

A CONCEPTUAL FRAMEWORK: FORENSIC ACCOUNTING AND CORPORATE GOVERNANCE MATURITY

Ali Rehman¹, Fathyah Hashim^{2*}

¹Internal Audit Department, A'Sharqiyah University, Sultanate of Oman ²Graduate School of Business, Universiti Sains Malaysia, Penang, Malaysia *Corresponding Author: fathashim@usm.my

Article history		To cite this document:
Received date	: 13-7-2020	Rehman, A., & Hashim, F. (2020). A Conceptual
Revised date	: 10-8-2020	Framework: Forensic Accounting and Corporate
Accepted date	: 30-9-2020	Governance Maturity. International Journal of
Published date	: 1-12-2020	Accounting, Finance and Business (IJAFB), 5 (30), 52
		- 63.

Abstract: Corporate governance maturity can be achieved when fraud within the organizations are mitigated and controlled. These frauds and related activities have created the expectation gap and means to fulfill this gap is the evaluation of mature corporate governance and inclusion of forensic accounting as a system of governance management. This paper concentrates towards integrating related literature and empirical research to broaden the proposed capacities of forensic accounting on corporate governance maturity specifically for the public listed companies. This paper will identify the two major roles of forensic accounting namely preventive and detective roles. This paper also suggests that fraud risk assessment poses a mediating role between forensic accounting and corporate governance maturity by linking agency theory, fraud triangle theory, and path dependence theory. This paper recommends and stresses a promising proposition for future research and will also assist regulators and organizations to formulate or update their codes and policies.

Keywords: *corporate governance maturity, forensic accounting preventive role, forensic accounting detective role, fraud risk assessment.*

Introduction

Theranos, Satyam Computers, Bank Muscat and Oman National Gas are organizations which categorized under different types of the industries and offer different services. However, these organizations have few things in common such as they suffered from fraudulent activities, demonstrated immature corporate governance and they do not have forensic accounting as inhouse activity (Pedneault, Rudewicz & Silverstone, 2012; Pretorius, 2015; Couzin-Frankel, 2018; Rehman & Hashim, 2019). With excessive incidents of fraud and fraudulent activities, innovation is required in the field of corporate governance and fraud prevention (Vinita, Joe & Lee, 2008). This innovation can be termed as corporate governance maturity (CGM) and availability of fraud preventive and detective measures such as forensic accounting preventive role (FAP), forensic accounting detective role (FAD), and fraud risk assessment (FRA) as part of governance management activities.



As per the requirements of law, public listed companies cannot operate without the presence of corporate governance (CMA, 2016); however and just to comply with the regulations of law, corporate governance is only utilized as compliance tool instead of measuring it to the maturity levels (Zhu, 2016; Wilkinson, 2014). Maturity of corporate governance defines that how mature is the organization towards its operations, succeeding strategies and achieving satisfied shareholders (O'Connor & Byrne, 2015). It is a possibility that organizations demonstrate immature corporate governance despite the fact that they are operating for more than a decade; on the other hand, newly formed organizations can have mature corporate governance. CGM can guarantee the achievement of organizational goals, objectives and strategies by identifying the potential planning and performance gaps. CGM also strengthens the overall control environment of the organization and provides satisfaction to the shareholders (Rehman & Hashim, 2020).

FRA is considered as cornerstone of corporate governance as it formalizes the policies and identifies the impact and likelihood of fraud before its occurrence (Singleton & Singleton, 2010). In accordance with the survey, 40% of the respondents indicated that their organizations have never performed FRA and it is also not implemented in many organizations (Observer, 2017; KPMG, 2014). FRA is a control (KPMG, 2014) and due to its non-implementation, many aspects of fraud and related activates go un-check which can enhance the chances of cheating and gross mismanagement that can negatively impact the achievement of CGM.

FAP and FAD can be considered as an internal activity available inside the organization and working as function of the governance management system (Rehman & Hashim, 2019). Governance management system is those who are directly responsible for the implementation and achievement of corporate governance (Afza & Nazir, 2014). FAP and FAD play a major role in identifying and mitigating fraud before its occurrence. With the assistance of FRA; FAP and FAD can devise the mechanism which enhances the control, reduces the chances of fraud and eventually assists in achieving CGM.

