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**SHAREHOLDER CONCENTRATION AND EARNINGS  
MANAGEMENT IN LISTED CORPORATIONS IN AN  
EMERGING MARKET**

**By**

**Dharmendra Naidu**

*A thesis submitted in fulfillment of the requirements for a degree of  
Master of Commerce*

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**August, 2012**

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## **DEDICATION**

To my parents (Maya Wati and Ram Krishna) for their upbringing, support throughout my education and their prayers and to my grandfather (George Smith) who motivated and directed my childhood towards high level of education and for his support through my education.

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Sachindra Singh – VB Holdings Ltd

Tanya – Fiji Television Ltd

Alumita – Fiji Television Ltd

Pretesh – South Pacific Stock Exchange

## **ABSTRACT**

The ownership structure of the companies in emerging stock markets is concentrated. The high level of shareholder concentration for the South Pacific Stock Exchange (SPSE) companies is unique. The alignment and entrenchment effects guide the relationship between shareholder concentration and earnings management. This thesis investigates the strength of shareholder concentration in constraining earnings management using archival data of the SPSE listed companies for the period 1986 to 2010.

The results suggest that high level of shareholder concentration is associated with high level of earnings management for companies listed on the SPSE. This result implies that although the concentrated shareholders of the SPSE companies are able to minimize owner – manager agency problem due to the alignment effect, they create a majority – minority shareholder agency problem due to entrenchment effect.

Additional results indicate that large boards are effective in mitigating the effects of shareholder concentration on earnings management. In shareholder concentrated firms, where owner – manager agency problem is minimal, the large independent boards are able to minimize the majority – minority shareholder agency problem.

Unlike firms with dispersed ownership, shareholder concentrated firms face a different form of agency problem indicating different influences on its corporate governance structure. As such, this study contributes to the extant literature on corporate governance and suggests new avenues for future research on corporate governance to protect the interests of the minority shareholders in shareholder concentrated firms.

This research offers insights to policy makers interested in enhancing corporate governance for firms with high levels of shareholder concentration, an important

variable that is very prevalent in developing countries with emerging stock markets. The descriptive results of this thesis indicate that the internal and external corporate governance structures of the SPSE companies are weak. However, there is scope to strengthen the internal governance structures to protect the interests of the minority shareholders. Thus, policy makers should strengthen the corporate governance code and the financial regulations for companies with high level of shareholder concentration by ensuring large boards with majority independent directors.



## ABBREVIATIONS

AC	Audit Committee
ADB	Asian Development Bank
AF	Audit Fee
APP	Atlantic & Pacific Packaging Company Limited
ASX	Australian Securities Exchange
ATH	Amalgamated Telecommunication Holdings Limited
BOD	Board of Directors
BS	Board Size
BSP	Bank of the South Pacific
CEO	Chief Executive Officer
CFL	Communications Fiji Limited
CG	Corporate Governance
CMDA	Capital Markets Development Authority
DAC	Discretionary Accruals
EM	Earnings Management
ER	Executive Remuneration
FF	Free Float
FGP	Foster's Group Pacific Limited
FHL	Fijian Holdings Limited
FIA	Fiji Institute of Accountants
FIL	FijiCare Insurance Limited
FMF	Flour Mills of Fiji Limited
FNPF	Fiji National Provident Fund
FSC	Fiji Sugar Corporation Limited
FTV	Fiji Television Limited
GAAP	Generally Accepted Accounting Practices
GMM	Generalized Method of Moment
ID	Percentage of Independent Directors
IPO	Initial Public Offers
IV	Instrumental Variable
IFAC	International Federation of Accountants
IFRS	International Financial Reporting Standards

KGf	Kontiki Growth Fund Limited
LEV	Leverage
LnADAC	Natural Logarithm of the Absolute Value of Discretionary Accruals
LnAF	Natural logarithm of Audit Fee
LnBS	Natural logarithm of Board Size
LnTA	Natural logarithm of Total Assets
MJM	Modified Jones Model
NAS	Non-audit services
NASRATIO	Non-audit service fee ratio
NBF	National Bank of Fiji
NDAC	Non-Discretionary Accruals
OECD	Organization for Economic Co-operation and Development
PBP	Pleass Beverage & Packaging Limited
PGI	Pacific Green Industries (Fiji) Limited
PMDA	Performance-Matched Discretionary Accruals
RBF	Reserve Bank of Fiji
RBG	R B Patel Group Limited
RCF	The Rice Company of Fiji Limited
ROA	Return on Assets
SC	Shareholder Concentration
SC*LnBS	Interaction of Shareholder Concentration and natural logarithm of Board Size
SEC	Securities and Exchange Commission
SOX	Sarbanes – Oxley Act
SOE	State Owned Enterprises
SPSE	South Pacific Stock Exchange
TA	Total Accruals
TTS	Toyota Tsusho (South Seas) Limited
UK	United Kingdom
US	United States
UTF	Unit Trust of Fiji
VBL	VB Holdings Limited

$\sigma_{CFO}$

Standard deviation of Cash Flow from Operations

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## CHAPTER 1 OVERVIEW OF THE RESEARCH

### 1.1 Introduction

Extensive research has been conducted with the issues surrounding earnings management (EM) in developed countries, while limited research exists in India and China. One important area of focus in EM studies has been corporate governance (CG), given that strong CG constrains EM. This research concentrates on EM and CG in developing countries. Several researches indicate that the CG format and structure are country, region and economic specific<sup>1</sup>. The financial regulatory environment within developed and developing countries impacts on the CG structure and format. This study investigates the impact of CG on EM in a developing country with an emerging capital market. Data from 16 listed companies of the South Pacific Stock Exchange (SPSE) in Fiji is analyzed to investigate the impact of CG on EM.

The ownership structure of the SPSE listed companies is largely considered as highly concentrated shareholding. Shareholder concentration (SC) which is also common in emerging economies such as China and India, dictates the governance structure of these companies. SC serves as a vital CG variable and has not been thoroughly explored as a constraint on EM. SC occurs when few large shareholders hold majority of the shares of the company. Due to greater control, the concentrated shareholders could extract resources from the minority shareholder. Since majority-minority shareholder conflict is dominant in a highly shareholder concentrated firm, it is vital to investigate whether SC leads to EM.

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<sup>1</sup> Dignam and Galanis (2004) explain that the system of CG is regularly described by the ‘insider’ (dispersed shareholding) or ‘outsider’ (concentrated shareholding) system of ownership and control. Moreover, the system of ownership and control is related to the state of development of the economy. Also, the regulatory regimes which differ between countries have an impact on the CG practices (Broshko and Li 2006).

## 1.2 Earnings Management Practices

Numerous researches have been constructed on the issue of EM. This has been as a result of the concerns raised by stakeholders of many organizations in an effort to improve the quality of financial reporting. Corporate collapses such as Enron, Qwest, Xerox, WorldCom and HIH Insurance have raised an alarm which led many to question the integrity of conventional accounting and auditing practices. These collapses also raised a concern about financial reporting, auditing, corporate regulations and the accounting profession as a whole. In response, the international accounting profession contributed efforts to improve the strength and independence of audit committee (AC) along with auditor independence (Behn et al. 2002).

The corporate collapses and some prior research have indicated greater instance of EM in organizations. This led to the suggestion that EM literature requires additional evidence on the factors that would limit EM (Healy and Wahlen 1999). Thus, the focus of EM research shifted towards exploring CG mechanisms and its ability to constrain EM. Research in this area has explored various CG attributes including institutional investors (Cheng and Reitenga 2009), board of directors (BOD), AC, internal audit function and the choice of external auditor (Davidson et al. 2005), role of outside directors and AC (Peasnell et al. 2005), and managerial ownership (Teshima and Shuto 2005).

This stream of research is still developing and various factors need to be explored as a constraint on EM. One of the many important CG mechanisms is SC (Zhuang et al. 2000 (hereinafter Asian Development Bank (ADB) 2000 Report)). This is because shareholders have major stake in the organization. They are the owners and therefore, they have the incentive to uphold the company in its continuous life. They also have incentives to support the managers' accounting choices if it benefits them. More importantly, the ADB (2000) Report indicates that SC is a major CG problem in emerging economies. Therefore, a relevant question is whether the concentrated shareholders would constrain EM or support managers' accounting choices.

### **1.3 Shareholder concentration in Emerging Economies**

Unlike developed economies, emerging economies have lower Gross National Income per capita with huge growth potential (BusinessDictionary 2011). Research on emerging economies such as India and China has identified that corporations have high SC. Ding et al. (2007) using data from Chinese listed companies found that on average 42% of shares are held by the top shareholder of state owned enterprises (SOE) and 32% of shares are held by the top shareholder of private companies.

Fiji is also classified as an emerging economy. Table 1.1 presents the level of SC in companies listed on the SPSE. The SPSE, formerly known as Suva Stock Exchange was established in 1979 and operated as a 'trading post'. The establishment of Capital Market Development Authority (CMDA) in January 1998 added vigor to the development of the equity market. Hence, Suva Stock Exchange changed its name to SPSE with the vision "to be an internationally recognized securities exchange for the Pacific" (SPSE 2012). Currently the SPSE provides a bond market which is highly inactive and an equity market with 16 listed companies.

Most of the listed companies on SPSE originated from Fiji. These companies were either SOE or family controlled private company. The company's vision of expansion and raising more capital encouraged them to be listed as public companies. This enables the firms' shareholding to get diverse as more and more investors invest in the company. Despite shares being traded on the stock exchange, most of the listed corporations' shareholding has not diluted. The major shareholders of these corporations, either the state or an institution or an individual or a family, are hesitant in losing control of the organization. The stock market growth has been slow with less listings and low liquidity (Mala and White 2006). It is therefore expected that high levels of SC will exist for some time in most of the listed corporation on the SPSE. Given the high level of SC, the shareholder structure of these companies differs from companies in developed economies where shareholding is diverse (for example, the United States (US)).

Table 1.1 provides the percentage of shares held by the largest shareholder in each SPSE listed company. All the SPSE companies have high levels of SC. On average, the largest shareholder holds 55.8% which is approximately 15% higher than those in other emerging economies. Moreover, in majority of the corporations, three to four largest shareholders hold approximately 80% of the shares.

**Table 1 Shareholder concentration in companies listed on the SPSE as at 31 December 2010**

<b>Company</b>	<b>% of shares held by top shareholder</b>
Amalgamated Telecommunication Holdings Limited	58.27
Atlantic & Pacific Packaging Company Limited	60.00
Communications (Fiji) Limited	26.79
Fijian Holdings Limited	65.00
FijiCare Insurance Limited	45.31
Fiji Sugar Corporation Limited	68.11
Fiji Television Limited	51.42
Flour Mills of Fiji Limited	68.64
Foster's Group Pacific Limited	89.59
Kontiki Growth Fund Limited	28.87
Pacific Green Industries Limited	35.74
Pleass Beverages & Packaging Limited	58.33
RB Patel Limited	50.75
Rice Company of Fiji Limited	75.00
Toyota Tsusho (South Sea) Limited	79.45
VB Holdings Limited	31.60
<b>AVERAGE</b>	<b>55.80</b>

#### **1.4 Research Issue and Motivation**

EM is mostly committed as a result of the loopholes in financial regulations which provide opportunities to make choices in many instances. On the one hand, major

accounting bodies like International Accounting Standards Board (IASB) and Financial Accounting Standards Board (FASB) are working to strengthen the accounting standards to minimize opportunistic choice of accounting. On the other hand, recent research is focusing on the factors to constrain EM where emphasis is on CG mechanisms as the major constraint. Most of these researches have been conducted in the United Kingdom (UK) and US and a body of research is growing in China.

It is established in prior research that EM is excessive in most corporations and organizations are strengthening their CG to constrain EM (Yu 2006; Liu and Lu 2007). This is also prevalent in the SPICs, for instance in Fiji, recent financial scams such as the agricultural scam and the collapse of the National Bank of Fiji (NBF) portrays weaker CG and greater EM. Moreover, Singh (2007) stated the same for two SOEs in Fiji. This indicates that competing incentives for EM exist for these listed corporations. EM in these corporations is motivated by regulatory pressure from SPSE, meeting benchmarks, contractual obligations, and managerial compensation. The recent corporate collapses and incentives for EM not only motivate the need to identify the extent of EM in corporations in Fiji but also the need to identify factors that would constrain EM.

EM mostly occurs due to agency problems. All public listed companies have some extent of agency problems due to separation of ownership and control. Additionally, the nature of agency problem in a corporation is determined by the firm's corporate ownership structure (ADB 2000). SPSE companies have concentrated share ownership. Therefore, the two forms of agency problem, owner – manager and majority – minority shareholder agency problem, are common in SPSE companies.

Due to high level of SC, the SPSE companies have less owner–manager agency problem and more majority – minority shareholder agency problem. The high level of SC is able to minimize owner – manager agency problem because the

concentrated majority shareholders, who are mostly part of the board and the management, provide extensive monitoring over the management team. As a result the management would refrain from opportunistic behavior. On the other hand, majority – minority shareholder agency problem is extensive in shareholder concentrated firms because the concentrated majority shareholders are able to extract private benefits of control from the minority shareholders. The dispersed minority shareholders do not monitor the majority shareholders due to asymmetric information and large costs of monitoring. Also, the board would refrain from monitoring the concentrated majority shareholders if it is dominated by them.

On the one hand, the alignment theory (alignment of owner – manager interests) suggests that high levels of SC would lead to less EM. On the other hand, the entrenchment theory suggests that high levels of SC would lead to more EM due to the tunneling behavior of the majority shareholders. Prior literature employs the alignment and entrenchment theories to explain the effect of managerial ownership on EM (Teshima and Shuto 2005). Ding et al. (2007) has also used these theories to explain the effect of the largest shareholder on EM.

More importantly, the ADB (2000) Report highlights that “a fundamental problem in corporate governance under concentrated ownership is how to protect minority shareholders from the expropriation by controlling shareholders”. Patel (2002) presents a similar view in relation to the SPSE companies that “controlling shareholders may act in their own interests at the expense of minority shareholders and other investors” (ADB 2000). Moreover, Patel (2002) explains that the concentrated shareholders resort to EM to extract private benefits of control.

The fundamental problem of resource expropriation and the presence of the competing agency theories due to the high level of SC provide a unique opportunity and motivation to investigate the impact of SC on EM in the SPSE companies.

## **1.5 Aim**

The aim of this study is to investigate the impact of SC on EM in the SPSE companies.

## **1.6 Objectives**

The objectives of this thesis are:

1. To identify the extent of EM in corporations listed on the SPSE.
2. To perform empirical tests in order to investigate the impact of SC on EM in the SPSE companies.
3. To provide a qualitative analysis on the strength of CG mechanism and SC in the SPSE companies.
4. To provide suggestions for improvement in the corporate ownership structure of the SPSE and other similar corporations.
5. To provide suggestions for improvements and betterment of CG in corporations listed on the SPSE and other similar corporations.

Table 1.2 presents the correspondence of the five objectives to the two hypotheses developed for this research. The methods, data source and decisions are also presented to highlight the link from the objectives to the decision attained upon the completion of this research.

**Table 22 The correspondence of objectives to hypotheses**

<b>Objectives</b>	<b>Method Used</b>	<b>Data Source</b>	<b>Hypothesis</b>	<b>Decision</b>
1	Estimation of DAC using PMDA model	SPSE listed corporations	none	There is high level of EM in SPSE listed corporations
2	Regression analysis		One and Two	SC leads to more EM and board size mitigates the impact of SC on EM
3	Questionnaire survey		none	CG is weak in SPSE listed corporations
4	Results discussion			Suggestions presented in chapters 5 and 6
5				

### **1.7 Justification and Contribution of the Study**

It has been identified that “studies on earnings management has mainly focused on the developed countries, such as the US, UK, Canada and some continental European countries” (Singh 2007). The findings of these studies cannot be directly applied to developing countries due to the institutional and regulatory differences. Singh (2007) also identifies that the regulatory environment in Fiji is weaker and lacks legal backing, unlike the environment in US, New Zealand and Australia.

Singh (2007) has been the first and only research on EM in the SPIC. Singh (2007) attempted to determine the instances of EM in organizations in Fiji by analyzing two state owned entities. The study employed a qualitative measure of EM from Mulford and Comiskey (2002). Given the unique ownership structure of the SPSE companies and an absence of any EM studies on the SPSE companies, it is important to investigate EM behavior within the SPSE listed companies. There are many cases in Fiji which portrays the weakness of the financial reporting and poor CG. This



includes the collapse of the NBF and the agricultural scam. Moreover, recently the media has highlighted on numerous occasions that corruption and lack of good governance is escalating in Fiji. In a recent Fiji Institute of Accountants (FIA) Congress, the Prime Minister of Fiji stated that the “FNPF board and management continued to misrepresent its books to the people” (Baselala 2010) in the wake of \$340 million write down of FNPF assets. Hence, it is vital to investigate the instances of EM in companies listed on the SPSE and it is also vital to identify and explain ways to constrain them.

First, it is important to determine the ways to measure EM. EM literature has identified the qualitative measure which is employed in Singh (2007) and the quantitative measure, which is widely used but has never been employed on the SPSE organizations. The major reason for not using the Jones model as explained in Singh (2007) is the lack of data availability. This study now has the benefit of six more years of data compared to Singh (2007) study and therefore it is possible to apply the accruals model to companies listed on the SPSE. All the 16 SPSE listed companies form the sample of this study. An unbalanced panel is formed with no companies having less than seven consecutive years of data. Hence, it is possible to use the accruals model to estimate EM. Thus, the quantitative measure of EM is employed in this study. The application of the quantitative measure allows further exploration of the variable. This enables the use of other variables to run a regression as done in many other researches in developed nations to determine the constraints on EM (Liu and Lu 2007; Ding et al. 2007).

Additionally, a questionnaire analysis is conducted to provide evidence on the CG practices in the SPSE listed companies. The CG practices in the SPSE companies are discussed in terms of internal and external governance structures. The CG practices of the SPSE companies provide further evidence on the inability of SC in constraining EM.

The extant literature has identified CG mechanisms as a major constraint on EM. The SPSE companies provide a unique opportunity to investigate the impact of SC on EM. The ownership structure of the SPSE companies is characterized by high levels of SC. Due to SC, the competitive nature of the alignment and entrenchment theories makes it imperative to explore the strength of SC in constraining EM. This study contributes to the extant literature by providing evidence on the dominant theory operating in high shareholder concentrated firms. Also, it provides empirical and qualitative evidence on the ability of SC in constraining EM.

## **1.8 Summary and Organization of the Thesis**

This thesis is divided into six chapters. The current chapter is an introduction which is followed by the literature review. Literature review discusses prior EM research highlighting incentives for EM and drivers for EM. It elaborates on CG as a major constraint on EM and CG mechanisms are discussed including internal and external CG structures. This is followed by two hypotheses.

Chapter 3 discusses the research design. This chapter discusses the research methods and describes the sample used in this study. A detailed discussion is provided on the measurement of EM and numerous EM models are discussed. Also, independent and control variables are highlighted. This is followed by a discussion on the data analysis and the regression model for the analysis.

Chapter 4 presents the empirical analysis to test the two hypotheses. A regression model is used to analyze the data.

Chapter 5 presents additional findings conducted through a questionnaire survey on the CG practices in the SPSE companies.

The final chapter presents the conclusion. It summarizes the findings of this research and highlights the implications and avenues for future research. This study encountered some limitations which are presented in chapter 6.

Next, chapter 2 discusses literature review.

## **CHAPTER 2      LITERATURE REVIEW**

### **2.1      Introduction**

This chapter provides a thorough review of the EM literature and elaborates on CG mechanisms (specifically SC and board size) which constrain EM. First, a review of the incentives for and the drivers of EM are provided. Given the incentives and opportunities for EM, it has been a concern for more than a decade. Hence, recent literature on this phenomenon highlights the importance of CG in constraining EM. Thus, external and internal CG mechanisms are also discussed in this chapter.

ADB (2000) Report suggests that high level of SC is a CG issue for companies in emerging economies. Moreover, the extant literature on board size emphasizes on the ability of larger boards in providing effective monitoring over the management of dispersed owned firms. Based on SC and board size theories, two hypotheses are developed in this chapter. First hypothesis establishes a relationship between SC and EM. The second proposition is on the ability of large boards in mitigating the effect of highly concentrated shareholders on EM.

### **2.2      Earnings Management**

EM being a concern to many corporate organizations is a broadly and well known phrase to accounting academics and practitioners. Healy and Wahlen (1999) explain that “earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported outcomes”. Judgments can be exercised in many ways and for various objectives. If it is to mislead some class of stakeholders then it is called EM (Healy and Wahlen 1999). Schipper (1989) has a similar view on EM. Schipper (1989) states that EM is the “purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain”.

Dechow et al. (1996) explain that EM is restricted to accounting choices made *within Generally Accepted Accounting Practices* (GAAP). However, the flexibility provided by accounting standards and the purpose of accrual accounting is to provide better information about the business performance. Moreover, if the choices are made to obscure true economic performance, then it is EM (Dechow and Skinner 2000). Dechow and Skinner (2000) added that the choices made to manage earnings will have similar consequences as financial fraud<sup>2</sup>. EM is not an illegal activity; however, it has been a concern for decades. Since EM is committed within the standards and other regulations given choices in some standards, it is of much interest to major stakeholders. This is also due to EM being an immoral and unethical activity where resource allocation is affected.

Fama (1980) explains the theory of a corporate organization where there is a separation of security ownership and control. The organizations operate based on principal – agent relationship. EM behavior is explained by the agency theory and is mostly due to differing interests of the principal and the agent. There are two forms of agency problems. First, owner – manager agency problem is common in dispersed owned firms. Second, majority – minority shareholder agency problem is common in shareholder concentrated firms. Emerging economies experience high levels of SC<sup>3</sup> resulting in reduced agency problem between the shareholder and the manager. However, there is an agency problem between the majority and the minority shareholders. One such an agency problem is referred to as “tunneling”. Tunneling refers to the “transfer of resources away from firms for the benefits of their controlling shareholders” (Liu and Lu 2007). Tunneling is serious in emerging economies where CG is weak (Liu and Lu 2007).

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<sup>2</sup> Financial fraud is when accounting choices explicitly violates GAAP. (Dechow and Skinner 2000)

<sup>3</sup> SC occurs when one or few largest shareholder hold majority of the shares of the company (Ding et al. 2007 and Liu and Lu 2007).

