FORENSIC ACCOUNTING AND CORPORATE GOVERNANCE MATURITY: CASE OF PUBLIC LISTED COMPANIES IN OMAN

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FORENSIC ACCOUNTING AND CORPORATE GOVERNANCE MATURITY: CASE OF PUBLIC LISTED COMPANIES IN OMAN

by

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LIST OF ABBREVIATIONS

AICPA	American Institute of Certified Public Accountants
ARC	Audit and Risk Committee
AVE	Average Variance Extracted
BOD	Board of Directors
CMM	Capability Maturity Model
CMA	Capital Market Authority
CEO	Chief Executive Officer
CFO	Chief Financial Officer
COO	Chief Operating Officer
COSO	Committee of Sponsoring Organizations of the Treadway Commission
CR	Composite Reliability
CGM	Corporate Governance Maturity
DV	Dependent Variable
FA	Forensic Accounting
FAD	Forensic Accounting Detective Role
FAP	Forensic Accounting Preventive Role
FRA	Fraud Risk Assessment
GoF	Goodness of Fit
GCM	Governance Capability Maturity
GCC	Gulf Corporation Council
IV	Independent Variable
IIA	Institute of Internal Auditors
IA-CM	Internal Audit Capability Model
MENA	Middle East and North Africa

MV	Mediating Variable
MMM	Modes of Managing Morality
MSM	Muscat Stock Market
OECD	Organization of Economic Cooperation and Development
PLS	Partial Least Squares
PLS-SEM	Partial Least Squares–Structural Equation Modeling
PCAOB	Public Companies Accounting Oversight Board
RC	Remuneration and compensation committee
RMM	Risk Maturity Model
SOX	Sarbanes-Oxley Act
SEC	Securities and Exchange Commission
SM	Senior Management
SRMR	Standardized Root Mean Square Residual
SPSS	Statistical Package for Social Science
UAE	United Arab Emirate
USA	United States of America
VAF	Variance Accounted For
VIF	Variance Inflator Factor

PERAKAUNAN FORENSIK DAN KEMATANGAN TADBIR URUS KORPORAT: KES SYARIKAT TERSENARAI AWAM DI OMAN

ABSTRAK

Kematangan tadbir urus korporat dan perakaunan forensik dapat dianggap sebagai komponen penting dalam persekitaran perniagaan semasa. Aktiviti audit tradisional telah mengabaikan peranan pengesanan penipuan lalu mewujudkan jurang jangkaan. Oleh hal yang demikian, usaha memasukkan perakaunan forensik boleh dianggap sebagai bahagian penting dalam sistem pengurusan tadbir urus. Dalam persekitaran perniagaan kini, sistem tadbir urus korporat dilihat hanya sebagai alat untuk melengkapkan kotak semakan; namun pelaksanaan kematangan tadbir urus korporat dapat mengatasi amalan tradisional ini, kerana amalan ini menentukan betapa matang sesebuah organisasi dalam usaha untuk mencapai matlamat, objektif dan kepuasan hati pihak berkepentingan. Oleh itu, kajian ini telah membangunkan rangka kerja penyelidikan konseptual untuk meninjau hubungan yang berpotensi wujud antara perakaunan forensik dengan kematangan tadbir urus korporat. Rangka kerja penyelidikan ini dibangunkan berdasarkan kajian literatur menyeluruh, kajian pengamatan dan pendapat pakar daripada kalangan ahli akademik dan profesional. Tiga teori pengurusan digunakan iaitu teori agensi bagi mewakili perakaunan forensik, teori laluan kebergantungan dan pertemuan bagi kematangan tadbir urus korporat kerana teori ini mentakrifkan struktur dan menggerakkan perubahan yang diperlukan dan teori segi tiga penipuan (fraud triangle theory) untuk membuat penilaian risiko penipuan yang menjadi pengantara dalam kajian ini. Dalam kajian ini, perakaunan forensik ialah pemboleh ubah tak bersandar dan kematangan tadbir urus korporat ialah pemboleh ubah bersandar. Perakaunan forensik diukur melalui dua dimensinya iaitu peranan pencegahan dan peranan detektif, manakala kematangan tadbir urus korporat diukur melalui empat konstituen utama iaitu lembaga pengarah, jawatankuasa audit dan risiko, jawatankuasa saraan dan pengurusan atasan. Kajian ini menggunakan pendekatan kuantitatif melalui soalan kaji selidik yang dibuat untuk mengumpulkan data daripada semua 115 syarikat tersenarai awam di Oman. Penemuan dan hasil kajian menunjukkan bahawa peranan pencegahan dan detektif dalam perakaunan forensik mempunyai hubungan langsung yang positif dengan pentaksiran risiko penipuan dan kematangan tadbir urus korporat. Pentaksiran risiko penipuan mempunyai hubungan langsung yang positif dengan kematangan tadbir urus korporat dan pentaksiran risiko penipuan sebagai pengantara antara peranan pencegahan oleh perakaunan forensik dengan kematangan tadbir urus korporat. Sumbangan kajian ini pada hakikatnya adalah bahawa perakaunan forensik dianggap sebagai aktiviti dalaman dan kesannya terhadap kematangan tadbir urus korporat diukur buat kali pertama. Kajian semasa menawarkan cara penyelesaian dan cadangan yang mungkin untuk memasukkan perakaunan forensik sebagai sebahagian daripada sistem pengurusan tadbir urus dan menggunakan rangka kerja kematangan untuk meningkatkan prestasi organisasi. Rangka kerja penyelidikan konseptual yang dicadangkan dalam kajian ini boleh digunakan dalam mana-mana organisasi. Kajian ini juga dapat memberikan manfaat kepada pengawal selia, sistem pengurusan tadbir urus organisasi, badan profesional dan juruaudit.

