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# Relationship between Corporate Governance Dimensions and Financial Performance of Listed Insurance Companies in Muscat Securities Market, Sultanate of Oman

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### Abstract

This study aims at determining the factors of corporate governance that impact financial performance. It uses a panel analysis approach that considers data from 2004 to 2018 of the insurance companies in Muscat, Oman. Out of the 10 insurance companies listed in Muscat Securities Market, four companies were chosen based on pre-established criteria considering the availability of data for the period indicated. To analyze the data gathered, descriptive analysis techniques using SPSS version 21 and Stata version 14 were applied. Based on the findings, board size affects ROA positively but negatively on ROE; FBM affects ROE positively but negatively affects ROA; BI has a negative influence on both ROA and ROE; and, AC affects ROA positively but negatively on ROE. Conversely, audit committee size positively impacts ROA and the independence and impartiality is a must to be a member of the audit committee. Conclusion from the findings suggests that the increasing number of the members of audit committee contributes positive signs for ROA which can be supported by many studies. Findings proved the significant positive relationship between audit committee size and independence on a firm's financial performance. For organizations such as insurance companies, the frequency of board meetings can be determining factor to decide in terms of profitability issues and business performance. Finally, the results provide the management to examine the implications of deciding how many members of the board, frequency of board meetings, board independence, and audit committee as these can influence financial performance such as ROA and ROE.

**Keywords:** Corporate Governance Dimensions, Financial Performance, Listed Insurance Companies, Muscat Securities Market, Oman

### Introduction

Corporate Governance has become synonymous with the modern era. Even before cyber tech was introduced, corporate governance is almost always at the forefront of every corporation whether big or small. In the past, say traditionally, corporations are mostly governed by family affairs. But in modern times, corporate governance has become part and parcel of every corporation, not necessarily within the confine of family affairs. Since the start of the millennium, there has been a strong and renewed interest in corporate governance. During the collapse of big corporations such as Enron and Lehman Brothers, corporate competition has shifted from the goal of making a profit, to a higher level – profitability and sustainability. According to Roman (2019), the three pillars of corporate governance include accountability, transparency, and security. She further stressed that all three are demanding elements to successfully run a corporation and form solid, professional relationship among its stakeholders which includes the board of directors, managers, employees, and most importantly, the shareholders. To drive a point, transparency is no longer an option, but a legal requirement that the company has to comply with, after the Enron scandal in 2001. The core of corporate governance rests in the Board of Directors (BOD). The BOD was put in place to create corporate

policies. It is also a tool for the corporation to monitor the effectiveness of its senior executives, like the CEO, on behalf of the shareholders whose common objectives are to increase shareholder value and profitability. The Organization for Economic Cooperation and Development (2004) also stressed that, corporate governance is one important element in boosting economic efficiency and growth, as well as strengthening investor confidence. Corporate governance also prepares the frameworks through which the company's purpose is set, and the means of securing those objectives, and controlling performance are resolved. Good corporate governance should contribute decent encouragement for the board and management to pursue the company's objectives that are in the interest of its stakeholders and should promote effective monitoring.

The existence of an adequate corporate governance system, within an individual organization and across an economy as a whole, helps to contribute an amount of confidence that is needed for the excellent functioning of a market economy. In effect, the cost of capital is lower and companies are more determined to use resources more effectively and efficiently, thereby sustaining and increasing growth. Alternatively, corporate governance failures can undermine development efforts by misallocating much needed capital and resources and developmental fallbacks can reinforce weak governance in the private sector and undermine job and wealth creation. (Doddamadanayak et al., 2011).

However, in Oman's current atmosphere, there is but little information on studies done to manifest the relationship between important factors of corporate governance and the company's performance of Insurance entities in operation. In a study conducted by the Center for International Private Enterprise (CIPE, 1990), good governance practices form an important part of the sustainable development prospects of most independent countries, expanded and continued economic growth of nations, and comprehensive reforms that come with it to administer significant support for enhanced governance in both public and private sectors. A further study conducted among insurance companies concludes that insurance companies need to establish corporate governance networks and practices in the insurance industry that will assure improved performance and ultimately higher value. Companies like Enron and WorldCom have enlightened the public that corporations sometimes do not act in the best interests of their stakeholders (Deakin, 2005).

The insurance market in Oman is a very important sector in the economy particularly because of its ability to enable policyholders to shift and handle their risks. The Insurance industry plays a crucial part in the financial system by compensating for financial risks in the economy. The industry players also assist as institutional investors for both capital and money market instruments. Being a legal document, an insurance policy defines the degree to which the claim amount must be paid to the insured provided appropriate care has been taken by the insured to avert losses that may be incurred. The Insurance Industry in Oman, just like in any other countries in and out of the Gulf countries, is described by an insignificant or low access rate due to small or little disposable income and other monetary factors. In Oman, there are registered insurance companies as per the 2019 report, of which are listed in Muscat Securities Market (Muscat Securities Market, 2019).

The state of corporate governance in Oman is still on its way to development as evidenced by the creation of the Oman Centre for Governance and Sustainability (OCGS) by virtue of Royal Decree 30/2015 dated the 12<sup>th</sup> of July 2015. Its main aim is to establish sound governance and sustainability and committed to the dissemination and best practices to all companies in Oman whether private or government entities (Capital Market Authority, 2019). The center works in coordination with the Capital Market Authority and the Ministry of Finance. On the issuance of the Corporate Governance Charter for Public Shareholding in order to organize the work in these companies, including the best international practices in order to strengthen the stock market. This has helped the Sultanate to be a leader in Corporate Governance initiatives among the member nations of the Gulf Cooperation Council (GCC) in this aspect, and thus the Sultanate is the first Arab country to codify corporate governance.

The government today relies on the private sector represented by these companies to contribute significantly to the implementation of projects, which will also contribute to the diversification of sources of income in the Sultanate, and provide job opportunities for job seekers, as well as high hopes to achieve comprehensive development plans and open wide markets for services. However; although corporate governance fully operates in the private sector, its presence in the Insurance industry is less observed based on the data from the Muscat Securities Market as there are at present only 10 insurance companies listed compared to other sectors. This has caught the attention of the researcher to investigate the extent of corporate governance application to the insurance industry and its impact on their financial performance.

Furthermore, opportunities investment including the insurance industry is increasing that demands strong corporate governance and its mechanisms. According to the data provided by Ubhar Capital (2017), the industry has grown at a compound annual growth rate (CAGR) of 9.6% during 2011-16 with its total gross written premiums (GWP) reaching the mark of OMR450.3mn (USD1.17bn) in 2016. Insurance segments such as engineering, construction, medical, and real estate have experienced decent growth. However, this increases the pressure on firms to develop corporate governance and provide higher protection for the stakeholders generally. Finally, this study will be conducted based on the challenges faced to ensure the effective implementation of corporate governance in the insurance industry.

This study, which has encountered relatively few studies, focuses on the long-term gains of corporate governance to financial performances of Insurance companies listed in the MSM. It also investigates the effect of corporate governance principles on the company's value in Insurance firms listed in MSM to find out whether there is a connection; and if any, the nature of this established relationship. Previous studies are focused mainly to examine the relationship between corporate governance and performance in general, mostly in developing economies of third-world countries. To emulate the proper conduct, listed companies must show the corporate governance statement and its components. On the other hand, some companies, especially the private ones, may not disclose theirs because of little, or absence of regulations by the securities market. Research questions developed in this study based on the research objectives are: How corporate governance operates in the Insurance industry? What is the level of impact of corporate governance in the insurance industry in the Sultanate of Oman? and Is there a relationship of corporate governance dimensions on the financial performance of selected Insurance companies in Oman listed at the Muscat Securities Market?

Moreover, this study is expected to benefit many recipients especially in the context of the current situation in Oman. Foremost, this study will secure stakeholders of their money's worth by knowing the significance of corporate governance to the chosen organizations and the insurance industry as a whole. The outcome also provides the latest information on the impact of corporate governance on financial performance as a reference for companies and viewers. To the management of the respondent companies, this will allow them to revisit their extent of implementation of corporate governance and look for ways to further improve. And, to the body of knowledge, this gives general insights on how to deal with corporate governance to improve the financial performance of companies and for researchers as additional information and references.

### **Literature Review**

Numerous researches have been done around the different forms of corporate governance, and in this section, the researcher limited the review of the literature and focus on the financial performance relationship. And with respect to the relationship, extensive analysis can be made for both corporate governance and financial performance. However, the independent variables used to measure corporate governance focused only on Board size, Board meetings, Board independence, and Audit Committee. A similar approach was used for financial performance, of which, the dependent variables used were limited to Return on Equity and Return on Asset.