This study proposes that CGM is a dependent variable, FAP and FAD is the independent variable while FRA mediates the relationship between FAP, FAD and CGM. This study highlights the potential of FAP and FAD not as a fraud finder but as part of governance management system that plays the role of agent as per agency theory. This study also emphasizes on a fact, and with the application of path dependence theory, that corporate governance can be measured to its maturity level. This study is unique in a way that the application of Path Dependence theory is applied to CGM for the very first time; moreover, FAP and FAD are considered as in-house activity i.e. available within the organization. This study can assist regulators to include FAP and FAD as part of governance codes and also to include evaluation of CGM as a compulsory feature. This study can also assist professional bodies to develop separate and standalone standards for FAP and FAD and can also oblige organizations to amend their policies towards the inclusion of FAP and FAD as a governance management system working towards the attainment of CGM.

Problem Statement

Several researches are being conducted on the implementation of corporate governance, attaining good corporate governance or strengthening audit activities. However, available literature is very limited when it comes for the study on CGM and FA as internal activity



available within the organization. Literature for CGM is available as "grey literature" i.e. researches on this topic is conducted by professionals and regulatory bodies but not by academicians. (Rehman & Hashim, 2020; Massie, 2012) and corporate governance is generally deemed as compliance tool only (Zhu, 2016; Wilkinson, 2014) which organizations are required to disclose just to fulfil the regulatory requirements.

It is compulsory for organizations to publish annually their compliance with codes of corporate governance (CMA, 2019); however, compliance itself cannot define anything and cannot provide functional information to shareholders unless it is being measured to its maturity (Wilkinson, 2014). CGM assures that organizations are on the right path and can achieve their goals and objectives. Non-compliances with the codes of corporate governance do not demonstrate a true and fair view of organizational commitment towards corporate governance (Oman Board Analysis 2018); on the other hand, CGM provides information which can inflict shareholders and future investors' decision to invest in a particular organization or not to invest. CGM provides information that is directly attributable to the main constituents of corporate governance are senior management or executive management (SM), remuneration committee or compensation committee (RC), audit and risk committee (ARC) and board of directors (BOD) (CMA, 2016; Sanyal & Hisam, 2018).

Fraud in terms of amounts and cases are increasing every year (ACFE, 2018). These everincreasing frauds require services of an anti-fraud expert such as FAP and FAD as conventional auditors denied the role of detecting fraud and label it as the responsibility of those who are charged with the governance of organization. In accordance with the survey conducted by ACFE (2018), only 1.3 percent of fraud is detected by external auditors. Additionally, and in accordance with Generally Accepted Auditing Standards (GAAS) mentioned in AU-C section 240 (AICPA, 2017):

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

In accordance with above, the question arises is that if auditors are only concerned with fraud which causes material misstatement then what about those frauds which are under materiality level and possesses strategic and financial risk; moreover, if it is the only responsibility of governance management to prevent and detect of fraud, then governance management require expertise which can only be provided by FAP and FAD.

Frauds are reported in all sorts of organizations and in all regions of the world. More than two thousand cases of fraud were reported in the year 2019 alone having a median loss of USD 125,000 per case (ACFE, 2020). Despite the increase in the number of frauds and marking governance management as responsible for the identification of fraud; the role of FAP and FAD is not visible within the organizations. FAP and FAD are called upon as and when required and always considered as fraud finders, litigation experts, insurance claim settlers and expert witnesses (Leonard, 2010). Furthermore, FAP and FAD are also not available in codes of corporate governance developed by any organization or country (Rehman & Hashim, 2019). It is worth mentioning that, forensic accounting as a profession which includes FAP and FAD are operating without standards or guidelines like other professional bodies such as certified public



accountants and institute of internal auditors. In the absence of these standards and guidelines, FAP and FAD are always considered as part of unorthodox audits and outside consultants.