FORENSIC ACCOUNTING AND CORPORATE GOVERNANCE MATURITY: CASE OF PUBLIC LISTED COMPANIES IN OMAN

ABSTRACT

Corporate governance maturity and forensic accounting can be considered as an essential component for the current business environment. Traditional audit activities have overlooked the role towards fraud detection which created expectation gaps; and due to this reason, inclusion of forensic accounting can be considered as an integral part in governance management system. In recent business environment, corporate governance system is becoming just a mere compliance check box tool; however, implementation of corporate governance maturity can overcome this traditional practice, as it defines how mature is the organization towards achievement of its goals, objectives and satisfied stakeholders. Thus present study developed a conceptual research framework for potential relationship between forensic accounting and corporate governance maturity. Research framework was developed in light of comprehensive literature review, observational study and expert opinions from academicians and professionals. Three management theories were applied namely agency theory for forensic accounting representing it as an agent, path dependence and convergence theory for corporate governance maturity as it defines structure and necessitated the required changes and fraud triangle theory for fraud risk assessment which is mediator in this study. Forensic accounting is independent variable and corporate governance maturity is dependent variable in this study. Forensic accounting is measured via its two dimensions namely preventive role and detective role, whereas corporate governance maturity is measured via its four major constituents namely board of director, audit and risk committee, remuneration committee and senior management. A quantitative approach through a survey question was used to collect data from all 115 public listed companies in Oman. Findings and results suggests that preventive and detective role of forensic accounting has positive significant direct relationship with fraud risk assessment and corporate governance maturity. Fraud risk assessment has positive significant direct relationship with corporate governance maturity and fraud risk assessment mediates between preventive role of forensic accounting and corporate governance maturity. Furthermore, corporate governance maturity does not significantly vary amongst different sectors. Contribution of this study lies in the fact that forensic accounting is considered as in-house activity and its impact on corporate governance maturity is measured for first time. Present study offered probable solutions and recommendations of including forensic accounting as part of governance management system and utilization of maturity framework to improve organizations' performance. Conceptual research framework proposed in this study can be utilized in any organization. This study can also be beneficial for regulators, governance management system of organization, professional bodies and auditors.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Corporate governance maturity is an internal process (Massie, 2012) which can be affected or improved internally. If internal controls are not strengthened by the use of expertise within an organization, then corporate governance can disintegrate, corporate governance maturity (CGM) will be difficult to achieve and above all, it will also raise the ventures for fraud and embezzlement. Internal controls and related implementing activities can be available within an organization which may assists in enhancing the efficiency and effectiveness of governance process, mitigate fraudulent activities and also foster satisfied shareholders (Anidjar, 2019; Khanna, 2017; Peltier-Rivest, 2017). For the purpose of this study, fraud risk assessment is the internal control and forensic accounting preventive and detective role is the activities.

CGM is not the same as corporate governance. Terms which are commonly used for corporate governance are "good," "bad," "aspirational" and "best practices" (Massie, 2012). It is the maturity of the corporate governance within an organization which is required to be identified; ensuring existence of good or bad corporate governance and positive and honest relationship between organization and its stakeholders (Schumpeter, 2010; Kocmanova & Simberova, 2012). Evaluation and measurement of corporate governance offer organized roadmap towards code implementation and also define measurable steps for organizations to achieve mature corporate governance (Massie, 2012; Bramont, 2012).

CGM was utilized by Deloitte and Touche (one of the world Big 4 audit firms) for the very first time by converting the King III codes of corporate governance into a quantitative model. CGM is defined as industry questioner framework that lists key attributes associated with discrete levels of maturity on the continuum to becoming a better governed enterprise. CGM can help companies identify where corporate governance capabilities may lie on the continuum/ range of maturity (Deloitte, 2010).

King III codes of corporate governance were issued in South Africa in 2009 for which Deloitte introduced King III Maturity Dashboard. Open ethics and compliance group (OCEG) also presented the governance maturity model which defines the stages starting from formation to mature. This model was further refined in 2009 when OCEG publicized principal performance approach and link it with governance maturity (Deloitte, 2010; Massie, 2012).

