# Organizational Corruption Prevention, Internal Audit, and Sustainable Corporate Governance: Evidence from Omani Public Listed Companies

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## ABSTRACT

**Purpose of the study:** The purpose of this study is to analyze the impact of fraud risk assessment (FRA) and internal audit activity (IA) on sustainable corporate governance within Omani publicly listed companies in the context of the Fraud triangle, Institutional theory, and Agency theory. This study also explores whether or not IA plays a mediation role between FRA and SCG. For this study, FRA and IA is the independent variable, and SCG is the dependent variable. IA in this study is also presented as a mediator variable. FRA is the internal control necessary to mitigate fraud risk, IA is the control activity available within the organization, and SCG is the governance mechanism for the organization.

**Methodology:** Descriptive cross-sectional survey design is utilized. The web-based application collects data, and Partial Least Square – Structural Equation Modelling tool (PLS-SEM) is applied for data analysis.

**Main Findings:** The result implies that IA has a significant direct relationship with SCG and mediates the relationship between FRA and SCG; however, FRA does not have a significant relationship with SCG.

**Research limitations/ implications:** This study is conducted in the Omani market and only for publicly listed companies. Future research can be extended to other Gulf countries and utilise private companies' data. This study is helpful for the regulators and policymakers who can amend the codes and policies and develop related frameworks.

**Novelty/ Originality of this study:** To the best of the researcher's knowledge, only a few studies have been conducted that link the FRA to IA and SCG. This research contributes to the existing body of knowledge. It can be used to amend corporate governance codes and organisational governance policies by introducing SCG clauses/regulations and requiring FRA in governance management policies.



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## 1. INTRODUCTION

Corporate governance was introduced to provide satisfaction to the shareholders and transparency in the business operations (NicolasGarcia, BelenFernandez & Cuesta, 2016). Corporate governance is implemented via codes or laws defined by regulators or similar authorities. In the current business environment, organizations cannot operate unless they provide compliance conformity with corporate governance codes. However, despite the availability of codes, regulators, and compliance authorities, organizations still encounter fraud much more intensely than before (Rehman & Hashim, 2019a). In accordance with the study conducted by the Association of Certified Fraud Examiners (ACFE), it is estimated that organizations lose five percent of their annual revenue to fraud every year, with an average loss of USD 1.5 million per organization (Association of Certified Fraud Examiners, 2020).

For offering security to shareholders and preventing organizations from fraud, innovation is necessitated in the field of fraud detection and corporate governance. This innovation can be termed fraud risk assessment (FRA) as compulsory control and achievement of sustainable corporate governance (SCG). The three main business sustainability and growth pillars are SCG, FRA, and internal audit (IA) (Rehman, 2021). Furthermore, SCG is only possible in a fraud-free environment (Lombardi, Trequattrini, Cuozzo, & Cano-Rubio, 2019). Similarly, FRA as control and IA as an activity are best suited to eliminating and mitigating fraud (Mock, Srivastava & Wright, 2017; Yee, Sujan, James, & Leung, 2008; Vinita, Joe & Lee, 2008).

SCG is defined as a mechanism that aids in the development of a proactive board of directors (BOD), an efficient and effective audit committee (ARC), a fruitful remuneration committee (NRC), and thoughtful executive/senior management (EM) (Crifo, Escrig-Olmedo & Mottis, 2019). EM develops organisational policies, which are reviewed and approved by the ARC and NRC before being approved by the Board of Directors. Because the BOD, ARC, NRC, and EM are the main pillars of corporate governance and should strive to achieve the highest governance standards, these policies assist organisations in achieving SCG (International Federation of Accountants, 2016). In order to achieve shareholder satisfaction, organizations need a fraud-free environment. The impact of fraud is not restricted to shareholder confidence but also affects the company's reputation and all related stakeholders (Enofe, Ekpulu, & Ajala, 2015). FRA is the cornerstone of corporate governance (Singleton & Singleton, 2010); however, it is overlooked and not implemented by several organizations. According to a survey conducted by Klynveld Peat Marwick Goerdeler (KPMG, a Big

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4 audit firm), fraud losses are increasing faster than FRA investment, and most organisations do not perform FRA at all (Klynveld Peat Marwick Goerdeler, 2019).