FRA is considered as cornerstone of corporate governance (Singleton & Singleton, 2010) even though, less importance is given by organizational management towards this control. In accordance with a 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 conducted a live polling session of 150 participants where 40% of respondents indicated that their organizations have never performed FRA (Observer, 2017). The 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. Moreover, there is also no compulsory disclosure requirement made by the regulators such as Capital Market Authority (CMA) towards FRA, its evaluation and fraud assessment.

Proposed Research Questions

In accordance with the problems (section 1.1) discussed above, the suggested research questions are: Is there any relationship between FAP and CGM? Is there any relationship between FAD and CGM? Is there any association between FAP and FAD with FRA? Is there any relationship between FRA and CGM? Whether FRA mediates the relationship between FAP, FAD and CGM?

Literature Review and Underlying Theories

This section covers the literature on the theoretical and empirical research related to CGM, FAP, FAD and FRA. This section also presents the conceptual framework for this study.

Corporate Governance Maturity

Corporate governance is not a new concept; it existed since the formation of organizations (Chin, Ganesan, Pitchay, Haron, & Hendayani, 2019). In the academic world, corporate governance is identified as good, poor or immature; however, limited literature is available which emphasizes on the corporate governance maturity and its related measurement (Massie, 2012). Corporate governance itself does not offer organized roadmap which is required for the implementation of organizational strategies and corporate governance also does not define the measurable steps (Massie, 2012; Bramont, 2012); hence, organizations are required to measure the maturity of the corporate governance (Rehman & Hashim, 2020) as CGM identifies planning and strategic gaps and also defines the ways to accomplish the targets by filling these gaps.

In the absence of CGM, it would be difficult for organizations to assess their strategies and to provide absolute management assurance. Furthermore, barriers related to the managements' assurance practices are not only linked to national or business culture but also associated with the non-achievement of CGM (Brender, Yzeiraj & Fragniere, 2015). It is worth mentioning that operationally mature organizations cannot define the maturity of corporate governance; however, CGM defines organizational maturity as a whole (O'Connor & Byrne, 2015). Table 1 describes the attributes of mature and non-mature governance.



Table 1 Characteristics of Mature and Non-Mature Governance

Non-Mature Governance	Mature Governance
Non independent directors. Ownership is personally held or among family members only	Ownership is diversified with independent directors who are associated with board members
Nonofficial, constitutional and statutory arrangement	Operations are conducted with strategies and policies. Minority shareholders rights are protected.
No segregation of duties among management. CEO and Chairman of board is the same person	Board of Directors is held responsible towards governance and proper segregation of duties.
Intuitive and informal decision making	Decisions are properly documented, made at board level and are followed up for implementation
Decision and responsibilities are taken at individual levels	Decision is made as a group
Non-formal meetings and as and when required.	Board and management meets regularly with agenda being circulated well in advance
Non-recoding or minuting meeting minutes	Meetings are formally conducted and are also minuted.
Only one person and or entirely unified leadership	Board approved the policies and governance decisions. These are implemented via CEOs.
Un-stable and regular changing strategies	Formal planning, evaluation and proper control against strategies, plans and objectives
Policies are not approved at appropriate levels and no formal approvals	Written policies, effective and efficient delegations of authorities and formal procedures

Source: Lockhart (2011)

Measurement of Corporate Governance Maturity

There are no definite criteria for measurement of CGM and very limited academic research is conducted in this area (Roberta, Sanjai & Brian, 2008; Massie, 2012). CGM is studied by companies or individuals that are outside of the academic publishing and distribution channels. These researches are conducted by governmental bodies, professionals and audit firms (Massie, 2012; Wilkinson, 2014; Wilkinson & Plant, 2012; Rehman & Hashim, 2019).

Further to above and it is a well-known fact that systems that cannot be measured cannot be controlled. Keeping a similar notion, corporate governance cannot offer desired results unless it is measured. The measurement of corporate governance eventually leads towards CGM. Mandatory features for the measurement of CGM are attributes, levels of maturity and criteria. Attributes can also be referred as constituents which in the case of CGM will be BOD, ARC,



RC and SM. Level of maturity are the stages which define the maturity level. Usually maturity level is least mature, normalize, effective, emerging and mature. Criteria define the requirements and the principles. Criteria associate and link the attributes and maturity level to define the organizational maturity level (Rehman & Hashim, 2020; Harpham, Grant, & Thomas, 2002; Berenson, 2016; Wilkinson, 2014; James, 2013).

