

## Developments in Non-Mandatory Disclosures in Annual Reports of Companies: A Case Study

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# Developments in Non-Mandatory Disclosures in Annual Reports of Companies: A Case Study

## **Abstract:**

The paper investigates the extent of non-mandatory disclosure of information (NMD) in the annual reports of the 17 companies listed on the South Pacific Stock Exchange (SPSE) in Fiji, a developing country, and whether NMD by these companies has changed over time providing additional and useful information to stakeholders. The empirical data was gathered from the years 2008 to 2010 to provide a clear picture of the change in the level and extent of NMD, and its influences over the periods 2008 to 2010. It can be seen from the Fiji perspective that the mandatory requirements tend to have a financial focus. However, it would be expected that the level of company disclosures would have changed over time, with not only global market forces but through differing societal values which have increased the frequency and demand of non-mandatory reporting by companies. All companies showed some degree of NMD, and on average this demonstrates an increasing trend. The stakeholders are receiving more information about a company's activities. The companies were analysed in light of recent developments in corporate governance by the Capital Markets Development Authority (CMDA) implementing their 10 corporate governance principles. This became a major driver of the increase in NMD levels of the disclosures in the annual reports of the listed companies. However, a large variation still exists between the level and extent of the NMD and the different listed companies. The minimum disclosure level found over the three years was 9.09 percent, which has increased to a minimum of 13.66 percent in 2010, and the maximum disclosure level over the three years was 81.82 percent. The findings for the extent of NMD was also similar where the minimum words used in NMDs was 114, increasing to 854 in 2010, and the maximum disclosure extent over the three years was 21,414 words. However, it was found that the measurement of counting words tended to fluctuate over different periods where significant events took place that affected the company. Therefore, it was established that disclosure is impacted by what happens in the reporting period, and can explain why one period may have greater disclosure than another. The paper aims to extend earlier work of Sharma & Davey (2013) on the extent of NMD in Fijian context. While Sharma & Davey (2013) considered voluntary disclosure from 1999-2005, our study reviews NMD over 2008-2010. The study has shown that corporate governance code issued in 2009 by Capital Market Development Authority has influenced the level of NMD.

**Keywords:** non-mandatory disclosure, developing economies, Fiji, legitimacy theory.

# **Developments in Non-Mandatory Disclosures in Annual Reports of Companies: A Case Study**

## **1. Introduction**

Companies are required to disclose mandatory information in their annual reports as per legislation and through the requirements from professional bodies; however, this does not necessarily mean that all important information as perceived by stakeholders is disclosed by companies. Legislation provides for a minimum standard of information to be disclosed to stakeholders; however, these legal requirements are not sufficient to satisfy the needs of society to enhance stakeholder knowledge (Arcay & Vázquez, 2005; Ho & Wong, 2001). Therefore, NMD is the information beyond that content required in the financial statements and annual reports, and is considered to be in the best interest of society with a focus on the company's interaction with society; the environment; employees; land and waste management; and a company's intended future prospects (Sharma & Davey, 2013; Barako, Hancock, Izan, 2006). There has been a growing movement for companies to be responsible for their actions to society and are able to express this through NMD (Smith, Adhikari, & Tondkar, 2005). It can be seen from the Fiji perspective that the mandatory requirements tend to have a financial focus. However, it would be expected that the level of company disclosures would have changed over time, with not only global market forces but through differing societal values which have increased the frequency and demand of non-mandatory reporting by companies.

The purpose of this paper is to examine the extent of non-mandatory disclosure (NMD) in the annual reports of the 17 companies listed on the South Pacific Stock Exchange (SPSE) in Fiji, a developing country, and whether NMD by these companies has changed over time providing additional and useful information to stakeholders. Prior NMD studies in Fiji have addressed disclosure elements relating to the environment; employees; land; government; development agencies; customers; shareholders; environment lobby groups; and other community concerns (Sharma & Davey, 2013). They also assessed the relationship between these disclosures with the size, performance and market concentration of the listed companies (Sharma & Davey, 2013). This investigation differs from the earlier Fiji studies as it includes more detailed variables and measures to explain and measure the level and extent of NMD. To help distinguish these variables the concept of themes and sub-themes as illustrated by

Gao, Heravi and Xiao (2005) is used to form a disclosure scorecard to distinguish the NMD categories. In addition, the criteria for each NMD category is explained which allows readers to see how the NMD is classified under each specific variable. A variety of NMD studies were analysed from both developed and developing countries to structure the disclosure scorecard adopting sub-themes from Barako et al., (2006); Haniffa and Cooke (2002); Hossain and Hammami (2009), and Leventis and Weetman (2004).

It is important to examine the ways in which organisations report non-mandatory information and how they are influenced by society to include NMD into their annual reports as it increases our understanding of accounting as having a social nature. The voluntary disclosure environment in developed countries as suggested by Luo, Courtenay, and Hossain (2006) is rich; therefore, as Fiji is a developing country the investigation should be able to capture the NMD and influences for voluntary disclosing information. This investigation contributes to prior literature on the influences in the variation of NMD, especially from the perspective of a developing country, and adds to the limited NMD research on Fiji. Although Fiji has a small capital market with only minor holdings by international investors, the desire to include additional information to enhance stakeholders' knowledge is evident as seen through the encouragement of disclosure by professional bodies such as the CMDA and the South Pacific Stock Exchange (SPSE). In this investigation, expectations' regarding an increase in the level and extent of NMD is based on legitimacy theory. In addition to corporate governance variables affecting a company's disclosure in annual reports, this investigation will also examine company attributes such as a company's liquidity; performance; size; leverage; assets in place; size of board; and percentage of major shareholdings as possible explanatory variables of voluntary disclosure decisions by companies.

The remainder of the paper is structured by first examining the prior studies on NMD. This is followed by the conceptual framework that guided the research process in Section 3. Next the Fijian environment is presented in Section 4. The study's research method is discussed on Section 5. The research results are presented in Section 6, followed by a discussion of the results and their implications for further research in the final section.

## **2. Prior Studies**

Due to the adverse effects on society through company failures such as Enron and WorldCom, there has been an increased demand for companies to report beyond their financial and

mandatory obligations (Smith et al., 2005). NMD can provide value relevant information about the financial and non-financial elements of an organisation, enabling stakeholders, including investors; creditors; employees; environmental groups; consumers; and governmental bodies, to make informed and effective decisions. It is "...defined as the discretionary release of financial and non-financial information through annual reports over and above the mandatory requirements, either in regards to ...company laws, professional accounting standards or any other relevant regulatory requirement" (Barako et al., 2006. p. 114). Therefore, NMD is used to reduce information asymmetry, thus increasing the exchange of company information to stakeholders as stakeholders do not have ease of access to obtain company information, and it increases accountability, which is the result of the growing demands for companies to become more transparent (Bhasin & Reddy, 2011). As a result the growth of disclosure and its significance to stakeholders is expected to increase (Gray, Javad, Power, & Sinclair, 2001). Through greater disclosure it reveals a company's private information which reduces investor uncertainty thus protecting investors and influencing market expectations (Luo et al., 2006). Therefore, through disclosures it allows the public to examine the quality of management decisions and their use of resources (Bhasin & Reddy, 2011).

NMD is said to reflect the underlying environmental influences that face a company's accounting practices and this affects the quality and detail of the disclosures made by companies (Latridis & Valahi, 2010). Subsequently, this leads to variations in disclosure by companies across different sectors, industries and between developed and developing countries. Environmental factors play a significant role in the level of NMD and it is believed that disclosure is based on internal factors in developed countries and in developing countries it is influenced by external factors (Elsayed & Hoque, 2010). It is also believed that greater social disclosures are found in developed and industrialised countries compared to disclosures found in developing countries (Andrew, Gul, Guthrie, & Teoh, 1989). The environmental influences consist of both internal and external pressures both globally and nationally including company size; industry; competition; stock ownership; stock market listing; corporate governance; stakeholder interest and expectations; market uncertainty; exposure to international markets; technology; inherent characteristics such as culture and education; an established accounting profession; socio-economic factors; and political factors (Elsayed & Hoque, 2010; Eng & Mak, 2003; Latridis & Valahi, 2010). An important contingent variable in NMD is culture as social values create traditions in a society and explain why things are the way they are, thus influencing how a company operates, accounts

for information, and reports to stakeholders (Haniffa & Cooke, 2005). Gray (1998, as cited in Williams, 1999) identifies that company disclosures are influenced by the cultural dimensions of strong versus weak uncertainty avoidance and masculinity versus femininity. Those societies that have high levels of uncertainty avoidance tend to prefer secrecy; therefore, companies outweigh the costs of disclosing information with the benefits associated with disclosing and if uncertainty is high they will limit disclosure. Furthermore, companies that operate in societies that have stronger masculine based traits experience less pressure from society to disclose environmental and social information. This is in contrast to a company who operates in a society with feminine characteristics as they have a higher demand and greater expectations for companies to disclose environmental and social information as they are more conscious of the effects the company has in its operating environment (Williams, 1999). Therefore, those companies operating in a feminine based society will have greater disclosures than a company operating in a masculine based society. In addition, key financial variables of a company can also affect the extent and quality of disclosures such as profitability, growth opportunities, liquidity, and financial leverage (Latridis & Valahi, 2010). As a result, disclosure is based on various contingent factors and the different factors that companies face in the country they operate in will result in different decisions about the level of disclosure.