### **2.2.1 Incentives for Earnings Management**

Dechow and Skinner (2000) identifies two major incentives for EM. First, in their view, Practitioners and Regulators mostly are more concerned about capital market incentives for EM. Capital markets provide incentives for EM, as it provides a market for trading shares. The share price changes in response to information release by organizations. Shareholders and potential investors react to new information disclosed and therefore causing changes in demand and supply of the corporations' shares. Thus, there is an impact on the share price. Managers or majority shareholders, if interested in share price, could manage earnings to eventuate temporary changes in prices. However, in a strong efficient form capital market, as true information is available, the prices will adjust to its true value. In an inefficient form market, which commonly exist in developing economies and emerging markets, the incentive to engage in EM is more profound because the majority shareholders have insider information which they would release when it is appropriate for them.

Second, contractual arrangement also provides incentives for EM. For instance, bonus plans and debt covenants. There is incentive for EM when these contracts are based on accounting numbers such as profits. Therefore, agents would manipulate accounting numbers so that they are able to get the most benefits from the contracts, such as a good bonus or further loans. Furthermore, Healy and Wahlen (1999) have also discussed regulatory incentives. These incentives along with other related incentives are further discussed.

#### **Meeting Simple Benchmarks**

According to Degeorge et al. (1999), most managers find that it is vital to avoid losses. Profits sound good for a business and also for managements' performance. Once managers achieve profitability, they find that it is important to maintain increases in profits each period. Moreover, once string of earnings increases is produced, it becomes vital to meet analysts' forecasts. Several researches have provided evidence on this phenomenon (Burgstahler and Dichev 1997; Burgstahler 1997; Degeorge et al. 1999). The studies explain that small reported losses are

unusually rare than small reported profits and small increases in reported earnings are unusually common than small declines in those earnings (Burgstahler and Dichev 1997; Burgstahler 1997; Degeorge et al. 1999). It is well known that reporting earnings in this manner usually signals positive information about the firm in the capital markets and thus market participants are expected to positively react. This would increase the shareholder wealth. Healy and Wahlen (1999) explain that earnings are manipulated as an attempt to influence short-term stock price performance. However, it is expected that businesses will not always have increases in earnings. In order to avoid any negative signal to the capital markets, managers' would engage in EM.

### **Meeting Analysts' Forecasts**

Financial analysts usually make periodic financial forecasts. The forecast depends on the current business situation and future prospects. Management takes the responsibility of meeting or beating the forecast. It is perceived that if the forecast is not met then the managers have failed in their part and have not performed efficiently and effectively. Hence, the managers are inclined to engage in EM to ensure that they meet or beat the analysts' forecasts. Several studies (Brown 1998; Burgstahler and Eames 1998; Degeorge et al. 1999; Richardson et al. 1999) which have provided evidence that EM is motivated by analysts' forecasts, document that firms normally meet or beat earnings forecasts by small numbers. There is unusually small number of cases where forecast is not met. Additionally, Burgstahler and Eames (1998) provide evidence that managers have engaged in income increasing EM to avoid reporting earnings below the analysts' forecast. Furthermore, Kasznik (1999) provides evidence that earnings are managed upwards using unexpected accruals when there is danger of firms not meeting management forecasts.

### **Equity Offering**

Since a firm's share price is related to the firm's earnings, managers are expected to engage in EM prior to equity offers such as Initial Public Offers (IPO) or Seasoned

Equity Offers. Hence, higher earnings and increases in earnings would signal positive information which would lead to overvaluation of initial offer price. Healy and Wahlen (1999) explain that some managers using income increasing accruals “inflate reported earnings in an attempt to increase investor’s expectations of future performance and increase the offer price”. Singh (2007) presents a similar view and states that due to information asymmetry between investors and IPO issuers, the IPO process is susceptible to EM. Earlier studies have provided some evidence on this incentive. Teoh et al. (1998b) provide evidence on the relationship between EM and underperformance of IPOs in the subsequent periods. Issuers with unusually high accruals prior to IPO year experience decline in stock prices in subsequent years reflecting true financial performance and allowing capital market to adjust the share price. Teoh et al. (1998a) and Rangan (1998) provide similar evidence around seasoned equity offering.

### **Management Buyouts**

When managers of a firm are considering purchase of the firm, it is expected that they would want its share price to decrease. As explained earlier, since share price reflects on the information generated from firm’s earnings, managers have an incentive to manage earnings that would result in a decline in the share price. This will make management buyout cheaper. DeAngelo (1988) provides some evidence from examination of changes in accruals that managers of buyout firms understate earnings prior to management buyouts. Moreover, Perry and Williams (1994) provide more evidence from an examination of discretionary accruals (DAC) using a larger sample that managers of buyout firms engage in negative or income – decreasing accruals prior to buyout.

### **Management Compensation contracts**

Similar to the capital market incentives, contract arrangement also induces EM. This is mostly when certain outcome in the contract is depended on accounting numbers. A management compensation contract is a good example where bonus plans depend



on earnings or share price increments. In a normal business scenario, managers are entitled for bonuses upon achieving certain level of earnings. Even if the compensation is in terms of share options, it is related to share prices which could be temporary manipulated. A few studies have examined actual management compensation contracts to provide evidence on this issue. Healy (1985) and Holthausen et al. (1995) explain that managers engage in income increasing EM to improve reported earnings when actual earnings do not qualify for bonuses. Additionally, managers would defer accruals to future periods when reported earnings have reached the upper bound of the executive bonus package. Gaver et al. (1995) presents a similar work, however, supports income smoothing hypothesis. Moreover, Guidry et al. (1999) supports Healy's bonus hypothesis and the study shows that managers manipulate accruals to maximize short – term bonuses.

Research has also examined incentives for EM when top managers' job security is threatened or their expected tenure with the firm is short. DeAngelo (1988) explains that incumbent managers exercise accounting discretion to improve reported earnings during a proxy contest. Dechow and Sloan (1991) present similar evidence relating to Chief Executive Officer (CEO) who reduce research and development spending in their final year in office, probably to increase reported earnings.

### **Lending Contracts**

Lenders in their lending contracts with firms usually have debt covenant to restrict the firm to maintain certain accounting ratios or impose limits to investing and financing activities. Violation of this covenant could lead to some serious consequence for the firm. This includes increase in interest rates, requiring additional security for the loan, or in extreme cases immediate payment of the loan. In order to avoid such consequences, managers could be motivated to manage earnings (Beneish 2001). Prior research has found some evidence of EM motivated by lending contracts. DeFond and Jiambalvo (1994) and Sweeney (1994) who examined a sample of firms that actually violated the debt covenant, found mixed results. The earlier paper states that firms engage in EM a year prior to covenant violation.

However, the later study finds that firms engage in income increasing EM after covenant violation. Healy and Wahlen (1999) provide an alternative explanation that the sample firms in Sweeney (1994) could have restructured their operations in response to their financial difficulties. Moreover, Dichev and Skinner (2002) using a sample of US firms having private lending agreements provide evidence that firms take actions to be on the safe side. They find an unusually small number of loans with financial measures just below covenant thresholds and an unusually large number of loans with financial ratios at or just above covenant thresholds.

### **Industry regulations**

Almost all industries are regulated to some degree and some face monitoring that is explicitly tied to accounting numbers. This includes the Banking industry where certain capital adequacy requirements are written in terms of accounting numbers and insurance regulations having conditions for minimum financial health (Healy and Wahlen 1999). It is asserted that these regulations being tied to accounting data create incentives for EM. This could be either income increasing or income decreasing EM. Moyer (1990), Scholes et al. (1990), Beatty et al. (1995) and Collins et al. (1995) provide evidence that firms overstate loan loss provisions, understate loan write-offs and recognize abnormal realized gains on securities portfolios when they are close to capital adequacy requirements. Similarly, insurance companies that risk regulatory attention understate claim loss reserves (Petroni 1992) and engage in reinsurance transactions (Adiel 1996).

### **Anti – trust regulations**

Similarly, firms' vulnerable to anti – trust investigations or adverse political consequences and firms seeking government subsidy or protection have incentives to manage earnings. The following studies have examined a sample of firms having such incentives. Jones (1991) examines 23 firms and states that firms seeking import relief such as tariff increases and quota reductions tend to defer income in the year of application. Cahan (1992) examines a sample of 48 firms for monopoly related

violations. The study states that these firms reported income decreasing DAC in investigation years. Similarly, Key (1997) reports evidence of firms in the cable television industry engaging in EM during the period of Congressional scrutiny.

Even though there are numerous incentives for EM, EM is not possible without availability of opportunities to perpetrators. The opportunities are available due to the flexibility in financial reporting, imperfect auditing and poor governance structures in organizations. The following sub section postulates discussion on the opportunities giving rise to ways in which managers engage in EM.

### **2.2.2 Drivers of Earnings Management**

There are three major ways in which managers could manage earnings. These are (1) the use of accruals, (2) changes in accounting methods and (3) changes in capital structure (debt defeasance and debt – equity swaps) (Jones 1991). Research in the past has mostly concentrated on the use of accruals for EM. Therefore, numerous authors have modeled this to compute DAC which is now used as a common proxy for EM (Healy 1985; DeAngelo 1986; Jones 1991; Dechow et al. 1995; Kothari et al. 2005).

Within accruals, there are several accruals which are managed to temporarily increase or decrease income. Some research has focused on the use of specific accruals. Nelson et al. (2003) identified several accounting areas such as revenue recognition, fixed assets, intangibles, investments, business combinations, leases and reserves being the most frequent area where EM is prevalent. Marquardt and Weidman (2004) examine the use of specific accruals for managing earnings. They state that the use of specific accruals depends on the associated costs and benefits which depends on the motivation for EM. McNichols and Wilson (1988) found firms managing earnings with bad debt provisions. Nevertheless, in practice, many accruals are simultaneously being used for EM. Since, in many cases it is unclear which specific accruals are managed, there are many works which concentrates on

aggregate accruals (Balsam et al. 2003; Davidson et al. 2005; Krishnan 2003; Liu and Lu 2007).

Accruals are easily and commonly used for EM due to the available flexibility within accounting standards. The flexibility is vital so that the management can convey information to the stakeholders about the entity's performance (Healy and Wahlen 1999). Due to the imperfect nature of auditing, this flexibility is abused to hide the true performance (Singh 2007). Based on prior studies; Amat and Gowthorpe (2004), Brewer et al. (2002), Healy and Wahlen (1999) and Blake et al. (1998); Singh (2007) outlines five potential categorical areas for EM resulting from the accounting standards. The following paragraphs in turn discuss these categories.

First, the current accounting process requires estimates of several future economic events. Managers are given the space to exercise judgments to derive these estimates. Estimates are required for events such as the expected lives and salvage values of noncurrent assets, deferred taxes, obligations for pension benefits and other post-employment benefits and losses from bad debts and asset impairments.

Second, accounting standards allow choices in the use of accounting methods for specific accounting purposes. For instance, inventories can be valued using First In First Out, Last In First Out or Weighted Average methods. Similarly, depreciation for long term assets could be calculated using straight line, unit of use, or diminishing value methods. Also, there is a dual treatment for borrowing cost depending on its nature. Therefore, justification could be used to treat it as an asset or an expense. The effect of changes in accounting methods can be easily identified in the year of change. However, it is less readily discernible thereafter.

Next, judgments are exercised in evaluating transactions if they meet certain criteria for a particular accounting treatment. For instance, previously, classification of

events into extraordinary items required explanation that is both unusual and infrequent. Likewise, recently for other comprehensive income, judgments are necessary for classifications.

Fourth, the timing of transactions also has an impact on the financial performance. Transactions could be either accelerated or deferred to ensure earnings figure is within the range desired by managers. Mostly, timing for expenditures such as advertisements, maintenance and research and development is adjusted to attain desired earnings.

Last, corporate transactions are also structured with the view to either report more or less earnings in the current period. Singh (2007) provides the following two examples. First, the sale proceeds of the asset could be artificially adjusted (increased or decreased) with an equivalent adjustment to related rental payments in a sale and leaseback arrangement. Second, equity investments can be structured to either avoid or require consolidation.

Accordingly, due to the incentives and opportunities for EM, EM has been high in corporations for decades. Even though EM is committed within the regulations, it has been a concern for practitioners and researchers. In response, academic research has shifted its focus to identify possible ways of constraining EM to ensure future viability of the corporation.

### **2.3 Recent Focus on Earnings Management Research**

Since late 1990s, EM researchers have prioritized investigation on EM constraints (Becker et al. 1998; DeFond and Subramanyam 1998). By that time, prior research had established that EM is common in most corporations (McNichols and Wilson 1988; Jones 1991; Dechow et al. 1995; Healy 1985). Earlier research identified various accrual models, some using single accruals (McNichols and Wilson 1988)

and others using total accruals (TA) (Jones 1991; Dechow et al. 1995; Healy 1985). Jones (1991) and its modified model (Dechow et al. 1995) have been widely used in literature. This is discussed in the EM measurement section in the next chapter (section 3.4).

Recent extant literature discusses several CG mechanisms that constrain EM. First, audit mechanism includes attributes such as audit quality (Becker et al. 1998; Krishnan 2003), auditor independence measured using audit fee (AF) (Frankel et al. 2002), and non-audit service (NAS) fee (Ferguson et al. 2004), audit effort (Caramanis and Lennox 2008), auditor industry specialization (Balsam et al. 2003) and external auditor changes (DeFond and Subramanyam 1998). Second, board mechanism consists of attributes such as board committees (Wild 1996; Chtourou et al. 2001), board and AC expertise and meeting frequency (Xie et al. 2003; Dhaliwal et al. 2006), board independence (Davidson et al. 2005; Peasnell et al. 2005; Klein 2002; Bar-Yosef and Prencipe 2009), board quality (Sarkar et al. 2008). Third, ownership mechanism includes attributes such as managerial ownership (Teshima and Shuto 2005; Gabrielsen et al. 2002), institutional blockholders (Cheng and Reitenga 2009), investor protection (Leuz et al. 2003) and ownership concentration (Ding et al. 2007; Liu and Lu 2007).

Since the recent literature on EM has identified CG mechanisms as a major constraint on EM, it is vital at this point to understand CG and its mechanisms. The following two sections elaborate on CG and discuss CG mechanisms as external and internal CG structures respectively.

## **2.4 Corporate Governance**

The Advisory Board Minutes of National Association of Corporate Directors Meeting explains that “Corporate Governance ensures that long-term strategic objectives and plans are established and that the proper management structure (organization, systems and people) is in place to achieve those objectives, while at

the same time making sure that the structure functions to maintain the corporation's integrity, reputation and responsibility to its various constituencies" (Vance 1983). Shleifer and Vishny (1997) state that "corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment". Broshko and Li (2006) explain that CG is about investor protection. This is vital in today's modern public companies where there are agency problems due to the separation of management and finance or separation of ownership and control. Corporations are financed by numerous individuals and/or institutions that have the ownership interest. Despite being the owners they are unable to get involved in the management of the business and hence the control is in the hands of the agents (managers or controlling shareholders). Since the agents have control over the assets and activities of the corporation, they can expropriate the firm's resources and extract private benefits. Shleifer and Vishny (1997) explain that agency problem results from contractual relationships where management gets discretion. The paper further explains that incentive contracts can align the interests of agents and principals. However, it leads to agency costs. Therefore, the shareholder wealth maximization goal, which is strenuous, can only be accomplished if agents are restricted from expropriating resources. Such restrictions could be through extensive monitoring and protecting investors. This is mostly accomplished with strong CG. Thus, CG is vital.

The importance of CG has been greatly acknowledged in the US upon the collapse of public companies such as Enron, Tyco International and WorldCom. The Sarbanes – Oxley Act (SOX) which was enacted in July 2002 "was designed to facilitate the tightening of accounting standards and enhance external auditor independence from management" (Robins 2006). The SOX consists of 11 titles which describes specific requirements for financial reporting. The 11 titles are (1) Public Company Accounting Oversight Board, (2) Auditor Independence, (3) Corporate Responsibility, (4) Enhanced Financial Disclosures, (5) Analyst Conflict of Interest, (6) Commission Resources and Authority, (7) Studies and Reports, (8) Corporate and Criminal Fraud Accountability, (9) White Collar Crime Penalty Enhancement, (10) Corporate Tax Returns, and (11) Corporate Fraud Accountability (SOX 2002).

The SOX provides several guidelines on various CG issues within the 11 titles. Specific CG mandates relate to the duties of the Board, member appointment, composition and independence, powers and rules of the board and also audit quality and auditor independence. Sections 201 to 209 outline various rules on maintaining auditor independence. The importance of an AC is discussed in section 204 which states that the auditor reports to the AC (SOX 2002). Likewise, other titles in the SOX provide numerous rules to ensure strong CG practices within corporations listed and operating in the US.

Australia also experienced a spate of dramatic corporate collapses which includes One.Tel, Harris Scarfe and HIH before the collapses in the US. Australia responded to this with legislative changes following the SOX. The Australian responses include a Corporate Law Economic Reform Programme (CLERP 9) which “amends the Corporations Act” effective from 1<sup>st</sup> July 2004 and the “establishment of a Corporate Governance Council by the Australian Stock Exchange” (Robins 2006). The CLERP 9 primarily strengthened the “financial disclosure and the independence and integrity of audit (Robins 2006). Additionally, CLERP 9 includes “more detailed regulation of audit practices” and provides “greater protection to whistleblowers” (Robins 2006).

Moreover, the Australian Securities Exchange (ASX) Corporate Governance Council publishes and provides CG Principles and Recommendations as guidelines for companies listed on the ASX and generally for companies operating in Australia (ASX Corporate Governance Council 2003). These principles and guidelines have been recently revised and its second edition is published (ASX Corporate Governance Council 2007).

## **2.5 Corporate Governance Mechanisms and Earnings Management**

CG literature identifies several mechanisms (audit, board and ownership) which are useful for investor protection. Most of these mechanisms focus on monitoring the



management or establishing policies to ensure that they are aware of the consequences of misappropriation of firm's resources. Yu (2006) while discussing the relationship of CG and EM classifies CG as external and internal governance structures. The discussion of CG mechanisms that follows is similarly compartmentalized.

### **2.5.1 External Corporate Governance Structures**

#### **Institutional ownership**

Within a capital market, few firms are actively involved in investment in stocks of other public corporations. These institutions normally hold significant proportion of the shares of the invested company and thus actively monitor the firms in their investment portfolio. Hence, if these institutional shareholders are active then they would lessen agency problem (Solomon and Solomon 2004). There has been an increase in institutional shareholder activism in the UK and it is having a positive effect on CG and corporate value as well (Solomon and Solomon 2004). Clay (2000) and Hartzell and Starks (2003) state that institutional investors influence executive compensation. Wu (2004) added that they also influence board structures. Similarly, Fleming (2003) explains that "the most likely outcome of the change in the type of owner and ownership concentration is in the review and monitoring of the board and management by shareholders that could incur the transaction costs of information collection and regular briefings and meetings". Moreover, Yu (2006) finds that "higher institutional holdings are associated with less earnings management". However, ownership endogeneity is a potential problem since institutional investors may have a preference to invest in firms with less EM which could be due to good internal governance (Yu 2006). Bushee (1998) and Yu (2006) further state that long-term institutional ownership significantly constrains EM while the effect of short-term holdings is positive and insignificant.

## **Securities Market Regulation**

ADB (2000) Report provides the CG insight of stock market regulations. The basic objective of the regulation is to ensure better CG and corporate performance and maximization of shareholders' wealth. This could be achieved if the regulation is able to protect investors' interests, maintain order in the market and promote market efficiency. There are usually numerous requirements of the securities market. Such requirements include; registration requirement, timely disclosure requirement, and restriction on share trading by certain groups and restrictions on the levels of shareholding by financial institutions (ADB 2000). These regulations could be effective for strong CG. Nevertheless, implementation mechanisms vary and there could be great costs of enforcing compliance. Emerging stock exchanges do have a number of regulations, however, implementation and enforcement is an issue in developing and emerging economies.

## **Market Control and Competition**

Corporate control is normally gained by corporations during mergers and takeovers. The market of corporate control is not common since information asymmetry may render the takeover mechanism ineffective. Even though the hostile company succeeds in the hostile takeover, it is usually at a very high price because the managements and the concentrated shareholders have inside information. Yu (2006) states that "hostile takeovers are a powerful form of governance to discipline managers". They can remove incumbent managers by gaining control of voting rights. When there is a threat of losing control, management is more vigilant and would probably work harder. However, anti-takeover legislation increases the difficulty and reduces the power of outsiders on current management. Using differences-in-differences methodology, Yu (2006) tests the effect of legislation changes on EM and finds that "once takeover pressure is reduced, managers are more likely to take 'big baths'".

Similarly a competitive market pressures management to be efficient otherwise they would be forced out of business. Shleifer and Vishny (1997) and ADB (2000) Report state that a perfectly competitive market could be sufficient to ensure managers act in investors' interests. However, a perfectly competitive market is uncommon.

### **Creditor Monitoring and Protection**

Creditors, similar to owners are a major stakeholder of a corporation. Unlike owners who are insiders, they are referred to as outsiders. Creditors provide short term loans and companies come back to them at regular intervals for more transactions. Hence, as stated in ADB (2000) Report, creditors have some control rights in the companies they finance, thus they are an important player in CG. They can “discipline companies that default on debt payments or violate debt covenant” (ADB 2000). Creditors can also influence decision making of solvent corporations by imposing restriction on the overall level of borrowing of the company. If borrowers violate any covenant or default in payments, lenders can repossess firm's assets (collateral) or liquidate the firm. Although these threats may ensure managers invest in good projects, there are costs involved. For instance, due to restrictions, companies may be prevented from undertaking better yielding projects.

The quality of creditor monitoring depends on a number of factors. This includes the difficulty in renegotiating in default states, whether creditors' rights are enforceable in courts, creditors' own CG structures and regulations (ADB 2000). Most corporations usually borrow from commercial banks. Hence, banks have stronger incentive to monitor corporate activities. However, market debt providers could more effectively monitor since renegotiating with these dispersed debt providers may be difficult than banks who hold bilateral relationships. ADB (2000) Report states that “the interlocking ownership relationship between creditors and borrowers could compromise the role of creditors as external agents in monitoring and disciplining borrowers, especially when bank and financial regulations and supervisions are weak”.

## **Legal Protection**

Shleifer and Vishny (1997) identified that “much of the differences in corporate governance systems around the world stems from the differences in the nature of legal obligations that managers have to the financiers, as well as in the differences in how courts interpret and enforce these obligations”. Shareholder voting right is an essential characteristic but it is expensive for small investors. In developed nations, voting violations are tried in courts. This is not a common practice in weaker legal systems, especially in developing nations. Strong legal protection is vital to attract potential investors. This includes “legal restrictions on managerial self-dealing, such as outright theft from the firm, excessive compensation, or issues of additional securities (such as equity) to the management and its relatives” (Shleifer and Vishny 1997). The duty of loyalty doctrine is strong in US and Canada but outside the Organization for Economic Co-operation and Development (OECD), it is a weaker concept (OECD 2004). Shleifer and Vishny (1997) explain that this is due to the courts’ incapability and lack of desire to interfere in business.