Forensic Accounting Preventive and Detective Role

The concept of forensic accounting is emerged due to continuous and significant fraud (Bhasin, 2017). Forensic accounting can be considered as an activity that can be divided into its two main functions namely preventive (FAP) and detective (FAD) role of forensic accounting. FAP and FAD are explained below:

Preventive role of Forensic Accounting (FAP)

FAP is an activity that can be available within an organization and working towards the prevention of fraud and developing fraud preventive measures (Singleton & Singleton, 2010). FAP can positively impact organizational achievement of goals by eliminating fraud risk and strengthening internal controls (Leonard, 2010). FAP plays vital role in strengthen corporate governance (Bhasin, 2017) and achievement of CGM. FAP develops controls which are related to fraud risk assessment and also assists constituents of CGM towards implementation of these controls. FAP possesses financial skills and investigative mindset which can resolve the unresolved issues and complements CGM in a manner which is not covered by the management's regular devised controls (Siregar & Tenoyo, 2015).

Detective role of Forensic Accounting (FAD)

FAD can be considered as an activity which can be available within an organization and working as part of governance management system. In the current business environment, FAD is only utilized as divorce settlement expert, litigation expert, and court expert witness (Odelabu, 2016; Gee, 2014; Nigrini, 2012). FAD can contribute towards setting up organizational internal controls in order to identify the fraud, its perpetrator and also assists in mitigating the fraud risks. FAD can also assist in achieving CGM by developing accounting controls which are based on the instances of actual fraud occurring (Singleton & Singleton, 2010; Leonard, 2010).

Fraud Risk Assessment

Fraud risk assessment (FRA) is one of the major elements of fraud risk management and is also considered as the cornerstone of corporate governance (Singleton & Singleton, 2010). FRA is a control which is affected by the observations and performance of FAP and FAD which inturns impacts the achievement of CGM. FRA identifies the fraud risk by utilizing scheme and scenario bases rather than control risk or inherent risk bases (KPMG, 2014). FRA defines the risks which are directly attributable to the fraud, its likelihood and also its impact by providing necessary and essential monitoring (Owens, 2013). FRA assists CGM by becoming part of organizational governance structure in shape of written policies by gathering information and identifying obstacles which creates hindrance in achievement of CGM (Rehman & Hashim, 2020).



Underlying Theory

Applicable theories are Agency theory for FAP and FAD, Fraud Triangle theory for FRA and Path Dependence theory for CGM. These theories are defined below:

Agency Theory

Agency theory defines the relationship between agent and the principal. Agents are appointed by principal to conduct the business on their behalf where agents are compensated for their services. Hired agents are SM, RC, ARC, BOD and internal audit function (CMA, 2016; Bahrman, Manchanda, Roth & Mendes, 2012). Principal in the agency theory is the shareholders of organization and they appoint the board for specific period of time. Reason to appoint agent is not only to conduct business on their behalf but to protect the rights of shareholders and derive the expected results (Afza & Nazir, 2014).

Agency conflicts arises when appointed agents acts to obtain personal gain via fraud or deceit without considering the benefit of organization or organizational principal. Agency conflicts and its related cost can be protected if FAP and FAD are considered as agent providing services to principal for the elimination of fraud and implementing mitigating controls. To the best of the knowledge of the researcher, there is no codes of corporate governance exists where FAP and FAD are considered as agent. It is worth mentioning that FAP and FAD are capable to provide much needed satisfaction to shareholders and can also enhance corporate governance (Ali & Oseni, 2010).