There are various reasons why companies decide to disclose additional information in their annual reports beyond what is required under legislation and professional frameworks. Companies are generally willing to voluntarily disclose additional information than that which is mandatory as they recognise there are benefits for the company (Barako et al., 2006). Research has established that company disclosure is a trade-off between the costs and benefits associated with the disclosure such as whether the voluntary information disclosed will be harmful to the company through competitors' obtaining this information and using it to their advantage (Arcay & Vázquez, 2005). It is expected that the cost of disclosing such as gathering, preparing, presenting and the risk associated with disclosure is lower for a larger sized company compared to companies that are smaller in size (Arcay & Vázquez, 2005). This is due to the belief that larger firms have greater resources and expertise allowing them to provide more detailed information to stakeholders (Barako et al., 2006). In addition, larger companies are considered to benefit from NMD through access to the capital market (Arcay & Vázquez, 2005). Although the larger companies appear to reap greater benefits which are not necessarily readily available to the smaller companies, larger companies are believed to face greater agency costs which in turn results in greater disclosure of company information

(Barako et al., 2006). This is to reduce the effects of agency theory which arise where there is a separation of ownership and control between the principal (investors) and the agents (managers), giving rise to moral hazard issues (Hossain, Perera, & Rahman, 1995). Although management should be acting in the best interest of the owners, conflicts of interest arise as management know more information about the company than stakeholders, including investors, and as they know the true position of the company they can take actions which benefit themselves rather than the company as a whole (Osma & Guillamón-Saorín, 2011). In addition to size, age of a company is also considered to play a role in the level of a company's disclosure where older companies may disclose more as new companies may not realise the public's demand for a suitable level of disclosure that the public desires, therefore, initially the new company may have a smaller NMD level (Hossain & Hammami, 2009).

Companies are also more willing to disclose good information rather than information that will have an adverse effect on the company (Latridis & Valahi, 2010). However, due to fear that non-disclosure and the delay of disclosure will lead to litigation costs and create a perception that the bad news is worse than it actually is; companies will be willing to disclose unfavourable information as these costs outweigh the benefits (Arcay & Vázquez, 2005). Managers are faced by two essential pressures to disclose. From an ethical stance disclosure enables stakeholders to see the impact of the company's activities to society, it demonstrates the company values fair practices and reduces concerns of corruption; and from a managerial stance disclosure is used to retain funds in the company (Mahaeo, Oogarah-Hanuman, & Soobaroyen, 2011). Leventis & Weetman, (2004) argue that disclosure is a combination of legitimacy, corporate social responsibility, political and marketing functions. The next section examines legitimacy theory which informs our study.

### **3. Legitimacy theory as an explanatory theory for NMD**

Organisational legitimacy theory assumes that corporations will do whatever they deem as necessary in order to preserve their image of a legitimate business with legitimate aims (Brown & Deegan, 1998; De Villiers & Van Staden, 2006; De Villiers & Lubbe, 2001). Gray, Owen and Adams (1996, p.45) point out "information is a major element that can be employed by the organization to manage (or manipulate) the stakeholder in order to gain their support and approval, or to distract their opposition and disapproval."

Deegan, Rankin and Voght (2000) conform the notion that legitimacy is about disclosure. The way legitimacy theory is generally utilized in the literature suggests that organizations

will continue to make their voluntary disclosure or make more voluntary disclosure to ensure that their legitimacy is not threatened (De Villiers and Van Staden, 2006). Deegan *et al.*, (2002) point out that “where there is limited concern, there will be limited disclosures” (p.335). According to Neu *et al.*, (1998) it may be possible that managers may from time to time misjudge the significance of a particular stakeholder group. If they consider this group as a major threat to their legitimacy, they will publish additional information to mitigate the perceived threat. Oliver (1991, p.164) comments on legitimacy in organizations as:

When an organization’s performance and survival are only moderately dependent upon the good opinion of the public (e.g. arms manufacturers), avoidance tactics such as ceremonial conformity, symbolic gestures of compliance and restricted access to information on the company’s practices (i.e. concealment), may be the extent of an organisation’s responsiveness.

Although companies operate in a physical environment, they also operate in a social environment. Therefore as managers are in a position of power and can determine what information to disclose and the extent of the disclosure, their views and characteristics play a significant role in disclosure as they are acting on their own interpretation of how society thinks the company should act (Smith *et al.*, 2005). The social environment places pressure on companies to comply with their demands; therefore, companies attempt to legitimise their actions and meet the socially acceptable norms through communicating to those within and outside the company through such means as NMD (Milne & Patten, 2002). In addition, through disclosing information companies can attempt to control their freedom and reputation within society (Gray *et al.*, 2001).

Over time stakeholders are placing greater importance on companies voluntarily disclosing information, especially in regards to corporate social responsibility disclosures (Mobus, 2005). These corporate social disclosures incorporate all disclosures in relation to the environment, community, customers, and employees. It is therefore considered to have a wider perspective than the traditional disclosures made by companies which concentrated on financial information for investors and creditors (Smith *et al.*, 2005). The trend away from traditional financial accounting encompasses the perception that socially responsible disclosures enhance market performance, managerial legitimacy, and corporate social responsibility as there is a social contract between the company and society (Mobus, 2005). It demonstrates that the company meets the values and beliefs of society, establishing its worthiness in society, and shows that the company is concerned with the greater environment in which it operates in (Haniffa & Cooke, 2005). “[S]urvival depends not only on such



mundane matters as efficiency and profits, but upon the acceptance of output and methods of operation by significant sectors of the organisation's environment" (Milne & Patten, 2002, p.364). Therefore, companies not only need to legitimise financial matters but also social matters; however, although NMD is thought of as being socially desirable, companies still weigh up the benefits of disclosing to the costs of disclosing the information from the perspective of the company (Hossain & Hammami, 2009).

Companies need to operate within society's values and norms because without support from society the company will fail (Williams, 1999). Subsequently, managers use disclosures to help build a relationship and trust between stakeholders and the company through building an acceptable perceived image for the company in society. Therefore, as a result of using disclosures as a means of legitimising actions the disclosures will vary over time (Clarke & Gibson-Sweet, 1999). Although NMD provides stakeholders with greater access to company information issues are raised about the reliability of NMD as it is management's discretion as to what is disclosed and what is not, and is therefore seen as a strategic tool for the company (Mobus, 2005). In addition, companies can manipulate how society sees the company in an attempt to appear legitimate through identifying itself with strong socially acceptable symbols and values to ensure it is seen as socially acceptable and operating within society's values (Milne & Patten, 2002). Therefore, "... whether legitimating initiatives occur as a result of management desire or institutional pressure, and whether they involve pure symbolism or substantive activity, they may mean little in terms of significantly changing the organisation's activities" (Milne & Patten, 2002, p.375).

Legitimacy is monitored through society rather than through the market, and how a company chooses to legitimise its activities depends on their target audience for the disclosure (Mobus, 2005). As a result, not all stakeholders are treated equally as one selection of stakeholders will always be considered of greater importance than the other. Consequently, the NMD is tailored to meet this specific stakeholder group's demands, which is generally the stakeholder group who holds the greatest resources that the company needs (Smith et al., 2005). As a result, Mobus (2005) implies "...that an organisation may materially diverge from expectations and still maintain legitimacy if the relevant audiences are not aware of the divergence" (p.496).

In brief, the extent and type of NMD in the annual report is, therefore, likely to be related to management's perception about the concerns of community, from a legitimacy perspective. The next section examines the Fijian environment and the financial reporting in Fiji.

#### **4. The Fijian environment and financial reporting in Fiji**

Fiji is a developing economy whose culture is characterised by uncertainty avoidance and a society that adheres to rules with strong power distances between leaders and society (Chand & White, 2006). The accounting system in Fiji has been primarily influenced by the British and international arrangements and practices as a result of expatriates who are educated in other countries and transfer international accounting practices to Fiji (Chand & White, 2006). Fiji's accounting practices are also influenced through international frameworks to encourage comparability of financial statements and to maintain and promote investor confidence in Fiji (Capital Markets Development Authority [CMDA], 2008). To encourage capital flow, enhance the efficiency of Fiji's capital markets, and to improve the financial reporting within Fiji, International Financial Reporting Standards were adopted from January 2007 which sets out mandatory accounting requirements (Deloitte Global Services Limited, 2011).

Fiji's professional accounting body is the Fiji Institute of Accountants (FIA), established in 1972 through the FIA Act 1971, and adopts and actively monitors accounting and auditing standards, and their application (Fiji Institute of Accountants, 2011). The Companies Act (Fiji) 1985 sets out the framework and basic minimum requirements for listed companies to adhere to such as to keep account and publish financial statements including the balance sheet, income statement, statement of changes in equity and a cash flow statement; audited by a qualified auditor (Pacific Islands Legal Information Institute, 2011). In addition the Banking Act 1995, Insurance Act 1998, and the Public Enterprise Act 1996 sets out a similar framework of requirements for companies as the Companies Act (Fiji) 1985 ; therefore, they have a similar focus on financial disclosure through the use of financial statements (Pacific Islands Legal Information Institute, 2011).

The SPSE, established in 1979, is the only licensed securities exchange in Fiji and consists of 17 listed companies (*see Appendix A for company information*). Although their mission is primarily to facilitate an efficient securities exchange, the listed companies are subject to the SPSE listing rules which sets out mandatory information that must be included in the listed company's annual reports. This ensures that company information is available and timely to stakeholders to make an informed decision thus maintaining investor confidence in the market. In addition the SPSE also encourage greater financial and non-financial disclosure to investors through holding an annual report competition each year. This began in 1981 to increase public awareness of a company's actions in society, increase disclosure of relevant information, and to aid in the growth of an organisation. Through this the SPSE believe that

the standard of annual reports of participating companies has increased substantially over time (South Pacific Stock Exchange, 2011). A vast majority of the listed companies in Fiji operate predominantly in a monopolistic environment and do not perceive the need to adhere to social contracts.