Similarly, effective creditor monitoring would be possible if creditors are legally protected. Shleifer and Vishny (1997) identify some of the ways creditors are protected across countries. These include the right to repossess collateral assets, liquidate company when it defaults payments, vote to reorganize the company, and remove incumbent managers. Even though creditor legal protection is often more effective, diverse creditors with conflicting interest makes the legal proceeding difficult, costly and lingering. Despite the difficulties, creditor legal rights are enforced. Leuz et al. (2003) and Yu (2006) provide evidence that stronger legal protection for outsider is negatively associated with the instances of EM. However, Shleifer and Vishny (1997) state that the situation is worse in developing economies due to incomplete bankruptcy laws and unreliable courts.

### 2.5.2 Internal Corporate Governance Structures

Internal CG stems from the shareholders (owners) to the employees. It includes the structures in place within the organization to ensure its efficient operations. The attributes include audit functions, executive remunerations, BOD's characteristics and committees and ownership structure which are discussed in this section respectively.

#### **Audit functions**

Effective audit consists of both internal and external audit. Internal audit function provides an assurance and consulting service to improve the effectiveness of risk management, control and governance processes (Institute of Internal Auditors 1999). It also facilitates the effective operation and functioning of the AC (Scarborough et al. 1998; Goodwin and Yeo 2001; Goodwin 2003). Clikeman (2003) emphasizes that internal audit should take a proactive approach in educating managers and directors on the dangers of EM practice. Hence, Davidson et al. (2005) explores the effectiveness of internal audit function in curbing EM and reports an insignificant negative relationship.

Past literature suggests that large audit firms (Big 4) are more effective in monitoring the financial reporting processes and performs higher quality external audits than the smaller firms (DeAngelo 1981; Francis et al. 1999; Francis and Krishnan 1999; Kim et al. 2003). Larger audit firms have more resources, expertise and greater incentive to protect their reputation (Krishnan 2003). Accordingly, Becker et al. (1998) and Francis et al. (1999) find that clients of larger auditors (Big 5) report lower levels of EM. Similarly, auditor industry specialization also contributes to audit quality and hence is positively associated to earnings quality (Balsam et al. 2003). In the contrary, Davidson et al. (2005) using Australian firms, reports an insignificant negative relationship between audit quality and earnings quality.

Auditor independence is also vital in constraining EM. Frankel et al. (2002) and Ferguson et al. (2004) provide evidence that auditor independence measured using the proportion of NAS fee constrains EM. When an audit firm provides excessive NAS to a client, its independence appears to be impaired. Caramanis and Lennox (2008) provide evidence that the level of audit effort is negatively associated with EM.

### **Executive remunerations**

Solomon and Solomon (2004) explain that it is vital to set the executive pay at appropriate levels. Jensen (1993) identified that the importance of establishing ERs is to incentivize management to pursue with shareholders' interests. In the UK, the Cadbury and Greenbury Reports led to the creation of remuneration committee (discussed later in this chapter) to determine pay packages of executives. Core et al. (1999) using US data presented significant statistical evidence on the association between excessive ER and poor corporate performance. Moreover, Cheffins (2003) identified that executives in the US were receiving larger pay packages than any other countries considered in the study. The paper highlighted on the importance of disclosure of ERs and argued that a significant relationship between remuneration and performance would reduce shareholder monitoring costs.

### **Board of Directors**

The many shareholders of public companies cannot individually oversee the business operations. Thus, the shareholders appoint BOD who monitors the activities of the management. ADB (2000) Report identifies some fiduciary responsibilities of BOD. These are to “formulate corporate policy, approve strategic plans, authorize major transactions, declare dividends, and authorize the sale of additional securities”. Their responsibilities also involve hiring, advising, compensating management and nominating new board members and to determine board size.

A board is composed of members with differing characteristics. In shareholder concentrated firms, the majority shareholders normally form part of the BOD. The board also consists of some executive and non-executive (independent) directors (Fleming 2003). Board independence is paramount to ensure effective monitoring over the management. Having greater proportion of non-executive directors on the board ensures that the CEO or other senior management is not able to influence the Board's decision. Similar view is presented by Davidson et al. (2005), Chtourou et al. (2001) and Xie et al. (2003) who test the effectiveness of the board in constraining EM. Chtourou et al. (2001) provide insignificant results. Xie et al. (2003) and Davidson et al. (2005) provide results that a board with majority of non-executive directors is significantly negatively associated with EM. However, Brickley and James (1987), Weisbach (1988), Byrd and Hickman (1992) and Lee et al. (1992) states that independent directors are effective in specific agency problem instances. Moreover, it is highly recommended that the responsibilities of the CEO and the chairperson shall be carried by two different individuals. The non-duality of CEO and board chairperson also ensures board independence. However, Davidson et al. (2005) present an insignificant positive relationship between CEO non-duality and EM, and Bar-Yosef and Prencipe (2009) find that the proportion of independent directors and CEO non-duality are weaker in constraining EM for family-controlled businesses.

The board independence is also affected if the CEO sits on any of the committee formed by the board, for instance, the nominating committee and executive compensation committee (Klein 1998, 2002; Shivdasani and Yermack 1999). Klein (2002) provides evidence that "earnings management is positively related to whether the CEO sits on the board's compensation committee. Peasnell et al. (1998, 2005) highlight that "the likelihood of managers making income-increasing abnormal accruals to avoid reporting losses and earnings reductions is negatively related to the proportion of outsiders on the board". The result is insignificant for income-decreasing EM. Likewise Sarkar et al. (2008) explain that diligent boards are associated with lower levels of EM, but promoters' influence on the board and busy

independent directors exhibit higher EM. Sarkar et al. (2008) conclude that board quality is more important than board independence in curbing EM.

Alternatively, board composition relates to the proportion of shareholding director and non-investor director. This alternative definition of board composition determines how well the board's interest is aligned with those of the shareholders or with the majority shareholders. Hence, Mace (1986) and Patton and Baker (1987) state that it is more likely that directors with sizeable ownership would question and challenge management's proposals because it would impact on their wealth (Minow and Bingham 1995). Since the board-owners interest will be aligned, they will be more effective in monitoring the management. Literature provides a positive association between stock ownership by outside directors and effective monitoring (see Gerety and Lehn 1997; Beasley 1996; Shivdasani 1993).

Moreover, board member competence is also vital in effective board monitoring (Beasley 1996; and Gerety and Lehn 1997). It is not only vital for the non-executive board members to have knowledge of the company's affairs and the governance process (Chtourou et al. 2001) but also to have experience on the company's board (Kosnik 1987). Chtourou et al. (2001) provide evidence that non-executive directors' competence, measured as number of directorships held and years served, constrain EM.

### **Board Committees**

The many responsibilities of the board are divided and board committees are formed to engage in each specific task. For instance, an AC is formed for the purpose of monitoring the financial reporting process (Laux and Laux 2007). The board committees are discussed in the following paragraphs.



### *Executive Committee*

Vance (1983) identifies that executive committees mostly have inside directors as members and outlines some salient features of this committee. The features include: it's constant presence and acts for the board in the interim between board meetings; it assists the CEO and also checks on him/her; members are mostly officer-directors, experienced, competent and dedicated to the company.

### *Nomination Committee*

Vance (1983) states that the nomination committee is responsible for locating competent and available candidate for the board. Mallin (2010) adds that the “nomination committee should evaluate the existing balance of skills, knowledge, and experience on the board, and utilize this when preparing a candidate profile for new appointments”. Moreover, the nomination committee is “frequently asked to review the board’s total composition, structure and membership”. That is, this committee selects and/or evaluates the members of each board committees, inside and outside directors, top executives, candidates for vacancies and incumbent directors (Vance 1983). Chtourou et al. (2001) explain that it is vital for firms to have independent nomination committee “for board effectiveness and monitoring ability because it takes away the CEO’s power in nominating new members to the board”. Chtourou et al. (2001) find insignificant results on the association between nomination committee and EM.

### *Compensation Committee*

The compensation committee is responsible for setting the higher managements’ remuneration, especially for the CEO and executive directors. The executive pay includes base salary, bonuses and performance based shares. Other benefits such as housing, travelling, and medical allowances are also provided. The compensation committee also oversees the company’s compensation practices and approves its compensation programs and plans. Vance (1983) adds that the compensation committee administers the stock option plans for some companies as well. The

committee, if dominated by inside directors, is excessively generous in setting their own executive pay (Vance 1983). Sykes (2002) states that although majority or entire members of the remuneration committee may be non-executive directors, they might be part of management in another company. Hence, non-executive directors could also be generous in setting the executive pay.

Laux and Laux (2007) explain that since the board members are distributed into board committees, the committee members would concentrate on committee specific goals. The committee specific goals may not individually positively contribute to the overall Boards aim. For instance, the purpose of performance sensitive pay is to motivate managers to work harder and also to align the long-term interests of the management to those of the shareholders. The compensation committee will be willing to boost performance sensitive pay to reward employees. This could consequently result in EM if management desires higher pay but actual performance is not on par. However, the subsequent monitoring will be borne by the AC.

### ***Audit Committee***

The purpose of AC formation is to oversee the financial reporting and auditing process of a firm. Vance (1983) identifies the following seven general functions of an AC.

1. “Be responsible for the nomination and appointment, subject to stockholder approval, of independent accountants and auditors.
2. Select the outside auditors and set the range of audit and non-audit fees.
3. Approve each professional service provided by the outside auditors before such services are performed and monitor the independent auditing.
4. Review management responses to important internal control recommendations by both independent accountants and internal auditors.
5. Review the annual financial statements and, when feasible, other financial reports before issuance.

6. Assist the full board in better comprehension of the company's accounting policies, internal controls, financial reporting practices, and business ethics policies.
7. Maintain clear and comprehensive lines of communication between the directors and the independent accountants, internal auditors, and financial managements".

Wild (1996) explains that AC formation enhances earnings quality. Additionally, Chtourou et al. (2001) explain that independence is an essential quality for AC effectiveness. It is preferred that the AC is entirely composed of non-executive directors (McMullen and Raghunandan 1996). Klein (2002) presents a non-linear negative relationship between AC independence and earnings manipulation. However, Chtourou et al. (2001) explain that non-executive members do not imply AC independence. Some non-executive members may be affiliated with client firms and some may be managers<sup>4</sup> in another firm. As a result, independence of the AC would be impaired and they would be less likely to be effective monitors. Klein (2002) provides evidence that at least one large (holding at least 5% shares) outside director on the AC contributes to curb EM. Furthermore, Dhaliwal et al. (2006) uses AC size and meetings as two other vital variables which contributes to its effectiveness. More members on an AC imply more resources (Anderson et al. 2004) and quality discussions (DeZoort and Salterio 2001). Menon and Williams (1994) state that greater AC meetings imply that greater effort was exerted to monitor the management. Chtourou et al. (2001) add that AC effectiveness is dependent on committee activity which is measured as the number of meetings held in a year and the presence of a formal mandate establishing the committee's responsibilities. The presence of at least one financially expert member, a formal mandate and only independent members who meet more than twice in a year, are negatively associated with EM (Chtourou et al. 2001). Dhaliwal et al. (2006) decompose AC into members having accounting, finance and supervisory expertise and suggest that accounting expertise is vital for effective ACs. Peasnell et al. (2005) and Davidson et al. (2005) find no evidence to support that the presence of AC directly affects earnings

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<sup>4</sup> Mace (1986), Lorsch and MacIver (1989) and Westphal and Zajac (1997) state that directors who are managers in another firm are less likely to criticize the firm's management.

manipulation. However, Davidson et al. (2005) provides results that AC independence constrain EM.

Chtourou et al. (2001) explain that it is vital for AC members to be financially literate to be competent in overseeing the internal control and financial reporting process. The Blue Ribbon Committee (1999, 25) Report provides a similar recommendation. McMullen and Raghunandan (1996) explain that firms subject to securities exchange commission's (SEC) enforcement actions are less likely to have CPAs on their AC. Likewise, DeZoort and Salterio (2001) find that AC is likely to support the auditor in auditor-corporate management dispute if its members have accounting experience and auditing knowledge. Similarly, Chtourou et al. (2001) find that AC with at least a member having financial expertise is negatively associated with EM. Moreover, Dhaliwal et al. (2006) decompose AC financial expertise into accounting, finance and supervisory expertise and provide evidence that indicates a significant positive relation between accounting expertise in ACs and accruals quality.

### ***Risk Management Committee***

Risk is part of business and directors need to realize and take responsibility of the company's internal control system to ensure that it is operating efficiently. Companies are exposed to interest rate, currency, business and other risks as well. Therefore, Mallin (2010) states that a risk management committee should comprehend the risks involved. The committee should possess high level of financial expertise to manage risks. Yatim (2009) explains the importance of risk management committee and provides evidence that its establishment is related to good CG. The paper demonstrates that the establishment of a risk management committee is associated with strong board structures. Other good CG attributes also leads to the establishment of risk management committee to minimize financial, operational and reputational risks. Companies not having a risk management committee usually incorporate this responsibility as part of the AC responsibility (Mallin 2010).

The recent global financial crisis of 2008-2009 highlighted weak risk management as a determinant of the crisis. Kirkpatrick (2009) explains this in relation to CG failures and weaknesses. The paper “concludes that the financial crisis can be an important extent attributed to failures and weaknesses in corporate governance arrangements which did not serve their purpose to safeguard against excessive risk taking in a number of financial services companies”.

### ***Public Policy Committee***

Public Policy Committee provides guidance to management on major public issues and policies and simultaneously monitors the corporation’s responsibility on these issues. It also reviews and recommends on “trends in the political and social environment, as they may affect the operations of the corporation” (Vance 1983). Moreover, Vance (1983) states that it considers general policies regarding educational and charitable organizations.

### **Ownership Structure**

The ownership structure (dispersed versus concentrated) of a firm determines the level of alignment of shareholders’ and managers’ interests. Accordingly, the ownership structure determines the nature of agency problems that exist in a firm (ADB 2000). When the ownership structure is dispersed, there is an agency problem between the incumbent shareholders and the managers. On the other hand, in ownership concentrated firms, the agency problem is between the majority and the minority shareholder groups.

In order to minimize shareholder – manager agency problem, shareholders need to monitor the management. In the US and the UK where ownership is dispersed, the inadequacy of shareholder monitoring is due to the free rider problem (ADB 2000). The BOD plays a vital role of monitoring in firms having dispersed ownership.

Conversely, SC is common in Continental Europe and East Asian countries. In shareholder concentrated firms, the majority shareholders play more active role in monitoring and disciplining managers (Clay 2000; Yu 2006). Thus, high level of SC minimizes shareholder – manager agency problems. However, minority shareholders' investments are at risk as controlling shareholders would extract private benefits of control (ADB 2000).

The nature of agency problem changes due to changes in ownership structure. Fleming (2003) provides evidence that the ownership by households/persons has decreased from 75.6% to 22.8% and the ownership by financial institutions has increased from 8.9% to 34.8% from 1952 to 1995 in Australia. The analysis portrays that the change in the nature of ownership structure is growing in line with corporations financing needs and as a result changes in corporate governance policies are necessary.

#### **2.5.2.1 Shareholder Concentration**

The distribution of powers between managers and shareholders depends on the degree of ownership concentration. Institutions holding large amount of stock are interested in long term performance of the business and they act as good monitors (Bushee 1998). Institutional blockholders are institutions holding a large amount of stock (Cheng and Reitenga 2009). Cheng and Reitenga (2009) explain the characteristics of institutional shareholders as institutional non-blockholders and institutional blockholders, who can be either active or passive. Active blockholders are good monitors over management and hence they constrain earnings management (Cheng and Reitenga 2009).

Even though the controlling power held by the concentrated shareholders is useful for monitoring the management, it could be misused to expropriate resources from minority shareholders. The majority-minority shareholder agency problem is expected because the controlling owners will not be disciplined by either the

management or the minority shareholders. It is important to investigate whether the monitoring role or tunneling is more prevalent for concentrated shareholders of listed companies in emerging economies. Liu and Lu (2007) explain that most management actions are performed specifically for the benefit of the largest shareholders. Therefore, management is anticipated to serve the best interests of the concentrated shareholders - either to achieve long term performance and growth or to maximize current returns.

From financial management perspective, individuals would mostly prefer current income as opposed to future income due to the following reasons. First, future income is never certain and is dependent on many unforeseen circumstances. Second, receipts of earlier funds could be invested to increase its value. Third, the purchasing power of money will decline in the future so it is more beneficial to utilize it in current consumption than future consumption. Thus, like any individual, the largest shareholder is expected to be more interested in current returns.

Moreover, managers have incentives to meet targets and therefore they use DAC to smoothen the gap between pre-managed earnings and targeted earnings (DeFond and Park 1997; Gaver et al. 1995; Subramanyam 1996). Incentives motivate management's choice of accounting. Shareholders can opt to support the management for income-increasing earnings management if it would benefit them. On the other hand, in order to reduce political costs, shareholders can opt to support management for income-decreasing earnings management.

We expect shareholders to have incentives at all times, either to support income increasing or income decreasing earnings management. Highly concentrated shareholders have controlling power, therefore, influencing decision outcomes pertaining to either income increasing or decreasing earnings management. This discussion leads to the hypothesis (stated in the alternative form):

**Hypothesis 1.** There is a positive relationship between shareholder concentration and earnings management<sup>5</sup>.

#### **2.5.2.2 Shareholder Concentration and Board Size**

High levels of SC as discussed earlier leads to more earnings management. The majority shareholders alone would not be able to constrain the instances of earnings management as they could also be self-interested and expropriate resources if private gains exceed costs. Even though SC provides more monitoring over the management, large abnormal accruals exist due to majority-minority shareholder agency problem. This is due to the entrenchment effect<sup>6</sup> discussed in Ding et al. (2007) and Fan and Wong (2002). Moreover, Wang (2004) states that majority-minority shareholder agency problem is severe when external governance mechanisms are weak. Thus, in such business environments, maximizing the benefits of internal corporate governance mechanisms would be more beneficial.

The BOD has various responsibilities and serves as an internal corporate governance mechanism to oversee the management and ensure maximum shareholder wealth. The number of directors on the board and board independence are important board characteristics which ensure efficient and effective board deliberations and monitoring. Literature documents mixed evidence on the association between board size and effective monitoring. On one hand, few studies argue that small boards are more effective monitors (Goodstein et al. 1994; Jensen 1993; Rahman and Ali 2006; Yermack 1996) since they are more focused in solving any issues that arise. On the other hand, Zahra and Pearce (1989) find larger boards as better monitors since they have better environmental links and more expertise (Dalton et al. 1999). In support, Chtourou et al. (2001), Cornett et al. (2008), Peasnell et al. (2005) and Xie et al. (2003) provide evidence that board size is negatively associated with the levels of earnings management.

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<sup>5</sup> The natural logarithm of the absolute value of discretionary accruals computed using the PMDA model is used to measure earnings management in this study.

<sup>6</sup> The entrenched majority shareholders are able to pursue their self-interest at the expense of the minority shareholders.



When SC is high, the board is dominated by the majority shareholders and therefore the majority shareholders are able to influence the board decisions. This is highly likely in smaller boards than in larger boards. When board size is large, wider representation of directors is possible, hence constraining the influence on board decisions of majority shareholders.

Wider representation of directors implies greater board independence. Prior research provides evidence on the relationship between independent boards and earnings management (Davidson et al. 2005; Klein 2002; Bar-Yosef and Prencipe 2009; Randøy and Jenssen 2004). In high shareholder concentrated firms, the board would be considered independent if majority of the directors are non-investor directors. Section 6.36 of the SPSE Listing Rule states that “at least one third of the directors must be independent” (SPSE 2010). Company specific rules provide guidance on the board composition of the company. For instance, Amalgamated Telecommunication Holdings Limited (ATH) has provisions for board composition of four strategic investor directors, seven non-executive directors and three Fiji directors (ATH 2010). A pre-analysis of board independence for the SPSE listed companies in 2010 indicates that, on average, 46 percent of the board members are non-investor directors. In 2010, 50 percent of the SPSE companies had less than 50 percent of majority shareholder representatives on the board. Hence, the non-investor directors being majority on the board could possibly collaborate to ensure that the investor directors are not pressing for self-interest decisions. Due to data unavailability for other years, the proportion of non-investor directors on the board is not used in this study. Instead, the board size is used as a proxy with the assumption of wide board representatives.

To the extent that large boards show mixed results as effective monitors, large boards in a highly concentrated firm are more likely to have proportionate representation by the executive and non-executive directors to investor directors (the majority shareholders). The non-investor directors would be able to ensure that the board

decisions are not disadvantage to any shareholder group. The highly concentrated shareholders (investor directors) would be able to ensure that shareholder-manager agency problem is minimal as they would be able to monitor the management. Hence, large boards would mitigate the influence of highly concentrated shareholders on earnings management. This discussion leads to the hypothesis (stated in the alternative form):

**Hypothesis 2.** The degree of interaction between the level of shareholder concentration and board size has a negative relationship with the instances of earnings management.

## **2.6 Conclusion**

This chapter has discussed the extant literature on EM and CG. CG is a major constraint on EM. Relating the theories to emerging economies, this chapter in the earlier section presents two hypotheses which are tested in this thesis. Chapter Three which is on research design discusses techniques of data collection and analysis to test the hypotheses.

## **CHAPTER 3 RESEARCH DESIGN**

### **3.1 Introduction**

Research hypotheses have been developed in chapter two. This chapter discusses the research design which is used to conduct this study. First, it elaborates on the research methods used for data collection and analysis. Second, a sample description used in this study is provided. Third, Section 3.4.1 provides a discussion on the accruals models used in prior literature. This is followed by a discussion on the measurement of each variable used in the regression model developed to test the hypotheses for this study.

### **3.2 Research Methods**

Theories and hypotheses developed need to be tested with data to validate the research. Also, research is useful when it produces knowledge. This is mostly impossible without a research method. Research method includes techniques for collecting, analyzing and interpreting data. All research heavily relies on the methods which are used to test hypotheses or answer research questions. Research methods based on the theoretical underpinning provide a link between the research objectives and research findings. This is vital as it contributes to the validity of the research.