Silwal (2016) studied the effect of corporate governance on the performance of Nepalese non-financial firms listed in NEPSE from 2010 to 2015. ROA, ROE, and Tobin's Q are the dependent variable for measuring firm performance while firm size, leverage, the board size, age of the firm, and audit committee are the explanatory variables. The result concludes that corporate governance has a significant impact on firms' performance. Board size and leverage have a negative and significant impact on ROA while the age of the firm and audit committee have a positive effect as ROE. Board size and audit committee were major determining variables of firm performance in Tobin's Q.

Similarly, Lamichhane (2018) analyzed the factors affecting corporate governance and the effect on the financial performance of Nepalese firms from 2009/10 to 2015/16. Profit margin and return on assets are dependent variables used to measure financial performance while corporate governance index, age of firms, size of assets, debt ratio, market to book ratio, and ownership concentration is considered as explanatory variables. The study reveals that profit margin and return on assets of firms are positively related with age, market to book ratio, and overall corporate governance index while the size of assets and debt ratio has a negative effect and ownership concentration has no relationship with firms' financial performance.

Mohan and Chandramohan (2018) examined the impact of corporate governance on firm performance in Indian with 30 firms quoted in the Bombay Stock Exchange. The results of the panel data analysis show that

the CG factor, namely CEO duality and board size has a significant negative impact on firm performance whereas board composition revealed no significant impact on firm performance. It reveals that there is a need to undertake the monitoring process to lead to superior firm performance and indicates the need for firms to separate the post of CEO and Chair in order to ensure optimal performance. The results also suggest the leverage and asset turnover have a significant positive impact on firm performance.

Marsigalia, et al. (2019) present an empirical paper that aims to investigate the effect of long-term company culture in terms of economic performance and firm value. Comparing firm longevity with the performance indicators, but also monitoring many other corporate governance or ownership indicators, on a panel dataset of the top Italian wine companies. The study reveals a larger presence of women on board, a higher average age of the directors, and a higher propensity to the production of grapes. The research findings support the hypothesis that a family firm adds value over the generations through generating an internal cumulative knowledge process and a strong brand image. In addition, the presence of an external CEO is positively influencing performance (the Most Trusted Advisor). Firm value increases along with the number of family members within the board, to support the family logic and the social capital theories.

Ojeka et al. (2017) estimated the relationship between governance and stock market behavior in Nigeria and discover the robust positive effect of the independent audit committee, financial expertise of audit committee, and board independence on stock price, the volume traded earnings per share and market capitalization. Research by Adigwe et al. (2016) showed that the audit committee and directors' interest enhance profitability, while the bank board's composition does not substantially affect it. Eluyela et al. (2018) also examined how profitability responds to board meetings and observe that more frequent board meetings correlate positively with firm performance (proxied as Tobin's Q). The authors also report a nonrobust positive relationship between firm performance and board size.

Evidence from Isik and Ince (2016) indicates a significant positive effect of board size on operating return on assets (OROA) and return on assets (ROA). It further reveals the non-significant negative effect of board composition on OROA but a significant negative effect on ROA.

# 2.2. Formation and Definitions of Corporate Governance

The beginning of the 21<sup>st</sup> century showed a number of failed MNCs such as Lehman Brothers, Enron, WorldCom, and Tyco to name a few. Due to these unprecedented circumstances, Sarbanes-Oxley Act was enacted into law in the US to compel corporations, especially those that are listed in Stock Exchanges, to provide information on the corporation's corporate governance policy, and financial performance report. Following these directives, leading auditing firms and practitioners in most countries have urged their clients to establish and practice good corporate governance standards to further protect their stakeholders. In today's corporate world, financial performance is almost always identified with good corporate governance. Ideally, good corporate governance is an easy activity to implement, but very difficult to achieve in totality. The earlier definition of corporate governance by Cadbury (1992, p. 35) states that corporate governance is a "system by which corporations are directed and controlled". In addition, corporate governance may be defined as processes and principles, a set of systems, as a safeguard to make sure that the company is governed, administered, and managed for the best interest of all stakeholders (Fung, 2014). It is a system by which business institutions, big or small, are directed and controlled. It is all about the promotion of company transparency, accountability, and fairness. Simply said, good corporate governance is equal to good business. The practice of good governance ensures:

- 1. Sufficient and acceptable disclosures, as well as effective decision making to attain corporate goals and objectives;
- 2. Clarity and transparency in all business undertakings;
- 3. Compliance with all statutory and legal requirements;
- 4. Maximization and protection of shareholder interests;
- 5. Adherence to company values and ethics in the conduct of business (Fung, 2014)

# 2.3. General Concepts of Corporate Governance

The general concepts of good Corporate Governance principally lie on the core principles that emphasize accountability, transparency, fairness and responsibility that, in many cases lead to more investment generation from capitalists and investors for financial growth. Specifically, it caters to the following terms:

#### 2.3.1. Direction

Corporate leadership and management must provide a clear and doable direction of the company's goals and objectives to all stakeholders, especially to the employees of the organization. Providing strategic decisions and consultations of the current and future areas of concern is just one of the techniques of this element. The organization's mission and vision are visible and easy to comprehend along with its business operation. Mission and Vision statement must be clearly manifested from its business activities. To the stakeholders of the organization, these statements provide a sense of motivation and symbolize primary consideration of the company's business activities.

# 2.3.2. Independence of Directors

If the composition of the board of directors of a corporation happens to also be the owners, or maybe their family members, or entrepreneurs selected by friends, or individuals who are committed to the daily management of the corporation, the impartiality of the board is remote to happen. Having a superiority of non-executive independent directors will lead to non-prejudiced and avoidance of conflict of interest between the board directors and the management. Impartial judgment is proven to be almost always in the best interest of the corporation.

### 2.3.3. Effective Risk Management

Business uncertainties cannot be avoided. However, this unwanted event can be minimized or eliminated if corporate governance is in place. On the other hand, competitors are bound to take advantage even with the presence of smart policies put in place. Competitors can steal your valued customers and clients, unexpected disasters might disable your operations, economic fluctuations might diminish the purchasing capacity of your target market. These are risks that are difficult to avoid. But the implementation of a comprehensive risk management program as part of your good governance can avoid or minimize unwanted events to happen. The example given is the strategic recruitment of your labor forces. To avoid the effect of continuously rising labor costs, management must be able to find alternatives where to recruit or hire the correct and required number of workers or staff.

# 2.3.4. Organization

Organizational structure plays a major part in good governance. To avoid confusion and duplication of functions, a clear and definite role for its players in the organization must be implemented. A precise and clear-cut organizational structure will fluidly and smoothly monitor and supervise business dealings, transactions, and operations effectively. As earlier said, one of the most important elements of good governance to achieve better financial performance is transparency. The practice of good corporate governance will strengthen internal control that will make business dealings and transactions above board to all parties.

### 2.3.5. Stakeholder Relations

One of the pillars of corporate governance is accountability to every stakeholder of the organization. As mentioned earlier, good governance requires a good check and balances among the different players of the organization. In general, communication between the corporate investors and other stakeholders must be simple and direct in order to make decisions undertaken by the board disseminated immediately. Board members' profiles and decisions must be available also to corporate web pages for proper information.

### 2.3.6. Transparency

Oftentimes, corporate managers and executives seek the advice of their corporate legal counsels, which leads to information being filtered down before reaching employees. Corporate governance with a good transparency policy will lead to a unified and solid organization. A constant and repeated reminder of the corporate's Mission Vision will educate each and every sector of the organization of the financial performance of the company, thereby, minimizing or avoiding issues related to financial matters.

# 2.3.7. Corporate Citizenship

According to Logan, et.al. (1997) corporate citizenship refers to the practice of a company to strict compliance with existing laws, regulations, and established business practices where the entity operates. It describes a company's behavior the way it conducts its business dealings to all constituents or communities, including the natural environment as a whole. With corporate governance, the Mission and Vision statement indicates that the organization is not solely focused on profit-generating activities, but must also take into consideration its social and moral responsibilities to the outside community.

#### 2.3.8. Self-Evaluation

As mentioned earlier, mistakes or unwanted events take place in an organization, no matter how good the policies are being practiced. In order to monitor and supervise daily operations, a self-evaluation must be an exercise to mitigate and identify the possible occurrence of a problem. Surveys or suggestions from employees and customers are an effective source of vital information to improve communication between the company and its clients that will lead to better and efficient performance.