Although the Capital Market Development Authority (CMDA) has a broad purpose of regulating and ensuring an efficient and active capital market in Fiji; they also have an objective to promote and to enhance disclosure requirements (CMDA, 2008). To achieve this they have developed a Code of Corporate Governance for those participating in the capital market, which provides a benchmark of expected good corporate governance. Although this code is voluntary, it is compulsory for listed companies and intermediaries, from the 1<sup>st</sup> of January 2009, to report how they are addressing the 10 corporate governance principles in their annual reports (CMDA, 2008). The CMDA's 10 corporate governance principles aim to help companies optimise their corporate governance standards and illustrate how the company is addressing corporate governance related issues to stakeholders. This includes such items as establishing the responsibility of the board; constituting an effective board; appointment of a chief executive officer; appointment of a board and company secretary; timely and balanced disclosure of material information; ethical and responsible decision making; maintaining a register of interest; respecting the rights of shareholders; disclosure of accountability and audit standards; and recognising and managing risk (CMDA, 2008).

## **5. Method**

A content analysis of the NMD of the 17 listed companies listed on the SPSE, as at September 2011, will be the primary instrument to determine the level and change of NMD in Fiji. Annual reports will be used as they are considered the most widely circulated form of communication of a public company's quantitative and qualitative information to various stakeholders (Barako et al, 2006; Hossain & Hammami, 2009). The annual reports are considered credible as they are audited by an independent auditor which ensures that the annual report information is consistent with the audited financial statements. How annual reports are designed and their layout is to influence the readers perception of the company and has been described as requiring a "...staggering amount of time, energy and money...[and is]...[u]nquestionably the most expensive and management-intensive tool within the typical financial communication program..." (Neu, Warsame, & Pedwell, 1998, p.269). As a result, the annual reports become a primary source for decision making and by measuring NMD in

annual reports it identifies whether NMD by these companies has changed over time providing additional and useful information to stakeholders. In this investigation, annual reports will be collected from the fiscal years ending 2008 to 2010. Three fiscal years worth of Annual reports of 14 of the companies were available through SPSE; however, the SPSE did not have all three fiscal years of annual reports for the Bank of South Pacific Limited and Fijian Holdings Limited, and as a result their annual reports were obtained from their home page. Due to the small size of companies listed on the SPSE all listed companies were considered in this study; private companies are excluded from this study as they are not required to prepare financial reports for the public and are not subject to stock market regulations and professional body regulations which require disclosure of company information.

Initially to determine what NMD is and what is not various IAS' such as IAS 1 *Presentation of Financial Statements*, IAS 4 *Insurance Contracts*, IAS 7 *Financial Instruments: Disclosure*, and IAS 24 *Related Party Disclosures* (Deloitte Global Services Limited, 2011); relevant Fiji legislation; and the SPSE's listing rules were examined to create a NMD scorecard consisting of a total of 23 items covering the environment (2 items); company background (1 item); corporate strategy (2 items); corporate governance (4 items); organisational structure (1 item); performance (3 items); shareholders (1 item); market disclosure (1 item); social disclosures (1 item); customers (1 item); human resources (3 items); health and safety (1 item); ethics (1 item); and graphs (1 item) (*see Appendix B for disclosure scorecard*). This disclosure scorecard was then used as a framework to classify and measure the NMD. To measure whether a variable was present in the annual report an un-weighted measure will be used where a value of "0" will be used to indicate the disclosure variable was not present and a value of "1" indicating the disclosure variable was present. The total disclosures for each company is then summed to derive the disclosure level for the company and will then be divided by the maximum possible NMD score to derive the percentage of disclosure for the specific company. The disclosure score is outlined below and is measured as:

$$DSCORE = \sum_{y=1}^n \frac{dy}{n}$$

where dy is "1" if the NMD variable is disclosed and "0" if it is not disclosed, and n (n=23) is the maximum NMD score that each company can obtain. This equation has been adapted

primarily from Hossain and Hommami (2009) and also follows the same approach as Elsayed and Hoque (2010); Haniffa and Cooke (2005); and Lopes and Rodrigues (2007). Through establishing a disclosure scorecard it creates a framework which enables a quantification analysis through counting the words of the NMD to measure the extent and trend of NMD in annual reports. Therefore for every NMD present in a company's annual report the number of words associated with this disclosure is counted and recorded in a chart to identify the change in the extent of NMD over time.

To measure whether disclosure is industry related the disclosure scores will be assessed by industry. To achieve this, the companies will be categorised into the industry that they operate within and the mean NMD score per industry and the percentage change in NMD score per industry will be assessed. In addition the investigation also considers the presence of the CMDA's 10 corporate governance principles and the SPSE's annual report competitions as independent variables as both these associations encourage greater voluntary disclosure. Many of the items listed by the CMDA and the SPSE are non-mandatory and are desired company disclosures by stakeholders. It is measured by assessing those companies whose NMD scores have increased over the time that the CMDA's 10 corporate governance principles are in place and assessing the NMD score of those participating in the SPSE's annual report competition. Through this the relationship between the NMD score of a company and the adoption of the governing principles and/or the participation of the SPSE's annual report competition can be established to see if they have influenced the level of information disclosed by companies.

The above un-weighted measure used to create the disclosure scorecard measures the dependent variable, level of NMD; however, there are also independent variables which need to be measured to assess their influence on the level of NMD. The independent variables assessed in this investigation include liquidity (measured through current assets divided by current liabilities); performance (measured through net profit divided by total equity); size (measured by total assets); leverage (measured through total debt divided by total equity); assets in place (measured through total fixed assets divided by total assets); size of the board (measured by number of directors on the company's board); major shareholders (measured through the percentage of owners that hold more than five percent of total shares). A regression analysis will be used to measure the impact of these independent variables in the movement of the dependent variable. This model is expressed as:

$$Y_{dcscore}(n) = \beta_0 + \beta_1 Liquidity(n) + \beta_2 Performance(n) + \beta_3 Size(n) + \beta_4 Leverage(n) + \beta_5 Assets\ is\ place(n) + \beta_6 Size\ of\ Board(n) + \beta_7 Major\ Shareholders(n) + e_{dscore}(n)$$

Through this regression analysis the association of each independent variable will be determined. To measure whether the relationship between the dependent and independent variables are year specific, and to measure whether the relationship between the dependent and independent variables have increased over the three year period; a regression analysis will be conducted for each specific year. As a result, the investigation should provide a clear picture of the change in the level and extent of NMD, and its influences over the periods 2008, 2009, and 2010.

Content analysis is the methodology used in this investigation to summarise the NMD in annual reports. Hooks & Van Staden (2011) defines content analysis as “...quantifying the contents of a text by way of a method that is clear and can be repeated by other researchers” (p.200). Content analysis can then be broken down into two different types: extent based analysis and quality based analysis. Under the extent based measures of content analysis the topic under investigation is measured by quantity rather than measuring quality and/or meaning the topic through a quality index under the quality based analysis (Hooks & Van Staden, 2011). In this investigation, the quality content analysis was excluded as assessing the quality of a disclosure increased the risk of subjectivity and bias. As a result, the extent measurement in content analysis was used as it reduces the likelihood of inconsistencies in the investigation through a descriptive method and scientific approach which attempts to describe the situation, analyse, and report the results of the investigation without being impacted by potential biases from the investigator (Hooks & Van Staden, 2011). In addition, through a descriptive method it allows for future studies to use the same method which enables the ability to make direct comparisons between future studies and this investigation.

To achieve this, a disclosure scorecard was established to develop categories where NMD can be classified to identify whether disclosure is present or is not and allowed for a variety of disclosures in a company’s annual report to be measured. Both financial and non-financial NMD were examined, including a performance category for the graphical representation of performance. It was considered significant to include a category to represent the presence of graphical representation of performance in the annual reports as images and graphs are a form

of communicating and enable the company to communicate a message to readers. The NMD scorecard provided a framework which enabled a quantification analysis through counting the words of the NMD to measure the extent and trend of NMD in annual reports. Through developing a detailed scorecard, it created a systematic approach which allowed for consistency when analysing the annual reports as it ensured that similar disclosures were accounted for under the correct NMD category. In addition, it also aids further research by providing a framework and enables the reader to grasp how certain NMD items were categorised and measured.

Disclosure has been described “...by its very nature, is an abstract construct that does not possess inherent characteristics by which one can determine its intensity or quality” (Barako et al., 2006, p. 114). It is viewed as being subjective leading to a variety of different disclosure scorecards as there is not one single selection of disclosure items that are present in all NMD studies i.e. they all differ in some aspect. A variety of disclosures need to be considered due to different interest groups desiring different levels and extent of disclosures; therefore, how the investigator interprets the needs of the interest groups could affect what disclosures are measured. To ensure that the disclosure was relevant to this investigation in Fiji, the disclosure scorecard was developed after a review of relevant disclosure requirements of various Fiji legislation, listing requirements of listed companies on the SPSE, and a review of prior research of NMD conducted by Barako et al., (2006); Haniffa and Cooke (2002); Hossain and Hammami (2009), and Leventis and Weetman (2004). A broad list was developed encompassing both financial and non-financial themes and sub themes which were considered as possible disclosure items. The initial disclosure scorecard list consisted of a total of 47 items; however, after a closer analysis of Fiji legislation, the IAS’ adopted in Fiji, and the SPSE listing rules the disclosure list was screened for mandatory disclosures and was condensed for ease of analysis. As a result, the final NMD scorecard consists of a total of 23 items covering the environment (2 items); company background (1 item); corporate strategy (2 items); corporate governance (4 items); organisational structure (1 item); performance (3 items); shareholders (1 item); market disclosure (1 item); social disclosures (1 item); customers (1 item); human resources (3 items); health and safety (1 item); ethics (1 item); and graphs (1 item).