This research thesis employs two major research methods. First, a quantitative analysis of financial data is conducted. The natural logarithm of the absolute value of discretionary accrual (LnADAC) is regressed on SC and an interaction of SC with board size including some control variables. DAC is computed using the Performance – Matched Discretionary Accruals (PMDA) model and it is transformed to LnADAC by, first, computing its absolute value since the focus of this study is not on directional EM (see Becker et al. 1998; Klein 2002) and, second, transforming using natural logarithm. The absolute value of DAC is transformed to LnADAC due to the expected abnormal distribution of its data series caused by computing the absolute value. LnADAC which is a proxy for EM is computed separately for each

company using time series data of the company. Second, a qualitative analysis is performed using a questionnaire survey to complement the quantitative results. Descriptive statistics of most qualitative data collected is computed for the discussion of the results. Next, the sample used in this thesis is described.

### **3.3 Sample Description**

Our preliminary sample comprised of all the 16 SPSE listed companies. These companies mostly operate in the following industries – telecommunication, investment, manufacturing, retailing and service. All these companies are characterized as highly shareholder concentrated where, on average, the largest shareholder held 52 percent of the shares in 2010. Table 3.1 provides a brief description on the percent of shares held by the largest shareholder of each SPSE listed company.

Financial information and information pertaining to BOD were obtained from disclosures made in annual reports. Annual reports from 1986 to 2010 were gathered forming an unbalanced panel due to missing reports of few firms. This resulted in an initial sample of 186 data points. Using the 186 data years, we first compute DAC and remove a number of outliers, resulting in the final sample of 151 panel data. Even though the final sample of 151 panel data from 16 SPSE companies is a small sample, it is not too small when compared to the Jones (1991) study which used 23 firms panel to investigate EM during import relief investigations.

**Table 3 Description of the SPSE companies based on shareholder concentration and ownership in 2010**

<b>Company</b>	<b>Percent of Shares held by largest Shareholder</b>	<b>Ownership Type</b>	<b>Percent of Majority Shareholder Representative</b>
Amalgamated Telecommunication Holdings Limited (ATH)	58.3	Institution	40.0
Atlantic & Pacific Packaging Company Limited (APP)	60.0	Private company	75.0
Communications (Fiji) Limited (CFL)	26.8	Private company	40.0
Fijian Holdings Limited (FHL)	6.4	Private company	66.7
FijiCare Insurance Limited (FIL)	45.3	Private company	25.0
Fiji Sugar Corporation Limited (FSC)	68.1	Government	16.7
Fiji Television Limited (FTV)	51.4	Institution	42.9
Flour Mills of Fiji Limited (FMF)	68.6	Private company	40.0
Foster's Group Pacific Limited (FGP)	89.6	Foreign	100.0
Kontiki Growth Fund Limited (KGF)	28.9	Institution	50.0
Pacific Green Industries Limited (PGI)	35.7	Institution	40.0
Pleass Beverages \$ Packaging Limited (PBP)	58.3	Individual	75.0
RB Patel Limited (RBG)	50.7	Institution	57.1
Rice Company of Fiji Limited (RCF)	75.0	Private company	100.0
Toyota Tsusho (South Sea) Limited (TTS)	70.4	Foreign	57.1
VB Holdings Limited (VBL)	31.6	Individual	40.0

### **3.4 Measuring Earnings Management**

EM cannot be directly observed in an organization, hence it requires proxy measurement. Empirical models and a qualitative approach have been used to measure EM in prior research (Singh 2007). Mulford and Comiskey (2004) explain the qualitative approach which is used in Singh (2007) thesis to measure EM in two SOEs in Fiji. Singh (2007) justifies the choice of the qualitative approach based on its applicability to Fiji's environment and not the merits and de-merits. Singh (2007) explains that "the lack of quality and consistent data for Fiji does not permit a reliable statistically based study" in Fiji. Singh (2007) further states that the use of the cross-sectional models is difficult due to unavailability of similar entities to form groups, such as entities in the same industry.

However, recent developments in statistical software and sampling techniques make it possible to do empirical analysis using panel data. Panel data is a matrix form data where cross-sections and time-series data are integrated. The panel can be formed from either a balanced sample where each cross-section has the same number of data years or an unbalanced sample where the number of data years would differ for each cross-section.

This study investigates the research phenomena using the SPSE companies. Most listings on the SPSE have been recent but some entities have been listed for at least a decade. Hence, the data gathered for these corporations form an unbalanced panel. This study uses EVIEWS to statistically measure EM proxy using an empirical model.

#### **3.4.1 Earnings Management – Empirical Models**

EM is measured using either a "portfolio approach" or a "representative approach" (McNichols and Wilson 1988). According to the portfolio approach, researchers examine "a proxy for the sum of all accruals' discretionary components" (McNichols and Wilson 1988). However, following the representative approach, one would

examine “a proxy for a single accrual’s discretionary component” (McNichols and Wilson 1988).

McNichols and Wilson (1988) use the provision for bad debts to provide evidence of EM for income smoothing and/or bonus maximizing purposes. The discretionary component of the provision for bad debts is used as the proxy for EM and is measured as “the difference between the reported provision and the measurement specified by GAAP”. Other specific accruals include deferred tax flows, increase in inventories, increase in receivables, unexpected earnings and a variant of TA (McNichols and Wilson 1988).

Marquardt and Wiedman (2004) also examine specific accruals in three EM contexts, equity offering, management buyouts and avoiding earnings decreases. The paper argues that the costs of EM vary depending on the specific accrual used and the benefits depend on the EM context. Hence, it makes “differential predictions regarding which specific accrual will be used to manage earnings in each of the three contexts” (Marquardt and Wiedman 2004). The paper highlights that accounts receivable is the preferred accrual for firms issuing equity and also in management buyout context where unexpected accounts receivable is negative. However, firms avoiding earnings decreases is more likely to use more transitory and less costly approach, such as the use of special items (non-recurring income statement items) (Marquardt and Wiedman 2004).

Even though the focus on specific accruals permits more precise modeling, large portion of managed accruals are not captured in the model (Kang and Sivaramakrishnan 1995). This problem is minimized by using TA instead of specific accruals. Several studies have modeled TA.

Healy (1985) uses mean TA to measure EM for bonus maximizing hypothesis. The paper presents three cases with different EM predictions. The partitioning variable is used to divide the sample into three groups. EM is investigated through a pair-wise comparison of mean TA across the EM partitioning variable. The mean TA is computed as TA scaled by lagged total assets divided by the number of estimation years. Healy (1985) estimates TA as “the difference between reported accounting earnings and cash flows from operations”. Kaplan (1985) criticizes Healy’s definition of DAC which is the changes in working capital plus depreciation. Kaplan (1985) argues that there are examples of DAC, for instance “accelerating or delaying the delivery of inventory at the end of the fiscal year”, that may not affect earnings but cash flows. Moreover, Healy (1985) assumes expected TA to be zero. However, Kaplan (1985) and Dechow et al. (1995) state that the changes to working capital depends on the economic circumstances of the firm. Thus, expected accruals need to be measured using expected levels for current year rather than actual values of prior year. Similarly, Kaplan (1985) identifies that the total depreciation is not discretionary. A great proportion of depreciation which arises from fixed assets acquired in prior years is predictable.

Furthermore, DeAngelo (1986) explains that TA is a poor proxy if non-discretionary accruals (NDAC) are relatively large. Mostly NDAC is relatively large and negative<sup>7</sup>. Hence TA is expected to be negative even in the absence of EM. The use of TA in such cases would wrongly imply income-decreasing EM (DeAngelo 1986). Despite recognizing TA as a poor proxy, DeAngelo (1986) uses lagged TA as a proxy for NDAC<sup>8</sup>. Dechow et al. (1995) argue that the Healy and DeAngelo models will measure DAC with error if NDAC change from period to period.

Dechow and Sloan (1991) relax the above stated assumption (that NDAC is constant over time) and introduce an accruals model<sup>9</sup> which “assumes that variation in the

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<sup>7</sup> This is due to large depreciation charge and a significant portion is part of NDAC (DeAngelo 1986).

<sup>8</sup>  $NDAC_t = TA_{t-1}$  (Dechow et al. 1995).

<sup>9</sup>  $NDAC_t = \lambda_1 + \lambda_2 \text{median}_1(TA_t)$  where  $\text{median}_1(TA_t)$  is “the median value of TA scaled by lagged assets for all non-sample firms” (Dechow et al. 1995).



determinants of nondiscretionary accruals are common across firms in the same industry” (Dechow et al. 1995). Although this model removes the variation in NDAC which are common across the firms in the same industry, it does not eliminate the effect of other changes in economic circumstances. This issue is addressed in Jones (1991). Another limitation of the Industry model is that it removes changes in DAC that is “correlated across firms in the same industry” (Dechow et al. 1995).

Jones (1991) presents another model which also relaxes the assumption that NDAC is constant over time. Since the economic circumstances of a firm changes, NDAC is also expected to change over time. Thus it is vital to control for the changes in the economic circumstances, which Jones (1991) does by including “gross property, plant and equipment and change in revenues” in the accruals model. The Jones model is presented below:

$$\frac{TA}{A_{it-1}} = \frac{\alpha}{A_{it-1}} + \beta_1 \left( \frac{\Delta REV_{it}}{A_{it-1}} \right) + \beta_2 \left( \frac{PPE_{it}}{A_{it-1}} \right) + \varepsilon_{it}$$

where,

$TA_{it}$  = total accruals for firm  $i$  in year  $t$ ,

$A_{it-1}$  = net total assets for firm  $i$  in year  $t-1$ ,

$\Delta REV_{it}$  = change in revenue for firm  $i$  from year  $t-1$  to year  $t$ ,

$PPE_{it}$  = gross property plant and equipment for firm  $i$  in year  $t$ ,

$\varepsilon_{it}$  = error term for firm  $i$  in year  $t$ .

Dechow et al. (1995) identify an implicit assumption in the Jones model that revenues are non-discretionary. Revenue includes credit sales where managers could exercise their discretions. In order to minimize the estimate of EM biasness, Dechow et al. (1995) adjust the change in revenue for change in receivables. The modified Jones model (MJM) is presented below:

$$\frac{TA}{A_{it-1}} = \frac{\alpha}{A_{it-1}} + \beta_1 \left( \frac{\Delta REV_{it} - \Delta AR_{it}}{A_{it-1}} \right) + \beta_2 \left( \frac{PPE_{it}}{A_{it-1}} \right) + \varepsilon_{it}$$

where,

$\Delta AR_{it}$  = change in accounts receivable for firm i from year t-1 to year t,

This “model implicitly assumes that all changes in credit sales in the event period result from” EM (Dechow et al. 1995). Dechow et al. (1995) conclude that the MJM is a relatively better model than other models discussed. On one hand, Subramanyam (1996)<sup>10</sup> and Bartov et al. (2000)<sup>11</sup> add that the cross sectional MJM out performs all other models. On the other hand, Singh (2007) identifies these observations as naïve due to the recent developments in time series techniques, especially unit root tests and co-integration.

Despite being the best available EM model, the MJM is not a perfect model. The model tends to overestimate the magnitude of DAC for firms with extreme performance (Dechow et al. 1995). Moreover, the model reflects measurement error which is partly due to misclassification of its independent variables (Bernard and Skinner 1996). Guay et al. (1996) also criticize the model by stating that the DAC is imprecise due to large variations in the estimated coefficients.

Kang and Sivaramakrishnan (1995) identify several methodological issues relating to the earlier explained models. These issues include errors-in-variables problem<sup>12</sup>, simultaneity problem<sup>13</sup> and omitted variable problem<sup>14</sup>. These issues are addressed

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<sup>10</sup> Subramanyam (1996) states that the accuracy of the estimated coefficients is higher in the cross sectional model than the time series model due to a large number of degrees of freedom. Also, there is lower risk of survivorship bias because cross sectional models do not impose a requirement for long series of data (Singh 2007).

<sup>11</sup> Bartov et al. (2000) concludes after evaluating seven accruals models to detect EM. They examined DeAngelo model, Healy Model, Industry model, Jones (time series and cross sectional) and MJM (time series and cross sectional).

<sup>12</sup> Since some of the variables determining NDAC are unobservable, accounting variables are used as proxy that can be affected by EM (Kang and Sivaramakrishnan 1995).

<sup>13</sup> For instance, NDAC and income are jointly determined by constraints imposed by GAAP.

by Kang and Sivaramakrishnan (1995) who presents an instrumental variable (IV)-based model which is more powerful and more robust against Type I errors. This model uses the “generalized method of moment (GMM) estimation procedure” (Kang and Sivaramakrishnan 1995). The IV/GMM model is presented below:

$$AB_{i,t} = \phi_0 + \phi_1[\delta_{1,i}REV_{i,t}] + \phi_2[\delta_{2,i}EXP_{i,t}] + \phi_3[\delta_{3,i}GPPE_{i,t}] + \beta PART_{i,t} + u_{i,t}$$

Where,

$AB_{i,t}$  = accrual balance,

$REV_{i,t}$  = net sales revenue,

$EXP_{i,t}$  = operating expenses (cost of goods sold, selling and administrative expenses before depreciation),

$GPPE_{i,t}$  = gross property, plant and equipment,

$PART_{i,t}$  = partitioning variables.

Kang and Sivaramakrishnan (1995) explain that most accrual account balances<sup>15</sup> have an unmanaged accrual component and a discretionary component. Hence, accrual balances can be used to predict unmanaged accruals. For instance, here, unmanaged accounts receivable (which is the second term in the above model) is determined as follows:

$$AR_i^* = \phi_1 \left[ \frac{AR_{t-1}^*}{REV_{t-1}^*} (REV_{i,t}^*) \right] + \varphi$$

Where,

$AR_i^*$  = accounts receivable for firm i,

$REV_t^*$  = unmanaged sales revenue for period t

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<sup>14</sup> Some models do not include variables that reflect current economic conditions to control for unmanaged accruals, for instance, cost of goods sold and other expenses (Kang and Sivaramakrishnan 1995).

<sup>15</sup> This includes accounts receivables, inventories, depreciations and other accruals.

This model helps to better control for unmanaged accruals and minimizes errors-in-variables. The IV/GMM model minimizes omitted variable problem by including operating expenses to control for unmanaged accruals affected by changes in economic circumstances.

Moreover, Kothari et al. (2005) provide tests and make comparisons of performance-matched DAC and the traditional DAC models. The Jones and MJM are misspecified when applied to firms with unusual performance. Kothari et al. (2005) present evidence on the properties of alternative measures of DAC that exhibit more power. Upon adjusting for performance, this model is known as PMDA model. The MJM being adjusted for performance is shown below:

$$\frac{TA_{it}}{A_{it-1}} = \alpha + \beta_1 \frac{1}{A_{it-1}} + \beta_2 \frac{(\Delta REV_{it} - \Delta AR_{it})}{A_{it-1}} + \beta_3 \frac{PPE_{it}}{A_{it-1}} + \beta_4 ROA_{it} + \varepsilon_{it}$$

where,

$\alpha$  = a constant term,

$ROA_{it}$  = Return on Assets

The purpose of the constant term in the PMDA model is firstly, to provide “an additional control for heteroskedasticity not alleviated by using assets as the deflator” and secondly, to “mitigate problems stemming from an omitted size variable” (Kothari et al. 2005). Return on asset (ROA) is used as an additional term in the MJM to control “for the effect of performance on measured discretionary accruals” (Kothari et al., 2005). The results indicate that matching on current ROA performs better than matching on lagged ROA<sup>16</sup>.

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<sup>16</sup> The motivation of using ROA as a performance measure is firstly,  $\frac{earnings}{assets} = ROA$ , which measure performance; and secondly, prior research finds matching with ROA is more specified and powerful than other matching variables (Kothari et al., 2005).

This research thesis uses PMDA model as stated above for the analysis and computation of DAC. The choice of the PMDA model is based on its merits and demerits of the traditional EM models. Kothari et al. (2005) concludes that the PMDA model provides a more powerful test for EM. Kothari et al. (2005) indicate that the Jones and MJM are “the most popular choices for estimating discretionary accruals even though previous research shows that (they) are severely misspecified when applied to stratified-random samples of firms”. Kothari et al. (2005) present the limitations inherent in the two popular models and provide evidence that the “performance-matched discretionary accrual model is useful in mitigating type I errors”.

The focus when detecting EM is on the residual representing DAC which is used by the management to cook the books. The other components are equally important as they are used to determine the magnitude and directions of DAC, or EM. DAC is the error term in the PMDA model and is calculated as follows:

$$DAC = TA - TA^*$$

Where,

$TA^*$  = predicted Total Accruals

There are two approaches to observe TA. One is known as the Income Statement approach while the other is the Balance Sheet Approach. The calculation for the two approaches is as shown below:

*Income Statement approach;*

TA = Net Income before extra-ordinary items – cash flows from operations,

*Balance Sheet approach;*

$TA = \Delta\text{Current Assets} - \Delta\text{Current Liabilities} - \Delta\text{Cash} + \Delta\text{Current Maturities of Long-Term Debt} - \text{Depreciation and Amortization Expense}$

As per the income statement approach, it is assumed that all the items affecting net income except extra ordinary items and items having an effect on cash flows from operations are accruals. On the other hand, the balance sheet approach which is a direct measure computes TA by adding individual accrual components and subtracting cash. A number of EM research have used the balance sheet approach to compute TA. This includes Healy (1985), Jones (1991) and Dechow et al. (1995).

In this thesis the balance sheet approach is used to estimate TA since it is a better approach and has been widely used. TA is then regressed on the NDAC components using the PMDA model. The estimates of the constant ( $\alpha$ ) and the coefficients ( $\beta$ ) of the independent variables are used to predict TA. The predicted TA is then subtracted from the observed TA to get DAC as shown below.

$$DAC = \frac{TA_{it}}{A_{it-1}} - \left[ \hat{\alpha} + \hat{\beta}_1 \frac{1}{A_{it-1}} + \hat{\beta}_2 \frac{(\Delta REV_{it} - \Delta AR_{it})}{A_{it-1}} + \hat{\beta}_3 \frac{PPE_{it}}{A_{it-1}} + \hat{\beta}_4 ROA_{it} \right]$$

Where  $\hat{\alpha}$ ,  $\hat{\beta}_1$ ,  $\hat{\beta}_2$ ,  $\hat{\beta}_3$  and  $\hat{\beta}_4$  are firm-specific estimates.

Positive (negative) DAC implies income increasing (income decreasing) EM. Since the focus of this research is on the magnitude and not the direction of EM, it uses the LnADAC as a proxy for the level of EM. LnADAC is the dependent variable in the regression model to test the hypotheses. The regression model is presented in section 3.8. Other variables used in the regression model are discussed next.

### **3.5 Independent Variable**

#### **3.5.1 Measure of Shareholder Concentration**

There are several ways to measure SC. Cheng and Reitenga (2009) have used blockholders who hold more than 5% of the shares in the company. Lehmann and Weigand (2000), and Firth et al. (2002), use herfindahl type index that measures SC as the sum of the squared individual percentage stakes in the company. Yu (2006) has used a discrete measure by including the presence of a large shareholder. Similar to Ding et al. (2007), Liu and Lu (2007) and Marra et al. (2011), we measure SC as the percentage of shares held by the largest shareholder due to two reasons. First, in most cases the largest shareholder holds a significant proportion of the shares of the sample companies (see table 3.1). Second, the largest shareholder of most sample companies has motivations for tunneling as they have significant stakes in other related companies.

#### **3.5.2 Measure of Board Size**

This study uses the natural logarithm of the number of directors on the board as the measure of board size following Cornett et al. (2008). The number of directors is transformed using natural logarithm in this study due to (1) the small sample size, and (2) to improve the interpretability. Data transformation also generates the new data series which has a more normal distribution.

### **3.6 Control Variables**

Prior CG and EM studies have provided evidence on various constraints and determinants of EM. These have been discussed in Chapter 2. In order to have a powerful analysis of the test variable, it is vital to control for all other variables which have an impact on the dependent variable. However, due to various limitations such as small sample size and data unavailability, it is not possible to control for all the variables that have an impact on the dependent variable. Therefore, leverage, audit quality, firm size and operating volatility are used as controls variables in this study.

## **Leverage**

The impact of leverage on earnings management is analyzed in prior studies which document mixed results. Balsam et al. (2003), Becker et al. (1998), Cheng and Reitenga (2009) and Frankel et al. (2002) find a negative association while Davidson et al. (2005) and Ferguson et al. (2004) find a positive association between leverage and earnings management.

## **Audit Fees**

Frankel et al. (2002) provide evidence that AF has an inverse relationship with earnings management. AF is a proxy for the extent of audit work. Better audit would mean high fees and low earnings management. The natural logarithm of the total audit fees (LnAF) paid to the auditor for external audit services is used as a control variable in this study.

## **Firm Size**

Firm size is a vital variable used in most accounting research. Prior studies have found mixed results (Balsam et al. 2003; Becker et al. 1998; Davidson et al. 2005; Klein 2002) on the relationship between earnings management and total assets. In this research, the natural logarithm of total assets (LnTA) is used to control for the firm size.

## **Standard Deviation of Cash Flows from Operations**

Since this study uses LnADAC as the dependent variable, firm size may not be a sufficient control. This is because the measurement error inherent in DAC influences the absolute value of DAC that could lead to biased inferences. Hribar and Nichols (2007) explore the properties of DAC and absolute value of DAC and examine the implications of using the absolute value of DAC when testing for EM. The mean for



the absolute value of DAC is always positive which implies that EM will always exist; however, this may not be true. Also, the mean of the absolute value of DAC is a function of the standard deviation of DAC. These distributional properties increases “the risk of incorrectly rejecting the null hypothesis” (Hribar and Nichols 2007). Moreover, the measurement error in signed DAC increases the absolute value of DAC on average. As indicated earlier, the variance in DAC determines the absolute value of DAC. “A significant determinant of DAC variance is the firm’s underlying operating volatility” (Hribar and Nichols 2007). Thus, operating volatility is taken into consideration to mitigate this problem.

There are two ways to minimize the biasness in test using unsigned measures. They are named as the control approach and the transformation approach. Hribar and Nichols (2007) use standard deviation of cash flows from operations ( $\sigma$  CFO) and standard deviation of revenue to control for operating volatility. This approach is more practical. Initially, it is vital to test the correlation between partitioning variables and operating volatility measure and firm size. If there is a correlation between the partitioning variables and operating volatility measure then the test should incorporate controls for operating volatility. Otherwise, severe biasness would result that would affect inferences (Hribar and Nichols 2007).

For the purpose of this study, we computed the correlation<sup>17</sup> between  $\sigma$  CFO, firm size and the partitioning variables. Since there is a significant correlation between the variables, we have used  $\sigma$  CFO to control for operating volatility in our regression model.

The following table provides a summary of the variables used in the regression models and their respective predicted signs in the regression.