An activity that assists in achieving organizational goals and objectives can be known as internal audit activity (IA). IA evaluates controls and governance processes to perform its tasks (Institute of Internal Auditors, 2020). Codes of corporate governance include a requirement for embedding IA into organizational operations; moreover, IA is the sole independent internal organizational assurance authority (Capital Market Authority, 2018). With its knowledge and skills, IA contributes extensively to implementing the control, detecting the vulnerabilities in various systems, and identifying meaningful recommendations (Eulerich, Kremin & Wood, 2019), which can ultimately lead to the attainment of the SCG. Publicly listed companies in Oman entrust IA with additional authority and reporting responsibilities, which enhances IA's objectivity and independence. Quite a few studies have been performed to investigate the role of IA in corporate governance; however, limited research proves a negative or positive relationship between IA and SCG.

In a current corporate environment, SCG is necessary for business continuance and endurance (Jarmai, Tharani & Nwafor, 2020). As per the survey conducted by World Bank, 66% of organizations recognize that SCG is essential for their organizations; conversely, only 22% believe that their BOD is offering importance and proper oversight for SCG (World Business Council for Sustainable Development, 2020). Available corporate governance codes still fail to define the necessity of SCG; moreover, the achievement of SCG is also not incorporated in the developed codes, including codes developed for Oman (Capital Market Authority, 2018).

Regulatory and market failures contribute to the non-implementation of SCG. Commercial laws and regulations require the BOD to act in the best interests of the whole company (Grove & Clouse, 2017); however, the BOD and the EM are more concerned with short-term profit taking so they can please stockholders. Furthermore, the BOD and EM are paid based on short-term profitability rather than long-term growth (Lombardi, et al., 2019). The cause of such failures in the market is likely to be a lack of corporate governance (European Commission, 2020), which creates obstacles to achieving SCG.

Codes of corporate governance implemented in Oman do not describe or give details of those necessary elements required for achieving SCG. Revised codes were issued in 2016 that do not find the conditions or necessary circumstances for business continuity, business sustainability and controlling or eliminating fraud and fraud-related activities (Rehman & Hashim, 2019a). Moreover, corporate governance in Oman is less effective than in more developed countries (Qurashi, 2017).

For the assurance of corporate governance, external auditors are required to provide their opinion to the shareholders; these opinions, however, are geared more toward protecting the external auditors' reputation than providing satisfaction to the shareholders. Many audit firms recently got fined for not performing their assurance work correctly, and their processes and controls did not prevent the auditing failures (Bramwell, 2020; Bramwell, 2018; Observer, 2019). In Oman, it is a regular practice for external auditors to provide their opinion on corporate governance by stating that they did not perform the procedures in accordance with International Standards of Auditing (ISA) or International Standards on Review Engagement (ISRE) (Klynveld Peat Marwick Goerdeler, 2020). Such sort of audit opinion cannot provide satisfaction to the shareholders or inform whether SCG is achieved or not (Garrow et al., 2019).

The independent variable in this study is fraud risk assessment (FRA), the independent and mediating variable is internal audit activity (IA), and the dependent variable is sustainable corporate governance (SCG) (SCG). When the fraud triangle theory is applied, FRA can be considered an integral part of the governance management system, and it plays a critical role in eliminating fraud and achieving SCG. This study will contribute to the existing body of knowledge by demonstrating that FRA can have an impact on SCG, with IA acting as a middleman for Omani publicly traded companies. To the best of the researchers' knowledge, no study has ever been conducted that demonstrates how FRA and IA impact sustainable corporate governance; additionally, previous relevant studies have verified only one essential element for SCG, whereas this study identifies four essential elements. This study could assist professional bodies, regulators, and organisations in revising corporate governance codes and organisational policies to include SCG conditions and ensure that FRA is a core component of governance management control.