To measure the level of NMD through the disclosure scorecard dichotomous variables were used which is an un-weighted measurement where variables can only take one of two values,

i.e. a value of “1” for disclosure and a value of “0” for non disclosure, which is consistent with various NMD studies (Arcay & Vázquez, 2005; Collett, & Hrasky, 2005; Elsayed & Hoque, 2010; Haniffa & Cooke, 2005; Hossain & Hammami, 2009; Hossain et al., 1995; Latridis & Valahi, 2010; Lopes & Rodrigues, 2007). However, this un-weighted approach makes the assumption that all disclosures are of equal importance where in fact some disclosures may be more relevant and useful to stakeholders than others and therefore should hold a greater weightage than those disclosures that are not (Barako et al., 2006). The alternative measurement basis that could have been adopted to measure the level of NMD was the weighted approach where variables are given a weighting between zero and one. However, through the weighted approach it can lead to a bias analysis as the weights of the variables are subject to the analyst’s perceptions (Hossain & Hammami, 2009; Luo et al., 2006). As a result the weighted and un-weighted measurement approaches could be used as a substitute for each other. Hossain et al., (1995) establishes that the un-weighted approach to measuring disclosure in annual reports is more appropriate than the weighted approach because annual reports are not directed at one specific user group but rather all users of the annual reports. Therefore each item of disclosure needs to be considered equally as important as the other, if not then it may give the impression that one disclosure and subsequently one interest group is of more importance than the others. In addition, Hossain et al., (1995) support the use of an un-weighted measure for disclosure as a significant amount of “...subjectivity exists in the assignment of weights because it reflects the perceptions rather than actual information needs of the users of financial reports” (p.77). Although Barako et al (2006) illustrates through using both weighted and un-weighted approaches to measure the same set of NMD that not one measurement basis is more beneficial to use over the other and found and that there was no difference between the two approaches as they “mirrored” each other, it was decided that for this investigation placing a equal weight on each NMD variable such as that of the un-weighted approach would be less bias then the weighted approach and more appropriate due to the vast target audience for a company’s annual report.

It was also decided when establishing how to account for any graphical representations of performance in the annual reports that the un-weighted measurement would be used, i.e. “1” for the use of graphs to communicate performance and “0” if no graphs were present. Although this does not account for companies that have illustrated more than one graph it was thought to have been less bias to account for whether they used graphs or not rather than the number of graphs as a number of items relating to performance can be put into a graph



which would increase a disclosure score of a company and the graphs may not actually provide any additional information to stakeholders than that already established through the report in words. The alternative would be to assess and record the amount of graphs that would benefit stakeholders; however, this brings subjectivity to the investigation.

The independent variables chosen in this investigation include liquidity; performance; size; leverage; assets in place; size of board; and percentage of major shareholders. These specific variables were chosen as the information required under these independent variables was available from the listed companies' annual reports. There was only one company who did not classify their assets and liabilities as either current or non-current. The categorisation of these assets and liabilities was attempted; however, the corresponding notes did not provide enough information to make an informed decision about whether the assets and liabilities were current or non-current. It was believed that through estimating the nature of the assets and liabilities could introduce subjectivity and uncertainty into the regression analysis. As a result, the independent variables addressing liquidity and assets in place were not assessed for this one company. Other variables such as foreign ownership; presence of an audit committee; age, quantity of subsidiaries; age; and the presence of a separate CEO and chairman were also considered. However, not all and barely a majority of the listed companies disclosed information on these potential independent variables. As a result, they were excluded from being used in the regression analysis.

## **6. Results**

This section presents the results in three sub-sections. Sub-section 6.1 examines trends in NMD, while sub-section 6.2 reveals NMD by industries. The subsection 6.3 presents the results on NMD through the regression analysis.

### *6.1 Trends in NMD reporting*

Descriptive statistics for the dependent variable is reported in Table 1 and a detailed analysis of the disclosure score and the quantity of words used in NMD is illustrated in Appendix C. Table 1 illustrates that the percentage level of NMD over the three year period has increased. Over the same sample the average level of NMD has increased from 28.07% in 2008 to 37.97% in 2010. Subsequently the minimum average disclosure score increased; however, of interest is the increase in the minimum percentage of disclosure between 2009 and 2010 moving from 9.09% to a minimum of 13.66% in 2010. A similar pattern is also apparent in

the measurement of the extent of NMD by companies. Over the three years, the average quantity of words for NMD has increased from 2637.94 in 2008 to 4438 in 2010, with a noticeable increase in the minimum quantity of words from 2009 to 2010 of 114 and 854 respectively. It is considered that the increase in NMD for these listed companies is a result of the introduction of the CMDA's corporate governance principles. All but 2 companies reported corporate governance principles in accordance with the CMDA, which was implemented from 1<sup>st</sup> January 2009. Due to the CMDA's corporate governance principles, companies who were not originally disclosing information regarding corporate governance in their company started to report this information in their annual reports. As a result, this has increased the average disclosure score and increased the average quantity of words used in the company disclosures, and has been considered a driving force for the increase in NMD in Fiji.

Although the SPSE has an annual report competition to encourage greater disclosure to stakeholders, it appears that it has achieved a lesser effect on the levels of NMD compared to the implementation of the CMDA's corporate governance principles. The annual report competition is open to a variety of different companies other than just those that are listed on the exchange and is not a compulsory requirement (South Pacific Stock Exchange, 2011). This differs to the CMDA's corporate governance principles where companies are required to illustrate how they meet or are not meeting the principles; therefore, this compulsory requirement increases the amount of disclosures made by the listed companies. Those companies who have won either first place, 1<sup>st</sup> runner up or 2<sup>nd</sup> runner up over the three years include (in no particular order) Amalgamated Telecom Holdings; Fijian Holdings Limited; Fiji Television Limited; and Fiji Sugar corporation Limited (South Pacific Stock Exchange, 2011). For most of these companies who received a placing in the SPSE annual report competition the disclosure scores have either remained at the same level or increased over the years; however, of concern is the disclosure level for Fiji Television Limited who have appeared to have reduced their disclosure level in 2010. Fiji Television Limited's disclosure score has dropped from 68.18% in 2009 to 40.91% in 2010, and is a result of no disclosures found in their annual report in regards to company background; objectives and visions, chairman and directors; senior managers; social disclosures; and health and health and safety. As a result, this becomes a concern for stakeholders if this trend continues for Fiji Television Limited as it will limit stakeholder's knowledge of the company and its activities.

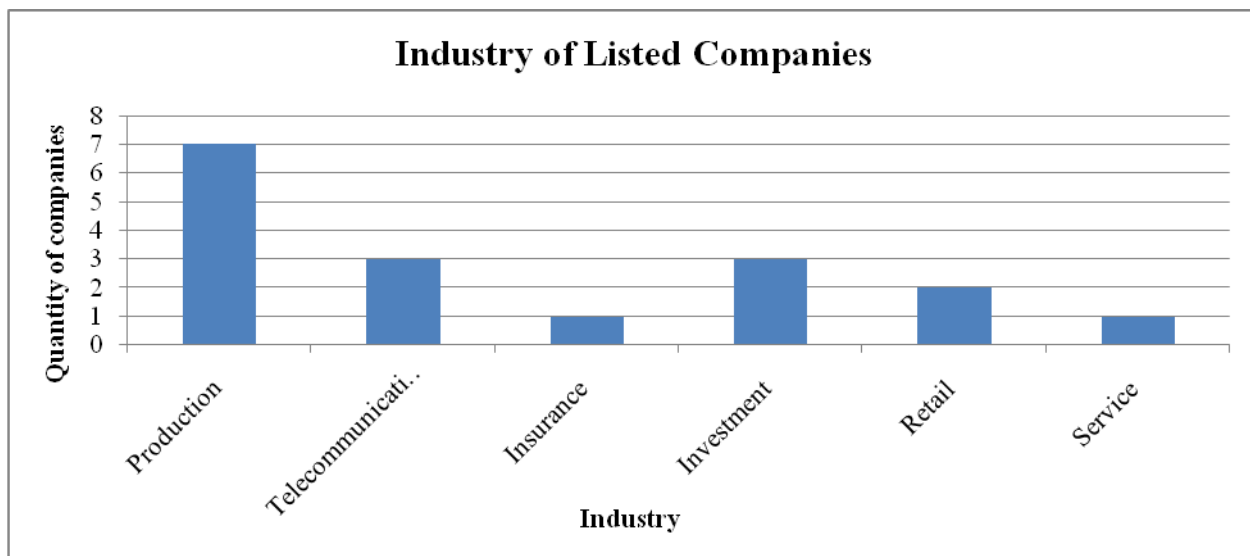
**Table 1**

<b>Descriptive statistics for dependent variable</b>					
<b>Variable</b>	<b>n</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min.</b>	<b>Max.</b>
2008 NMD score	17	28.07	20.66	9.09	68.18
2009 NMD score	17	32.62	22.57	9.09	81.82
2010 NMD score	17	37.97	18.53	13.66	81.81
Total NMD over all three years	51	32.89	20.64	9.09	81.82
2008 word count	17	2637.94	3796.48	129.00	12639.00
2009 word count	17	3439.06	4535.27	114.00	15366.00
2010 word counts	17	4438.00	5801.04	854.00	21414.00
Total word count over all three years	51	3505.00	4745.10	114.00	21414.00