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<sup>17</sup> The correlation results are discussed in chapter 4 when we discuss the results of this research.

**Table 4 Predicted signs for each variable in the multi variant regression model**

<b>Variable</b>	<b>Predicted sign</b>
Shareholder concentration (SC)	+
Interaction of SC and board size (SC*LnBS)	-
Leverage (LEV)	Mixed
Natural log of audit fees (LnAF)	-
Natural log of total assets (LnTA)	Mixed
Standard deviation of Cash Flows from Operations ( $\sigma$ CFO)	+

### 3.7 Data Analysis

A descriptive analysis is conducted for all the data collected. The mean, median, maximum, minimum, standard deviation, skewness and kurtosis for each variable are computed. The descriptive statistics provide the distribution of each variable and highlight any flaws on the data or measurement of any variables. A correlation matrix is computed to highlight the relationship of each variable with the rest of the variables used in this research. This provides an idea of the importance of inclusion of each variable in the regression. Lastly, a multivariate regression is performed using the regression models (discussed next), each to test for each hypothesis.

### 3.8 Regression model

The first hypothesis refers to the SC variable while the second is about the interaction of SC with board size. This paper incorporates the interaction variable in the regression model as used by Fan and Wong (2002) and Park and Shin (2004). The regression model to test the hypotheses is:

$$\text{LnADAC} = \alpha + \beta_1 * \text{SC} + \beta_2 * \text{SC} * \text{LnBS} + \beta_3 * \text{LEV} + \beta_4 * \text{LnAF} + \beta_5 * \text{LnTA} + \beta_6 * \sigma\text{CFO} \quad (2)$$

Where:

LnADAC = Natural logarithm of the absolute value of Discretionary Accruals.

SC = Shareholder Concentration is the percentage of shares held by the largest shareholders.

LnBS = natural logarithm of board size.

LEV = financial leverage calculated as total liabilities divided by total assets.

LnAF = natural logarithm of audit fees.

LnTA = natural logarithm of total assets, used as a measure for firm size.

$\sigma\text{CFO}$  = standard deviation of cash flows from operations, used as a proxy for operating volatility.

### 3.9 Conclusion

This chapter has discussed the research methods used in this study that includes a qualitative analysis using a questionnaire survey and an empirical analysis of financial data. The PMDA model is used to compute LnADAC which is used as a dependent variable in the regression models to test the two hypotheses. The definition and explanation of each test and control variable is provided in this chapter. The regression models used for analysis are also presented in this chapter

Next chapter presents the empirical results for this study based on the regression model discussed in this chapter.

## **CHAPTER 4      SHAREHOLDER CONCENTRATION AND EARNINGS MANAGEMENT RESULTS**

### **4.1      Introduction**

The current age and business professionals in this era place more emphasis on CG. The long term business success is highly depended on its governance. It, as highlighted in the literature, has strong capabilities to constrain EM in any business environment. The ability of CG to constrain EM depends on the corporate structure and governance policies and implementations. The corporate structure and its policies vary between countries due to numerous factors<sup>18</sup> such as the state of the nation.

The corporate structure of companies listed on the SPSE vastly differs from those listed on developed stock exchanges. This is due to the high level of SC of companies listed on the SPSE. This chapter provides the descriptive statistics, correlation statistics of each variable used in this study and regression results based on the regression model developed in chapter three. The descriptive statistics highlight that shareholdings are highly concentrated in SPSE companies. Also, the regression results indicate that there is a significant relationship between SC and EM. Next, descriptive statistic is discussed for all the variables used in this research.

### **4.2      Descriptive Analysis**

An analysis of each variable highlights some interesting characteristics about the variable. The descriptive analysis enables the researcher to better understand the characteristics and behavior of each variable, including the dependent, test and control variables. It also highlights if any variable needs to be omitted in further analysis.

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<sup>18</sup> Identifying these factors are not part of this research.

Table 4.1 provides descriptive statistics for EM, SC, the interaction of SC and BS, LEV, LnAF,  $\sigma$ CFO and LnTA of the sample companies. The LnADAC which is computed using the PMDA model is used as a proxy for EM in the SPSE companies. The descriptive statistics indicate that EM is common in all SPSE companies. The mean and median LnADAC is -2.7261 and -2.7449 respectively. For further understanding, the mean of DAC and absolute value of DAC which are computed, are 0.0007 and 0.1351 respectively. The mean of DAC which is not equal to zero, implies that EM is common in the sample companies. The minimum LnADAC is -6.2102 and the maximum is -0.1535. The standard deviation is 1.3111. The descriptive statistics indicate that EM is a concern for all companies listed on the SPSE.

Moreover, the skewness, kurtosis and probability provide statistic about the normality of the distribution. The skewness of -0.2892 means that the LnADAC data series has a small left tail. Kurtosis which measures the peakedness or flatness of the series is 2.7178. This means that the LnADAC distribution is not leptokurtic (peaked) relative to the normal distribution. The probability of greater than 0.05 implies that LnADAC is normally distributed.

The descriptive statistic of SC indicates that on average 41 percent of the shares of the SPSE companies are held by the largest shareholder with the median being 39 percent. The shareholding of the largest shareholder of the sample companies range from 10 percent (the minimum) to 82 percent (the maximum). This implies that the level of SC is very high in SPSE companies. The standard deviation of 0.2183 implies that the level of SC is within 22 percent of the mean value of SC for most corporations (approximately 67 percent). SC is common in other developing and emerging economies (Ding et al. 2007; Fan and Wong 2002; Wang 2004).

Further statistics indicate that the SC data is not skewed as the skewness (0.1836) is close to zero. The SC data is flat compared to the standard normal distribution

because the kurtosis is 1.6938. Since the skewness is close to zero, kurtosis is close to three and Jarque-Bera statistic is not large, it could be concluded that the SC data series is close to a standard normal distribution.

The interaction variable (SC\*LnBS) has a mean (median) of 0.7101 (0.6671) and the standard deviation is 0.3870. The minimum is 0.1543 and the maximum is 1.6972. The mean of the interaction variable implies that with the average level of SC, the BS is approximately 5.65. The BS of the SPSE companies ranges from 3 to 14 directors. The average BS is 5.78. Despite the high level of SC in the sample companies, the BS is quite low. This could be a contributor to the high level of EM in SPSE companies. Similar to SC, the statistics of the interaction variable indicate that it is close to standard normal distribution. The skewness is 0.6843 indicating a small right tail and the kurtosis of 2.7452 is good since it is close to three.

LEV has a mean (median) of 0.4400 (0.4532) and a standard deviation of 0.1628. The descriptive statistic implies that approximately 44 percent of the company's assets are owned by outsiders leaving a larger proportion to equity holders. The minimum is 0.0356 and the maximum is 0.9747. This implies that for some sample companies, equity holders have significant control in terms of shares and finance as well. SPSE companies also portray characteristics of significant outsider control in terms of finance. The skewness and kurtosis of 0.1553 and 3.2129 respectively implies that the distribution is normal.

The LnAF is used as a proxy for audit quality. The mean (median) LnAF is 10.3860 (10.7058) with a maximum of 12.4723 and a minimum of 7.8240. The standard deviation of LnAF is 1.1931. The LnAF is close to normally distributed because its skewness and kurtosis are -0.6252 and 2.3843 respectively. The skewness and kurtosis of LnAF are close to the standard of zero and three respectively.

The  $\sigma$ CFO, which is used as a proxy for operating volatility has a mean (median) of 0.1377 (0.0871) and a standard deviation of 0.1211. The minimum and maximum of the  $\sigma$ CFO are 0.0286 and 0.5933 respectively. The descriptive statistics imply that the cash flows from operations are volatile. Due to the operating volatility, some variations in the AbsDAC are as a result of normal business operations. This is primarily due to the large number of credit transactions. Furthermore, the  $\sigma$ CFO is not normally distributed at 1% significance level and the distribution is more peaked given a kurtosis of 6.2621 and has a right tail (skewness is 1.9308) compared to standard normal distribution.

The firm size is used as a control variable in most EM research. In this thesis LnTA is used as a proxy for the firm size. The mean (median) is 17.3295 (17.2587) with the maximum of 20.0463 and the minimum of 14.7436 and a standard deviation of 1.5476. The skewness of LnTA is 0.1613 and the kurtosis is 1.5970, both implying that it is close to standard normal distribution.

The descriptive characteristics of the variables used in this study indicate several aspects about the companies listed on the SPSE. In summary, most firms engage in EM, have high level of SC, a board of approximately 6 directors, and more equity than liability. The descriptive statistics does not provide conclusive evidence on the hypotheses developed. However, it only provides statistics that highlights the characteristics of each variable.

**Table 5** Descriptive statistics of the dependent and independent variables

	<b>LnADAC</b>	<b>SC</b>	<b>LnBS</b>	<b>SC*LnBS</b>	<b>LEV</b>	<b>LnAF</b>	<b><math>\sigma</math>CFO</b>	<b>LnTA</b>
Mean	-2.7261	0.4148	1.7548	0.7101	0.4400	10.3860	0.1377	17.3295
Median	-2.7449	0.3924	1.7918	0.6671	0.4532	10.7058	0.0871	17.2587
Maximum	-0.1535	0.8162	2.6391	1.6972	0.9747	12.4723	0.5933	20.0463
Minimum	-6.2102	0.0959	1.0986	0.1543	0.0356	7.8240	0.0286	14.7436
Std. Dev.	1.3111	0.2183	0.3127	0.3870	0.1628	1.1931	0.1211	1.5476
Skewness	-0.2892	0.1836	-0.3281	0.6843	0.1553	-0.6252	1.9308	0.1613
Kurtosis	2.7177	1.6938	2.6819	2.7452	3.2129	2.3843	6.2621	1.5970
Jarque-Bera	2.6057	11.5836	3.3458	12.1939	0.8923	12.2211	160.7738	13.0398
Probability	0.2717	0.0031	0.1877	0.0023	0.6401	0.0022	0.0000	0.0015
Sum	-411.6368	62.6349	264.9765	107.2289	66.4355	1568.2790	20.7990	2616.7460
Sum Sq. Dev.	257.8376	7.1478	14.6635	22.4596	3.9735	213.5348	2.2004	359.2798

Notes: This table reports the descriptive statistics of earnings management measure (LnADAC), the shareholder concentration measure (SC), the natural logarithm of board size (LnBS), the interaction of shareholder concentration and board size (SC\*LnBS), leverage (LEV), audit quality measure (LnAF), operating volatility measure ( $\sigma$ CFO) and firm size (LnTA) of the sample companies. LnADAC is the natural logarithm of the absolute value of discretionary accruals. SC is the shareholding percentage of the largest shareholders. SC\*LnBS is the interaction of shareholder concentration and board size. LEV is total liabilities over total assets. LnAF is the natural logarithm of audit fees.  $\sigma$ CFO is the standard deviation of cash flows from operations. LnTA is the natural logarithm of total assets.



### 4.3 Correlation Analysis

Table 4.2 presents the correlation matrix for the variables used in this study. All the variables have significant correlation with LnADAC except SC, the interaction of SC and BS and LEV. The correlation analysis indicates that some independent variables are significantly correlated with each other. For instance, LnAF and LnTA have a correlation of 0.8304 which is significant at 1% level. SC and SC\*LnBS also have a high correlation of 0.8874 significant at 1% level. Such a high value of correlation coefficient amongst independent variables could lead to multicollinearity problem. Since multicollinearity problem could lead to misleading results, Variation Inflation Factor (VIF) is computed for the independent variables. Rawlings (1988) suggests that VIF of more than 10 imposes serious multicollinearity problem. Our test shows that all VIFs of the variables in our regression are less than 10.

The correlation matrix computes the coefficients and significance of each variable in isolation of the other variables. A better analysis is the multivariate regression which incorporates the test variable and the control variables in one regression analysis to avoid biasness in coefficients and is discussed next.

**Table 6** Correlation analysis of all the variables used in the regression model

Correlation Probability	LnADAC	SC	LnBS	SC*LnBS	LEV	LnAF	$\sigma$ CFO	LnTA
<b>LnADAC</b>	1.0000							
<b>SC</b>	0.1069	1.0000						
<b>LnBS</b>	-0.3200***	-0.2621***	1.0000					
<b>SC*LnBS</b>	-0.0548	0.8874***	0.1803**	1.0000				
<b>LEV</b>	-0.0091	-0.0408	0.1134	0.0760	1.0000			
<b>LnAF</b>	-0.1839**	0.0382	0.4647***	0.2678***	0.3121***	1.0000		
<b><math>\sigma</math>CFO</b>	0.2650***	0.2448***	-0.3892***	0.0279	-0.2839***	-0.4287***	1.0000	
<b>LnTA</b>	-0.1517*	0.0556	0.6461**	0.3521***	0.2802***	0.8304***	-0.3765***	1.0000

Notes: This table reports the correlation matrix for the variables used in the regression. LnADAC is the natural logarithm of the absolute value of discretionary accruals. SC is the shareholding percentage of the largest shareholders. LnBS is the natural logarithm of board size. SC\*LnBS is the interaction of shareholder concentration and board size. LEV is total liabilities over total assets. LnAF is the natural logarithm of audit fees.  $\sigma$ CFO is the standard deviation of cash flows from operations. LnTA is the natural logarithm of total assets. \*\*\* = significant at 1%, \*\* = significant at 5%, \* = significant at 10%.

#### 4.4 Regression Results

Table 4.3 reports the estimated coefficients, t-statistics, probabilities and adjusted  $R^2$  from an Ordinary Least Square (OLS) regression of LnADAC on SC, the interaction of SC and BS, and the control variables. The model is significant with F-statistic of 4.60 ( $p < 0.01$ ) and its adjusted  $R^2$  is 0.13 which is a good explanatory power. The adjusted  $R^2$  in this study is comparable to those in similar studies (see Ferguson et al. 2004; Davidson et al. 2005; Ding et al. 2007; Liu and Lu 2007; Sarkar et al. 2008).

Consistent with Yu (2006), the coefficient of  $SC^{19}$  is positive and significant ( $\beta = 4.74$ ,  $p < 0.01$ ). This supports the first hypothesis. The result suggests that high levels of SC lead to higher levels of EM. This could be due to either ineffective monitoring over the management of the SPSE companies or the largest shareholder has incentives to support the management for EM. Even though the positive coefficient is as predicted, the large coefficient is captivating as it implies that SC itself is unable to constrain EM. Conversely, SC contributes to more EM.

The coefficient of the interaction variable,  $SC*LnBS$ , is negative and significant ( $\beta = -2.75$ ,  $p < 0.01$ ). This supports the second hypothesis<sup>20</sup>. The result implies that the larger the interaction between SC and BS, the lesser will be EM. In other words, large BS is able to constrain the effect of SC on EM. This is because, in larger boards, a wider representation of board members is expected and the investor directors would not be able to influence the board decisions. On the one hand, the concentrated shareholders would monitor the management and minimize owner-manager agency problem and on the other independent board members would monitor the concentrated shareholders and

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<sup>19</sup> Following Ding et al. (2007) and Liu and Lu (2007), a separate regression analysis was conducted which incorporated squared shareholder concentration variable ( $SC^2$ ) assuming a non-linear relationship with earnings management. The result for  $SC^2$  was insignificant ( $\beta = -0.06$  and  $P = 0.85$ ) and the coefficient and significance of the variables presented in table 4.3 were insignificantly different.

<sup>20</sup> A separate regression analysis was conducted that incorporated LnBS in the regression model. The result for LnBS was insignificant ( $\beta = 0.07$  and  $P = 0.56$ ) and the coefficient and significance of the variables presented in table 4.3 were insignificantly different.

minimize majority-minority shareholder agency problem. As a result, there will be low levels of EM as indicated by the negative coefficient.

**Table 7 Regression analysis of the interaction effect of shareholder concentration and board size on earnings management including controls**

	Coefficient	Std. Error	t-Statistic	Prob.
C	-5.1797	1.5155	-3.4177	0.0008
SC	4.7383	1.3238	3.5794	0.0005
SC*LnBS	-2.7532	0.7754	-3.5505	0.0005
LEV	0.8885	0.6588	1.3488	0.1795
LnAF	-0.2251	0.1576	-1.4277	0.1555
$\sigma$ CFO	1.5707	1.0014	1.5685	0.1190
LnTA	0.2408	0.1339	1.7988	0.0741
R-squared	0.1608	Mean dependent var		-2.7261
Adjusted R-squared	0.1259	S.D. dependent var		1.3111
S.E. of regression	1.2258	Akaike info criterion		3.2903
Sum squared resid	216.3698	Schwarz criterion		3.4302
Log likelihood	-241.4178	Hannan-Quinn criter.		3.3471
F-statistic	4.5997	Durbin-Watson stat		1.3601
Prob(F-statistic)	0.0003			

Notes: This table reports coefficient for regression of the natural logarithm of the absolute value of discretionary accruals (LnADAC) on shareholder concentration (SC) variable and control variables. The following model  $LnADAC = \alpha + \beta_1 * SC + \beta_2 * SC * LnBS + \beta_3 * LEV + \beta_4 * LnAF + \beta_5 * \sigma CFO + \beta_6 * LnTA$  was regressed including 151 observations. LnADAC is the natural logarithm of the absolute value of discretionary accruals. SC is the shareholding percentage of the largest shareholders. SC\*LnBS is the interaction of shareholder concentration and board size. LEV is total liabilities over total assets. LnAF is the natural logarithm of audit fees.  $\sigma$ CFO is the standard deviation of cash flows from operations. LnTA is the natural logarithm of total assets.

The coefficient for all the control variables are as expected. LnTA has a significant positive coefficient of 0.24. This result is consistent with past studies (see Becker et al. 1998). Large firms have more business operations compared to smaller firms. Since large firms are more complex, it is expected that the large firms will have more DAC.

The coefficient of LEV, LnAF and  $\sigma$ CFO is 0.89, -0.23 and 1.57 respectively. However, these results are insignificant. The positive coefficient of LEV could be as a result of EM pressures to meet debt covenants. The major lenders for the sample companies are banks. Since there are only a few listed companies, the banking sector would prefer not to lose a client by engaging in extensive monitoring. This would result in loss of income for the lender given few opportunities in a small developing market.

Audit quality is unable to significantly constrain EM because the auditors of all the SPSE companies are one of the Big Four audit firms. There is probably insignificant difference in the quality of audit service provided by these firms due to similar expertise. The insignificant association of operating volatility with LnADAC could be due to the lack of influence of the business operations on accruals.

#### **4.5 Sensitivity Analysis**

Table 4.4 provides the results of the sensitivity analysis used in this study. The sensitivity analysis uses Herfindahl index (H index) as the measure of SC. H index is used in previous studies that investigate the consequences of concentrated ownership structures (Demsetz and Lehn 1985; Hartzell and Starks 2003; Makhija and Patton 2004). The H index is computed as the sum of the squares of the percentages of shares held by the 5 largest shareholders. Ding et al. (2004) also uses the shareholding of the 5 largest shareholders to measure SC. The results of the sensitivity analysis are generally consistent with the main regression results reported in Table 4.3. Both, SC and its interaction with BS, are significant at 1 percent and LnTA is significant at 10 percent.

**Table 8 Sensitivity results of the interaction effect of shareholder concentration and board size on earnings management**

	Coefficient	Std. Error	t-Statistic	Prob.
C	-5.1199	1.5133	-3.3832	0.0009
HIndex	6.2198	1.7913	3.4723	0.0007
HIndex*LnBS	-3.7544	1.0506	-3.5734	0.0005
LEV	0.9425	0.6621	1.4235	0.1568
LnAF	-0.2165	0.1575	-1.3744	0.1714
$\sigma$ CFO	1.6078	1.0101	1.5917	0.1136
LnTA	0.2353	0.1335	1.7631	0.0800
R-squared	0.1595	Mean dependent var		-2.7261
Adjusted R-squared	0.1244	S.D. dependent var		1.3111
S.E. of regression	1.2268	Akaike info criterion		3.2919
Sum squared resid	216.7242	Schwarz criterion		3.4318
Log likelihood	-241.5413	Hannan-Quinn criter.		3.3488
F-statistic	4.5529	Durbin-Watson stat		1.3705
Prob(F-statistic)	0.0003			

Notes: This table reports coefficient for regression of the natural logarithm of the absolute value of discretionary accruals (LnADAC) on shareholder concentration (SC) variable and control variables. The following model  $LnADAC = \alpha + \beta_1 * HIndex + \beta_2 * HIndex * LnBS + \beta_3 * LEV + \beta_4 * LnAF + \beta_5 * \sigma CFO + \beta_6 * LnTA$  was regressed including 151 observations. AbsDAC is the absolute value of discretionary accruals. HIndex is the herfindahl index which is computed as the sum of the squares of the percentages of shares held by the 5 largest shareholders. HIndex\*LnBS is the interaction of HIndex and board size. LEV is total liabilities over total assets. LnAF is the natural logarithm of audit fees.  $\sigma$  CFO is the standard deviation of cash flows from operations. LnTA is the natural logarithm of total assets.

#### 4.6 Robustness Test Results

Table 4.5 presents the results for a robustness test conducted for this study. From the sample of the SPSE companies which is used in this study, ATH and FSC are significantly large. The mean LnTA including the two companies in the sample is 17.3295 and without them, the mean decreases to 16.7713. Since these two companies are larger and has greater business operations compared to other companies in the sample, their inclusion could lead to biasness in the multivariate regression results. Even

though LnTA (firm size) is used as a control variable in the main regression analysis, a further robustness test<sup>21</sup> is conducted to ensure that the results are not biased due to the inclusion of ATH and FSC in the sample.

The empirical results for the robustness check are largely consistent with the main regression results. The relationship of SC, the interaction of SC with BS and LnTA are as predicted and presented above. SC and the interaction between SC and BS are significant at 1% level and 5% level respectively while LnTA is significant at 10%.

