	.0071 to 1.7050*
	.0000	.1080	.0139 to .3295*
	1.0059	-.0144	-.1851 to .0236
<i>Service role performance (BP<sub>2</sub>)</i>	-1.0059	.1966	.0175 to .6335*
	.0000	.0503	-.1408 to .2308
	1.0059	-.0031	-.1707 to .1309
<i>Strategic role performance (BP<sub>3</sub>)</i>	-1.0059	.2523	.0428 to .6648*
	.0000	.3562	.1733 to .6940*
	1.0059	.2670	.1378 to .4928*

A12.21 Test for Proposition 10(c)

Board performance variables ( <i>Y</i> )	Board cohesiveness values ( $\theta x$ )	Indirect effect estimates ( $\theta$ )	90% Bootstrap confidence intervals
<i>Monitoring and control role performance (BP<sub>1</sub>)</i>	-1.0059	.5978	.0015 to 1.7621*
	.0000	.4176	.0059 to .9661*
	1.0059	.2375	.0134 to .4853*
<i>Service role performance (BP<sub>2</sub>)</i>	-1.0059	.1545	.0179 to .4198*
	.0000	.1080	.0332 to .2447*
	1.0059	.0614	.0092 to .2024*
<i>Strategic role performance (BP<sub>3</sub>)</i>	-1.0059	.1509	.0296 to .4033*
	.0000	.1054	.0313 to .2273*
	1.0059	.0600	.0050 to .2087*

\* Significant indirect effect (90% BC-CIs)