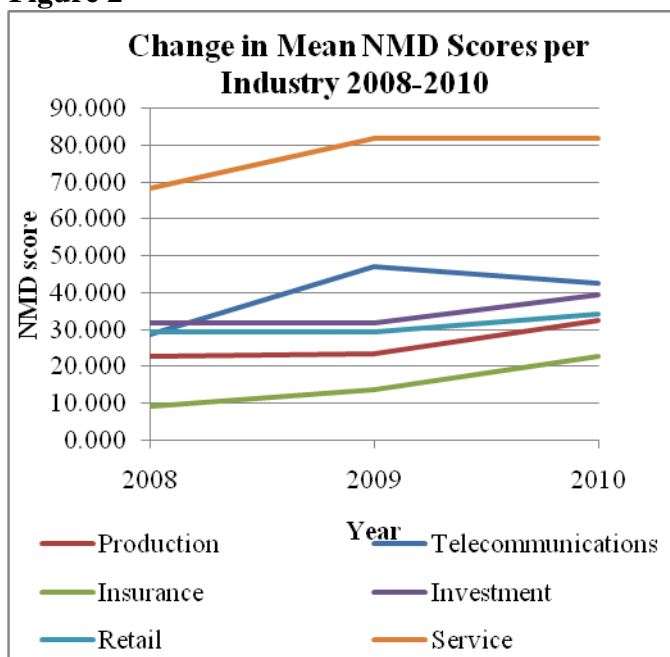
### *6.2 NMD by industries*

The industries the listed companies operate in include production; telecommunications; insurance; investment; retail; and the service industry. Most listed companies operate in the production industry, followed equally by the telecommunications industry and the investment industry. The retail industry contains the second lowest number of listed companies, and the insurance and service industry contains only one company each. The number of companies within each industry is illustrated in Figure 1, and a breakdown of the companies in each industry is illustrated in Appendix A. The change in mean NMD scores per industry and the percentage change in NMD scores per industry are illustrated below in Figures 2 and 3, respectively.

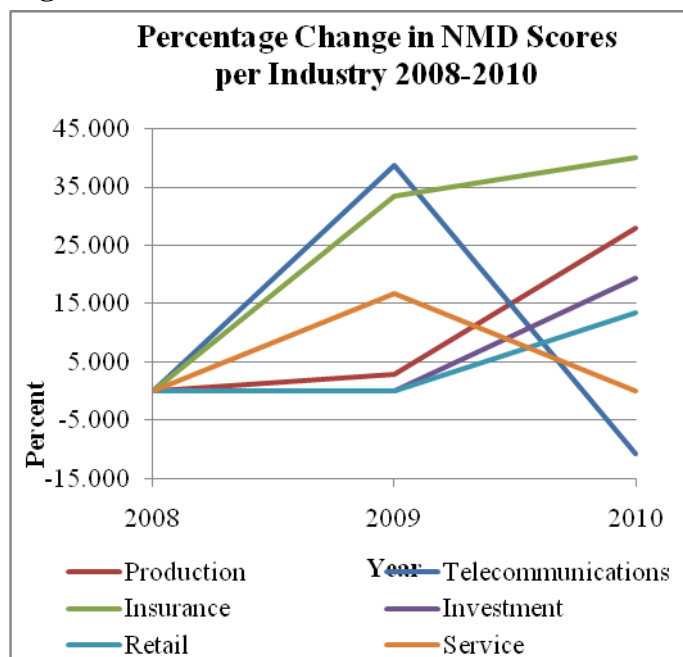
**Figure 1**



**Figure 2**



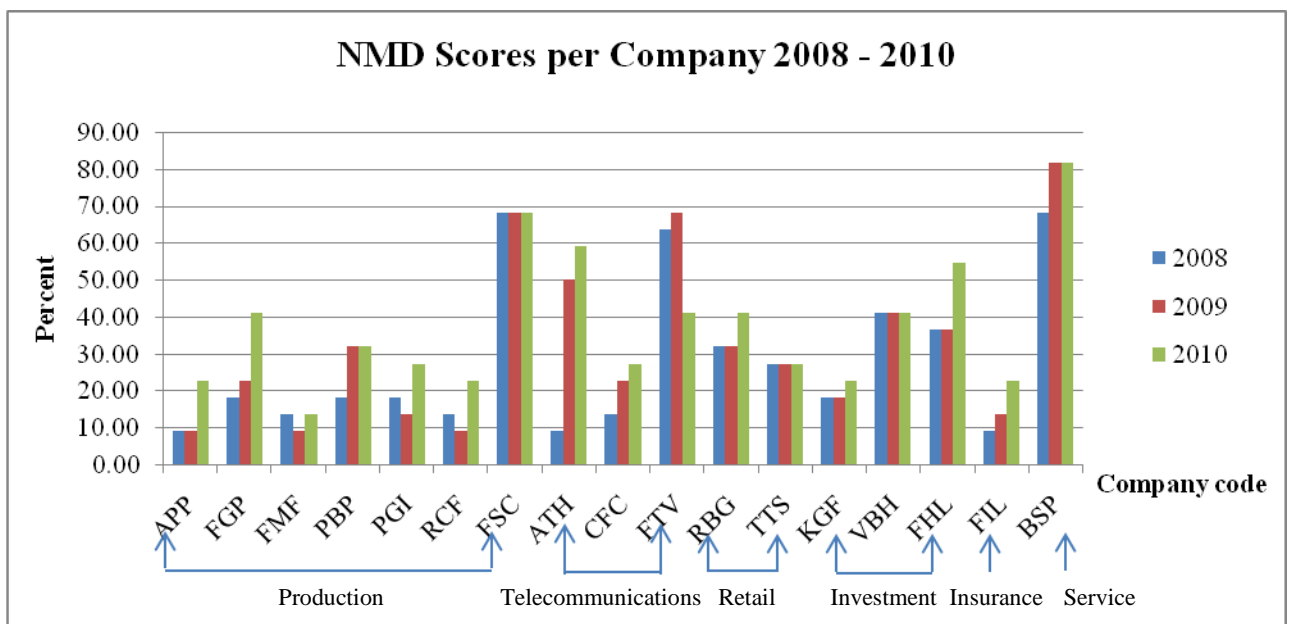
**Figure 3**



The general trend in NMD over the three years shows an increasing trend as illustrated in Figure 2 and Figure 3. The Service industry has the highest NMD score resting at 81.82% in both 2009 and 2010, and due to this stable score over this period it shows a decreasing trend in figure 3. This score however, only takes into consideration the one company in the industry. The telecommunication industry shows the greatest percentage change in NMD up until 2009; however, due to the significant drop in the NMD score for Fiji Television Limited over the 2010 period, the NMD scores for the telecommunication industry also suffered a

drop in NMD scores in 2010. The drop in NMD score for Fiji Television Limited in 2010 is in contrast to the other two companies in the telecommunications industry, Amalgamated Telecom Holdings Limited and Subsidiary Companies and Communications (Fiji) Limited, who both show an increase in NMD scores from 2009 to 2010 of 50% to 59.09% and 22.73% to 27.27% respectively (see Appendix C for total disclosure scores by company). As a result, and in conjunction with a closer analysis of the NMD scores for each company in each of the industries, it appears that the NMD scores is not industry related. As illustrated in Figure 4, the NMD scores differ between each company within an industry and in some cases the NMD scores differ quite substantially. Therefore, it is found that the NMD score is related to the individual company and is not considered to be industry related.

**Figure 4**



### 6.3 Regression Analysis

To measure the association between the independent variables and the dependent variable a regression analysis was used. The regression results are presented in Table 2 and the results are considered significant when  $p < 0.05$  as a 95% confidence level was used.

**Table 2**

<b>2008 Regression analysis results</b>				
<b>Variable</b>	<b><math>\beta</math></b>	<b>t-value</b>	<b>Sig.</b>	<b>VIF</b>
Constant	12.57	0.41	0.69	
Liquidity	-2.92	-0.49	0.63	2.73
Performance	-0.12	-0.33	0.75	1.47
Size	0.00	1.17	0.27	1.51
Leverage	-0.10	-1.09	0.31	1.57
Assets in place	-0.09	-0.33	0.75	2.95
Size of Board	6.28	2.60	0.03	1.35
Major Shareholders	-0.10	-0.74	0.48	1.30

<b>2008 Model summary</b>	
R	0.77
R <sup>2</sup>	0.60
Adjusted R <sup>2</sup>	0.25
F Value	1.71
Sig.	0.23
Durbin-Watson	2.89

<b>2009 Regression analysis results</b>				
<b>Variable</b>	<b><math>\beta</math></b>	<b>t-value</b>	<b>Sig.</b>	<b>VIF</b>
Constant	2.70	0.41	0.92	
Liquidity	-0.44	-0.49	0.68	2.10
Performance	-0.21	-0.33	0.46	1.31
Size	0.00	1.17	0.57	1.84
Leverage	-0.09	-1.09	0.29	1.75
Assets in place	0.19	-0.33	0.59	3.55
Size of Board	5.28	2.60	0.19	1.62
Major Shareholders	-0.29	-0.74	0.27	2.50

<b>2009 Model summary</b>	
R	0.74
R <sup>2</sup>	0.54
Adjusted R <sup>2</sup>	0.14
F Value	1.36
Sig.	0.34
Durbin-Watson	2.88

<b>2010 Regression analysis results</b>				
<b>Variable</b>	<b><math>\beta</math></b>	<b>t-value</b>	<b>Sig.</b>	<b>VIF</b>
Constant	26.89	1.75	0.12	
Liquidity	-1.62	-0.60	0.57	3.80
Performance	-0.05	-0.70	0.50	4.50
Size	0.00	2.43	0.04	1.44
Leverage	-0.08	-2.32	0.05	3.99
Assets in place	0.17	0.93	0.38	4.57
Size of Board	1.36	0.88	0.40	1.18
Major Shareholders	-0.29	-2.19	0.06	2.11