Fraudulent incidents created an economic and financial crisis not only in the established markets but also in emerging markets (Chambers, 2010). The financial crisis and economic downturn are the indicators of corporate governance failures (Kumar & Singh, 2013) which always existed but never noticed by either senior management or board of directors such as in case of Satyam computers, board were made aware of the fraud once it was reported by CEO himself that he conducted the fraud (Singh, Kumar, & Uzma, 2010). Probable reasons for such fraudulent incident and consequent economic collapse are non-availability of fraud detection expertise and lack of risk management activities coupled with weakness in relevant and related regulations (Sahlman, 2010). For the majority of fraud encountered organizations, corporate governance is utilized only as compliance check box (Zhu, 2016; Fernando, 2009), instead of being employed as measuring system towards quantum of maturity with the ultimate aim of achieving shareholders' satisfaction.

The concept of corporate governance is relatively new in Oman as recent codes were introduced in 2016 and previous codes were introduced in 2002 (CMA, 2016). There are very few studies available in the area of corporate governance related to the Omani market. No country is safe in terms of fraud (Bhasin, 2013) and it includes Oman as well. Few fraud cases were reported in Oman which can be categorized as bribery and financial misconduct frauds (Reuters, 2014a; Reuters, 2011). These frauds are reported in public listed companies and government control entities. Fraud median losses which are related to the Middle East and North Africa (MENA) region amounts to USD 275,000 with more than 70 affected organizations (ACFE, 2016). Furthermore, for the occupational frauds in MENA region, following Table 1.1 demonstrates the fraud schemes adopted by fraudsters:

Table 1.1

Fraud Schemes in Middle East and North Africa Region

Scheme	**Number of Cases**	**Percent of Cases**
Corruption	45	57.0%
Non-cash	21	26.6%
Cash on hand	15	19.0%
Billing	12	15.2%
Expense reimbursement	9	11.4%
Skimming	9	11.4%
Check tampering	6	7.60%
Financial statement fraud	5	6.30%
Cash larceny	4	5.10%
Payroll	2	2.50%
Register disbursements	1	1.30%

Source: ACFE (2016)

Occurrence of fraud are not only due to the failure of corporate governance but also exhibited poor accounting practices which were not detected by the conventional auditors (Vinita, Joe & Lee, 2008; Fernando, 2009). Controlling ownership and minority shareholders protection is difficult through conventional corporate control mechanism, which means that the system requires process enhancement which can be provided by forensic accounting (Fan & Wong, 2004). Besides, auditors have overlooked the role of identifying fraud which had created an expectation gap between shareholders and auditors (Adedire, 2016). A similar concept is defined by ACFE (2016), that financial statement auditors' (i.e., external auditors) are not fraud examiner and also states that, external auditors cannot be considered as the most efficient way to detect or limit fraud.

In correspondence to Agency Theory, it is necessary to have robust and stable corporate governance practices; as principal (shareholders) are not responsible for setting strategy or carrying out business activities (ACFE, 2016; Afza & Nazir, 2016). These corporate governance practices or codes assist in preventing fraud and fraudulent activities. These codes can be further strengthened by the utilization of the right anti-fraud expertise. Moreover, the aftermath of corporate accounting scandals and the resultant outcry for transparency and reliability in reporting created two outcomes first is "forensic accounting" and second is "improvement in corporate governance" (Vinita, Joe & Lee, 2008). Improvement in corporate governance can be termed as CGM and forensic accounting can be considered as in-house control providing its services towards preventing and detecting fraud.

For the achievement of CGM, effectiveness of forensic accounting (FA) can be enhanced by utilization of fraud risk assessment. Fraud risk assessment (FRA) provides the control mechanism which drafts and links all the related risks, its intensity and impact. With regards to the effectiveness of FRA as control, the involvement of entire governance management is obligatory which can also include FAP and FAD. Preventive and detective role of FA is positioned and capable of enhancing corporate governance because of its skills and knowledge (Bhasin, 2013a; Ali & Oseni, 2010), these skills and knowledge includes but not limited to accounting, auditing, investigative, criminology, risk analysis and problem solving (Crain, Hopwood, Pacini, & Young, 2016). Here the question arises, if forensic accounting can improve corporate governance then why forensic accounting cannot become a function of governance management?

Several studies are available which define forensic accounting as an institution/ organization or a person who appears or calls upon after the fact (i.e., when the fraud has actually happened). For instance Odelabu (2016), Adrian, Lawrence, and Lee (2009), Gee (2014) and Nigrini (2012) investigated the role of forensic accounting as detection control, litigation expert, and fraud finder. There are only a few studies available which stress that forensic accounting should be a part of corporate governance. However, limited study is available which defines the relationship of forensic accounting as a governance management system and as part of the organization's management team. Similar concept is defined by Bhasin (2013a) that literature on FA and its adoption is limited and they are US centric only. Governance management is the one which is directly responsible for the governance of organization, i.e., board of directors, audit and risk committee, governance and compliance committee and internal audit department (Hermanson & Rama, 2016).