**Table 9 Robustness results of the interaction effect of shareholder concentration and board size on earnings management**

	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.5705	2.2192	-2.9607	0.0037
SC	4.5394	1.5242	2.9783	0.0036
SC*LnBS	-2.1635	1.0121	-2.1377	0.0347
LEV	0.9857	0.7668	1.2856	0.2013
LnAF	-0.3444	0.1879	-1.8332	0.0694
$\sigma$ CFO	1.3009	1.0572	1.2305	0.2211
LnTA	0.3820	0.2061	1.8535	0.0664
R-squared	0.1675	Mean dependent var		-2.6247
Adjusted R-squared	0.1229	S.D. dependent var		1.3535
S.E. of regression	1.2676	Akaike info criterion		3.3692
Sum squared resid	179.9690	Schwarz criterion		3.5327
Log likelihood	-193.4665	Hannan-Quinn criter.		3.4356
F-statistic	3.7547	Durbin-Watson stat		1.4817
Prob(F-statistic)	0.0019			

Notes: This table reports coefficient for regression of the natural logarithm of the absolute value of discretionary accruals (LnADAC) on shareholder concentration (SC) variable and control variables. The following model  $LnADAC = \alpha + \beta_1 * SC + \beta_2 * SC * LnBS + \beta_3 * LEV + \beta_4 * LnAF + \beta_5 * \sigma CFO + \beta_6 * LnTA$  was regressed including 151 observations. LnADAC is the natural logarithm of the absolute value of discretionary accruals. SC is the

<sup>21</sup> The sample size of the robustness test is 119 firm years.

shareholding percentage of the largest shareholders. SC\*LnBS is the interaction of shareholder concentration and board size. LEV is total liabilities over total assets. LnAF is the natural logarithm of audit fees.  $\sigma$ CFO is the standard deviation of cash flows from operations. LnTA is the natural logarithm of total assets.

## 4.7 Conclusion

This chapter has presented the results for the three hypothesis developed in Chapter Two using the regression model developed in chapter three. Table 4.6 presents a summary of the signs (representing direction of relationship with LnADAC) of the test variables and it is compared with the predicted sign. The key test variables used are SC and the interaction between SC and BS. Other variables are used as controls to minimize biasness of the coefficients. The results indicate that SC contributes to more EM. The result also supports the second hypothesis that large BS is effective in mitigating the effect of SC on EM. The results for the test variables are significant at 1% level.

**Table 10** Summary of the results of the test variables used in the multi variant model

Variable	Predicted sign	Coefficient
SC	+	4.7383***
SC*LnBS	-	-2.7532***

Notes: This table reports the coefficients and significance of the test variables, shareholder concentration (SC) and the interaction of shareholder concentration and board size (SC\*LnBS), used in this study. \*\*\* = significant at 1% level

The next chapter presents additional findings conducted through a questionnaire survey on the CG practices in the SPSE companies.



## **CHAPTER 5      CORPORATE GOVERNANCE PRACTICES IN THE SPSE LISTED COMPANIES**

### **5.1      Introduction**

The empirical results in the earlier chapter provide evidence that high level of SC is a CG issue in an emerging stock market such as the SPSE. The results indicate that the high levels of SC contribute to more EM. The ADB (2000) Report indicates that this issue is severe when the internal and external CG mechanisms are weak. This chapter provides evidence on the CG practices in the SPSE listed companies using a questionnaire<sup>22</sup> survey and annual report analysis.

The CG practices of the SPSE companies are expected to be different from those of corporations listed on the stock exchanges in developed nations due to two major reasons. First, the place (country) of origin of a company dictates its rules, policies, regulations, culture and law on the company like the place of birth of an individual explains his/her language, culture, values and personalities. There are various differences between countries, within countries between states, within states between towns and cities which contribute to the differences between companies. These differences explain the strength of the external CG structures available to support business growth and development.

For instance, a company incorporated in the US and Australia is expected to have strong external CG practices. In the US, the SOX provides several guidelines on CG issues. These include rules on the establishment and registration of the Board. Specific rules such as the duties of the Board, member appointment, composition and independence, powers and rules of the board and also audit quality and independence are outlined within Title I of SOX. The SOX has its second Title (II) on Auditor Independence where

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<sup>22</sup> The questionnaire is provided in Appendix 1.

sections 201 to 209 outline various rules on maintaining auditor independence. The importance of an AC is discussed in section 204 which states that the auditor reports to the AC (SOX 2002). Likewise, other titles in the SOX provide numerous rules to ensure strong CG practices within corporations listed and operating in the US.

Similarly, the ASX Corporate Governance Council in Australia publishes and provides CG Principles and Recommendations as guidelines for companies listed on the ASX and generally for companies operating in Australia (ASX Corporate Governance Council 2003). The CG Principles and Recommendations outline eight principles which are each of equal importance. The principles are: (1) Lay solid foundations for management and oversight, (2) Structure the board to add value, (3) Promote ethical and responsible decision-making, (4) Safeguard integrity in financial reporting, (5) Make timely and balanced disclosure, (6) Respect the right of shareholders, (7) Recognize and manage risk, and (8) Remunerate fairly and responsibly (ASX Corporate Governance Council 2007). These guidelines have been very useful in improving the CG practices in most corporations in Australia.

However, there are very limited guidelines and recommendations on CG for the SPSE companies. This chapter highlights on the external policies and practices governing corporations listed on the SPSE.

Second, the strength of the CG practices in a company is determined by the available internal governance structures in the company. The shareholders (with power), BOD and the management of a company determine the internal CG practices of the company. The external business environment also influences the internal CG practices of an organization.

A major factor that contributes to the differences between corporations is their governance mechanisms and administration. CG mostly differ between corporations due to various reasons including the laws of the nation, the strength of the stock exchanges, the strength of the accounting body, the competitiveness of the corporate market and the status of the economy. These factors have an impact on the CG practices within the corporations.

## **5.2 Rules and Regulations governing the SPSE companies**

The Government of Fiji (hereinafter Companies Act (1985)), SPSE (2010) Listing Rules, CMDA (2008) CG code for the capital markets (which is also known as the Reserve Bank of Fiji (RBF) CG principles and reporting guidelines) and the FIA provide rules and regulations that govern the operations of the SPSE publicly traded companies. The Companies Act provides legislations on the incorporation of companies and generally on the administration and management of the companies. The SPSE listed companies are required to follow the International Financial Reporting Standards (IFRS) since 2007 following a decision of the FIA to adopt the IFRS. The FIA also provides the code of ethics for accountants based on the International Federation of Accountants (IFAC) code of ethics.

The CG principles and regulations for the SPSE companies are provided by the SPSE (2010) Listing Rules and CMDA (2008) CG code. The SPSE requires all listed companies “to comply with corporate governance code as stipulated under the RBF corporate governance principles and reporting guidelines” (SPSE 2010) which was previously known as CMDA (2008) CG code for the capital markets.

The SPSE (2010) requires a minimum of three directors on the board. On the other hand, the CMDA (2008) CG code takes a flexible approach by stating that “the board should be structured in a way, in terms of its composition, size and commitment that it

effectively carries out its responsibilities”. The CMDA (2008) CG code recommends the establishment of a nomination committee for the selection and appointment of directors.

Additionally, the regulations require the board to be independent. The SPSE (2010) Listing Rules state that “at least one third of the directors must be independent”. There is some inconsistency as the CMDA (2008) CG code recommends that at least thirty percent of the board to be independent. The CG code defines an independent director as “a non-executive director who is not a member of management and who is free of any business or other relationship that could materially interfere with-or could reasonably be perceived to materially interfere with-the independent exercise of their judgment” (CMDA 2008). Moreover, it is recommended that “the board should ensure that all conflicts of interest are disclosed” (CMDA 2008).

The CG code states that the appointment of directors should be based on consideration of factors such as “skills, knowledge, expertise and experience; professionalism; and integrity” (CMDA 2008). Also, the appointment should be for a fixed period for each director. Reappointment of directors should not be automatic but directors may be subject to re-election (CMDA 2008).

Moreover, the CG code recommends that the board, at a minimum, should have the following three sub-committees. (1) AC, (2) Risk management committee and (3) Recruitment committee (CMDA 2008). Each committee is recommended to have a formal charter and sufficient meeting to ensure that the board is informed about “relevant issues pertaining to the company’s operations” (CMDA 2008). Furthermore, recommendation 9.2 states that the AC should have at least three members and majority of the members should be independent (CMDA 2008). It is also recommended that the chairperson of the AC should not be the chairperson of the board (CMDA 2008). Recommendation 10.1 indicates that although a separate risk management committee

may be established, the ultimate responsibility for risk oversight and management rests with the full board (CMDA 2008).

Recommendation 9.1 of the CG code relates to internal audit function and external audit. It is recommended that a company should have an internal audit function or an alternative mechanism to achieve the same objective (CMDA 2008). The SPSE requires public corporations to present annual audited financial statements no later than three months after the end of the financial period (SPSE 2010). The company appoints an independent “external auditor who reports directly to the Board Audit Committee” (CMDA 2008). Also, “companies must ensure that the extent of non-audit given to the external auditor does not cause any compromise of the independence of auditors” (CMDA 2008).

Principle 5 of the CG code highlights on “timely and full disclosure of all material matters concerning the company” (CMDA 2008). Beyond annual report disclosures, the CG code recommends at least disclosures of governance structures and policies, and company’s compliance to the CG code (CMDA 2008).

Similar to the motivation of this study, recommendation 8.1 of the CG code states that “the board must ensure that the interests of the minority shareholders are protected” (CMDA 2008). This is only possible if the internal and external CG mechanisms are optimally structured and enforced. Hence, this study also investigates the practice CG practices in the SPSE companies.

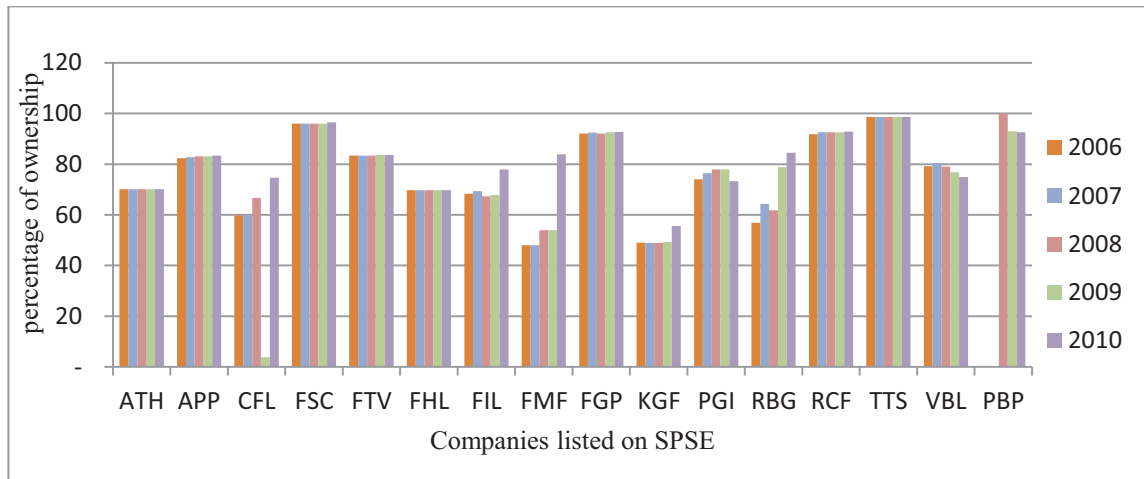
### 5.3 Internal Corporate Governance practices

#### 5.3.1 Ownership Structure

##### Ownership Concentration

Unlike the US and the UK, the ownership of all listed corporations on the SPSE is highly concentrated. Figure 5.1 provides the aggregate proportion of shares held by the largest five (5) shareholders of each SPSE listed company for the last five years based on the annual report analyses of the companies. The bar graph shows that all the SPSE listed companies have very high levels of SC and it is also consistent over time. The latter does not imply lack of stock trading. The large controlling shareholders do not mostly engage in trading and prefer to maintain control over the business. This is visible in Figure 5.1. The five largest shareholders hold a minimum of approximately 50 percent of the shares. For some companies this is above 80 percent. The shares held by the five largest shareholders do not decrease vastly in most cases.

**Figure 5.1 Shareholder Concentration representing the aggregate shareholdings of the largest five shareholders**



Within the SPSE corporations, monitoring over the management is not an issue as the large concentrated shareholders have the control. Hence, the shareholder – manager agency problem is minimized in these companies. However, in these companies, there is

an agency problem between the large concentrated shareholders and the dispersed small investors. Since the majority shareholders could extract resources for private benefits, protection of the minority shareholders is a concern. A different set of CG policies is necessary in this business scenario because the policies in the developed nations where shareholding is dispersed may not be fully applicable.

EM is a tool which is most likely to be used by the accountants and/or managements to produce results favoring the majority concentrated shareholders. The consistency in shareholding by the large shareholders implies long term interest in the firm and that they are going to work to uphold the firm. In spite of having a long term interest in the firm, the large controlling shareholders' choice of accounting could be detrimental to the minority shareholders. For instance, income increasing EM could be used to increase the value of the shares (firm value) which could then be sold by the large shareholders to realize some gain. Also, EM could be used by the controlling shareholders to hide any tunneling activities.

Thus, the high levels of SC contribute to strong CG by minimizing owner-manager agency problems. However, it creates another form of agency problem – majority-minority shareholder agency problem.

### **Shareholder Composition**

The shares of a firm can be owned by various groups such as family, government, financial institutions and individuals. The ownership type of the controlling shareholders would determine their long term interest. For instance, family groups would be interested in more income, government may be interested in better service while financial institutions would want business growth. Hence, the shareholder composition of the large shareholders of each company would determine their long term interest. This would then determine the strength of SC as a strong CG attribute.

Table 5.1 presents the ownership type of the largest shareholder of the SPSE companies and their proportion of ownership in the company in 2010. This data is gathered from the SPSE who maintains the shareholder register for each company. The descriptive statistics indicate that the level of SC is very high for companies which are foreign, government and family owned. The average percentage of shares held by the largest shareholder of these companies is 66.57. On the other hand, the average proportion of shares held by the largest shareholder who is an individual, a financial institution or an investment company is 45.04 percent.

**Table 11 Ownership type of the largest shareholder of the SPSE companies**

<b>Company</b>	<b>Percent of shares held by the largest shareholder</b>	<b>Ownership type of the largest shareholder</b>
FGP	89.59	Foreign
TTS	79.45	Foreign
RCF	75.00	Public company – Family
FMF	68.64	Private company –Family
FSC	68.11	Government
FHL	65.00	Private company
APP	60.00	Public company – Family
PBP	58.33	Individual
ATH	58.27	Financial Institution
FTV	51.42	Investment company
RBG	50.75	Investment company
FIL	45.31	Private company
PGI	35.74	Private company
VBL	31.60	Individual
KGF	28.87	Financial Institution
CFL	26.79	Private company –Family
<b>AVERAGE</b>	<b>55.80</b>	



The largest shareholder composition of the SPSE companies indicates that the level of CG practices would be different for each company due to different interests of each shareholder group. Future studies could investigate the level of CG in each ownership type. This study focuses on the CG practices of all SPSE listed companies.

### 5.3.2 Board of Directors

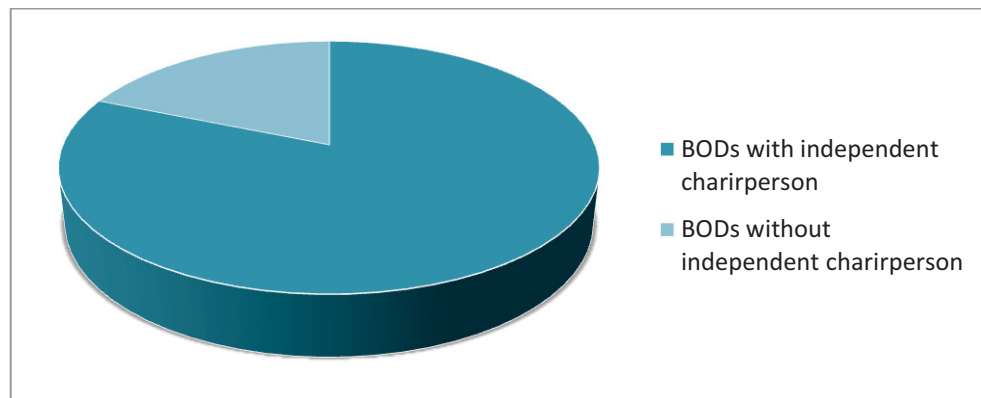
The board is an important CG mechanism for public corporations. It is the medium through which the management (agents) and the shareholders (principal) communicate. Section one of the questionnaire, which is available in appendix 1, relates to the CG issues concerning the BOD. The first question is about the BS. An appropriate BS is vital to accommodate open communication and also to ensure effective decision making. The BS is largely dependent on the size of the firm because companies with large operations require more board deliberations and expertise. Table 5.3 indicates that the BS of listed companies on SPSE varies from three to eight members. SPSE listing rules outline that the minimum BS should be three (SPSE 2010). Unlike in the developed nations, the BS of the SPSE listed corporations is not dependent on the firm size. For instance ATH, being the largest in terms of Total Assets, Net Assets and Revenue has a BS of five directors while FTV and FHL which are smaller in terms of firm size have eight directors on the board.

**Table 12 Characteristics of Board of Directors based on 2010 data**

Company	Board Size	independent directors	Corporate and Financial background	Accounting and Financial background	Average tenure of a board member	# of Board meetings
Mean	6	3	2	1	3	7
Minimum	3	0	0	0	2	2
Maximum	8	6	6	6	4	15

Question number three to six of the questionnaire relate to board independence. Prior research has identified the importance of board independence (Davidson et al. 2005; Chtourou et al. 2001; Xie et al. 2003). The board chairperson is seen as independent if he/she is not the company CEO (Davidson et al. 2005; Bar-Yosef and Prencipe 2009). Accordingly, most of the SPSE companies have an independent chairperson (see figure 5.2). Furthermore, the SPSE requires each listed companies to have at least one third independent directors (SPSE 2010). Only a few of the SPSE companies maintain the minimum board independence. These companies are mostly family owned. On the other hand, institution and government owned companies have majority of independent directors on the board. Thus, for all the SPSE companies, the average board independence is 47 percent (see table 3.1).

**Figure 5.2 The proportion of independent Chairperson in the SPSE companies in 2010**



Question two of the questionnaire is about the number of meetings held by the board. The number of board meetings has been used as a proxy for board effectiveness in the literature (Dhaliwal et al. 2006). Table 5.3 provides descriptive statistics on board meeting of the SPSE companies. On average, seven board meetings were held in 2010 for the SPSE listed companies. The minimum number of board meetings held was two

and the maximum was 15. The greater number of board meetings gives an indication on the number of executive decisions engaged by the board. For instance, the board of FHL had 15 meetings in 2010 and the year was very fruitful for the company as it expanded and engaged in large investments as well.

The first question of section one of the questionnaire also required information on the directors' characteristics such as the directors' qualification and experience. The corporate, accounting and financial background and the experience of each board member contribute to the effectiveness of board decisions. Table 5.3 provides statistics on board members' corporate, accounting and financial background and tenure. On average, a board member remains in a company for three consecutive years which is ample to fully understand the company and contribute towards its growth. Moreover, some board members have corporate background as they have worked and served as directors of other companies. However, the average number of directors that have accounting and financial background was only one for the SPSE companies in 2010. Lack of directors with accounting and financial background could undermine the success of some decisions taken by the board. It could also undermine effective governance of the company.

In summary, the small BS, lack of board independence and lack of directors with accounting and financial background contribute to the weak CG in the SPSE companies.

### **5.3.3 Audit Committees**

The literature identifies a number of board committees which performs various specific board functions. These board committees include AC, executive committee, nomination committee, risk management committee, compensation committee, disciplinary committee, public policy committee and CG committee. These committees with other responsibilities also monitor the management and ensure that the management makes

decisions which would lead to shareholder wealth maximization. Furthermore, they contribute to better governance of the corporation. As such, each committee members are expected to have relevant qualifications and experience to perform their responsibilities so that shareholder wealth could be maximized.

Section two of the questionnaire is specifically on ACs. AC has been given lots of importance since the establishment of the SOX following the corporate collapses in the US. Most of the SPSE companies have established an AC during 2004 to 2006. However, few SPSE companies formed their AC after the requirements by the stock exchange and the CMDA in Fiji. Table 5.5 provides the descriptive statistics on the characteristics of the AC in the SPSE companies.

**Table 13      Characteristics of Audit Committee based on 2010 data**

Company	Size	% of independent members	# of meetings	# of meetings with external auditor	% of Corporate and Financial background	% of Accounting and Financial background
Mean	4	79	5	2	88	75
Minimum	2	25	2	1	67	50
Maximum	6	100	12	3	100	100

The AC is formed as a sub-committee of the BOD. The first four questions of section two of the questionnaire relate to AC size, establishment and characteristics. The board decides on the AC size and assigns members to the AC. For most SPSE listed companies, the AC size ranges from 2 to 6 members. The AC members are chosen based on their qualification and prior experience. Most of the AC members possess accounting, corporate and financial background. This contributes to the strength of the AC in performing its functions. Moreover, question five of section two of the

questionnaire relates to AC independence. Almost all AC members are independent non-executive directors. This is vital to ensure the independence of the committee as it liaises with the management and the auditors.

Furthermore, question seven and eight of section two of the questionnaire is about AC meetings. The AC members meet, on average, every quarterly and some of these meetings are with the external auditor. On average, from five AC meetings, two meetings are held with the external auditor. Few SPSE companies have as many as 12 AC meetings which depend on the seriousness of the issues and its urgency.

Literature identifies various functions of an AC. In order to answer question ten of section two of the questionnaire; participants from the companies listed on the SPSE have listed the following functions of an AC.

- ❖ To oversee the financial reporting process;
- ❖ To oversee the balance, transparency and integrity of published financial information;
- ❖ Ensure timely and balanced disclosure;
- ❖ Promote ethical and responsible decision making;
- ❖ Maintain a register of interests;
- ❖ Respect the rights of shareholders;
- ❖ Promote accountability and audit;
- ❖ Recognize and manage risk;
- ❖ To challenge and review all internal processes;
- ❖ To carry out audit of internal control;
- ❖ Assess whether the Company's external reporting is legally compliant, consistent with Committee members information and knowledge, and suitable for shareholder need;
- ❖ Assess the management processes and internal control systems supporting external reporting;

- ❖ Liaise with the external auditors and ensure that the annual statutory audit and half year review are conducted in an effective manner;
- ❖ Make recommendation for the appointment or removal of the external and the internal auditors;
- ❖ On an annual basis, assess the performance and independence of the external and internal auditors;
- ❖ monitor the coordination of the internal and external audits;
- ❖ to look at transparency and verification of internal controls and procedures;
- ❖ To provide recommendations, advice and information concerning its accounting and reporting responsibilities under Companies Act 1983 and related legislation, and evaluating risk management practices.

The above comprehensive list indicates that the AC has numerous responsibilities. If most of the SPSE corporations have other board committees then most of these functions could be distributed to other committees. The numerous functions of the AC pose questions on the effectiveness of the committee in conducting its core responsibility. This indicates that although most SPSE companies have an AC, it is not structured in the best manner to promote strong CG.