Fraud Triangle Theory

Fraud is a crime which is conducted by individual or group of individuals for their personal gain and it has adverse impact over organization. Fraud triangle theory defines the reasons behind these individuals to commit fraud. Reasons or factors defined by Fraud Triangle theory are pressure, incentive and rationalization/ opportunity. All three factors of Fraud Triangle theory are interrelated. Loose controls when coupled with pressure, increases the chances of fraud. Similarly, when the pressure is combined with rationalization then fraud chances are elevated. FRA is a control mechanism which is developed to identify and mitigate all possible scenarios. FRA is majorly built upon these three factors and FAP and FAD is best positioned to explore and implement FRA (Skousen, Smith & Wright, 2009; Singleton & Singleton, 2010; ACFE, 2018; IIA, 2016; Torpey, Walden & Sherrod, 2011).

Path Dependence Theory

Institution's development of corporate governance can be explained by application of Path dependence theory (Pittroff, 2016). Path dependence can be rationalized as development of system towards consistency. With regards to the regulations; consistency implied that all of the regulations are applicable. Theoretically, this means that entire rules should be complementing each other, and all rules are mandatory (i.e. rules mutually support each other). For a system which is controlled by market, major focus is towards strengthening rights of shareholders (Chizema & Buck, 2006). With regards to rules related towards strengthening shareholder's right, each and every element of rules should support each other. Change of one element can result in non-achievement of goals as the change cannot be complemented in other elements which are directly associated with similar goal such as shareholders' satisfaction. The entire system might become volatile if interdependencies of all individual elements are not considered (Pittroff, 2016).



In light of above, all related elements and constituents of CGM should work in coherence and synergy for the betterment of organization and for the achievement of CGM. If one constituent or element is not performing, then system as whole cannot perform effectively and efficiently. CGM, therefore, has to be embedded in the whole corporate governance setting. One cannot pick out CGM regulation as a single element and select an approach that is considered to be efficient from the view of another corporate governance system. Changes of special aspects of corporate governance regulations can therefore only be achieved if the interdependencies with other parts of regulations are taken into account which is required for the achievement of CGM.

Proposition Development

After presenting the above arguments on FAP, FAD, CGM, and FRA, it is undeniably intriguing to further explore the influences of FAP and FAD on CGM of public listed companies. The purpose of this proposed research is twofold. First is to identify the potential impact of FAP and FAD on CGM. Secondly, if the result suggests that there is direct positive relationship between FAP, FAD, FRA and CGM then organizations can start considering utilization of FAP and FAD services along with the implementation of FRA as control towards achievement of CGM. Following are the propositions:

Proposition 1	:	Forensic accounting preventive role has significant direct relationship with the corporate governance maturity. (FAP \rightarrow CGM)
Proposition 2	:	Forensic accounting detective role has significant direct relationship with the corporate governance maturity. (FAD \rightarrow CGM)
Proposition 3	:	Forensic accounting preventive role has significant direct relationship with the fraud risk assessment (FAP \rightarrow FRA)
Proposition 4	:	Forensic accounting detective role has significant direct relationship with the fraud risk assessment (FAD \rightarrow FRA)
Proposition 5	:	Fraud risk assessment has significant direct relationship with the corporate governance maturity (FRA \rightarrow CGM)
Proposition 6	:	Fraud risk assessment mediates between forensic accounting preventive role and corporate governance maturity (FAP \rightarrow FRA \rightarrow CGM)
Proposition 7	:	Fraud risk assessment mediates between forensic accounting detective role and corporate governance maturity (FAD \rightarrow FRA \rightarrow CGM)

Conceptual Framework

The model proposes that the independent variable (FAP and FAD) influences the mediator (FRA), which then will influence the dependent variable (CGM). FAP and FAD is proposed as the independent variable based on the fact of literature and previous researches, which reveals that FAP and FAD can have strong influence on corporate governance (Bhasin, 2017; Ali & Oseni, 2010) which can eventually lead towards CGM.

FRA is the cornerstone of corporate governance which is impacted by the FAP and FAD. FRA becomes the part of CGM in shape of policies and risk assessment. FRA assists constituents of CGM (BOD, ARC and SM) by identifying the high-risk areas which can impact the organizational strategy and its overall performance. FAP and FAD identify and assure the risk which are defined by FRA and assesses their likelihood and impact which can influence the achievement of CGM. Proposed conceptual framework is presented in Figure 1.