# 2.4. Dimensions of Corporate Governance

#### 2.4.1. Board Size

Dallas (2004) defines board size as the composition of the board in terms of the number of directors. He further stated that the larger composition of the board will provide added value for companies because it facilitates better decision-making and the CEO has limited power to dominate the entire board. Furthermore, it is statistically presumed that organizations that maintain large board size will likely experience difficulty in coordination among members, encourages free-riding, and other related challenges. Conversely, when the composition of the board of directors is small, they possess more responsibility and accountability.

# 2.4.2. Frequency of Board Meeting

Funmi (2014) described the frequency of board meetings as the number of times that the board members conduct meetings to monitor financial and organizational performance. This is done to ensure that the organization upholds strong corporate governance in terms of the frequency of managerial performance and in improving the effectiveness of the board members' functions. Regular meetings as frequently as possible provide directors up-to-date information and well-informed judgment and continue to be knowledgeable of the company's status or performance leading to adequate and accurate actions and responses to any issues related to performance. (Abbott et al., 2003; Adams, 2000; Funmi, 2014).

### 2.4.3. Board Independence

**Board independence** sometimes called board composition is measured as the ratio of independent (external) board members to the total number of board members. There is empirical evidence supporting that the higher proportion of outsiders on a board can better monitor and control the opportunistic behavior of the incumbent management, thus, minimizing the agency problem and maximizing shareholders' wealth (Adeusi et al., 2013; Musa et al., 2020).

### 2.4.4. Audit Committee

**Audited Committee Size**: A review of the literature has revealed that the existence of independent and competent audit committees has a positive effect on firm performance (Anthony, 2007). The audit committee helps to ensure that accounting policies are sound and financial statements are properly prepared and audited.

**Board diversity:** In recent years, there has been an increasing interest in investigating the impact of gender diversity on the firm's performance, which is whether the addition of women to the board affects performance, and a number of research projects have attempted to provide evidence for this argument. The empirical study by Smith et al. (2006) have found that the presence of women in the board positions has a positive effect on the firm's performance. Thus it could be hypothesized as board diversity has a positive effect on the financial performance of insurance companies.

### 2.5. Financial Performance

Financial performance can be defined as a subjective measure of how a company can use its assets and other resources from its fundamental process of doing business to achieve the desired revenues. It is also expressed as the general determination of a company's financial health over a specified period of time and can be used to match the same firm within the same industry or to correlate industries or sectors as a whole.

# **2.6.** Concept of Financial Performance

According to Almajali, et.al. (2012), there are several means or techniques in measuring the financial performance of a company. Return on Asset discloses the business entity's competence to make use of its assets; another example is that Return on Sales describes how much a business entity gains relative to sales generated, or Return on Equity interprets what returns (in percent) an investor foresees of their investments. And this financial performance of a business entity can be examined under three dimensions. The first of which is productivity. The financial performance report will tell users about the company's ability to make use of its contributed resources (inputs) into gains (outputs) effectively and efficiently. The second dimension is the profitability or the degree to which the entity's income supersedes the costs it has to make in order to generate the earnings desired. And the third dimension is the market premium or the degree the company has achieved, over time, the business' value or worth, as against the book value of the company. Additionally, Cohen et al. (1997) quantified accounting returns using Returns on Asset (ROA). From their observation, they expressed that return on the asset is also commonly used by market analysts to measure the financial performance of a business entity, arguing that financial performance magnifies the efficiency and capability of assets in generating income.

# 2.6.1. Return on Assets

According to Lindo (2008), Return on Asset (ROA) is a commonly used general-purpose financial ratio computed to measure the correlation of profits earned against the investments in assets required to earn that profit. The Return on Assets (ROA) was calculated as a ratio of the operating results and the infused or invested capital. It is also a guideline that can be utilized to gauge the profit contribution necessary from new investment.

# 2.6.2. Return on Equity

Rappaport (1986:31) describes that literature review on Return of Equity (ROE), and so with Return on Assets (ROA), remains one of the most favorites, and commonly used widely as a tool to measure corporate financial performance. Monteiro (2006) confirmed these observations who said ROE maybe is the most significant tool financial consultants should consider. In other words, return on Equity can easily be improved by enhancing profitability; utilizing corporate resources more efficiently and effectively, and increasing financial leverage.

# 2.7. Relationship between Corporate Governance and Financial Performance

As observed in many companies, good governance practices improve a firm's stock values, in the long run, that can be translated into a better and higher financial performance. Every element of the corporate governance framework, such as the board size, number of committees, non-directorship, board meeting frequency, number of meetings passed in every meeting, presence of the board chair in every meeting, insider holding, and the frequency of CEO changes are indicative factors to express the certainty of a better financial performance of a company.

CEOs have an exclusive obligation of making decisions that can affect the company they represent, favorable or not, in relation to the company's financial performance. It is a given assumption that they are given the full trust and confidence for them to work or conduct their responsibilities in the best interest of the shareholders. And the CEO's main objective is to maximize shareholders' wealth. And this group of investors believes that this practice is more likely to safeguard their interests, thus a better financial performance must be achieved.

Furthermore, corporate governance is supposed to drive financial performance to a greater height for firms that exercise these practices, than those to which corporate governance is not practice (Hafiza & Susela, 2008). The absence of corporate governance in a firm may block or interrupt the board's ability to monitor or supervise management's practices, in effect, will increase agency cost (Fama & Jensen, 1983). Additionally, Stoeberl and Sherony (1985) argue that enforcing corporate governance will bring the clear-cut

policy in leadership strategy standardization and implementation, and will ultimately bring about better performance. On the other hand, a poor implementation may generate information sharing costs, agency problem (conflicting interest between CEO and other board members) that may lead to board inefficiency to function; it will also be costly to deliver the company's specific task or information to others in a timely manner, and decision-making practice and implementation may be less efficient; and it may be more challenging to identify blame for bad company value (Kim, et al, 2008).

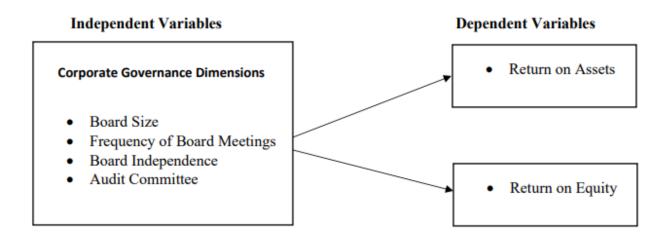


Figure 1. Conceptual Framework of the Study

# 2.8. Research Hypotheses

From the research questions and objectives of this study, the hypotheses are proposed:

- H1. Board size significantly influences the return on assets (ROA).
- H2. The frequency of board meetings significantly influences ROA.
- H3. Board independence significantly influences ROA.
- H4. The audit committee significantly impacts ROA.
- H5. Board size significantly influences the return on equity (ROE).
- H6. The frequency of board meetings significantly influences ROE.
- H7. Board independence significantly influences ROE.
- H8. The audit committee significantly impacts ROE.

# 3. Methodology

This research adopted a cross-sectional research design. Cross-sectional research design, also known as social survey design, is one of the most famous research designs among other designs. Easterby-Smith et al. (2008) state that cross-sectional research design is widely used and retain for survey strategy. Additionally, Bryman and Bell (2007) state that cross-sectional design requires the collection of data on more than one case and at a single point in time in order to accumulate a bulk of qualitative or quantitative data in relation to two or more variables, which are then investigated to discover patterns of association. The main focus of this research was qualitative. However, some quantitative procedures and approaches were made in order to achieve a better understanding and probably enable a better and more intelligent interpretation of the results from the qualitative study.

# 3.1. Population and Sample

Mugenda and Mugenda (2003) define the population as an entire group of individuals, events, or objects having similar and observable characteristics and or behavior and for this research, the population consisted of four Insurance companies registered under the Muscat Securities Market as well as recorded listings of Insurance Companies available under the records of the Insurance Regulatory Authority of Oman. From the gathered list of all registered insurance institutions, the researcher intentionally selected only the insurance firms listed in Muscat Securities Market, and Securities and Exchange Commission under the office of

Insurance Regulatory Authority by obtaining financial performance data over a period of fifteen years from 2004 to 2018 and, all insurance companies that were not regularly and consistently listed between the years and with incomplete data were removed.