Losses incurred and attained by organizations can be categorized as measurable in monetary terms and non-measurable in monetary terms (e.g., loss of reputation and loss of shareholders' confidence). In accordance with COSO (2016) and OECD (2014) reputation risk and fraud risk should always be available in organization’s top ten risks as both of these risks can decimate whole organization and all of its reputation. Savior from such a situation is proper implementation and achievement of CGM and FRA (Pretorius, 2014; Hermanson & Rama, 2016).

CGM ensures that the organization is on its right path (Deloitte, 2010). CGM can be measured in several frameworks provided by many authorities but all are pointing towards one direction which is the achievement of true corporate governance (Wilkinson & Plant, 2012). There could be many attributes or constituents directly associated with achievement of CGM; however, the major attributes are board of directors (BOD), audit and risk committee (ARC), remuneration and compensation committee (RC) and senior or executive management (SM).

In accordance with recent codes of corporate governance issued by capital market authority (CMA, 2016) in Oman, much importance is provided to the roles and duties of BOD, ARC, RC, and SM thus composing them as the major player towards corporate governance which can strive to achieve CGM. It is worth mentioning that, Government organizations or Government control entities in Oman are still lagging in the implementation of corporate governance (Kutty, 2017) and are recently instructed to follow the codes of corporate governance (OEAA 2019). In this scenario, it is high time that codes are implemented properly, all risks are identified, organizational vision is linked with codes and organizations strive towards attainment of CGM.

Effective FRA requires a continuous and ongoing approach and also requires an expert who can perform such an assessment. It is worth mentioning that both Institute of Internal Auditors (IIA) (2016) and American Institute of Certified Public Accountants (AICPA) (2013) negated the role of identifying the fraud and labeled it as management's responsibility and this role of external auditors as mentioned in AICPA (2013), is acceptable to the Securities and Exchange Commission of the United States (Singleton & Singleton, 2010; Johnson, Ayoib & Shamsiah, 2014).

There is no doubt and in accordance with regulatory standards, it is the management's responsibility to identify and report fraud. However, in doing so, management requires FAP, FAD and FRA. It is worth mentioning that past studies only examine the relationship with one constituent of CGM and not all four. This study is intended to explore the relationship of all major constituents of CGM and thus makes this study unique in its own way.

This study proposes that FRA poses a mediating role between FAP, FAD and CGM by linking path dependence and convergence theory, fraud triangle theory, and agency theory in its relationship. FRA is the cornerstone of fraud risk management and also plays vital role in shaping the organization's goals, strategies and objectives

(KPMG, 2014). Fraud risk assessment can only be performed by an expert who can be considered as forensic accounting. Bhasin (2017) stated that fraud has existed in our society for centuries long. It is estimated that the typical business loses 5 percent of its revenues each year to fraud; this equates to $50,000 for every US Dollar one million in annual revenues (ACFE, 2016). Such a disastrous situation requires certain additional steps and one of which is acquiring the assistance of forensic accounting towards implementing FRA and enhancing and strengthening corporate governance.

This study also attempts to integrate relevant empirical research and literature to extend the intended potentials of forensic accounting on corporate governance maturity particularly in public listed companies in Oman where corporate governance is still relatively a new concept. Moreover, this study is undertaken to identify that either preventive or detective role of forensic accounting enhances corporate governance maturity. It is worth mentioning that forensic accounting is majorly perceived as detective role instead of a preventive role (Singleton & Singleton, 2010). This study also wants to establish that forensic accounting is an essential and important part of the governance management system. Existing literature provides less evidence for the role of forensic accounting which can enhance corporate governance maturity. Therefore this study offers great opportunity to explore that how CGM is enhanced by FAP and FAD with FRA as mediator. Likewise, this study also wants to highlight that forensic accounting should be included in codes of corporate governance as a mandatory constituent and forensic accounting should be operating under its own rules and regulations.

1.2 Problem Statement

Concept of corporate governance in Gulf Corporation Countries (GCC) which also includes Oman is relatively **immature**; moreover, for many of the public listed companies vital information is not available such as unavailability of websites, lack of information on certain companies on the stock exchange and non-publication of consequential five year annual reports (Pillai & Al-Malkawi, 2016). In the absence of these information, it will be difficult for investors or shareholders to identify the activities in Organization, related parties transactions or fraudulent financial statements.