<b>2010 Model summary</b>	
R	0.92
R <sup>2</sup>	0.84
Adjusted R <sup>2</sup>	0.71
F Value	6.13
Sig.	0.10
Durbin-Watson	2.35

The correlation coefficient is measured by R and indicates the relationship between the dependent and independent variables. Over the three year period R indicates that the relationship between the dependent and independent variables have increased, moving from 0.77 in 2008 to 0.92 in 2010. Although this appears to be a significant improvement, other statistical measures need to be addressed to assess the reliability and usefulness of the R values. A more useful measurement of how well the regression model accounts for the variance in the variables is the adjusted coefficient of determination (R<sup>2</sup>) which establishes the proportion of variation that is explained by the model (Investopedia, 2011). Over the three year period, the R<sup>2</sup> value has also fluctuated, but provides a better grasp of how well the variation in the dependent variable is explained by the independent variables. In 2008, the adjusted R<sup>2</sup> value illustrates that only 25% of the variation in the dependent variable is explained by the independent variables; decreasing to only 14% in 2009 before increasing substantially to 71% in 2010. This is of a concern as the level of NMD has increased over the three years, subsequently it would be expected that there would then be a greater increase in the R<sup>2</sup> value as it would show that the movements in the same independent variables would affect the dependent variable. Therefore, doubt is raised about whether the independent variables do explain the variations in the dependent variable, as the relationship determined by the model fluctuates substantially. Furthermore, the p values of 0.23, 0.34 and 0.10 for the years 2008, 2009 and 2010 respectively indicate that the model is not significant at the five percent level.

In addition, another conflict arises in the regression analysis due to multi-collinearity. Regression analysis is used to show the effect on the dependent variable with a change in the independent variable. However "...[i]f there is multi-collinearity this assumption will be unjustified since movements in one explanatory variable will be matched by movements in one or more of the other explanatory variables. There will be insufficient independent



variation in the explanatory variables to disentangle their separate effects” (Hallam, 1990, p. 87). To determine whether multi-collinearity is present in this regression analysis, the correlation and the variable inflation factors (VIF) can be assessed (Hossain & Hammami, 2009). As a result a correlation matrix, Table 3, has been constructed to assess whether there is a linear relationship between the independent variables as a relationship between each independent variable can cause an inconclusive result for the measurement of the correlation between the dependent and the independent variables. Problems begin to emerge in the regression analysis when the multiple independent variables are highly correlated because if independent variables are highly correlated it makes it difficult to establish the changes in the dependent variable to the independent variables as another independent variable could be influencing the results of the independent variable.

The average VIF for 2008, 2009 and 2010 is 1.84, 2.10 and 3.08 respectively. As a result, this raises some concerns that the regression may be biased and that collinearity is a problem as the VIF values are greater than 1 (Hossain & Hammami, 2009). This is also supported by the correlation matrix, Table 3, which illustrates that various independent variables are correlated with another.

**Table 3**

2008 Correlation Matrix									
		Disclosure	Liquidity	Performance	Size	Leverage	Assets in place	Size of Board	Major Shareholders
Correlation	Disclosure	1.000	-.254	-.358	.187	-.016	.246	.659	-.223
	Liquidity	-.254	1.000	.286	-.177	-.401	-.705	-.283	.055
	Performance	-.358	.286	1.000	.035	.107	-.416	-.402	-.135
	Size	.187	-.177	.035	1.000	.244	.355	-.144	-.280
	Leverage	-.016	-.401	.107	.244	1.000	.105	.140	-.359
	Assets in place	.246	-.705	-.416	.355	.105	1.000	.208	.087
	Size of Board	.659	-.283	-.402	-.144	.140	.208	1.000	-.066
	Major Shareholders	-.223	.055	-.135	-.280	-.359	.087	-.066	1.000
Sig. (1-tailed)	Disclosure		.171	.087	.243	.477	.180	.003	.203
	Liquidity	.171		.142	.257	.062	.001	.144	.420
	Performance	.087	.142		.448	.346	.055	.061	.309
	Size	.243	.257	.448		.182	.089	.297	.147
	Leverage	.477	.062	.346	.182		.349	.303	.086
	Assets in place	.180	.001	.055	.089	.349		.220	.374
	Size of Board	.003	.144	.061	.297	.303	.220		.404
	Major Shareholders	.203	.420	.309	.147	.086	.374	.404	

Significant as 0.05 (1-tailed)

2009 Correlation Matrix									
		Disclosure	Liquidity	Performance	Size	Leverage	Assets in place	Size of Board	Major Shareholders
Correlation	Disclosure	1.000	-.337	-.042	.514	.134	.293	.582	-.237
	Liquidity	-.337	1.000	-.060	-.213	-.371	-.623	-.474	-.155
	Performance	-.042	-.060	1.000	.039	-.360	.000	-.024	-.075
	Size	.514	-.213	.039	1.000	.287	.337	.459	-.263
	Leverage	.134	-.371	-.360	.287	1.000	.212	.342	-.233
	Assets in place	.293	-.623	.000	.337	.212	1.000	.456	.528
	Size of Board	.582	-.474	-.024	.459	.342	.456	1.000	.018
	Major Shareholders	-.237	-.155	-.075	-.263	-.233	.528	.018	1.000

Sig. (1-tailed)	Disclosure		.101	.439	.021	.311	.135	.009	.189
	Liquidity	.101		.412	.214	.079	.005	.032	.283
	Performance	.439	.412		.444	.085	.499	.465	.391

	Size	.021	.214	.444		.141	.101	.037	.162
	Leverage	.311	.079	.085	.141		.215	.098	.193
	Assets in place	.135	.005	.499	.101	.215		.038	.018
	Size of Board	.009	.032	.465	.037	.098	.038		.473
	Major Shareholders	.189	.283	.391	.162	.193	.018	.473	

Significant as 0.05 (1-tailed)

2010 Correlation Matrix									
		Disclosure	Liquidity	Performance	Size	Leverage	Assets in place	Size of Board	Major Shareholders
Correlation	Disclosure	1.000	-.360	.559	.628	-.523	.463	.313	-.297
	Liquidity	-.360	1.000	-.181	-.320	-.022	-.803	-.115	-.271
	Performance	.559	-.181	1.000	.093	-.788	.184	.117	-.271
	Size	.628	-.320	.093	1.000	.038	.359	.164	-.201
	Leverage	-.523	-.022	-.788	.038	1.000	-.148	-.109	.001
	Assets in place	.463	-.803	.184	.359	-.148	1.000	.303	.430
	Size of Board	.313	-.115	.117	.164	-.109	.303	1.000	.086
	Major Shareholders	-.297	-.271	-.271	-.201	.001	.430	.086	1.000
Sig. (1-tailed)	Disclosure		.085	.012	.005	.019	.035	.119	.132
	Liquidity	.085		.251	.114	.468	.000	.336	.155
	Performance	.012	.251		.366	.000	.248	.333	.155
	Size	.005	.114	.366		.444	.086	.272	.228
	Leverage	.019	.468	.000	.444		.292	.344	.498
	Assets in place	.035	.000	.248	.086	.292		.127	.048
	Size of Board	.119	.336	.333	.272	.344	.127		.376
	Major Shareholders	.132	.155	.155	.228	.498	.048	.376	

Significant as 0.05 (1-tailed)

As a result through the regression analysis, it is concluded that there may be a weak relationship between the dependent and the independent variables. However, these results have been impacted by mutli-collinearity. Further tests between the individual independent variables and the dependent variable need to be completed to check whether a relationship exists between the two, without assessing the relationship of the other independent variables at the same time. As a result, it will remove any bias in the model due to the effects of mutli-collinearity.

Although the results of the level and extent of NMD in Fiji has increased over time, the regression results do not show that the liquidity; performance; size; leverage; assets in place; size of the board; and percentage of major shareholders is significant at the five percent level. The results of the increasing trend in the level and the extent of NMD in Fiji are consistent with Sharma and Davey (2013) who found an increasing trend of NMD over the periods 1999-2005. However, this is in contrast to Sharma & Davey (2013) who found no improvement in the trend of NMD over the periods 1999 to 2005. Sharma & Davey (2013) found in their investigations that there is a correlation between the performance of the listed companies and the level of NMD, and the size of the listed companies with the level of NMD, and in addition, found many of the correlations to be significant.

## **7. Discussion/ Conclusion**

The paper investigates the extent of NMD in the annual report of listed companies in Fiji. The paper is informed by legitimacy theory. A broad range of NMDs were used to examine whether Fijian listed companies have increased the level and the extent of their NMDs over time. The investigation examined 23 NMD disclosures in 14 areas including the environment; company background; corporate strategy; corporate governance; organisation structure; performance; shareholders; market disclosures; social disclosures; customers; human resources; health and safety; ethics; and graphical representation. A regression analysis was also used to measure the correlation between independent variables such as liquidity; performance; size; leverage; assets in place; size of the board; and percentage of major shareholders.