## 2. LITERATURE REVIEW

The following section covers the relevant literature for the FRA, IA, and SCG, in addition to a summary of Oman's publicly listed companies. Additionally, all three variables will be discussed in this section, along with the corresponding theories.

### 2.1. Fraud Risk Assessment

The focus of risk assessment is to implement suitable risk responses for the organization with the objective to achieve maximum sustainable value (Florea & Florea, 2016), which can eventually lead to the achievement of SCG. FRA enhances the understanding of the potential risk factors that can affect organizational performance, simultaneously increases the possibility of success, and condenses the probability of failure (Gullkvist & Jokipii, 2015; Mohd-Sanusi, Rameli, Omar& Ozawa, 2015).

For compliance with rules, regulations and shareholders' expectations, governance and organizational management is pursuing to understand enterprise risk assessment which also includes FRA (Julien & Richards, 2008). In recent times much attention has been provided to FRA in terms of standard and definition development; however, it is not well understood by EM and is not implemented in many organizations.

Fraud is one of the significant bars for SCG. In the current business environment, almost all organizations are subject to fraud, including the organizations in Oman. Organizations across the globe lose 5% of their revenue in fraud every year, with an approximate median loss of USD 125,000 per case (Association of Certified Fraud Examiners, 2020). It is worth mentioning that fraud is an intentional act (Varma & Khan, 2016), as a non-intentional act can be considered an error or mistake. It is impossible to eliminate all frauds in all organizations (Karanja, 2018); however, implementing the FRA will maximize the likelihood that fraud will be detected and prevented in a timely manner (Cotton, Johnigan & Givarz, 2016). FRA assists organizations in controlling all three aspects of the Fraud Triangle theory, namely opportunities**,** pressure and rationalization (Gullkvist & Jokipii, 2015).

FRA is required to be performed continuously to identify possible plans and events that need to be evaluated (Mansour, Ahmi & Popoola, 2020), thus offering guidance for IA to perform procedures to verify the fraud control and its related implementation. FRA provides complete support to SCG in the form of policies and s governance management, to words, national strategies that that be impacted by fraud (Vona, 2011). However, to perform all these support services towards SCG, skills and knowledge of IA are required (Morang & Sobel, 2017).

## 2.2. Internal Audit

As a function available within an organization, internal audit (IA) provides objective assurance to stakeholders about how effectively organizational operations and governance are run (Florea & Florea, 2016). An IA is an essential component of any successful organization (Capital Market Authority, 2018) and can also contribute to the achievement of the Strategy for Change Goal (Cioban, 2016). Those involved in internal auditing are professionally governed by the Institute of Internal Auditors' framework.

IA's three core functions are to provide objectivity, independence and assistance to organizations to governess processes and improve risk. Auditors' independence is needed for IA to be objective because it can improve IA's operations, reduce the influence of EM (MacRae & Gils, 2010), and provide better governance and risk services, thus assisting in the achievement of SCG.

In today's corporate environment, governance management expects more of IA, so IA must also transition from traditional auditor to agile (Jr, 2015). The application of IA agility can improve efficiency, generate value-driven insights, and also create risk agility. IA can assist FRA by checking the compliance of policies, identification of risk which is not covered and can also implement Fraud Triangle theory by embedding opportunities**,** pressure and rationalization in their audit programs and performing audit task for their identification or exposure (Said, Alam, Ramli & Rafidi, 2017).

IA is considered an important activity for corporate performance to enhance the quality of financial information and deliver transparency to organizational financial statements (MacRae & Gils, 2010). In accordance with research conducted by Drogalas et al., (2016), it was identified that IA has a positive association with corporate governance and enhances the quality of ARC, which is the principal constituent of SCG. In a similar context and IA's ability to enhance quality for the constituents of governance management, IA is capable enough to impact the SCG positively.