Corporate governance mechanisms in Oman is not as effective as in more developed countries (Baatwah, Salleh, & Ahmed, 2015; Qurashi, 2017) and regulators should impose and encourage substantial corporate governance practices instead of merely adhering to pro-forma practices (Baatwah, Salleh, & Ahmed, 2015). In the light of the conclusion provided by Baatwah et al., (2015), it can be reasoned that corporate governance is only utilized as compliance check box instead of it being measured to know its maturity. Although new code of corporate governance were issued in 2016 (CMA, 2016), however these codes still lack traits of fraud prevention (FAP) and detection (FAD), board characteristics, board knowledge and risk assessment. There is no complete data available in Oman to verify or confirm the level of frauds in the public sector; however, fraud exists and is still occurring. Recent Fraud cases in Omani companies ranges from USD 2.9 million to USD 39 million (Reuter, 2013; MSM, 2019). Control of corruption and regulatory quality scores in Oman are the same in the year 2016 as they were in the year 2006 (World Bank, 2016) which demonstrates that there is no improvement and more efforts are required to attain enhanced controls and regulatory quality which can eventually leads towards attainment of CGM.

There are limited past studies available in the area of corporate governance related to Omani market and researcher was not able to find any study for CGM pertaining to Oman. The available corporate governance studies demonstrates the concept of corporate governance with financial reporting time lines, compliance with accounting standards, relationship of corporate governance with financial performance, comparison of codes between GCC countries and potential challenges faced towards implementation of new codes of corporate governance (Ellen, 2002; Al-Shammari, Brown, & Tarca, 2008; Baydoun, Maguire, Ryan, & Willett, 2013; Shehata, 2015; Baatwah, Salleh, & Ahmad, 2015; Sanyal & Hisam, 2018; Yılmaz, 2018). Furthermore researcher was also not able to find studies concerning Omani market explaining, how corporate governance can be considered as mature or immature and how FAP and FAD can be considered as part of the governance management system.

Frequency in corporate scandals impacted the governance and also damaged the investors' confidence (Xiaolu, Jieji, & Jian, 2016). Financial statement frauds/ scandals indicate poor corporate governance, lack of accountability, and misrepresentation of financial information (Dănescu, Oncioiu, & Spătăcean, 2019). Poor corporate governance leads towards non-mature corporate governance, as non-mature governance creates organizational structural problems, corruption and ethical problems (Chang, Cohen, McCarty, Dennis, Traci & McConnell, 2015; Rivera & Karlsson, 2017; Wessels & Wilkinson, 2016).

In Omani market and with regards to the formation of ARC, RC and BOD; members are selected based on personal relationships which do not take into effect any qualification, experience or Law requirements. Such practice jeopardizes the very existence of the committee and also the board. Instances are observed in the Omani market where organizations are not following the Law or codes towards Board and its related committee's formation and their meetings. Thus, creating example towards inadequate governance structure and non-compliance with the Law or codes (Services, 2018). Such a problematic governance structure and non-compliances also encourages related parties transactions, erroneous disclosure and non-independent auditors (Mokhtar & Mellett, 2013) and can be considered as barriers for the achievement of CGM.

Enron, World Com, Parmalat and organizations of a similar sort are well known for their fraudulent activities. All these organizations operate in different modes and provide different services to clients; however there is one thing common in all of these companies and that is non-achievement of CGM (Pretorius, 2014). It is worth mentioning that these fraud encountered organizations were established at different dates and were operating for years which are different from each other. Organizations are suffering from fraud despite the availability of policies and controlling authorities (Bhasin, 2016) and amounts and instances of fraud are increasing every year (ACFE, 2016). It is a fact that fraud cannot be eliminated, however it can be controlled and minimize by utilization and achievement of governance maturity (Wilkinson, 2014) which can also be interpreted as corporate governance maturity.

The interests of investors and other stakeholders are usually protected by a three-tier security system which comprises of governance codes, organization's management and the controllers such as auditors (Bhasin, 2016). These three tiers lead to one another for the achievement of CGM and on the whole, becomes the overall process of CGM. In consistency with path dependence theory, if any one of these three tiers is not performing effectively and efficiently, then the whole process could collapse (Pittroff, 2016; Butt, 2012). In terms of Omani market and from the auditor's perspective, CMA already suspended services of KPMG and Moore Stephens and also issued warning letters to PWC (Reuters, 2018; Y-Magazine, 2018; Service, 2017). These suspensions are made due to violation of Law which is directly related to their performance of Public Listed Companies audits. Furthermore, CMA also suspend trading of shares for public listed companies for their violation of Companies Law which can attract chances for insider trading, conflict of interest and manipulating rights of minority shareholdings (James A. E., 2016; Kutty S. , 2015).

In the light of preceding paragraph, it can be asserted that organizations, its management and auditors are lacking behind in performing their duties towards shareholders. Furthermore organizations might fail to achieve corporate governance due to a) lack of well-formulated policies, b) non-implemented policies and standards of achieving corporate governance, c) lack of honesty, integrity, and transparency in financial reporting, c) inefficient and ineffective system of risk assessment, and d) non-independent board and audit committee (Vinita, Joe & Lee, 2008; Wilkinson, 2014; Pretorius, 2014; Wessels & Wilkinson, 2016). If corporate governance is not attained than it would be difficult to achieve CGM. Moreover the current control mechanism is not enough alone and FA is the best suitable to detect and prevent such non-compliances and fraudulent financial transactions (Bhasin, 2013a; Bhasin, 2016).