All companies showed some degree of NMD, and on average this demonstrates an increasing trend. Therefore, this investigation meets the expectation that the level of company disclosures would have changed over time. Thus, stakeholders are receiving more information about a company's activities. It would appear that NMD helps to gain legitimacy as a firm grows in size, and shareholding become more dispersed. Fiji was analysed in light of recent developments in corporate governance by the CMDA implementing their 10 corporate governance principles. This became a major driver of the increase in NMD levels and the extent of the disclosures in the annual reports of the listed companies. However, a large variation still exists between the level and extent of the NMD and the different listed companies. The minimum disclosure level found over the three years was 9.09 percent, which has increased to a minimum of 13.66 percent in 2010, and the maximum disclosure level over the three years was 81.82 percent. The findings for the extent of NMD was also similar where

the minimum words used in NMDs was 114, increasing to 854 in 2010, and the maximum disclosure extent over the three years was 21,414 words. However, it was found that the measurement of counting words tended to fluctuate over different periods where significant events took place that affected the company. Therefore, it was established that disclosure is impacted by what happens in the reporting period, and can explain why one period may have greater disclosure than another.

Legitimacy theory, used within the context of the study, posits that corporate management reacts by increasing the level of NMD if they believe that the legitimacy of their organisation/ industry is threatened stemming from public concern over the social and environmental implication for the organisation/ industry (Brown & Deegan, 1998). Entities in Fiji operate predominantly in a monopolistic environment and do not perceive the need to adhere to social contracts. As such there is a lack of incentive for listed companies to disclose information on a NMD basis especially when required to exercise professional judgement. A legitimacy theory of NMD could therefore not be supported.

It was found that the NMD scores differ between each company within an industry and in some cases the NMD scores differ quite substantially. Therefore, it was found that the NMD score is related to the individual company and is not considered to be industry related. The regression analysis shows the relationship between disclosure and the independent variables. Although in 2010, 75 percent of the variation in the dependent variable is explained by the independent variables, this is inconsistent with the values identified in 2008 and 2009. Further analysis will be conducted to measure the relationship between an individual independent variable and the dependent variable, as the current regression analysis examines all independent variables at once in relation to the dependent variable.

Although this investigation shows how developments in corporate governance has influenced the NMD reporting standards of companies, there appears to be no other apparent reasoning for the level of NMD in Fiji, and as found in Sharma & Davey (2013), companies appear to disclose NMD on an ad hoc basis. The study extends the Sharma & Davey (2013) study which was for the period 1999- 2005 and examines the NMD from 2008 to 2010. The results of this investigation provide additional knowledge about the increase in the level of NMD in Fiji. It has showed that NMD has increased through CMDA; however, it is currently inconclusive about what company characteristics influence NMD.

This investigation only covers a three year period, thus providing a limited view of the developments of NMD. Although the investigation has captured the changes in corporate governance, further research should be carried out as the companies may take time to respond

to the changes in reporting due to an increase in social accountability through the movement towards incorporating greater corporate governance principles into their annual reports. As a result, the disclosure of a company's corporate governance principles may be a step closer towards greater NMD. The size of the sample in this investigation is small; however, this enables all companies listed on the SPSE to be analysed. This investigation only assessed the growth of NMD through annual reports; however, there are additional means for management to communicate information and disclose NMD to stakeholders such as announcements through company websites, newspapers and magazines. Therefore, further research could include these means of communication to assess the full extent of how the level of NMD has changed.

## References

- Andrew, B.H., Gul, F.A., Guthrie, J.E., & Teoh, H.Y. (1989). A note on corporate social disclosure practices in developing countries: the case of Malaysia and Singapore. *The British Accounting Review*, 21(4), 371-376.
- Arcay, M.R.B., & Vázquez, M.F.M. (2005). Corporate characteristics, governance rules and the extent of voluntary disclosure in Spain. *Advances in Accounting*, 21, 299-331.
- Bhasin, M. L., & Reddy, M. (2011). Corporate governance disclosure practices: the portrait of a developing country. *International Review of Business Research Papers*, 7(1), 393-419. Retrieved from <http://www.bizresearchpapers.com/30.%20MADAN%20BHASIN.pdf>
- Barako, D. G., Hancock, P., & Izan, H. Y. (2006). Factors influencing voluntary corporate disclosure y Kenyan companies. *Corporate Governance: An International Review*, 14(2), 107-125.
- Brown, N., & Deegan, C. (1998). The public disclosure of environmental performance information: A dual test of media agenda theory and legitimacy theory. *Accounting and Business Research*, 29(1), 21-41.
- Capital Markets Development Authority [CMDA]. (2008). *Capital Markets Development Authority*. Retrieved from <http://www.cmda.com.fj/?Page=index>
- Chand, P. & White, M. (2006). A critique of the influence of globalisation and convergence of accounting standards in Fiji. *Critical Perspectives on Accounting*, 5(18), 605-622.
- Clarke, J., & Gibson-Sweet, M. (1999). The use of corporate social disclosures in the management of reputation and legitimacy: a cross sectoral analysis of UK top 100 companies. *Business Ethics: a European Review*, 8(1), 5-13.
- Collett, P., & Hrasky, S. (2005). Voluntary disclosure of corporate governance practices by listed Australian companies. *Corporate Governance: An International Review*, 13(2), 188-198.
- Deegan, C., Rankin, M., & Tobin, J. (2002). An examination of the corporate social and environmental disclosure of BHP from 1983- 1997: A test of legitimacy theory. *Accounting, Auditing & Accountability Journal*, 15(3), 312-343.
- Deegan, C., Rankin, M., & Voght, P. (2000). Firms disclosure reactions to major social incidents: Australian evidence. *Accounting Forum*, 24(1), 101- 130.
- Deloitte Global Services Limited. (2011). *IAS Plus*. Retrieved from <http://www.iasplus.com/index.htm>
- De Villiers, C. J., & Lubbe, D. S. (2001). Industry differences in respect of corporate environmental reporting in South Africa: A research note. *Meditari Accountancy Research*, 9, 81-91.

- De Villiers, C., & Van Staden, C. J. (2006). Can less environmental disclosure have a legitimacy effect? Evidence from Africa. *Accounting, Organizations and Society*, 31(8), 763- 781.
- Elsayed, M.O., & Hoque, Z. (2010). Perceived international environmental factors and corporate voluntary disclosure practices: an empirical study. *The British Accounting Review*, 42(1), 17-35.
- Eng, L.L., & Mak, Y.T. (2003). Corporate governance and voluntary disclosure. *Journal of Accounting and Public Policy*, 22(4), 325-345.
- Fiji Institute of Accountants. (2011). *Fiji Institute of Accountants*. Retrieved from <http://www.fia.org.fj/Home.aspx>
- Gao, S.S., Heravi, S., & Xiao, J.Z. (2005). Determinants of corporate social and environmental reporting in Hong Kong: a research note. *Accounting Forum*, 2(29), 223-242.
- Gray, R., Javad, M., Power, D.M., & Sinclair, D. (2001). Social and environmental disclosure and corporate characteristics: a research note and extension. *Journal of Business Finance & Accounting*, 28(3-4), 327-356.
- Gray, R., Owen, D., & Adam, C. (1996). *Accounting and Accountability: Changes and Challenges in Corporate Social and Environmental Reporting*. London: Prentice-Hall.
- Hallam, D. (1990). *Econometric modelling of agricultural commodity markets*. Retrieved from [http://books.google.co.nz/books?id=39ANAAAAQAAJ&pg=PA87&lpg=PA87&dq=harmful+multicollinearity+present&source=bl&ots=s0CtAo6DrL&sig=Yc5GBv0b8y-p0KkdQh5\\_cLO\\_zLo&hl=en&sa=X&ei=uJbpTomUK4egiQf6-fWYBw&ved=0CBwQ6AEwAA#v=onepage&q=harmful%20multicollinearity%20present&f=false](http://books.google.co.nz/books?id=39ANAAAAQAAJ&pg=PA87&lpg=PA87&dq=harmful+multicollinearity+present&source=bl&ots=s0CtAo6DrL&sig=Yc5GBv0b8y-p0KkdQh5_cLO_zLo&hl=en&sa=X&ei=uJbpTomUK4egiQf6-fWYBw&ved=0CBwQ6AEwAA#v=onepage&q=harmful%20multicollinearity%20present&f=false)
- Haniffa, R.M., & Cooke, T.E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, 38(3), 317-349.
- Haniffa, R.M., & Cooke, T.E. (2005). The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy*, 24(5), 391-430.
- Hooks, J., & Van Staden, C.J. (2011). Evaluating environmental disclosures: the relationship between quality and extent measures. *The British Accounting Review*, 43(3), 200-213.
- Ho, S.S.M., & Wong, K.S. (2001). A study of the relationship between corporate governance structures and the extent of voluntary disclosure. *Journal of International Accounting, Auditing and Taxation*, 10(2), 139-156.
- Hossain, M., & Hammami, H. (2009). Voluntary disclosure in the annual reports of an emerging country: the case of Qatar. *Advances in Accounting*, 25(2), 255-265.
- Hossain, M., Perera, M.H.B., & Rahman, A.R. (1995). Voluntary disclosure in the annual reports of New Zealand companies. *Journal of International Financial Management and Accounting*, 6(1), 69-87.