#### **5.3.4 Board Committees**

Section three of the questionnaire relate to board committees and internal audit. The earlier is discussed first and the latter is discussed in the next section, 5.3.6. Table 5.4 summarizes the number of SPSE companies that have established a number of board committees. Most companies listed on the SPSE have ACs. Question eight to 14 of section three of the questionnaire relates to other board committees. Other common board committees in the SPSE companies are executive committee, risk management committee and disciplinary committee. A company also has a compensation committee and a CG committee. Two SPSE listed companies do not have any board committees. Hence, the BOD of these companies performs all the board functions. For some SPSE

companies, board committees cannot be easily formed to perform the specific board functions. For instance, some corporations have only three directors on the board. If board committees are formed for these companies, the same three directors will be on all committees. Hence, these companies mostly perform all board functions together as a group instead of dividing the few members into committees. It is unfeasible to divide a board of three members into a number of committees. The BS is an issue for these companies.

**Table 14 Statistics on Board Committees based on 2010 data**

	Audit	Executive	Nomination	Risk Management	Compensation	Disciplinary	Public Policy	Corporate Governance
Number of companies	10	4	0	5	1	2	0	1

A board with only few directors may not be equipped with sufficient knowledge and experience to serve a public company at the optimal level. Moreover, the lack of board committees could imply that specific board functions are not deliberated and performed at the best level. These imply that the SPSE companies have weak CG practices.

### **5.3.5 Executive remunerations**

The remuneration or compensation committee mostly determines the remuneration of the business executives. For some companies this is decided by the human resource committee or the human resource manager in consultation with the BOD. Literature argues on the importance of having an outlined procedure in deciding the ERs and its disclosure (Cheffins 2003). Being transparent is vital especially when dealing with controversial subjects like ER. In high shareholder concentrated firms, the large shareholders are actively involved in business management and directorship. Remuneration is one of the easier ways the controlling shareholders could diverge funds

away from the firm into their own pockets. Hence, an outlined procedure to determine ER and the disclosure of ER are vital for strong CG levels.

Question twelve of section three of the questionnaire relates to the compensation or remuneration committee and the annual report of some SPSE companies provides information on executive remunerations. One of the SPSE companies has a compensation committee which makes decisions on executive remuneration of the company. In another company, a human resource committee is “responsible for advising the Board on human resources issues including the remuneration and conditions of employments of the CEO, and senior management and succession planning” (ATH 2010). Moreover, the “remuneration of directors is based on fees of directors approved by the shareholders. In addition, the Company provides travel, medical and professional indemnity insurance for the directors. The Board sets remuneration and scope of technical and professional services required by directors in addition to their services as directors.” (FSC 2010).

Most of the SPSE companies do not disclose their procedures for setting ER. However, many SPSE companies publish the ER in their annual reports. Companies divide the remunerations paid to directors into directors’ fees, directors’ fees for other services and also directors’ emoluments – staff costs. Table 5.2 provides the descriptive statistics of the directors’ fees for directorial and non-directorial services for the SPSE companies for years 2008 to 2010. The average directors’ fee for other services is greater than the average directors’ fee for directorial services during the years 2009 and 2010. The SPSE companies have a fixed fee payable to directors for participating on the Board and committee meetings and providing other directorial services.



**Table 15 Descriptive statistics on Directors fees of SPSE companies for 2008 to 2010**

<b>Directors Fees for directorial services</b>				<b>Directors Fees for other services</b>		
Company	2008	2009	2010	2008	2009	2010
Mean	106,276	93,468	131,893	36,019	544,338	552,632
Minimum	12,000	-	-	-	-	-
Maximum	515,000	528,000	622,000	270,000	8,229,289	9,286,740

The non-disclosure of ER policies and procedures and the large amounts of directors’ fees for other services raise concern for CG. These demonstrate that the SPSE companies portray weak CG. For most SPSE companies, there is no remuneration or compensation committee. Moreover, a substantial payment for non – directorial services is an issue.

### **5.3.6 Internal Audit**

An internal audit is important for all corporations to ensure that all policies and procedures are designed and practiced to promote shareholder wealth maximization. Internal audit ensures that the business operations, core functions and internal control are in order. Earlier section discusses that the internal control function is one of the functions of an AC in the SPSE companies. This is because some SPSE listed companies do not have a structured internal audit team. Hence, internal audit is partly a responsibility of the AC of some SPSE companies. However, the AC may not as effectively conduct the internal audit functions because it has many other responsibilities.

Question one to seven of section three of the questionnaire relates to factors concerning internal audit function. An internal audit requires personnel to possess certain skills and

knowledge to be effective in performing their function. Like the AC of a SPSE company, the internal audit functions are not defined optimally as well. A few companies do not have a proper internal audit function. For most of the SPSE listed companies, the internal audit function has been established within the last 5 years. This, similar to an AC, has been as a result of past corporate collapses.

The internal audit members of the SPSE companies are either appointed by the management or the BOD with an exception of one company where the AC appoints the internal audit team members. Mostly, the team comprises of members who are employees of the company. It is rare in Fiji but two companies outsource this function. One outsources the internal audit function to its external auditor while the other to another audit firm which is not its external auditor. On average, the internal audit team is made up of 5 members. These members have tenure of approximately 3 to 4 years. The internal audit team in most cases reports to its appointer.

The lack of internal audit function in some SPSE companies and the weak practices of the internal audit team, such as reporting to the appointer and not the board or the AC, contribute to weak CG practices in the corporation. AC participation would have been useful in improving the internal control weakness. There are some improvements in the recent years as more companies now have an AC due to the CG requirements of the SPSE through capital market unit of the Reserve Bank of Fiji (RBF).

### **5.3.7 External Audit**

Within an agency relationship, due to price protection agents ultimately bear monitoring costs associated with contracts. Hence, the agents establish mechanisms to guarantee that they will behave in the principal's interests. External audit is one of the many bonding mechanisms employed by managements. Even though it adds creditability to

the reports produced by the managements, there are issues regarding external audit that emasculate CG.

The CG, EM and audit literature have highlighted various concerns relating to external audit practices (Frankel et al. 2002; Ferguson et al. 2004). This includes and mostly revolves around factors that contribute to lack of auditor independence. Auditor independence is also a major concern for the SPSE listed companies. Table 5.6 presents the descriptive statistics on audit tenure and non-audit service fee ratio (NASRATIO). The average audit tenure for the SPSE listed companies is eight years and the maximum is 21 years. The audit tenure is large enough for the management to establish a good relationship with the external auditor. This could lead to biasness in the audit report which is relied upon by the stakeholders to make decisions. Although an audit firm spends 21 consecutive years with a company, it is possible that they are ensuring independence through rotation of the individual auditors conducting the audit. However, this does not confiscate the issue that the independence of the auditor is likely to be impaired. The audit reports are signed by the audit firm as a whole and not individual partner or auditor.

**Table 16      Audit tenure and non–audit service fee statistics for SPSE listed companies**

	<b>Audit tenure</b>	<b>Non audit fees as a proportion of total fees</b>
Mean	8	33%
Minimum	1	2%
Maximum	21	97%

On the other hand, the minimum of one year with a company also raises questions. It is important to understand why the auditor left the company in a year. There could be

various reasons such as a disagreement on the accounting treatment of some transactions, a disagreement on the classification of certain accounts and a disagreement on the methods for calculations (for example, depreciation method).

Prior literature documents that the ratio of NAS fee paid to the audit firm is a proxy for auditor independence (Frankel et al. 2002; Ferguson et al. 2004). A large proportion of NAS to total audit fee implies that the auditor is getting a good income from the company. In such cases the audit firm would do their best not to lose the client. If they do, it would mean a big loss of income for the firm. Table 5.6 provides the descriptive statistics on the proportion of NAS to total fees. On average, a listed company pays 33 percent for NAS (of the total fees paid) to the audit firm. The proportion of NAS fee usually varies from period to period and between companies. The minimum is as low as two percent but the maximum is as high as 97 percent. For most SPSE companies, the proportion of NAS to total audit fee is quite large. Similar to the audit tenure issue, this indicates that there is a strong relationship between the audit firm and the management of the company. Like audit tenure issue, the high proportion of NAS may not necessarily imply impairment of auditor independence. However, the two issues do raise questions on the audit quality.

Moreover, the annual report analyses also indicate that all the audit reports of the SPSE companies have been unqualified. There is one exception. A company has been having a disclaimer on its going concern which is dependent on the government's support for the company (FSC 2010). The unqualified report of all the SPSE listed companies raises concerns for the quality of the audit. The financial and annual reports of these companies are either of very high quality or there are issues regarding the audit quality.

The long audit tenure and the high ratio of NAS to total audit fee are clear indication of the weak CG practices in the SPSE companies. With respect to the external audit, auditor independence is a major concern for the SPSE listed companies.

## **5.4 External Corporate Governance practices**

### **5.4.1 Institutional Ownership**

Financial institutions are a major contributor to the function and development of the capital markets. Some financial institutions actively participate in investments which is their business. In Fiji, the few major players are the Fiji National Provident Fund (FNPF), the Bank of the South Pacific (BSP), Unit Trust of Fiji (UTF), Kontiki Growth Fund (KGF) and FHL. These corporations, some are listed, invests in other listed corporations and also hold shares of unlisted companies. Hence, they have their representatives on the Board of the invested company and have some say over the operations of the company. This may have a positive contribution on the CG practices of the SPSE companies. However, the shares mostly held by the institutional investors and foundation members (mostly the concentrated controlling shareholders) of the company are classified as non-free float shares in the share registry of the SPSE.

Table 5.7 provides information on the composition of shares into FF and non-free float share of the SPSE listed companies. On average, 77 percent of the shares are non-free float shares. This means that, on average, only 23 percent of the shares of the SPSE companies are available in the market for trading purposes. Majority of the shares are either held by the foundation shareholders or the institutional investors. These shareholders prefer to maintain control over the corporation. This could be a good CG attribute as these investors would provide better monitoring over the management. However, the major agency problem in this nature of ownership structure (SC) is the majority – minority shareholder agency problem.

**Table 17 Shareholder composition of the SPSE companies based on Free Float**

<b>Company</b>	<b>Free Float (%)</b>	<b>Non-Free Float (%)</b>
ATH	7	93
APP	19	81
CFL	27	73
FFF	27	73
FTV	17	83
FHL	92	8
FIL	17	83
FMF	23	77
FGP	10	90
KGF	40	60
PGI	9	91
RBG	17	83
RCF	11	89
TTS	6	94
VBL	29	71
PBP	13	87
<b>Mean</b>	23	77
<b>Minimum</b>	6	8
<b>Maximum</b>	92	94

(Source: SPSE 2011 annual report)

This shareholder composition not only creates an agency problem but it also hinders the development of the capital market. The FF shares of one company are a good percentage as most shares are available for trading in the capital market. However, for majority of the SPSE companies, the small percentage of the FF shares discourages potential investors. As a result there are not many individuals and/or companies who participate in the capital market. Those who participate, analyze their investments through

brokers/analyst. The high percent of non – free float shareholding indicates a possibility of expropriation by the larger shareholders. Thus, institutional investors are useful in minimizing one agency problem but it creates another. The non-free float shares held by these investors would increase their confidence. Being the big sharks in the market and given the weak capital market regulations, they could easily accomplish their self motives. Also, these non-free float shares discourage competition in the market. The control is in the hand of the founders and the institutional investors instead of the market.

#### **5.4.2 Market Control and Competition**

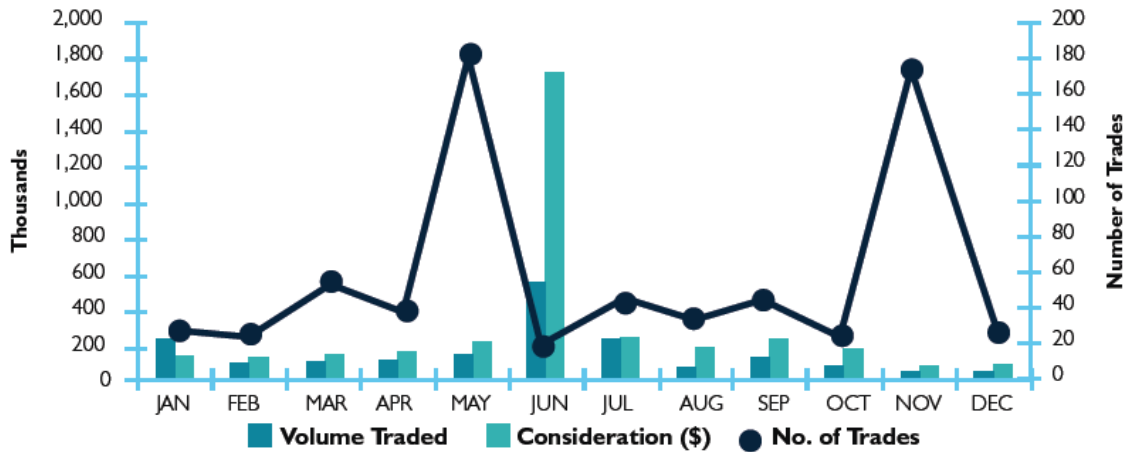
The SPSE, formerly known as Suva Stock Exchange was established in 1979 and operated as a ‘trading post’. The establishment of the CMDA in January 1998 added vigor to the development of the equity market. Hence, Suva Stock Exchange changed its name to SPSE with the vision “to be an internationally recognized securities exchange for the pacific” (SPSE 2012).

SPSE fulfills two major functions as a capital market. First, it acts as a primary market and allows means of equity finance for companies by initially listing on the stock exchange and engaging in IPO. Second, the more vital role is that it provides a secondary market where initially offered shares could be further traded. Not only it provides a market for trading shares of listed companies but also a market for trading government bonds, statutory authority bonds, government treasury bills, statutory authority promissory notes, RBF notes, and tradable term deposits. However, it does not provide a market for derivatives and futures.

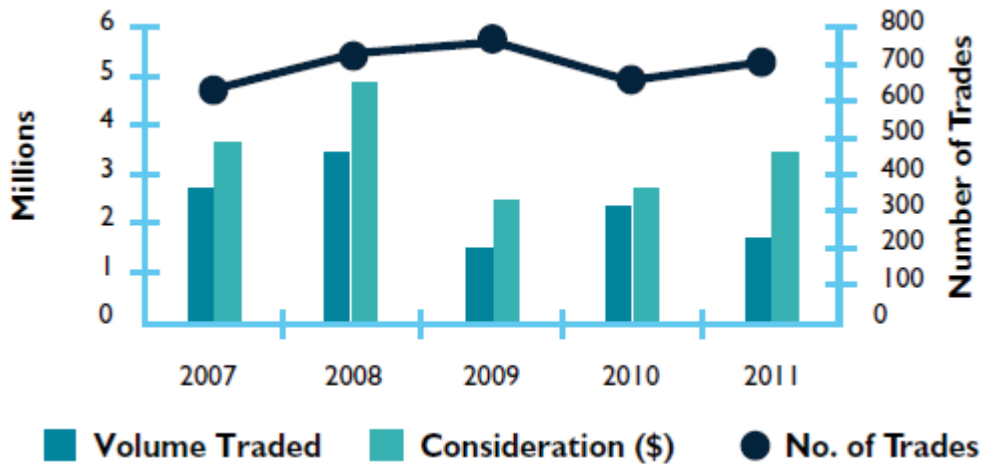
Today, there are 16 companies listed on the stock exchange. Many of these companies have been added in the last decade. Although the market is developing and inactive, trading has been taking place in the past years as shown on figure 5.3 and 5.4. In spite of

the trading activities, many companies are not encouraged to list on the stock exchange. There are a number of large companies operating privately and not willing to list with the fear of lost control. The incumbent shareholders want control over their company.

**Figure 5.3 Trading Statistics over 12 months**



**Figure 5.4 Trading Statistics over last 5 years**



(Source: SPSE 2011 Annual Report)



Due to the less developed secondary market, Fiji's financial market is shallow. Institutional investors have the largest share in most of the investments including government bonds and bills. FNPF holds 72 percent of government bonds. "Since it is the main purchaser for government bonds, it influences to a greater extent the current market interest rates within the economy" (Fiji Peoples Charter website 2011). Likewise, for equity, the founders and institutional investors hold non-free float shares as discussed in section 5.3.1. Hence the control is mostly in the hands of the founders and the institutional investors. Market has a minimal say in this regard as it is highly inactive.

Active markets provide market competition between corporations and other listings. Competition brings efficiency in the activities conducted. The domination by the founders and institutional investors imply monopoly position. Also, the small number of listings contributes to the lack of competition in the market. This does not encourage strong CG within corporations. The companies and its managements do not have any major threat of existence and continuation as they are dominating in their sector. Thus the external governance mechanism from the market is very weak.

However, managements of weak performing business are always under spotlight. There have been mergers and/or takeovers which has been a concern for incumbent manager of weak performing companies. Decades ago the NBF was taken over by the Colonial Group which was recently in December 2009 bought by the BSP. In 2005, Carlton Brewery took over South Pacific Distilleries and later renamed itself to FGP which is now listed. A more recent case is where FHL Retailing limited partially took over RBG. This takeover was facilitated through special crossing transaction. The first batch of takeover happened on 14th April 2008 and the quantity that got transferred was 15,060,000 at a price of \$1.40. This equates to \$21,084,000. The second batch of takeover happened on 20th March 2009 and the quantity that got transferred was 163,796 at a price of \$1.40. This equates to \$229,314.40. As a result, FHL Retailing

Limited owns 15,223,796 shares of RBG. This is 50.75 percent of the total issued shares of RBG.

The takeover and/or merger may result in restructure of the company whose shares are sold. The buying company may bring in their administration and their senior personnel so that in their opinion the business would perform better. This imposes threats to the incumbent managers. For poor performing companies, the senior managers would do their best to ensure their performances improve. This may also lead to EM. However, the threat could also be a form of external governance whereby the management ensures smooth operation of the business to avoid any takeover.

#### **5.4.3 Creditor Monitoring and Protection**

Creditors who are basically outsiders make lots of contribution to business success. They provide finance and in some statement of financial position, their contribution outweighs equity. LEV is the ratio of total liability over total assets. Table 5.8 provides the descriptive statistics on LEV for the SPSE listed corporations. On average, 38 percent of the Assets of the listed companies are financed by the outsiders. The minimum is zero which means that all the assets are financed by the equity holders for at least a SPSE company. The maximum LEV is 146 percent implying that the equity is in negative, that is, the value of the assets is less than the liabilities. This is a concern for the business.

**Table 18 Statistics on Leverage based on past decade data**

<b>Company</b>	<b>Mean</b>	<b>Minimum</b>	<b>Maximum</b>
ATH	0.47939	0.43266	0.51906
APP	0.41710	0.19673	0.57048
CFL	0.42773	0.23850	0.65890
FSC	0.58086	0.20223	1.45628
FTV	0.22804	0.15526	0.31287
FHL	0.39419	0.18341	0.54427
FIL	0.64977	0.51187	0.75772
FMF	0.53020	0.37877	0.75555
FGP	0.21995	0.17701	0.30849
KGF	0.06328	0.00000	0.15596
PGI	0.42157	0.16962	0.87859
RBG	0.46368	0.37079	0.62335
RCF	0.19569	0.03562	0.37732
TTS	0.34190	0.20994	0.54432
VBL	0.57052	0.41893	0.67857
YGL	0.10750	0.06887	0.14552
Pleas	0.34096	0.33339	0.34853
<b>Statistics</b>	0.37837	0.00000	1.45628

In most cases, creditors have some right over the assets of the business as their funds are at risks and they want to ensure repayment. The creditor – debtor relationship is usually facilitated by a contractual agreement. This agreement would provide collaterals for the dealings or a guarantee that the payments will be made on time. If the transaction involves a substantial amount, a detailed contract is written outlining numerous aspects and conditions to guide the creditor – debtor relationship. The debt covenant may have restrictions on the dividend policy, investment decisions, collateralized assets and many other business aspects.

For companies listed on the SPSE, given that the creditors have a large share in financing the business assets, creditors could also be monitoring the management to ensure timely service of their loan. The creditors may not provide monitoring over all the companies at all times but they are expected to rigorously monitor the underperforming companies. The debt covenants could always give a number of rights to the creditors or lenders by having clauses on the following issues:

- ❖ Annulment or suspension of credit
- ❖ Suspension of disbursement
- ❖ Use of loans and other funds
- ❖ Deadline for completion of project for which the loan is undertaken
- ❖ Insurance over all properties forming part of the project that is related to the loan
- ❖ Maintenance of all properties forming part of the project
- ❖ Audit of accounts
- ❖ Disclosure of all information relating to the project for which funds are borrowed
- ❖ Right to demand prepayments

This is a stronger form of external governance. However, this is effective when poor performing firms are discovered in a timely manner. Otherwise, the underperformance would lead to loss to both, the equity and debt financiers' investments. On the other hand, debt covenants also motivate management to engage in EM so that the real performance is hidden.

#### **5.4.4 Securities Market Regulations**

The capital market unit within the RBF sets rules for companies listed on the SPSE. The SPSE also have listing rules for listed companies and for those companies interested in listing. The SPSE listing rules were recently updated in July 2010 and now it has more

strong requirements. The SPSE listing rules have 7 sections. The following paragraphs outline the rules in four major categories.

The first part of the listing rule is about Listing Requirements. This section outlines a number of requirements for a company to be listed. Some rules are on the capital requirements (total market capitalization must be at least \$1 million), public shareholding, operating history, working capital, memorandum and article of association and dual or secondary listing. Companies must satisfy the requirements in this section (section 3 of the SPSE listing rules) to be qualified for the SPSE listing.

The second major category outlines rules on application for listing. Section 4 elaborates on public offering and compliance listing. This section outlines the documents required for listing and the process involved in public offering. Section 5 is about additional issues where requirements on shareholder approval, SPSE approval, dividend plan, options, allotment and issue of certificates are outlined.

Continuing listing requirements, section 6 of the listing rule is comprehensive. It includes requirements on disclosure of material information, response to rumors and unusual trading activity, public shareholding and working capital, transfer of securities, shareholder meetings, takeovers, half yearly financial statements, annual audited financial statement, annual report, change of balance date, statutory and shareholder disclosure, board composition, director fees, transactions with related parties, CG, insider dealing and capital structure. This section highlights on a number of CG aspects. It requires the boards of the SPSE listed companies to have a minimum of three directors and at least one third of the directors must be independent. Directors' fees cannot be increased without shareholders' approval. "All listed companies are required to comply with the corporate governance code as stipulated under the RBF corporate governance principles and reporting guidelines" which are discussed later in this section.