#### 3.2. Data Collection

This study used secondary data for the collection. Considering the research objectives, the nature of research which examines the relationship of corporate governance dimensions and financial performance, the appropriateness of secondary data was applied. Secondary data were collected from published annual reports and websites of the preferred insurance companies. The use of secondary data furnished is a dependable and reliable source of information needed by researcher to examine the circumstances and look for efficient ways for problem-solving situations (Uma, 2003). Particularly, the data were gathered from the section expressing the corporate information, statement of corporate structure, corporate governance, including the profiles of the Board of Directors and its executive management team. Information on financial performance were collected from the annual audited financial statements such as comprehensive income statement, balance sheet, statement of cash flows, and statement of changes in equity. Collection of secondary data are usually easy to gather, owing to the ease of availability as required by the MSM.

### 3.3. Research Instrument

In this study, it solely used the secondary data which were collected from the Muscat Securities Market website and the annual report from the respondent insurance companies from 2004 to 2018. From the sets of data, the independent variables such as board size, frequency of board meetings, board independence, the composition of the audit committee and the independent variables consisting of Return on Equity (ROE) and Return on Assets (ROA). The description of the independent and dependent variables is described in Table 1.

Table 1. Description of the Variables Used

Variables	Description	Symbolic Term
Board Size	Total number of directors on the board.	BS
Frequency of Board Meetings	Ratio of meetings in one year.	FBM
Board Independence	Measured as the ratio of independent (external) board members to the total number of board members.	BI
Audit Committee	The size and extent of independence of the committee over the firm management.	AC
Return on Assets	Amount of net income as a percentage of total assets.	ROA
Return on Equity	Amount of net income returned as a percentage of shareholders equity.	ROE

Source: Author

### 3.4. Data Analysis

The data collected in this study are generally quantitative in nature and were examined and determined by the descriptive analysis techniques using SPSS version 21 and Stata version 14. Furthermore, qualitative data are likewise analyzed descriptively. This study concentrated on the Corporate Governance's dimensions namely Board Size, Frequency of Meetings, Board Independence, Audit Committee, and how they affect the financial performance of Insurance companies listed in MSM. Observing the structure, independent and dependent variables were grouped into components namely: Independent variables as Board Size, Frequency of Board Meetings, Board Independence, Audit Committee's Size, and on how they impact the financial

performance of the insurance companies and the dependent variables which include a financial performance with its indicators namely: Return on Assets, and Return on Equity.

# 3.4.1. Descriptive Statistics and Correlation Coefficient

Hair et al. (2010) defined Descriptive Statistics as one of the branches of statistics that provides a brief summary of the samples and the measures done on a particular study. Descriptive statistics describe the variables in the simplest way for readers to develop a summary of the basic features of the study's data. It includes percentages, frequencies, averages/means, and standard deviations for continuous data. On the other hand, correlation measures the strength or relationship or association of one variable to another

Moreover, correlation analysis is a significant tool in order to discover beforehand a chance of multicollinearity. A correlation value of 0 indicates that there is no relationship between the dependent and independent variables. Accordingly, a correlation of  $\pm$  1.0 means there is a near-perfect positive or negative relationship. The values were then explained according to the result of 0 (no relationship) and 1.0 (perfect relationship). It is further interpreted that the relationship is considered small when  $r = \pm 0.1$  to  $\pm 0.29$ , and the relationship is interpreted as a medium when  $r = \pm 0.3$  to  $\pm 0.49$ . And when  $r = \pm 0.5$  and above, the relationship is considered strong. In this study, the independent and dependent variables were presented for analysis using both descriptive statistics and correlational analysis.

### 3.4.2. Panel Regression Analysis

Panel regression is a modeling method adapted to panel data, also called longitudinal data or cross-sectional data (Stock & Watson, 2007). The applicability of this modeling technique is common for econometrics where the statistical units are behaviorally presented in panel data to be examined across time, hence; longitudinal approach. As applied to this study, secondary data gathered from 2004 to 2018 were analyzed cross-sectional considering that there are four companies, six variables and 60 observations. Using this method, the relationship is examined between the independent variables such as board size, frequency of board meetings, board independence, audit committee and return on equity as expressed in statistical equation patterned after the hypothetical structure developed by Baltagi and Li (2004) that can be applied as follows:

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(1) ROEit = \beta\theta + \beta 1 BSit + \beta 2 FBMit + \beta 3 BIit + \beta 4 ACit + uit
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where;

i = number of insurance companies

t = time/period (2004-2018)

ROE = return on equity;

BS = Board Size

FBM = Frequency of Board Meetings

BI = Board Independence

AC = Audit Committee

uit = error

(1) 
$$ROAit = \beta 0 + \beta 1$$
  $BSit + \beta 2$   $FBMit + \beta 3$   $BIit + \beta 4$   $ACit + uit$ 

Where:

i = number of insurance companies

t = time/period (2004-2018)

ROE = return on equity;

BS = Board Size

FBM = Frequency of Board Meetings

BI = Board Independence

AC = Audit Committee

uit = error

Based on the above-mentioned equations, the analysis determines the coefficient of correlation, the coefficient of determination, the F statistics, and the P-value specifically in determining the suitability of the chosen model. And, in determining the probability values of the individual independent variables in relation to the dependent variables, if the p-values results are below 0.05 significance level using the 2-tailed test, then the relationship is established between the independent and dependent variables (Cavana et al., 2001; Pallant, 2010).

# 4. Findings and Interpretation

In this study, the main objective is to examine the significant relationship between corporate governance dimensions and the financial performance of selected insurance companies in Muscat Securities Market, Sultanate of Oman. The independent variables consist of board size, frequency of board meetings, board independence and audit Committee while the dependent variables include return on equity and return on assets. This section shows statistical tools based on the research objectives that include descriptive statistics, correlation of study variables and regression for independent and dependent variables. Indicators for financial performance focused on financial statements for the period 2004-2018. Analysis of the data is presented in the following sub-sections as hypothesized.

# 4.1. Descriptive Statistics and Correlation Matrix

Tabachnick and Fidell (2007) defined descriptive statistics as a brief coefficient that summarizes a given set of data that represents the entire sample of a population. In this study, the descriptive statistical used are: mean, standard deviation, skewness, and kurtosis. Mean refers to the average of all data by dividing the total of data over the number of observations or data in a given set. Standard deviation measures the dispersion of the dataset relative to the mean and also measures how to spread out the data are throughout the mean (Kline, 2005). Accordingly, the higher standard deviation would mean the more the data are spread out around the mean.

On the other hand, Kline (2005) and Brown (2006) defined and provided criteria for the measurement of skewness and kurtosis. Skewness is a measure of the asymmetry of the probability distribution of a random variable about its mean. Based on his criteria, if skewness is less than -1 or greater than 1, the distribution is highly skewed; if between -1 and -05, moderately skewed; and, if between -0.5 and 0.5, the distribution is approximately symmetric. Also, skewness that falls within -3 and +3 are acceptable values and those skewed values that are less than the mean values are positively skewed while values more than mean values are negatively skewed although, both are asymmetrical normal curves. While criteria for kurtosis illustrate that values that range from -10 to +10 are acceptable values. As seen in Table 2, the results of the descriptive analysis are summarized.

Table 2. Descriptive Statistics of Study Variables

Variables	N	Minimum	Maximum	Mean	Std. Deviation		Kurtosis
ROE	60	42	.34	.0868	.14991	1.436	2.824
ROA	60	09	.17	.0280	.04120	.021	2.866
BS	60	2.00	10.00	5.5833	1.64977	.328	.666
FBM	60	4.00	12.00	5.7167	1.59546	1.546	3.641

BI	60	2.00	12.00	4.2000	1.77363	1.647	5.647
AC	60	2.00	6.00	3.7000	.84973	.799	.227

As displayed in Table 2, there are 60 observations in the study composing of four insurance companies. Minimum values were revealed on the independent and dependent variables with ROE, -0.42; ROA, -0.09; BS, 2.00; FBM, 4.00; BI, 2.00; and AC, 2.00. These results may indicate that for ROE, some years of these companies experienced difficulties in profitability which according to the data includes 2008, 2011, 2012, 2015, 2016, and 2017. The negative ROE further entails that the company is struggling to earn profit or return from their invested capital and signals challenges for companies in achieving a healthy business environment. For ROA, the lowest values of -0.09 can be traced similarly with ROE from years 2008, 2011, 2012, 2015, 2016, and 2017. The difficulty to recover the assets from the profits earned by these insurance companies is not sufficient.