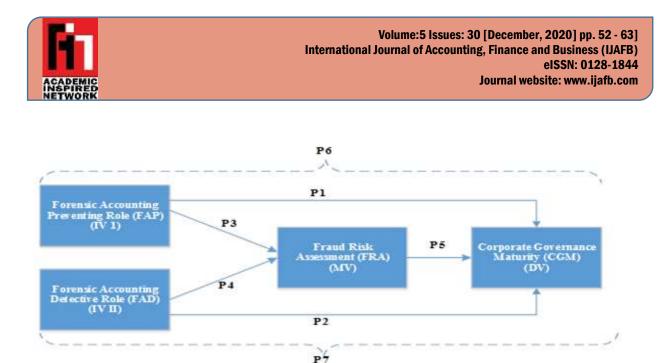


Figure 1 Conceptual Framework

Conclusion

The intention of this study is to explore potentials to examine the mediating effect of FRA on FAP, FAD and CGM as shown in proposed conceptual framework (Figure. 1). Several literatures is available which demonstrates the role of forensic accounting as fraud finder only; however, this proposed study is emphasizing on the fact that FAP and FAD can be considered as agent towards the principal by following agency theory and hence making this study unique and distinctive.

Fraud is the major barrier towards achievement of CGM and attaining satisfied shareholders; however, identification of fraud and developing its mitigating factors are labelled as responsibility of those who are charged with the governance of organization. In order to prevent, detect and mitigate fraud risk; FAP and FAD can act as governance management system which can create immense influence on achievement of CGM.

Reason to investigate mediating variable is mainly because there is likelihood that the relationship between FAP, FAD and CGM is not completely direct. FRA is the cornerstone of CGM and control which is essential to reduce the fraud within an organization; however, in doing so FRA requires skills, knowledge and involvement of FAP and FAD. Similarly, CGM can operate efficiently and can offer satisfaction to shareholders after the organization is free from fraud and fraud related activities. CGM in this study is considered by its four major constituents namely SM, RC, ARC and BOD.

This study can assist regulators and professional bodies to include FAP and FAD as part of governance codes and also to include evaluation of CGM as compulsory feature. This study can oblige authorities to develop separate and standalone standards for FAP and FAD and can also necessitate organizations to amend their policies towards inclusion of FAP and FAD as governance management system working towards attainment of CGM.

This study can be considered as the addition of previous studies related to FAP and FAD to a new perspective by incorporating them towards achievement of CGM. This study is also expected to contribute and develop additional perceptions, insights and views on FAP and FAD



which have not been explored before such as inclusion of FAP and FAD as in-house governance management activity which can provide satisfaction to shareholders by playing role of agent per agency theory. This can offer substantial opportunities for future researchers towards investigating diverse perspective pertaining to FAP and FAD.