FAP and FAD can be considered as experts towards identifying the risk related to fraud (Bhasin, 2013a). It is very obvious that fraud is the major cause for the failure of CGM and best option available, which is FA, is not considered as part of the governance management system. Currently, the role of FA is not seen as preventive (FAP) or detective measure (FAD). FA is only required when management or state institutions considers it necessary and always after the fact. Such treatment of FA is also obvious in the codes of corporate governance developed by CMA (2016) and many other authorities or bodies for instance SOX and Organization of Economic Cooperation and Development (OECD).

The role of FA is only limited as an outside party and towards fraud detection, litigation support, divorce claim verification, insurance claim verification and expert witness (Singleton & Singleton, 2010; Charles, Ramona, & Suzanne, 2009). It is worth mentioning that internal and external auditors are governed by their own standards and regulations whereas FA operates without any standards or regulations. Due to non-availability of standards and regulations, FA's importance and significance becomes ineffective and always considered as hired consultant (as and when required) and a third party claim verifier.

It is the responsibility of auditors to assure transparency in financial statements; moreover, auditors are also obliged to provide opinion on financial statements that organization's financials are free of fraud and free from material misstatement (International Organization of Supreme Audit Institutions, 2016). However, internal and external auditors overlooked the role for fraud detection (AICPA, 2017a; IIA 2016; Salem, 2012; Francine, 2018). Auditor's opinion is considered as persuasive verdict towards assurance of "true and fair view" of organization's performance, but unfortunately in MENA (including Oman) when it comes to fraud detection; auditor's performance is considered insignificant (ACFE, 2016). Additionally and in accordance with Generally Accepted Auditing Standards (GAAS) mentioned in AU-C section 240 (AICPA, 2017a):

> "*…the auditor is primarily concerned with* ***fraud that causes a material misstatement*** *in the financial statements…*" and *…."The primary* ***responsibility for the prevention and detection of fraud rests with both those charged with governance of the entity and management…"***

There is no doubt that it is the management's and board's responsibility to detect and fix fraudulent activities and transactions but in doing so, management requires knowledge and proficiency (expertise) and these expertise can only be provided by FA in the shape of FAP and FAD. Moreover, IPPF Section 1210.A2 (IIA, 2016) states that:

> *"Internal Auditors must have sufficient knowledge to evaluate the risk of fraud and the manner in which it is managed by the organization,* ***but are not expected to have the expertise of a person whose primary responsibility is detecting and investigating fraud."***

Thus, it is always recommended for the internal audit profession to obtain expert services or manage a department in a manner which contains all the necessary business expertise (IIA, 2016). In the current business environment, fraud testing is becoming a necessity (Gabriella, 2012), which can be provided by FA (Enofe et al., 2015). Accordingly, it is proposed by many scholars that all auditors should enhance their audit programs and include fraud testing as a separate audit or additional test in their regular audits (Singleton & Singleton, 2010; Leonard, 2016). It is worth mentioning that all audit firms in Oman do not have the services of either FAP or FAD. In cases where their services are required, expertise is called upon from neighboring countries.

Fraud risk assessment (FRA) supports organizations in developing controls with the aim of achieving CGM (Switzer, Mitchell, & Mefford, 2015). FRA is the most effective internal control directed towards protecting reliability and integrity of the financial reporting process; however, it is overlooked by many organizations and also by those who are charged with control of the governance namely BOD, ARC, RC and SM (Rodgers, Söderbom & Guiral, 2015). In accordance with survey conducted by KPMG (2013), 60% of respondents informed that fraud is occurring due to lack or poor knowledge towards FRA and it requires major improvement. Furthermore PWC Middle East (which also includes Oman) conducted live poling session of 150 participants where 40% of respondents indicated that their organizations have never performed a FRA (Observer, 2017). Point of consideration is that these organizations are aware that they are under the risk of fraud but still they are not performing FRA at all. There is also no compulsory disclosure requirement made by CMA towards FRA, its evaluation and fraud assessment.

It is one of the common understandings in Oman that only financial sector is well regulated and controlled (Lars Hodel, 2017); thus the financial sector always demonstrates good corporate governance. However, it is not necessary that mature organizations or sectors will always have mature corporate governance and immature organizations or sectors will always have immature corporate governance. As stated by O'Connor and Byrne (2015) it is the maturity of the governance which defines organizational maturity and not the organization or its related sectors defines mature corporate governance.