Furthermore, evaluation of the maximum values provided the following: ROE, 0.34; ROA, 0.17; BS, 10.00; FBM, 12.00; BI, 12.00; and, AC 6.00. According to the Corporate Finance Institute (2015), the return of equity of more than 15% is considered good and 25% or more is very good. However; a return on assets of more than 5% is also considered acceptable. Based on the findings, the highest ratings on ROE and ROA are very good which means that these insurance companies were able to achieve very good ratings during the period of the study from 2004 to 2018. Further, the maximum values of BS, FBM, BI and AC show these companies' ability to exercise corporate governance with more compositions in the board, more frequencies of meetings, higher independence of the board and sufficient composition of the audit committee. Also, the mean values showed good values and the standard deviation is considerably higher than 1 except for values of ROE, ROE, and AC. Generally, the values indicate the normality and acceptable spread of data values within the mean.

When evaluated using the skewness and kurtosis, the results showed that the values of skewness are within -3 and +3 and thus, acceptable. Specifically, ROE, FBM, BI, and AC are highly skewed while ROA and BS are distributed approximately symmetric. Moreover; positive skewness was observed with all other variables with skewed values of less than the mean values except ROE which revealed a negative skewness. Meanwhile, kurtosis values also proved normality and acceptable values with all the variables fall within the range from -10 to +10 (Brown, 2006; Kline, 2005). A correlation matrix was run in order to determine the strength of the relationship among the variables used in this study. As shown in Table 3, the six constructs were tested with correlation values ranging from -1 to 1 as perfectly correlated; -0.5 to 0.5 highly correlated; -0.25 to 0.25 moderately correlated.

Table 3. Correlation Matrix of the Study Constructs

	Constructs		F			F	R
	Pearson Correlation			.5			3
BS	Sig. (2-tailed)						
	N						
	Pearson Correlation				1	-:	2
FBM	Sig. (2-tailed)						
	N						
	Pearson Correlation	.5				ı.	
BI	Sig. (2-tailed)					,	,
	N						
	Pearson Correlation		ī				
AC	Sig. (2-tailed)			,		•	
	N						
	Pearson Correlation	-,	3	Ī			.8
ROE	Sig. (2-tailed)						
	N						

	Pearson Correlation	3	2	_		.8	
ROA	Sig. (2-tailed)				,	,	
	N						

- \*\*. Correlation is significant at the 0.01 level (2-tailed).
- \*. Correlation is significant at the 0.05 level (2-tailed).

Results from Table 3 revealed the correlations of the following variables: high correlation between board size and board independence with r = 0.516, p = 0.000; board independence and audit committee with r = 0.5160.322, p = 0.012; frequency of board meeting and ROE with r = -0.303, p = 0.019; board size and ROA with r = -0.374, p = 0.003; frequency of board meetings and ROA with r = -0.264, p = 0.042; and, ROE and ROA with r = 0.822, p = 0.000. The high correlation between board size and board independence can be interpreted that those companies that have a higher number of board composition from outside the organization or external board would likely increase financial performance. The positive relationship between independence and audit committee, on the other hand, may indicate that the impartiality of the board of directors have a significant relationship on how independent the audit committee regardless of their number in performing their functions. According to Muth and Donaldson (1998), the larger size of the board of directors reduce the power of the CEO to control the operations of the company and will instead find more time to obtain consensus from the board of directors in arriving at final decisions and in general and specific situations. Hence, the influence of the CEO on the board of directors will diminish. As stated earlier, board independence reflects the ratio of external/outside board of directors over the total number of board of directors (Adetunji and Olawoye, 2009). The higher number of external board of directors, the more independence and fairness in the board decision making, thus believed to be indicators of good financial performance (Adeusi et al., 2013; Anthony, 2007; Lorne and Dilling, 2012; Musa et al., 2020).

Conversely, there is no relationship between board size and return on equity. This means that regardless of the number of the board of directors seating in the company, it neither affects the return on equity so the increase or decrease has no bearing on the board size. This result contradicts the study of Kajola (2008) who postulated that board size reflected a strong positive impact on return on equity. Even the study of Nguyen and Nguyen (2020) as affirmed in the results of Mak and Kusnadi (2005) found a negative relationship between board size and return on equity furtherly justifying that, as the board size increase, the lesser its contribution to the financial performance specifically in terms of return on equity (Yasser, 2011a).

Many researches have confirmed the positive relationship between frequencies of the board meeting on firm performance although these affirmations do not specify the measurement of financial performance. These claims further explained that, as the number of board meetings increase, more knowledge, well-informed judgment, and proactive response about the well-being of the company and especially during challenges and problems facing the organization (Abbott et al., 2003; Adams, 2000; Funmi, 2014). The hypothetical assumption is that, the increase in board meetings which they often conducted on monthly basis established a strong positive significant relationship on the company's financial performance measured by both ROE and ROA. However, in this study, the result of analysis between the frequency of board meeting on return on equity showed a negative moderate correlation which may mean that as the frequency of board meeting increases, the return on equity decreases. These findings were confirmed by the studies of Vafeas (1999) and Karamanou and Vafeas (2005) stating that the frequency of board meetings is a strong predictor of financial performance.

Furthermore, board size also established a moderate significant negative relationship on financial performance measured in ROA which is in consonance with other studies (Hermalin & Weisbach, 2001; Yermack, 1996). While many studies have demonstrated a positive significant relationship between board size and ROA, in this study reverse finding was derived which may mean that a negative relationship can be attributed to the incompetence of the board of directors to monitor the activities of the corporation and thus, the larger size practically do not contribute to successful management. However; those who affirm positive relationships, have experienced that the larger board size helped in easy monitoring of the corporation's overall activities (Dar, et. al., 2011; Dwivedi & Jain, 2005; Georgiou, 2010).

In regard to determining the relationship between the frequency of board meetings and ROA, again the outcome revealed a negative moderate relationship which clearly indicates that the larger the size of the

board of directors or its composition, the ROA declines. However; the study of Nguyen and Nguyen (2020) contradict this finding by stating that the frequency of board meetings does not significantly influence ROA while also limited studies that measure the impact of the frequency of board meeting and the ROA. Finally, in the correlation matrix, the relationship between the two variables ROA and ROE produced a strong relationship with p=0.822 which means that, as ROA increases, the ROE will also increase.

# 4.2. Results of Panel Regression

The panel regression version 14 was used in this study to determine the impact of corporate governance dimensions identified such as board size, frequency of board meetings, board independence, and audit committee size on both ROE and ROA. Specifically, the random-effects model and the fixed effects model establish the individual relationships of independent variables on dependent variables. To determine which of the model is most appropriate, the Hausman test was run and the results showed a p-value of 0.072 which means that the use of the random effects model is suitable. Tables 4 and 5 depict the results of the random-effects model testing based on the hypothetical assumptions as described hereunder.

Table 4 shows the panel regression to assess the significant relationship between the independent variables and the dependent variable, the ROA. Of the 60 observations from the data gathered from four insurance companies in years 2004 to 2018, the findings revealed that  $R^2 = 28.36\%$  which means the variation of the dependent variable (ROA) can be explained at about 28.36% of the independent variables (Board Size, Frequency of Board Meeting, Board Independence, and Audit Committee). The p-value of Chi² showed 0.0002 which entails that the model is a suitable statistical tool for the analysis.

Further, specific findings displayed that board size (p=0.007) and audit committee (p=0.007) significantly impacts ROA while the frequency of board meeting (p=0.069) and board independence (p=0.356) have no significant impact on ROA. This indicates that the negative relationship between board size and ROA depicts the increase of board size as an indicator of a decline in ROA. In other words, it is not advisable for these companies to increase their board composition as an increase in remuneration but lesser productivity would likely increase in expenditures without clear possible returns. This result earlier confirms with other studies which established a moderate significant negative relationship on financial performance measured in ROA (Hermalin & Weisbach, 2001; Yermack, 1996). Hence; it would be impractical to have more members of the board but are not competent to perform their duties as desired.