References

- ACFE. (2018). Report to the nations on occupational fraud and abuse. Chicago: Association of Certified Fraud Examiners.
- AICPA. (2017). Practice Aid: Audit and Accounting Manual. New York: American Institute of Certified Public Accountants.
- Afza, T., & Nazir, M. S. (2014). Theoretical perspective of corporate governance: A Review: *European Journal of Scientific Research*. 119 (2), 255-264.
- Ali, M., & Oseni. (2010). Corporate governance, transparency and shareholders' rights: the role of the forensic accountants in propelling economic growth: *Multidisciplinary journal of research development*. 15 (1), 1-10
- Bahrman, D., Manchanda, A., Roth, J., & Mendes, M. (2012). IIA Research Foundation, IIARF [Online]. Available from na.theiia.org: https://na.theiia.org/standardsguidance/Member%20Documents/PG%20-%20Assessing%20Organizational%20Governance%20in%20the%20Private%20Sector.p
 - %20Assessing%20Organizational%20Governance%20in%20the%20Private%20Sector.p df (assessed on 18-Oct-2019)
- Berenson, R. A. (2016). If You Can't Measure Performance, Can You Improve It? *The JAMA Forum.* 315 (7), 645-646.
- Bhasin, M. L. (2017). Integrating Corporate Governance and Forensic Accounting: A Study of an Asian Country: *International Journal of Management Sciences and Business Research*. 6 (1), 31-52.
- Bramont, P. (2012). Maturidade em governança corporativa : diretrizes para um modelo preliminar. (PhD Thesis Universidade Catolica de Brasilia,. Brazil). Retrieved from https://bdtd.ucb.br:8443/jspui/bitstream/123456789/1374/1/Pedro%20Bramont.pdf
- Brender, N., Yzeiraj, B., & Fragniere, E. (2015). The management audit as a tool to foster corporate governance: an inquiry in Switzerland: *Managerial Auditing Journal*. 30 (8/9),785-811.
- Chin, Y. S., Ganesan, Y., Pitchay, A. A., Haron, H., & Hendayani, R. (2019). Corporate Governance and Firm Value: The Moderating Effect of Board Gender Diversity. *Journal of Entrepreneurship, Business, and Economics*, 7(2s), 43–77.
- Chizema, A., & Buck, T. (2006). Neo-institutional theory and institutional change: Towards empirical tests on the "Americanization" of German executive pay: *International Business Review*. 15, 488-504.
- CMA. (2016). Oman Code of Corporate Governance for Public Listed Companies. Capital Market Authority.
- Couzin-Frankel, J. (2018, May 18). *The rise and fall of Theranos*. Retrieved from Science.sciencemag.org: https://science.sciencemag.org/content/360/6390/720.ful
- Gee, S. (2014). Fraud and Fraud Detection: A Data Analytics Approach. New Jersey: John Wiley & Sons, Inc., Hoboken, New Jersey.
- Harpham, T., Grant, E., & Thomas, E. (2002). Measuring Social Capital Within Health Survey: Key Issues. *Health Policy and Planning*. 17(1), 106-111.
- IIA, I. o. (2016). Internal Auditing and Fraud. The Institute of Internal Auditors-IPPF Practice Guide.



- James, R. (2013). Selecting, Using, and Creating Maturity Models: A Tool for Assurance and Consulting Engagements. Retrieved from www.iia.org.uk: https://www.iia.org.uk/media/358857/selecting_using_and_creating_maturity_models _-__a_tool_for_assurance_and_consulting_engagements.pdf (assessed on 23-Dec-2019).
- KPMG. (2013). KPMG Forensic Integrity Survey 2013. Retrieved from www.kpmg.com: https://assets.kpmg.com/content/dam/kpmg/pdf/2013/08/Integrity-Survey-2013-O-201307.pdf
- KPMG. (2014). Fraud risk management Developing a strategy for prevention, detection, and response. Retrieved from www.kpmg.com/cn: https://assets.kpmg.com/content/dam/kpmg/pdf/2014/05/fraud-risk-management-strategy-prevention-detection-response-O-201405.pdf
- Leonard, W. V. (2010). The Fraud Audit: Responding to the Risk of Fraud in Core Business Systems. John Wiley and Sons Ltd.
- Lockhart, J. (2011). Governance of the Economic Engine Room: Insights From Agricultural Governance in New Zealand: Proceedings of the *European Conference on Management*, *Leadership & Governance*. 254-261.
- Massie, R. (2012). Key Identifiers of Corporate Governance Maturity: A Literature Review: 10th European Academic Conference on Internal Audit and Corporate Governance. Verona: University of Verona, Verona, Italy
- Nigrini, M. J. (2012). Benford's Law Applications for Forensic Accounting, Auditing, and Fraud Detection. John Wiley & Sons, Inc., Hoboken, New Jersey
- Observer, O. (2017, February 15). *Economic crime in Mideast still tough to tackle: PwC*. Retrieved from https://www.omanobserver.om: https://www.omanobserver.om/economic-crime-mideast-still-tough-tackle-pwc/
- O'Connor, T., & Byrne, J. (2015). Governance and the corporate life-cycle: *International Journal of Managerial Finance*. 11 (1), 23-43.
- Odelabu, A. (2016). Relationship between Forensic Accountants' Competences and Audit Expectation Gap: Evidence from Nigeria Money Deposit Banks. . (PhD Thesis, Jomo Kenyatta University of Agriculture and Technology, Kenya.). Retrieved from http://hdl.handle.net/123456789/2195
- Oman Board Analysis Second Edition 2018 (2018, May). Retrieved from http://www.ingovern.com: http://www.ingovern.com/wp-content/uploads/2018/05/Oman-Board-Analysis-2018.pdf
- Owens, D. R. (2013). Fraud Risk Assessment Practices and Corporate Governance. Schneider Downs & Co., Inc. Retrieved from https://www.schneiderdowns.com/UserFiles/File/PDF/Fraud%20Risk%20Assessment%2 0Practices%20and%20Corporate%20Governance.pdf
- Pedneault, S., Rudewicz, F., & Silverstone, H. (2012). Forensic Accounting and Fraud Investigation for Non-Experts. New Jersey: John Wiley & Sons, Inc., Hoboken.
- Pittroff, E. (2016). Whistle-blowing regulation in different corporate governance systems: an analysis of the regulation approaches from the view of path dependence theory: *Journal of Management & Governance*. 20 (4), 703-727.
- Pretorius, H. W. (2015). Towards a Theoretical Framework to Support Corporate Governance through the use of a Business Process Management System: A South African Perspective. (PhD Thesis: University of Pretoria; South Africa.). Retrieved from https://repository.up.ac.za/handle/2263/40824