From cases like Enron, WorldCom, Madoff, and Satyam it is evident that fraud is conducted by board or senior management due to several and various reasons (Fernando, 2009, Butt, 2012). If fraud awareness's checks and assessments are not available within the organization, then it will be difficult to have satisfied shareholders and difficult to achieve CGM. Furthermore, if adequate inspection is not provided then whole governance mechanism could collapse and it will be impossible to attain and or maintain corporate governance (Bhasin, 2013; Wilkinson, 2014), additionally, if organizations fail to achieve corporate governance, then it would be impossible to accomplish CGM.

1.3 Research Questions

In accordance with the problems discussed above, the proposed research questions are**:**

1. Is there any association between preventive and detective role of forensic accounting and corporate governance maturity?
2. Is there any relationship between preventive and detective role of forensic accounting and fraud risk assessment?
3. Is there any correlation between fraud risk assessment and corporate governance maturity?
4. Whether fraud risk assessment mediates relationship between preventive and detective role of forensic accounting and corporate governance maturity?
5. Is there any difference in corporate governance maturity between different sectors?

1.4 Research Objectives

The main objective of this study is to investigate the effect of forensic accounting dimensions on corporate governance maturity. Current research is undertaken to examine the indirect relationship of forensic accounting on corporate governance maturity through mediation effect of fraud risk assessment. Relationship of forensic accounting is examined for its two dimensions namely preventive role of forensic accounting and detective role of forensic accounting whereas, relationship of corporate governance maturity is examined with its four major constituents namely board of directors, audit and risk committee, remuneration committee and senior management.

To answer the above-mentioned research questions, the following objectives are established.

RO1. To examine the association between preventive and detective role of forensic accounting and corporate governance maturity.

RO2. To investigate the relationship between preventive and detective role of forensic accounting and fraud risk assessment.

RO3. To identify correlation between fraud risk assessment and corporate governance maturity.

RO4. To examine the mediating influence of fraud risk assessment on preventive and detective role of forensic accounting and corporate governance maturity.

RO5. To examine the corporate governance maturity levels between different sectors.

1.5 Significance of the Study

Majority of fraud that affects normal public and or society occurs in public listed companies; therefore the significance of this study should be viewed in light of public listed companies in Oman. Furthermore, and if adopted this study can be beneficial for Government entities and private companies as well. The significance of this study is distributed further into three sections namely theoretical significance, practical significance and methodological significance which are explained below:

1.5.1 Theoretical Significance

Fraud exists in our society for centuries long and no nation is safe concerning fraud and fraudsters (Bhasin, 2017). This study highlighted that FA could be utilized as in-house preventive and detective measure. It is relatively new in its kind as majority of available studies demonstrated FA as an out-side party only and not related to organizational operations and objectives (Singleton & Singleton, 2010) with minimal or ordinal impact on CGM.

This study contributes to the existing compilation of literature and enhances the body of knowledge. Understanding of this study will be beneficial to offer a ground for future research and to further generate extensive knowledge on issues relating to FA and CGM. This study examined the mediating effect of FRA on the relationship between FA and CGM, the context that has not well studied. Moreover, this research specifically explores the extent to which the effects of FA dimensions on CGM may depend upon the effect of FRA in the context of agency theory, fraud triangle theory and path dependency and convergence theory.

1.5.2 Practical Significance

This research will provide support to professionals and regulatory authorities and assists organizations in setting up charters and promotes inclusion of FA in the governance management system. Additionally, this study will also provide guidelines to regulators and institutions (such as Institute of Internal Auditors) to include FA as compulsory part and not as an extra option. This study can also necessitate having separate standards and code of ethics for FA where FA will be the standalone body and will not be misperceived with regular audits. This study will also assist in enhancing charters or terms of references for BOD and its related committees so that fraud can be discussed as a major limitation for the achievement of true corporate governance and to include FA as in-house available activity. This study can also oblige organizations to conduct fraud risk management with focus on fraud risk assessment on regular basis and also to conduct governance maturity with focus to enhance shareholders' values.

1.5.3 Methodological Significance

This study developed the model for measurement of corporate governance maturity in the context of the Omani market and also defined the maturity rating scales. This scale is developed with regards to the four major constituents of CGM as these constituents can also be considered as attributes of CGM. Furthermore, this maturity model will contribute in the identification of maturity levels for organizations listed in MSM and will also substantiate that corporate governance is not for compliances purposes only but can be measured and can be utilized as strategy tool.

1.6 Scope of the Study

Focus of this study is CGM within Omani public listed companies. This study evaluated the relationship between FA and CGM with FRA as mediator. Target population is public listed companies of Oman. The questionnaire of the study was developed based on the previous studies and was distributed to personal who can respond on behalf of organization such as BOD, ARC, and SM. Unit of analysis for this study is public listed companies in Oman. Furthermore, PLS-SEM was utilized to analyze the data.