Table 4. Panel Regression of Independent Variables on ROA

	y Year						
panel v	variable: Con	mpany (stron	gly bala	nced)			
time v	variable: Yea	ar, 2004 to	2018				
	delta: 1 t	unit					
20							
. xtreg ROA BS	FBM BI AC, 1	re					
Random-effects	GLS regress:	ion		Number	of obs	=	60
Group variable	: Company			Number	of group	s =	4
R-sq:				Obs per	group:		
within =	0.2699				n	nin =	15
between =	0.5482				a	wg =	15.0
	- 0 2026				n	nax =	15
overall =	- 0.2036						
overall =	- 0.2036			Wald ch	i2( <b>4</b> )	-	21.78
		i)					21.78 0.0002
	= 0 (assumed	d) Std. Err.	z	Prob >	chi2	=	
corr(u_i, X)	= 0 (assumed	Mas Shaper at a country because	100000	Prob >	chi2 [95%	Conf.	0.0002
corr(u_i, X)	= 0 (assumed Coef.	Std. Err.	-2.69	Prob > P> z	chi2 [95% 0157	= Conf.	0.0002 Interval]
corr(u_i, X)  ROA  BS	= 0 (assumed Coef00909160054052	Std. Err.	-2.69 -1.82	Prob > P> z  0.007 0.069	Chi2 [95% 0157 011	Conf.	0.0002 Intervall 0024755 .0004306
corr(u_i, X)  ROA  BS FBM	Coef009091600540520029407	Std. Err. .0033756 .0029775	-2.69 -1.82 -0.92	Prob > P> z  0.007 0.069 0.356	[95% 0157 011	Conf.	0.0002 Interval] 0024755 .0004306 .0033022
COTT(U_i, X)  ROA  BS FBM BI	Coef. 009091600540520029407 .0158012	Std. Err. .0033756 .0029775 .0031852	-2.69 -1.82 -0.92 2.69	Prob >  P> z   0.007 0.069 0.356 0.007	[95% 0157 011 0091	Conf.	0.0002 Interval] 0024755 .0004306 .0033022 .0273278
COTT(U_1, X)  ROA  BS FBM BI AC	Coef. 009091600540520029407 .0158012	Std. Err0033756 .0029775 .0031852 .005881	-2.69 -1.82 -0.92 2.69	Prob >  P> z   0.007 0.069 0.356 0.007	[95% 0157 011 0091	Conf. 2076 241 836 2746	0.0002 Interval] 0024755 .0004306 .0033022 .0273278
COTT(U_1, X)  ROA  BS FBM BI ACCONS	Coef. 009091600540520029407 .0158012 .0635478	Std. Err0033756 .0029775 .0031852 .005881	-2.69 -1.82 -0.92 2.69	Prob >  P> z   0.007 0.069 0.356 0.007	[95% 0157 011 0091	Conf. 2076 241 836 2746	0.0002 Interval] 0024755 .0004306 .0033022 .0273278

On the other hand, the positive relationship brought by the audit committee on ROA implies that, as the size of the audit committee increased, the profitability in terms of ROA also increase. This result may have explained that when the number of members of the audit committee increases the independence and impartiality of decisions can be assured and which leads to an increase in returns or profitability. Unbiased decisions can be avoided as well as better and sound financial reporting. In many studies, findings proved the significant positive relationship between audit committee size and independence on a firm's financial performance (Anthony, 2007; Defond, et al., 2005; and, Green, 2005). They argued that the audit committee ensures that financial statements are prepared in accordance with accounting principles and audited accordingly thus a sound financial statement. It also improves quality governance which is directly linked to the financial performance of organizations. Hence; these results concluded that H1 and H4 are accepted while H2 and H3 are rejected.

Table 5. Panel Regression of Independent Variables on ROE

	ny Year						
panel v	variable: Con	mpany (strong	gly balan	nced)			
time t	variable: Yea	ar, 2004 to	2018				
	delta: 1 1	unit					
. xtreg ROE BS	FBM BT AC						
. Horey had be	, ibi bi no, i	-					
Random-effects	GLS regress:	ion		Number	of obs	=	60
Group variable	: Company			Number	of group	os =	4
R-sq:				Obs per	group:		
within =	= 0.1759				ı	min =	15
between =	= 0.3606				a	avg =	15.0
overall =	0.1841				n	max =	15
				Wald ch	i2(4)	=	12.41
corr(u_i, X)	= 0 (assumed	1)		Prob >	chi2	=	0.0145
corr(u_i, X)	= 0 (assumed	Std. Err.	z	Prob >	V-901-00-00		0.0145 Interval]
Je swe	terma valor	Std. Err.	LEN GROSS	200000 20	(95%	Conf.	Name to a second
ROE	Coef.	Std. Err.	-1.36	P> z	[95% 0438	Conf.	Interval]
ROE	Coef.	Std. Err. .0131071 .0115613	-1.36 -2.20	P> z	(95% 0435 048	Conf. 5194 3136	Interval]
ROE BS FBM	Coef01783010254764	Std. Err. .0131071 .0115613 .0123678	-1.36 -2.20 -0.94	D> z  0.174 0.028	(95% 0435 048	Conf. 5194 3136 3209	Interval] .0078593
ROE BS FBM BI	Coef017830102547640115804	Std. Err. .0131071 .0115613 .0123678 .0228353	-1.36 -2.20 -0.94 1.72	P> z  0.174 0.028 0.349	(95% 0435 048	Conf. 5194 3136 3209 4085	Interval] .00785930028167 .01266
ROE BS FBM BI AC	Coef017830102547640115804 .0393478	Std. Err. .0131071 .0115613 .0123678 .0228353	-1.36 -2.20 -0.94 1.72	P> z  0.174 0.028 0.349 0.085	0435 048 0358 0054	Conf. 5194 3136 3209 4085	Interval] .00785930028167 .01266 .0841041
BS FBM BI AC _cons	Coef017830102547640115804 .0393478 .2350753	Std. Err. .0131071 .0115613 .0123678 .0228353	-1.36 -2.20 -0.94 1.72	P> z  0.174 0.028 0.349 0.085	0435 048 0358 0054	Conf. 5194 3136 3209 4085	Interval] .00785930028167 .01266 .0841041

As shown in Table 5, there are four groups or insurance companies with a total number of 60 observations and with the data collected from 2004 to 2018. Results showed that 18.41% of the changes or movement of the dependent variable (ROE) can be explained by the independent variables namely: board size, frequency of board meeting, and audit committee. Furthermore, the model used is appropriate with a p-value of 0.0145 which is less than the 0.05 level of significance. From the outcome, it was revealed that only the frequency of board meeting (p=0.028) only significantly impacts ROE while board size (p=0.174), board independence (p=0.349), and audit committee size have no significant influence on ROE. The extent of impact however of the frequency of board meetings is negative that supports the previous studies of Vafeas (1999) and Karamanou and Vafeas (2005) depicting the strong significant negative relationship between the abovementioned two variables.

Moreover; the results of the random-effects model align with the previous results from a correlational analysis conducted in this study confirming that only the frequency of board meeting negatively correlates ROE. Jensen's (1993) study found a significant negative association between the frequency of board meetings and financial performance by stating further that, using the frequency of board meetings is a reactive measure and not proactive. Many studies have confirmed the significant relationship between board size either positive or negative significant relationship but in this study the relationship is not significant (Kajola, 2008; Nguyen and Nguyen, 2020; Mak and Kausnadi, 2005; and, Yasser, 2011a). Based on these

results, hypothesis (H6) is accepted that there is a significant influence of the frequency of board meetings on ROE while, hypotheses 5,7, & 8 are rejected which simply means that board size, board independence, and audit committee have no influence on ROE.

Furthermore, the results of the panel regression between independent and dependent variables displayed that only the frequency of board meetings significantly influences ROE while the board size and audit committee significantly impacts ROA. The results are summarized in Table 6 as shown below.

Table 6. Summary of Panel Regression Results of Independent and Dependent Variables

		oility (P) @ 0	Significance (@ .05)		
Specific/Individual Variables	ROA	ROE	ROA	ROE	
BS	.007	.174	S	NS	
FBM	.069	.028	NS	S	
BI	.356	.349	NS	NS	
AC	.007	.085	S	NS	

Legend: S = Significant @ 0.05; NS = Not Significant @ 0.05 level.

Further, the results from the table depicted that no significant relationship was found on BS on ROE; FBM on ROA; BI on both ROA and ROE; and AC on ROE. Thus, the decision is to accept Hypotheses 1, 4, 6 while reject Hypotheses 2, 3,5,7,8.

#### 5. Conclusion

This study performed in the insurance industry has provided more avenues for wider investigations in the financial sector in general. Determining the factors of corporate governance to assess the financial performance reflects the important role of attaining good corporate governance to ensure a successful financial operation. The data from 2004 to 2018 has been considered as an acceptable trend of data as indicated in this study that may illicit implications towards current conduct and operations of the insurance industry. Based on the findings, board size affects ROA but not on ROE; FBM affects ROE but no effect on ROA; BI has no influence

on both ROA and ROE; and, AC affects ROA but not on ROE. Implications from these results reflect the contextual nature of the operations and performance of the banking industry as there are both affirmations and contradictions of the results. It means that the board size influences the ROA wherein in this study it posted a negative significant relationship. Dealing with small numbers of board of directors but comply with the expectations of the task expected of them increase profitability in terms of ROA rather than larger board size but are not practically contributing to the success of the company's operation.