- Rehman, A., & Hashim, F., (2019), "Impact of Mature Corporate Governance on Detective Role of Forensic Accounting: Case of Public Listed Companies in Oman" in FGIC 2nd Conference on Governance and Integrity 2019, *KnE Social Sciences*, 637–665. DOI 10.18502/kss.v3i22.5080
- Rehman, A., & Hashim, F., (2020), "Is corporate governance maturity measurable?", *Corporate Governance*, 20 (4), 601-619
- Roberta, R., Sanjai, B., & Brian, B. (2008). The Promise and Peril of Corporate Governance Indices. Retrieved from www.yale.edu: http://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=2970&context=fss_paper s (assessed on 18-Jan-2020)
- Sanyal, S., & Hisam, M. W. (2018). Corporate Governance in Emerging Economies: A Study Of The Sultanate of Oman. *International Journal of Business and Administration Research Review*. 3 (20), 27-31
- Singleton, T., & Singleton, A. (2010). Fraud Auditing and Forensic Accounting 4th Edition. Chicago: John Wiley & Sons.
- Siregar, S. V., & Tenoyo, B. (2015). Fraud awareness survey of private sector in Indonesia: *Journal of Financial Crimes*. 22 (3), 329-346.
- Skousen, C., Smith, K., & Wright, C. (2009). Detecting and predicting financial statement fraud: The effectiveness of the fraud triangle and SAS No. 99. . Emerald Group Publishing Limited.
- Torpey, D., Walden, V., & Sherrod, M. (2011). Viewpoint Breaking the status quo: Moving beyond traditional e-mail review. Fraud Watch by EY.
- Vinita, R., Joe, U. C., & Lee, C. (2008). Corporate Governance Characteristics of Growth Companies: An Empirical Study: *Academy of Strategic Management Journal*. 7, 21-33.
- Wilkinson, N. (2014, March). A framework for organizational governance maturity: an internal audit perspective. South Africa: (PhD Thesis, University of Pretoria. South Africa). Retrieved from https://repository.up.ac.za/bitstream/handle/2263/43563/Wilkinson_Framework_2014.pd

f;sequence=4 (assessed on 06-June-2019)

- Wilkinson, N., & Plant, K. (2012). A framework for the development of an organisational governance maturity model: a tool for internal auditors: *Southern African Journal of Accountability and Auditing Research*. 13, 19-31.
- Zhu, P. (2016). Digitizing Boardroom: The Multifaceted Aspects of Digital Ready Boards. Book Bay.