- Investopedia. (2011). *Investopedia*. Retrieved from [www.investopedia.com](http://www.investopedia.com)
- Latridis, G., & Valahi, S. (2010). Voluntary IAS 1 accounting disclosures prior to official IAS adoption: an empirical investigation of UK firms. *Research in International Business and Finance*, 24(1), 1-14.
- Leventis, S., & Weetman, P. (2004). Impression management: dual language reporting and voluntary disclosure. *Accounting Forum*, 28(2), 307-328.
- Lopes, P.T., & Rodrigues, L.L. (2007). Accounting for financial instruments: an analysis of the determinants of disclosure in the Portuguese stock exchange. *The International Journal of Accounting*, 42(1), 25-56.
- Luo, S., Courtenay, S.M., & Hossain, M. (2006). The effect of voluntary disclosure, ownership structure and proprietary cost on the return-future earnings relation. *Pacific-Basin Finance Journal*, 14(5), 501-521.
- Mahaeso, J.D, Oogarah-Hanuman, V., & Soobaroyen, T. (2011). Changes in social and environmental reporting practices in an emerging economy (2004-2007): exploring the relevance of stakeholder and legitimacy theories. *Accounting Forum*, 35(3), 158-175.
- Mobus, J.L. (2005). Mandatory environmental disclosures in a legitimacy theory context. *Accounting, Auditing & Accountability Journal*, 18(4), 492 – 517.
- Milne, M.J., & Patten, D. M. (2002). Securing organizational legitimacy: an experimental decision case examining the impact of environmental disclosures. *Accounting, Auditing & Accountability Journal*, 15(3), 372 – 405.
- Neu, D., Warsame, H., & Pedwell, K. (1998). Managing public impressions: environmental disclosures in annual reports, *Accounting, Organisations and Society*, 23(3), 265-282.
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16(1), 145- 179.
- Osma, B.G., & Guillaón-Saorín, E. (2011). Corporate governance and impression management in annual results press releases. *Accounting, Organisations and Society*, 36(4-5), 187-208.
- Pacific Islands Legal Information Institute. (2011). *Pacific Islands Legal Information Institute*. Retrieved from <http://www.paclii.org/>
- Sharma, U., & Davey, H. (2013). Voluntary disclosure in the annual reports of Fijian companies. *International Journal of Economics and Accounting*. (Forthcoming).
- Smith, J.V., Adhikari, A., & Tondkar, R.H. (2005). Exploring differences in social disclosures internationally: a stakeholder perspective. *Journal of Accounting and Public Policy*, 24(2), 123-151.
- South Pacific Stock Exchange. (2011). *South Pacific Stock Exchange*. Retrieved from <http://www.spse.com.fj/Home.aspx>

Williams, S.M. (1999). Voluntary environmental and social accounting disclosure practices in the Asia-Pacific region: an international empirical test of political economy theory. *The International Journal of Accounting*, 34(2), 209-238.



## Appendix A: Companies Listed on SPSE

<b>Fijian Companies Listed on the South Pacific Stock Exchange (SPSE) as at September 2011</b>					
	<b>Company Code</b>	<b>Company Name</b>	<b>Industry</b>	<b>Principal Activities</b>	<b>Financial Year Ending</b>
1	APP	Atlantic & Pacific Packaging Company Limited	Production	Manufacturing of Packaging	30-Jun
2	ATH	Amalgamated Telecom Holdings Limited and Subsidiary Companies	Telecommunications	Investments in telecommunications and provision of management services	31-Mar
3	CFM	Communications (Fiji) Limited	Telecommunications	Radio Broadcasting	31-Dec
4	FGP	Foster's Group Pacific Limited & Subsidiary Group	Production	Manufacture and sale of beverages	30-Jun
5	FIL	Fiji Care Insurance Limited	Insurance	Underwriting medical, health, workers compensation, personal accident, marine and term life insurance risks	31-Dec
6	FMF	Flour Mills of Fiji Limited	Production	Milling of wheat, rice and whole dunfield peas, manufacturing of packaging materials and related products	30-Jun
7	FTV	Fiji Television Limited	Telecommunications	Operating and servicing telecommunication products	30-Jun
8	KGF	Kontiki Growth Fund Limited	Investment	Investment of shareholders' funds in private equity projects and shares in the Kontiki Fund	31-Dec
9	PBP	Pleass Beverages and Packaging	Production	Trading in non-alcoholic beverages and wholesaling packaging materials	
10	PGI	Pacific Green Industries	Production	Manufacturing and sale of furniture and architectural products made from coconut palm wood	31-Dec
11	RBG	RB Patel Group Limited	Retail	Retailing and wholesaling of general merchandise, and owners and administrators of properties and equity investments	30-Jun*
12	RCF	The Rice Company of Fiji Limited	Production	Processing and wholesaling of rice and allied products	30-Jun
13	TTS	Toyota Tsusho (South Sea) Limited	Retail	Automotive importation and distribution through retailing	31-Mar
14	VBH	VB Holdings Limited	Investment	Property investment, financing of vehicles and fleet management services	31-Dec
15	FHL	Fijian Holdings Limited	Investment	Investments	30-Jun
16	BSP	Bank of South Pacific Limited	Service	Commercial banking and finance services	31-Dec
17	FSC	The Fiji Sugar Corporation Limited	Production	Manufacture and sale of sugar	31-May

\*RBG initially had a balance date of 31-Mar ; however, after the takeover by FHL from 2009 onwards RBG's balance date became 30-Jun

## Appendix B: Disclosure Scorecard

Theme for disclosure	Criteria of Disclosure
<b>Environment</b>	
- Economic environment	Any statement, discussion or analysis of the influential activities of the Government such as regulations, restraints, and decisions made by the Government that affect the company; macro indicators that affect the company's operations; and company specific characteristics such as industry profile trends, problems, customers, competition, growth, opportunities or threats; and any discussion of the possible effects on the company.
- Non-economic environment	Any statement or discussion about environmental protection programmes, pollution control, conservation and waste management.
<b>Company background</b>	Any statement of a company's development or overview of the company's history.
<b>Corporate strategy</b>	
- Objectives and visions	Any statement about the company's objectives, visions and values.
- Future strategy and plans	Any discussion about future expansion, investments and activities to complete to develop the company; and potential factors that could affect the future plans.
<b>Corporate governance</b>	
- Chairman and directors	Description of chairman and/or board of directors other than name and title; such as their academic, professional, or business experience.
- Senior managers	Any statement or discussion about senior managers in the company.
- Corporate governance principles	Any statement or discussion about the function of the board of directors, significance of corporate governance, the monitoring of board performance through committees and their role, general information about board remuneration and reimbursement, and methods employed to monitor performance of the company.
- Risk Management	Discussion of risk management such as policies, committees, risk measurement, monitoring and disclosure of risks. Excluding disclosure of financial risk management.
<b>Organisation Structure</b>	Description of the company structure, including description of business units and their functions.
<b>Performance</b>	
- Financial highlights and last year's performance	Any statement or discussion emphasising particular results such as sales, profits, etc. and achievements the company has made over the past year or movements made in the year that have positioned the company to generate greater future returns, including any performance discussion about subsidiary companies if applicable.
- Financial summary	Five or ten year financial summary of key performance information and ratios that go beyond the SPSE requirements.
- Graphical presentation	Any graphical presentation showing the company's performance over time.
<b>Shareholders</b>	Any statement or discussion about shareholders and policies.
<b>Market Disclosure</b>	Any statement or discussion about disclosing information to the market.
<b>Social disclosures</b>	Any statement or discussion about the company's involvement in the community, donations and sponsoring of social activities, charitable organisations, and the community.

<b>Customers</b>	Any recognition in regards to what the company is doing for the customer.
<b>Human resources</b>	
- Employee: qualitative	Any statement or discussion about employee welfare, appreciation, issues with recruitment or employment and methods of overcoming these issues, training and progress over the past year, and any changes or improvements to be made for future years to further develop their employees.
- Employee: quantitative	Any mention of the number of employees, breakdown by line of business, geographic area, functions, race and age; number of employees with the company for over 2 years; reasons for change in employee numbers; redundancy and retrenchment.
- Fair business practices	Any mention of practices for employment of women, minorities, and/or disabled persons.
<b>Health and safety</b>	Any discussion on health and safety standards for employees and customers such as a safe working environment and the sale of safe products.
<b>Ethics</b>	Any discussions about a code of conduct and polices for ethical behaviour.
<b>Graphs</b>	Graphical presentation of performance indicators

### Appendix C: Total Disclosure Level and Quantity of Words per Company

	Total Disclosure Level			Total Disclosure Score (%)			Total words in NMD		
	Year								
Company	2008	2009	2010	2008	2009	2010	2008	2009	2010
Atlantic & Pacific Packaging Company Limited	2	2	5	9.09	9.09	22.73	129	114	1081
Amalgamated Telecom Holdings Limited and Subsidiary Companies	2	11	13	9.09	50.00	59.09	446	10886	14508
Communications (Fiji) Limited	3	5	6	13.64	22.73	27.27	603	929	1448
Foster's Group Pacific Limited & Subsidiary Group	4	5	9	18.18	22.73	40.91	552	875	2661
Fiji Care Insurance Limited	2	3	5	9.09	13.64	22.73	204	254	1024
Flour Mills of Fiji Limited	3	2	3	13.64	9.09	13.64	225	667	1241
Fiji Television Limited	14	15	9	63.64	68.18	40.91	8052	6311	4741
Kontiki Growth Fund Limited	4	4	5	18.18	18.18	22.73	2438	2352	2589
Pleass Beverages and Packaging	4	7	7	18.18	31.82	31.82	1062	915	2217
Pacific Green Industries	4	3	6	18.18	13.64	27.27	491	415	1061
RB Patel Group Limited	7	7	9	31.82	31.82	40.91	841	1300	1301
The Rice Company of Fiji Limited	3	2	5	13.64	9.09	22.73	226	476	1113
Toyota Tsusho (South Sea) Limited	6	6	6	27.27	27.27	27.27	854	706	854
VB Holdings Limited	9	9	9	40.91	40.91	40.91	1022	1232	1323
Fijian Holdings Limited	8	8	12	36.36	36.36	54.55	7314	7400	10479
Bank of South Pacific Limited	15	18	18	68.18	81.82	81.82	12639	15366	21414
The Fiji Sugar Corporation Limited	15	15	15	68.18	68.18	68.18	7747	8266	6391