The last category on compliance and enforcement is discussed in section 7. This section highlights the consequences to a company if found not complying with the SPSE listing requirements. The SPSE has the powers of inspection of any books, records or accounts of the entity. The non-compliance of the listing requirements could result in trading halts, suspensions and delisting.

The Capital market unit of the RBF provides “reporting guidelines for listed companies and licensed intermediaries” and the “corporate governance code for capital markets”. The code highlights on ten CG principles and provides recommendations on best practices. The reporting guideline elaborates on the approach to be adapted to report under the CG principles. CG code and the reporting guidelines together are very similar to ASX Corporate Governance Council’s “Principles of Good Corporate Governance and Best Practice Recommendations”. Paragraph 6.42 of SPSE listing rule requires all listed companies to comply with the CG Code. The regulations together have strengthened the CG reporting by all the SPSE listed companies. However, brief information is provided in the annual reports. Detailed information would have been useful to give an indication on the level of improvements.

The recent development in the CG policies has resulted in an improvement in the disclosure on CG by the SPSE companies. These disclosures are very brief and it does not imply that the CG practices have actually improved in these companies. In most cases, it is identified that the SPSE companies only maintain the minimum mandatory requirements. Most of these companies do not see the CG recommendations as a good practice but an additional obligation and documentation.

## 5.5 Conclusion

This chapter discussed the CG practices of the SPSE listed companies based on a questionnaire survey. The CG practices are discussed as internal and external governance structures.

The internal CG structures of most SPSE companies are generally weak due to many reasons. First, the high level of SC creates an agency problem between the majority and minority shareholder groups. Second, the large amount of payments for non-directorial services and lack of disclosure on ER for some SPSE companies raise concerns because it is the easiest medium to divert funds from the company and expropriate from the minority shareholders. Third, the directors do not possess adequate qualities to be efficient and effective with their responsibilities. The board lacks independence and directors with accounting and financial background. Fourth, most boards of the SPSE companies do not have the necessary board committees to effectively distribute the board's responsibilities. Fifth, the AC has lots of responsibilities that may hinder its performance. Sixth, the internal audit function is not clearly defined in most SPSE corporations. Last, the external audit quality is an issue given the high level of NASRATIO, audit tenure and many unqualified reports.

Moreover, the external CG practices are mostly weak due to the following reasons. First, the low percentage of shares available for FF indicates that the minority shareholders' interests may not be protected as most controls are with the concentrated large shareholders including the institutional investors. Second, although mergers/takeovers have been practiced earlier, the business market and environment does not provide much scope for competition. Lack of competition indicates weak external governance. Third, the securities market regulations have been weak in the past. Despite the recent developments on the CG code, it is unclear as to whether CG practices have actually improved in the SPSE companies. Furthermore, there is more scope for development in

the policies for CG. For instance, the minimum level of BS and board independence should be increased.

On the other hand, creditor monitoring is a more effective governance structure in the SPSE companies. Large LEV indicates that the outsiders also have some control over the firm and could possibly oppose the concentrated shareholders.

Therefore, the CG practices are weak in the SPSE companies. This implies that there is lack of protection for the minority shareholders. This supports the results presented in chapter four that the high level of SC leads to more EM due to the majority-minority shareholder agency problems. Despite the impractical minimum requirements on BS and board independence, some SPSE companies practice good governance by having large independent boards. As a result, those companies experience low levels of EM. The large independent boards are effective in mitigating the effect of SC and constrain EM.



## **CHAPTER 6      CONCLUSION: Implications and Future Research**

### **6.1 Introduction**

This chapter summarizes the research findings of this study and discusses the implications of the research. It also presents the scope for future research and discloses the limitations encountered in conducting this research.

This study provides evidence on the instances of EM and the CG practices of the SPSE listed companies. The results indicate that the high level of SC creates an agency problem between the majority and the minority shareholder groups. Hence, there is more EM in highly shareholder concentrated firms. Furthermore, large BS is effective in mitigating the effect of SC on EM. The questionnaire survey supports the empirical findings that SC leads to more EM due to weak CG practices in the SPSE companies. The results indicate that there is lack of protection for the minority shareholders of the SPSE companies.

The findings of this research have implications on the CG practices and policies for the SPSE companies. The major implication of this study is on the improvements of the level of the CG policies and practices in companies listed on the SPSE. Due to the high level of SC, the rights and interests of the minority shareholders are at risk. This study suggests some possible ways of improving CG policies for the protection of the minority shareholders and the company as well.

The limitations and scope for future research is also presented in this chapter. Next, a summary of this research is provided.

## **6.2 Shareholder Concentration and Earnings Management in SPSE listed companies**

Chapter Four provides the empirical evidence on the effect of SC on EM based on a multi-variant regression model. The analysis is based on 151 data years of 16 SPSE companies.

The descriptive statistics indicate that there is a high level of SC in all SPSE listed corporations. The largest shareholder of the SPSE companies hold, on average, 55.80 percent of the shares of the company. Additionally, the five largest shareholders hold approximately 81.57 percent of the shares of the company. The qualitative analysis identifies that approximately only 23 percent of the shares of the SPSE listed companies are on FF. This indicates that the concentrated controlling shareholders do not want to lose control. The high level of SC creates an agency problem between the majority and the minority shareholders. This is a major concern for all the SPSE listed companies because the large concentrated shareholders would not facilitate the dilution of their shares and thus the market cannot protect the minority shareholders. Due to the high level of SC, the minority shareholders' investments are at risk because the controlling shareholders could expropriate resources from the company.

EM is a tool which could be used by the concentrated shareholders to divert resources or to hide their tunneling behavior. The descriptive statistics suggest that there is high level of EM in the SPSE companies. The academic literature indicates that weak CG leads to EM. Despite the ability of the high level of SC to minimize owner-manager agency problem through monitoring, there is an agency problem between the majority and minority shareholders that could motivate EM. The correlation statistics support this proposition.

The multi variant regression results provide evidence that there is a significant positive relationship between SC and EM. This result indicates that the high level of SC is unable to constrain the instances of EM in the SPSE companies. Although EM is not always bad for a company, it can also be advantageous to some shareholders. Since shareholders can also benefit from EM in a company, they support the managers' choices of accounting discretion. Only the large concentrated controlling shareholders would benefit from EM. Hence, it is a major concern for all the SPSE companies and the protection of minority shareholders is paramount in emerging stock markets.

The empirical results also support the second hypothesis that the interaction between SC and BS is negatively associated with the level of EM. This implies that large BS mitigates the adverse effect of SC on EM. In high shareholder concentrated firms, it is highly likely that the concentrated controlling shareholders would not be able to influence the board decisions if the BS is large. When BS is large, wider representation of directors is possible, hence constraining the influence on board decisions of majority shareholders.

The SPSE listing rule requires a minimum of three directors on the board and one third of the directors should be independent. Despite the impractical minimum requirement, some SPSE companies maintain better CG in terms of BS and independence. The average BS is approximately 6 directors and average board independence based on 2010 data is 47 percent. Even though, on average, majority of the directors are not independent, the 2010 data shows that almost 50 percent of the SPSE companies have majority independent directors. Thus, using BS as a proxy for board independence due to unavailability of board independence data for prior years, this study provides evidence that large boards are effective in mitigating the adverse effect of SC on EM. The results are robust based on an alternative measure of SC and upon the removal of dominant firms from the sample. ATH and FSC were eliminated from the sample for the later robustness test.

Other variables are used as controls in the multi variant regression model. The coefficients of all the control variables are as predicted. However, only the coefficient of LEV is significant while other control variables are insignificant.

Prior research has explained that blockholders constrain EM and that SC has a non-linear relationship with EM. This study adds to the CG and EM literature by providing empirical evidence that the majority-minority shareholder agency problem leads to more EM in very high shareholder concentrated firms such as the SPSE companies. This study also contributes to the extant literature that large boards are effective in minimizing the majority-minority shareholder problem through extensive monitoring in very high shareholder concentrated firms.

### **6.3 Corporate Governance in the SPSE listed corporations**

Literature has discussed various important CG policies which are good for companies for strong CG. Most of these policies are implemented and practiced in the developed stock exchanges such as the ASX. However, the CG practices in developing economies with emerging stock exchanges have been a concern. The weak CG practices in companies are a major factor that hinders the capital market development. Hence, the SPSE with the CMDA in Fiji has developed a CG guideline. Prior to the requirement by the SPSE, CG had been very poor in the listed companies. There have been some improvements recently; however, it is not sufficient to minimize agency problems and promote capital markets development.

CG is divided into internal and external governance structures and accordingly discussed in Chapter Five. Internal CG attributes include ownership structure, ER, BOD characteristics, board committees, AC, internal audit and external audit. Like other emerging stock markets, the shareholding structure of the SPSE companies is highly

concentrated. Most concentrated large shareholders are founders of the company. Even though these concentrated shareholders have futuristic view and minimizes owner-manager agency problems, they could dominate the other small investors. Thus, there is a majority-minority shareholder agency problem which motivates EM in the SPSE companies. This is severe when CG practices are weak.

The non-disclosure of ER policies and procedures and the large amounts of directors' fees for other services raise concern for CG. For most SPSE companies, there is no remuneration or compensation committee. Moreover, a substantial payment for non – directorial services is an issue.

Board has a major role in the administration of a company. Companies with high level of SC need to have a board which is able to maintain balance and also have a futuristic perspective. Information on BS, independent directors, corporate, accounting and financial background, director's tenure, and board meetings are presented in chapter five. Board committees are also formed to perform specific board functions. Audit, risk management and executive committees are more common in the SPSE companies from a list of eight committees identified in the literature.

Since AC is common in almost all the SPSE companies, further analysis was conducted to gather more information. AC in most SPSE companies is made up of four directors, most of which are non-executive independent directors. On average, from five meetings, two are held with external auditor and most members have corporate, accounting and financial background. These all are good indicators of CG. However, the survey indicates that the AC in the SPSE companies has many responsibilities which could make its functioning inefficient.

In most corporations, the internal audit function was established recently, approximately five years ago. The internal audit team is either appointed by the board or the AC and they mostly report to their appointer. A number of SPSE corporations do not have a defined internal audit function. All companies listed on the SPSE are audited by an external auditor. The audit tenure and NASRATIO is large and this raises issues of auditor independence and audit quality.

This research indicates that the external CG structures are even weaker. External CG structures include institutional ownership, market control and competition, creditor monitoring and protection, and securities market regulations. The founders of companies and institutional investors hold majority of the shares of the company. The issue is that most of these shares are unavailable for trading in the stock market despite the company being listed. Furthermore, the SPSE is not very active and the market does not provide much competition and it is inefficient. Lack of competition implies no threat of existence and continuation for the SPSE listed companies and the concentrated controlling shareholders are able to dominate. This is a weak CG attribute.

Moreover, creditor monitoring and protection is vital as well. Creditor monitoring is a strong CG mechanism for the SPSE companies. Since the creditors finance, on average, 38 percent of the assets of the SPSE companies, they provide monitoring over the companies. The securities market also screens the listing process. The listing rules outline rules on listing requirements, application for listing, and compliance and enforcement. Recently, the CG code was developed. This is a positive factor; however, there are rooms for further development and success would depend on the implementation and practice of the guidelines in the Code.

Upon a thorough analysis of the internal and external CG structures of the companies listed on SPSE, it is clear that the CG practice is weak in most SPSE companies. The

practices of the SPSE companies indicate weak governance structures. This includes shareholder composition, board committees, internal audit, and external audit, lack of market competition, compliance and enforcement of SPSE rules. Since CG practices are poor, the SPSE companies have a high level of EM.

#### **6.4 Implications**

The results of this research highlights that the majority – minority shareholder agency problem is a concern for companies with very high levels of SC such as the SPSE companies. Moreover, a further analysis indicates that large boards are effective in minimizing the majority – minority shareholder agency problem and hence mitigating EM. Thus, this study has implications for regulators who are concerned about strengthening the CG policies to protect the interests of the minority shareholders, minimizing opportunities for EM and improving the quality of financial reports.

The board mechanisms are considered as the basic and the most important internal CG mechanism. The board mechanisms relate to board size, board independence, board expertise, board tenure and board meeting frequencies. It is important for companies to decide on an appropriate board size as it would determine the strength of other board mechanisms. The SPSE companies currently have an average board size of six directors despite the minimum requirement of three directors. Ning et al. (2010) suggest that the “target number of directors on the board for average US publicly-traded corporations is between eight and eleven directors”. Moreover, the results of this study suggest that large boards constrain EM. Therefore, the SPSE needs to reconsider its requirement on board size for the publicly traded companies.

Furthermore, board independence is also vital to ensure effective CG. The SPSE requires publicly traded corporations to have a minimum of one third proportion of independent directors on the board. However, SOX requires majority independent

directors on the board (SOX 2002). Similarly, this study suggests that a wider representation of directors is important for the protection of the minority shareholders in a very high shareholder concentrated firm. Additionally, majority independent directors would monitor the controlling concentrated shareholders. Therefore, it is important for the SPSE to reconsider its requirement on board independence for the publicly traded companies.

Adequate board size and board independence are the primary aspect of the board mechanisms. Upon strengthening the rules on these primary board mechanisms, the SPSE, FIA and the Capital Market Unit at RBF need to update the specific guidelines on board expertise and board tenure. The current guidelines are broad as indicated in section 5.2 of Chapter Five. The SOX in its first Title, section 101, paragraph (e) clearly outlines the requirement on board composition for US publicly traded companies. The findings of this study suggest that it is vital to appoint directors with expertise such as accounting and financial. Also, it is important to have guidelines on board tenure to ensure effective and efficient board deliberations.

Despite the minimum recommendation of the CMDA (2008) CG code, all SPSE companies did not have an AC, risk management committee, recruitment committee and nomination committee in 2010. The results of this study indicate that there is a need for enforcement of the CG guidelines to ensure that the SPSE companies practice strong governance. The revised CG code follows the “if not, why not’ approach” where the companies are required to explain if they do not follow any principles of the code (CMDA 2008). However, this approach does not seem to be fruitful for strong governance practices in the SPSE companies due to a different business culture in this business environment. The SPSE needs to incorporate rules on the establishment and the operations of board sub committees to ensure effective and efficient governance in publicly traded companies.



Moreover, it is recommended that there should be a requirement that all companies have a compensation committee to determine the appropriate salary packages of the executives. A defined procedure for determining ER is vital. Future research (probably case studies) could be conducted to have an in – depth understanding of current procedures on ERs. ER needs to be clearly disclosed in the annual reports.

The weak levels of CG in the SPSE companies are mostly due to the lack of an internal audit function. The SPSE should require all listed companies to have an internal audit function and the responsibilities of the internal audit should be clearly outlined.

Even though all SPSE companies have the Big 4 firms as their external auditor, external audit quality is still an issue due to the large NASRATIO and audit tenure. The SPSE needs to incorporate rules on auditor independence to ensure effective governance. Title II of the SOX could be followed to develop the rules on auditor independence.

It is now timely that an independent council or institution is established to oversee and discipline professionals engaging in immoral and unlawful business activities. The Prime Minister of Fiji in 2010 FIA Congress “questioned the efficiency of auditors in the country’s two biggest financial debacles that cost \$699million” (Baselala 2010). Furthermore, the Prime Minister of Fiji in 2011 FIA Congress states that the Cabinet has approved “the creation of a legal framework to establish an independent body to set standards for the accounting profession; to monitor, hear complaints and institute disciplinary proceedings” (Bainimarama 2011). The Prime Minister indicated that an Independent Financial and Auditing Services Commission (IFASC) will be established under the framework.

External CG structures also require major improvements. Further research could consider the reasons for having low proportion of FF shares offered by the SPSE companies. Research also needs to identify ways to have most shares on FF and limit restriction on trade. This will enhance market competition and more open economy will promote growth of competitive firms. Financial market research should consider avenues to increase listing in the near future. Stock market regulations have been recently updated. However, more research is required to ensure more relevant and reasonable rules and regulations considering the business environment. Outright adoption of developed markets guidelines on CG may not be very fruitful. This could be one reason for the lack of compliance. Also, there is a need for more compliance and strict implementation of the current CG code.

Literature clearly indicates that strong CG minimizes EM. This research highlights that EM is common in the selected companies mostly due to poor governance which is possibly a result of the high levels of SC. Strengthening CG mechanisms will be fruitful for the development of the capital market and the economy as well.

## **6.5 Limitations**

Even though this research has highlighted various issues on CG and EM in the SPSE companies, the study encountered a number of limitations. The limitations are discussed in the following paragraphs.

Only companies listed on the SPSE have been selected for this study. Other private or SOEs were not selected due to the difficulty in gathering ample financial data to compute AbsDAC. Most private companies are hesitant in providing annual reports. It is important for the nation that financial data is compiled for companies and is available for research. The results would differ for different set of companies if their shareholders'

are not as highly concentrated. Future research needs to consider companies in different jurisdictions.

Moreover, due to the small number of firms (only 16), the firms were not distributed into their respective industries to conduct the empirical analysis. Separate analysis for each industry could produce interesting results as firms in each industry experience different level of pressures and competition and motivations for EM. This could be further investigated in future research if there is sufficient data.

The main sample includes firms with different shareholding structure such as majority state owned and majority family owned. The sample was not disaggregated into different shareholding structure due to the small number of firms in the main sample. Future research could investigate this further given ample data availability.

DAC can be income increasing or income decreasing. Some shareholders would support income increasing while others would support income decreasing EM due to differing incentives. A better analysis would have been to segregate the data into income increasing and income decreasing DAC and test for SC separately for each component. The study was unable to do this due to a small sample. Such analysis will produce better results given a larger sample.

## **6.6 Conclusion**

Despite the limitations, this study presents results which are vital to better understand the nature of the SPSE companies. The results are useful to have a better understanding of the lack of growth of the capital market. CG has always been an important factor to ensure the growth of corporations and minimize issues which limits development. EM may be good in some instances. However, mostly managers engage in EM due to agency

problems and self – interest attitudes. Current income (of self – interested parties) is prioritized at the expense of the business survival. This problem is common and it leads to further severe problems such as business fraud and the extreme is business collapse. These need to be minimized. Hence it is vital to strengthen the CG policies and practice of all SPSE companies and other organizations.

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## APPENDIX 1



My name is Dharmendra Naidu and I am an assistant lecturer in the School of Accounting and Finance at USP. You are invited to participate in this survey, which is part of my research study. The Purpose of this questionnaire is to collect information on various aspects of corporate governance in an organization.

The questionnaire is organized in three parts. Part one collects information regarding the Board of directors of the company. Part two comprises of a survey to collect information on various aspects of an audit committee. Part three collects information in regards to the various other aspects of corporate governance for example, corporate governance committee and internal auditing.

Any information provided will be treated with strict confidence. Data will be analyzed in aggregate form, held solely by the researcher and will not be used for any other purpose.

It would be greatly appreciated if you could please fill the attached questionnaire. Your time and cooperation in this study will be greatly appreciated.

Dharmendra Naidu [[naidu\\_d@usp.ac.fj](mailto:naidu_d@usp.ac.fj), Ph: 3232774]



**Audit Committee**

1.0 Is there an audit committee?

Yes  No

2.0 If yes, when was it established?

3.0 If yes, then who appoints the members of the audit committee?

- Board of Directors
- An independent nominations committee.

4.0 Who is responsible for dismissal or resignation of external auditor?

- Board of Directors
- An independent nominations committee.

5.0 What is the **size** of the committee?

Members	Tenure	Non-executive (Y/N)	Affiliated (Y/N)	Number of shares	Corporate/financial background (Y/N)	Accounting background (Y/N)

6.0 Is the chair of the audit committee an affiliated director?

Yes  No

7.0 How many **meetings** are held by the committee in each financial year?



8.0 How many **meetings** does the audit committee have with the **external auditor** of the company in one financial year?

9.0 Does the audit committee have either joint or sole authorization to dismiss the chief internal auditor?

Yes

No

10.0 What are some of the major responsibilities of the Audit Committee in your company?

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**Internal Audit and Corporate Governance Committee**

1.0 Does the company perform internal audits?

Yes  No

2.0 If yes, in which year did internal auditing commence?

3.0 Who appoints the internal auditors?

4.0 Who are the internal auditors?

An internal audit team employed by the organization

Out-sourced from the external auditor

Out-sourced from other audit firms.

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

5.0 How many members are in the internal audit section?

6.0 For how many years does each member remain in the team (**tenure**)?

7.0 Whom does the internal auditor report to?

8.0 Does the company have any **executive committee**?

Yes  No

8.1 Which year was this committee established?

8.2 What is the **size** of the committee?

8.3 For how many years does each member remain in the committee (**tenure**)?

8.4 How many **meetings** are held by the committee in each financial year?

9.0 Does the company have any **nomination committee**?

Yes  No

9.1 Which year was this committee established?

9.2 What is the **size** of the committee?

9.3 For how many years does each member remain in the committee (**tenure**)?

9.4 How many **meetings** are held by the committee in each financial year?

10.0 Does your Company have a **risk management Committee**?

Yes  No

10.1 Which year was this committee established?

10.2 What is the **size** of the committee?

10.3 For how many years does each member remain in the committee (**tenure**)?

10.4 How many **meetings** are held by the committee in each financial year?

11.0 Does the company have a **Corporate Governance Committee**?

Yes  No

11.1 Which year was this committee established?

11.2 What is the **size** of the committee?

11.3 For how many years does each member remain in the committee (**tenure**)?

11.4 How many **meetings** are held by the committee in each financial year?

12.0 Does the company have any **compensation committee**?

Yes  No

12.1 Which year was this committee established?

12.2 What is the **size** of the committee?

12.3 For how many years does each member remain in the committee (**tenure**)?

12.4 How many **meetings** are held by the committee in each financial year?

12.5 Is the chair of the compensation committee an affiliated director?

Yes  No

13.0 Does the company have any **disciplinary committee**?

Yes  No

13.1 Which year was this committee established?

13.2 What is the **size** of the committee?

13.3 For how many years does each member remain in the committee (**tenure**)?

13.4 How many **meetings** are held by the committee in each financial year?

14.0 Does the company have any **public policy committee**?

Yes  No

14.1 Which year was this committee established?

14.2 What is the **size** of the committee?

14.3 For how many years does each member remain in the committee (**tenure**)?

14.4 How many **meetings** are held by the committee in each financial year?

15.0 Did the Board form any other sub-committee?

Yes  No

16.0 Does the **Chief Executive Officer own any shares** in the Company?

Yes  No

16.1 If yes, from **which financial year** the management started to own shares?

16.2 In total, **how many shares** are owned by the management?

17.0 Does any other employee own any shares in the company?

Yes  No

17.1 If yes, from **which financial year** the employee started to own shares?

17.2 In total, **how many shares** are owned by the employee?

*Thank You*