1.7 Definition of Key Terms

Key terms utilized in this research are forensic accounting (FA), preventive role of FA, detective role of FA, fraud risk assessment (FRA), corporate governance maturity (CGM), board of directors (BOD), audit and risk committee (ARC), remuneration and compensation committee (RC) and senior management (SM).

1.7.1 Forensic Accounting (FA)

For the purpose of this study forensic accounting can be considered as an activity available within organization.

1.7.1(a) Preventive Role of Forensic Accounting (FAP)

Preventive role represents that FA is working as an activity within organization towards preventive measures of fraud and fraud related activities.

1.7.1(b) Detective Role of Forensic Accounting (FAD)

Detective role represents that FA is working as an activity within organization towards detection of fraud and fraud related activities.

1.7.2 Fraud Risk Assessment (FRA)

For the purpose of this study, FRA is proposed as control to assess fraud in the organization which eventually assists in the achievement of corporate governance maturity.

1.7.3 Corporate Governance Maturity (CGM)

Corporate governance maturity is the key attribute associated with levels of maturity on the continuum to becoming a better-governed organization (Deloitte, 2010).

1.7.3(a) Board of Directors (BOD)

Board of directors can be defined as leaders of the organization who monitor organizations business and control its operations.

1.7.3(b) Audit and Risk Committee (ARC)

For the purpose of this study, ARC is a committee who ensure that senior management has robust internal controls in place and systems for risk management is available aiming at the safeguarding of shareholders' interests and organization's assets.

1.7.3(c) Remuneration Committee (RC)

For the purpose of this study, RC can be defined as committee engaged in assessing clear and transparent method towards preparing and monitoring nomination, compensation and remuneration policy and its related implementation

1.7.3(d) Senior Management (SM)

For the purpose of this study, senior or executive management plays major role towards the achievement of corporate governance, strategies, identification of gaps and implementation of policies.

1.8 Organization of Thesis

Current study structures as follows: the first chapter introduces the background of the study, identification of the research problem, the research questions and objectives, the significance of the study, scope of the study and definitions of the main research terms.

Second chapter discusses the review of literature of different variables related to this research. This chapter also incorporates the underlying theories and provides reasoning and justifications regarding selection of these theories for the present framework. Based on the literature review, this chapter discusses the theoretical framework and hypotheses of this study.

Third chapter explains the research methodology which is required towards achievement research objectives. It defines research design, the population of study, sampling design, including sample size, definitions and measurements, data collection procedures and data analysis techniques.

The fourth chapter presents the analysis and outcome of the empirical data collected. It includes the analytical results of descriptive analysis and also statistical confirmatory factor analysis and structural equation modeling. Finally, the conclusion drawn from the finding is to be presented and discussed in chapter five.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews related and relevant literature on the theoretical and empirical research related to FA, FRA, and CGM along with dimensions of FA. This chapter discusses the definition, concepts, dimensions and prior studies. Firstly, there is a review of existing literature in the field of CGM which provides the understanding of foundation and its related concepts. Moreover, this chapter also identifies theoretical and empirical gaps in the literature. Related and underline theories are reviewed towards the support of the theoretical model. This chapter also presents the framework for proposed research and hypotheses for empirical testing.

2.2 Corporate Governance Maturity

CGM can only be achievable when corporate governance exists in an organization. In accordance with Fernando (2009) and Butt (2012), organizations cannot operate without following corporate governance standards prescribed by regulators such as CMA and OECD. These standards define the minimum criteria for organizations to operate. Organizations follow these standards in the form of developed guidelines and contemplate it as good or bad governance. In order to completely understand the concept of CGM, it is necessary to describe brief and concise information for corporate governance and good corporate governance.

2.2.1 Corporate Governance

Creation of many governance committees is the result of financial fraud occurred in organizations and adversely impacted shareholders and society It is worth mentioning that despite the fact committees are formed, and policies are developed; fraud is still transpiring and with more intensity than before (Bhasin, 2013).

Corporate governance is an internal system comprising of policies, process, and people, which serves the needs of shareholder and other stakeholders (Baghel & Yadav, 2009). Corporate governance directs and controls management activities with positive business perception, objectivity, and integrity. Further, it is also elaborated by Earnest and Sofian (2013) that corporate governance is a system of structuring, operating and controlling a company with a view to achieve long term strategic goals to satisfy all the stakeholders. There are many definitions of corporate governance; however, the purpose is the same (Fernando, 2009). It exclusively depends upon organization how they want to implement corporate governance, i.e. either considering it as check box compliance or as compliance or monitoring system (Mazars, Ecoda & Ecgcn, 2015).

It is widely understood that organizations with better corporate governance are also able to demonstrate better results and attract more customers (Pintea & Fulop, 2015; Rahman & Bremer, 2016). Corporate governance system cannot perform itself and requires proper structures, rules, and regulations. Recent history is filled with frauds and scams even for those companies who won awards for best corporate governance organization such as Satyam Computer Services Ltd., a leading global consulting and information technology services provider, has won the