In the same way, the negative significant relationship between frequency of board meeting on ROE entails that even the board conducted more board meetings but if the substance or the implementation of such minutes and subjects approved would not reflect the real performance then it would tantamount to increase expenditures that will, in turn, decreased financial performance particularly the ROE. This had been clearly supported in the study of Vafeas (1999) and Karamanou and Vafeas (2005) depicting the strong significant negative relationship between the above-mentioned two variables. For organizations such as insurance companies, frequency of board meetings can be determining factor to decide in terms of profitability issues and business performance.

Conversely, audit committee size positively impacts ROA aside from the fact the independence and impartiality are a must to be a member of the audit committee. It can safely be concluded from the findings that increasing the number of the members of audit committee contributes positive signs for ROA which can be supported by many studies. Findings proved the significant positive relationship between audit committee

size and independence on a firm's financial performance (Anthony, 2007; Defond, et al., 2005; and, Green, 2005). They argued that the audit committee ensures that financial statements are prepared in accordance with accounting principles and audited accordingly thus a sound financial statement. It also improves quality governance which is directly linked to the financial performance of organizations. Overall, insights from the results provide management of these companies to take a closer look at the implications of deciding how many members of the board, frequency of board meetings, board independence, and audit committee as these can influence financial performance such as ROA and ROE.

### 5.1. Recommendations

In the light of the findings and conclusion reached, several recommendations can be offered to provide more insights and avenues for wider consideration and studies. The recommendations can be stated as described hereunder:

- 1. The management should increase their extent of implementation, assessment and evaluation of corporate governance considering the board size, frequency of board meetings, and audit committee. These areas should be given preferences as these influence ROA and ROE.
- 2. Increase the involvement of the board of directors in the decision-making of these companies so that if they are closely involved with the affairs, sound financial statement, financial reporting, governance, and management will be assured.
- 3. Regular and periodic review of the corporate governance system implemented to take a closer look at the implications of deciding how many members of the board, frequency of board meetings, board independence, and audit committee as these can influence financial performance such as ROA and ROE.
- 4. Intensify planning and strategy with a plan of actions taking into account these dimensions in the order of priority to the dimensions that significantly impact financial performance.
- 5. Consider other corporate dimensions which are not covered in this study as well as considering other financial measures extending the used ROA and ROE in this study to arrive at possible better outcomes.
- 6. Develop or implement stringent policies that assess the performance of the people belonging to the top management so that, any improvements and soundness of policies,
- 7. measures, and performance will be emanating from top management down to the lowest level of the organizational hierarchical structure.

However; these proposed recommendations are suggestive in nature and thus, are not conclusive to the entire financial sector. In Oman, there are only ten (10) insurance companies that are registered with the Muscat Securities Market (MSM) of which only four companies have been existing for quite a long time. These recommendations can be carried through with the other insurance companies as a guide on how they implement corporate governance as an indicator of financial performance. The results and implications from this study can also serve as a signal for them to regularly evaluate their status and current state of implementation of corporate governance to their respective offices.

### **5.2.** Limitations of the Study

In this study, several limitations can be noted. First, the study only limits its scope which only considers the Insurance Industry out of the many institutions under the financial sector and considering only those insurance companies that are listed in the Muscat Securities Market. Second, there are many dimensions of corporate governance that are not mentioned in this study as the variables used are only limited to board size, frequency of board meetings, board independence, and audit committee. The same holds for financial performance indicators that limit only on ROA and ROE. Third, the period considered for this study covered only the years 2004 to 2018 which can still be expanded. Finally, this study covers only the country of Oman where the study is conducted.

# 5.3. Future Research

Considering the above-mentioned limitations, it is clear from this point that future researches can be undertaken to expand the results of this study by adding more dimensions of corporate governance variables and performance indicators. For example, variables such as board diversity, chief executive officer duality, institutional ownership, leadership, and others while Return on Investment, Gross Profit Ratio, Net Profit

Ratio, and Tobin's Q can also be added as indicators for performance. The study can also be expanded to consider the entire financial sector and in the future can also cover other countries for a more generalized outcome. While the data are primarily taken from the MSM, the comparative study can be conducted to compare between those insurance companies listed in MSM against those who non-listed. Lastly, the longitudinal study can be expanded to consider longer years over the period considered in this study.

# References

- 1. Abbott, L.J., S.P., K.R., & Gary, F.P. (2003). The Association between Audit Committee Characteristics and Audit Fees. *Auditing a Journal of Practice & Theory*, 22(2), 17-32.
- 2. Adams, M. D., et al. (2000). The genome sequence of Drosophila melanogaster. *Science*, 287(5461), 2185-2195.
- 3. Adetunji. B., & Olawoye, O. (2009). The effects of internal and external mechanism on governance in Nigeria. *Corporate Ownership & Control*, 7(2), 330-344.
- 4. Adeusi, S.O., Akeke, N.I., & Aribaba, F.O. (2013). Corporate governance and firm financial performance: Do ownership and board size matter? *Academic Journal of Interdisciplinary Studies*, 2(3), 77-91.
- 5. Adigwe, P. K., Nwanna, I. O., & John, E. I. (2016). Effect of corporate governance mechanism on the financial performance of banks in Nigeria. *NG-Journal of Social Development*, *5*(2), 41-50.
- 6. Almajali, A.Y., Alamro, S.A. & Al-Soub, Y.Z. (2012). Factors Affecting the Financial Performance of Jordanian Insurance Companies Listed at Amman Stock Exchange, *Journal of Management Research*, 4(2), 266-289.
- 7. Anthony, K. (2007). Corporate governance and firm performance in Africa: Dynamic panel data Analysis. Istanbul, turkey: Sabanci University.
- 8. Baltagi, B., & Li, D. (2006). Prediction in the Panel Data Model with Spatial Correlation: the Case of Liquor, *Spatial Economic Analysis*, *I*(2), 175-185.
- 9. Brown, T.A. (2006). Confirmatory factor analysis for applied research. New York: Guilford
- 10. Bryman, A., & Bell, E. (2007). The Ethics of Management Research: An Exploratory Content Analysis. Oxford: Oxford University Press.
- 11. Cadbury, A. (2002). Corporate Governance and Chairmanship: A Personal View. USA: Oxford University Press.
- 12. Cavana, R. Y., Delahaye, B. L., & Sekaran, U. (2001). *Applied business research: Qualitative and quantitative methods*. Milton, Australia: John Wiley & Sons.
- 13. CIPE. (1990). Global Programs, Democratic Governance. *How Good Governance Got a Bad Name and Why Governance Still Matters*. Retrieved March 3, 2020, from:https://www.cipe.org/resources/good-governance-got-bad-name-governance-still-matters/ Capital Market Authority. (2019). *Annual report*, 2004-2018. Retrieved February 27, 2020, from: https://www.cma.gov.om/Home/AnnualReportFileDownlad/6
- 14. Cohen, S. G., Chang, L., and Ledford, G. E., Jr. (1997). A hierarchical construct of self-management leadership and its relationship to quality of work life and perceived work group effectiveness. *Personnel Psychology*, *50*(2): 275-308.
- 15. Corporate Finance Institute Education Inc. (2015). What is Return on Equity (ROE)? Retrieved March 11, 2020, from: https://corporatefinanceinstitute.com/resources/knowledge/finance/what-is-return-on-equity-roe/.
- 16. Dallas, G. (2004). Governance and Risk: An Analytical Handbook for Investors, Managers, Directors, & Stakeholders. US: McGraw-Hill Inc.
- 17. Dar, L. A., Naseem, M. A., Rehman, R. U., & Niazi, D. G. (2011). Corporate Governance and Firm Performance a Case Study of Pakistan Oil and Gas Companies Listed in Karachi Stock Exchange. *Global Journal of Management and Business Research*, 11 (8), 1-10.
- 18. Deakin, S. (2005). The coming transformation of shareholder value. *Corporate Governance: An International Review, 13*(1), 11–18.
- 19. DeFond, M., Hann, R., & Hu, X. (2005). Does the Market Value Financial Expertise on Audit Committees of Boards of Directors. *Journal of Accounting Research*, 43(2), 153-193.

- 20. Doddamadanayak, R., Prabhakar, K., & Prabhakaran, C. (2011). *Impact of Corruption on Corporate Governance An Overview Under the Context of Policy Framework Against Corporate Corruption*. Retrieved March 2, 2020, from: https://ssrn.com/abstract=1937733
- 21. Dwivedi, N., & Jain, A.K. (2005). Corporate governance and performance of Indian firms: the effect of board size and ownership. *Employee Responsibilities and Rights Journal*, 17(3), 161-172.
- 22. Easterby-Smith, M., Thorpe, R., & Jackson, P. (2008b). *Management Research*. London: SAGE.
- 23. Eluyela, D. F., Akintimehin, O. O., Okere, W., Ozordi, E., Osuma, G. O., Ilogho, S. O., & Oladipo, O. A. (2018). Board meeting frequency and firm performance Examining the nexus in Nigerian deposit money banks. *Heliyon*, 4(10), 1-14. https://doi.org/10.1016/j.heli-yon.2018.e00850
- 24. Fama, E., & Jensen, M. (1983). Separation of Ownership and Control. *Journal of Law and Economics*, 26(1), 301-325.
- 25. Fung, B. (2014). The Demand and Need for Transparency and Disclosure in Corporate Governance. *Universal Journal of Management*, 2(2), 72-80. DOI: 10.13189/ujm.2014.020203.
- 26. Funmi, B. (2014). *Code of Corporate Governance for the Insurance Industry, Insurance and you.* RetrievedMay 1, 2020, from: https://www2.deloitte.com/content/dam/Deloitte/ng/Documents/centre-for-corporate-governance/code-of-good-corporate-governance-for-the-insurance-industry-innigeria.pdf
- 27. Georgiou, J. (2010). Verification of a building defect classification system for housing. *Structural Survey*, 28(5), 370-383.
- 28. Green, S. (2005). Sarbanes-Oxley and the Board of Directors: Techniques and Best Practices for Corporate Governance. New Jersey: John Wiley and Sons, Inc.
- 29. Hafiza A., Hashim, I., & Susela S.D. (2008). Board Independence, CEO Duality and Accrual Management: Malaysian Evidence. *Asian Journal of Business and Accounting*, 1(1), 27-46.
- 30. Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate Data Analysis*. 7<sup>th</sup> Edition. Upper Saddle River, New Jersey: Prentice Hall.
- 31. Hermalin, B. E., & Weisbach, M. S. (2003). Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature. *Federal Reserve Bank of New York Economic Policy Review*, 9(1), 7–26.
- 32. Isik, O., & Ince, A. R. (2016). Board size, board composition and performance: An investigation on Turkish banks. *International Business Research*, *9*(2), 74-84. https://doi.org/10.5539/ibr.v9n2p74
- 33. Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48(3), 831-880.
- 34. Kajola, S. O. (2008). *Corporate Governance and Firm Performance: the Case of Nigerian Listed Firm.* Retrieved May 2, 2020, from: http://www.sciepub.com/reference/221156.
- 35. Karamanou, I., & Vafeas, N. (2005). The Association between Corporate Boards, Audit Committees, and Management Earnings Forecasts: An Empirical Analysis. *Journal of Accounting Research*, 43, 453-486
- 36. Kim, J., et al. (2008). Chemosensitization prevents tolerance of Aspergillus fumigatus to antimycotic drugs. *Biochem Biophys Res Commun*, *372*(1):266-71
- 37. Kline, R. B. (2005). *Principles and Practice of Structural Equation Modeling*. 2<sup>nd</sup> Edition. New York: Guilford.
- 38. Lamichhane, P. (2018). Corporate Governance and Financial Performance in Nepal. *NCC Journal*, *3*(1), 108–120. https://doi.org/10.3126/nccj.v3i1.20253
- 39. Lindo, D.K. (2008). Asset Management is Your Job. SuperVision, 69(1), 14-18.
- 40. Logan, D., Roy, D., & Regelbrugge, L. (1997). *Global Corporate Citizenship Rationale and Strategies*. New York: The Hitachi Foundation.
- 41. Lorne, F.T., & Dilling, P. (2012). Creating Values for Sustainability: Stakeholders Engagement, Incentive Alignment, and Value Currency. *Economics Research International*, 2012(1), 1-9.
- 42. Mugenda, O. M. & Mugenda, A. G. (2003). Research methods: Quantitative and qualitative Approaches. Nairobi: Acts Press
- 43. Mak, Y., & Kusnadi, Y. (2005). Size really matters: further evidence on the negative relationship between board size and firm value. *Pacific-Basin Finance Journal*, 13(1), 301-318.

- 44. Marsigalia, B., Giovannini, R., & Palumbo, E. (2019). *Corporate Governance and Firm Value: An Empirical Investigation of The Wine Companies*. Corporate Governance: Search for the Advanced Practices.
- 45. Mohan, A., & Chandramohan, S. (2018). Impact of Corporate Governance on Firm Performance: Empirical Evidence from India (March 3, 2018). *IMPACT: International Journal of Research in Humanities, Arts and Literature, 6*(2), 209-218.
- 46. Monteiro, A. (2006). A quick guide to financial ratios: education. *Personal Finance*, 2006(307), 8-10.
- 47. Musa, B., Abdulrasheed, A., & Umar, H. (2020). Effect of board size and ownership structure on deposit money banks financial performance in Nigeria. *Management and Social Sciences* (*GOJAMSS*), 18(January 2020), 79-90.
- 48. Muscat Securities Market. (2019). *Annual reports*, 2004-2018. Retrieved on October 18, 2020, from: https://www.cma.gov.om/Home/AnnualReportFileDownlad/11.
- 49. Muth, M., & Donaldson, L. (1998) Stewardship Theory and Board Structure: A Contingency Approach. *Corporate Governance*, *6*(1), 2-28.
- 50. Nguyen, T. H., & Nguyen, H. A. (2020). The Impact of Capital Structure on Firm Performance: Evidence from Vietnam. Journal of Asian Finance, Economics and Business, 7(4), 97-105. https://doi.org/10.13106/jafeb.2020.vol7.no4.97
- 51. Ojeka, S. A., Iyoha, F. O., Ikpefan, O. A., & Osakwe, C. (2017). Does reformed code of corporate governance 2011enhance the market performance of the firms in Nigeria? *International Journal of Economic Performance*, 11(1), 155-164.
- 52. Organization for Economic Cooperation and Development. (2004). *Software: 1987-1996, Acrobat is a trademark of ADOBE*. Retrieved January 31, 2020, from:https://www.oecd.org/daf/ca/oecd-principles-corporate-governance-2004.htm
- 53. Pallant, J. (2010). SPSS Survival Manual. 4th Edition. New York: McGraw-Hill.
- 54. Rappaport, A. (1986). Creating Shareholder Value: The New Standard for Business Performance. New York: The Free Press.
- 55. Roman, A. (2014). *The Three Pillars of Corporate Governance*. Retrieved February 2, 2020, from: https://www.azeusconvene.com/articles/three-pillars-of-corporate-governance
- 56. Silwal, P.P. (2016). Effects of Corporate Governance on the performance of Nepalese Firms. *The International Research Journal of Management Science*, 1 (1), 42-59.
- 57. Smith, N., Smith, V., & Verner, M. (2006). Do women in top management affect firm performance? A panel study of 2,500 Danish firms. *International Journal of Productivity and Performance Management* 55 (7), 569–593.
- 58. Stock, J.H., & Watson, M.W. (2007). *Introduction to Econometrics*. (2<sup>nd</sup> Ed.). Boston: Addison Wesley.
- 59. Stoeberl, P. A., & Sherony, B.C. (1985). Board efficiency and effectiveness. In E. Mattar and M. Ball (eds.) *Handbook for Corporate Directors*. New York: McGraw-Hill.
- 60. Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics*. 5th Edition. Upper Saddle River, NJ: Pearson Allyn and Bacon
- 61. Ubhar Capital (SAOC). (2017). Arabian Falcon IPO Prospectus\_English.pdf, 2017. Retrieved October 23, 2019, from: https://www.u-capital.net/pdf/Arabian%20Falcon%20IPO%20Prospectus English.pdf
- 62. Uma,S. (2003). Research Methods for Business: A Skill Building Approach. 4th Edition. USA: John Wiley & Sons, Inc.
- 63. Vafeas, N. (1999). Board meeting frequency and firm performance. *Journal of Financial Economics*, 53(1), 113-142.
- 64. Yasser, Q. R. (2011a). Corporate Governance and Performance (A Case Study for Pakistani Communication Sector). *International Journal of Trade, Economics and Finance*, 2 (3), 204-211.
- 65. Yermack, D. (1996). Higher market valuation of companies with a small board of directors, *Journal of Financial Economics*, 40(2), 185-211