## 2.3. Sustainable Corporate Governance

Organizations and society both need sustainable corporate governance (SCG). It can improve/ augment the trust and confidence of shareholders in an organization's corporate leaders (Choi et al., 2020). In accordance with the corporate governance codes, organisations' leaders include ARC, NRC, EM and BOD. Shareholders and societies are protected from fraud by regulations and laws, and measures are taken to prevent these frauds from happening in the future. Recent corporate scandals such as 1 MBD fraud, NMC Health Care fraud, and the downfall of the Abraaj group (Burroughs & Khan, 2019; Parasie, 2020; Sharif, 2019) have fostered doubts regarding corporate organizational accountability and the corporate social responsibility. The only solution to evade fraud and satisfy shareholders in the current corporate environment is through SCG (Grove & Clouse, 2017).

The European Union (EU) attaches great importance to establishing and implementing the SCG. EU states in their Inception Impact Assessment report that *"Sustainability should be further embedded into the corporate governance framework, as many companies still focus too much on short-term financial performance compared to their long-term development and sustainability aspects"* (Commission, 2020). Following are the principles of SCG that can be surmised from the EU Inception Impact assessment report:

a. Align long-term interests of EM, shareholders, stakeholders and society as a whole.
b. Integrate stakeholder interests, sustainability risks, dependencies, opportunities and adverse impacts into strategies, decisions and oversight.
c. Create legal certainty enabling organizations to identify, assess and mitigate adverse impacts.
d. Develop corporate governance arrangements regarding directors' remuneration and corporate bonus schemes.
e. Empowering corporate directors to integrate broader interests into decisions and enhancing existing corporate governance mechanisms.
f. Implement Non-Financial Reporting Directive, which will assist organizations in disclosing information about their risks and impacts.
g. Implement SCG strategy through proper risk management and impact mitigation procedures.

With SCG, organizations can better deal with social change, environmental changes, and sudden exogenous shocks that could threaten their long-term survival. For the development and implementation of SCG, the major stakeholders (BOD, ARC, NRC, and EM) are significant contributors. The following is an overview of these four constituents:

### 2.3.1. Board of Directors

The board of directors (BOD) can be defined as leaders of the organization who monitor the organization's business and control its operations. BOD is responsible for ensuring that the organisation's success is aligned with long-term objectives and are achieved. BOD also plays an essential role in scrutinizing/ monitoring and ascertaining corporate governance. In addition to being an advocate for organizational sustainability and substantial commitment, the Board of Directors is also expected to incorporate sustainability into the organization and its culture (Salvioni, Gennari, & Bosetti, 2016).

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### 2.3.2. Audit and Risk Committee

The Audit and Risk Committee (ARC) is a mandatory feature of corporate governance, whose members are selected from the Board of Directors. Oman's new regulations require that ARC members be independent, with IA reporting directly to ARC (Capital Market Authority, 2018). ARC's success is directly related to its oversight responsibilities and relationships with other constituents of the SCG, including the Board of Directors, NRC, Executive Committee, and external auditors. The nomination and Remuneration Committee (NRC) is mandated for the EM's bonus, payments, remuneration, and other compensations. NRC plays a vital role in diffusing agency conflicts and also provides satisfaction to shareholders (Dell'Atti, Intonti, & Iannuzzi, 2013; Acharya & Volpin, 2010). The NRC helps firms achieve a higher level of performance and reduce the levels of failure.

### 2.3.3. Executive Management

Executive Management (EM) performs a vital role in corporate governance, as they are the implementers of the instructions received in the form of goals, guidelines and policies from BOD (Capital Market Authority, 2018). As part of its role, EM is responsible for monitoring, implementing and developing corporate strategies aimed at achieving sustainable organizational goals. EM is a group of experts who are responsible for the performance of an organization and are primarily responsible for achieving its goals, mission, and vision (Carcello, 2009).

## 2.4. Corporate Governance in Oman

Founded in 2002, the Omani codes of corporate governance underwent a second revision in 2016 (Capital Market Authority, 2018). Some more amendments have been introduced recently, which are aimed at improving control and transparency in the performance of organizations. Although the developed codes do not define sustainability clauses, they only aim to comply with certain procedures rather than making policy recommendations (Baatwah et al., 2015). The Sultanate of Oman has developed sustainability goals for 2030, which include all the mandatory components, such as the centre for governance and sustainability (Omanuna, 2015); however, the rules of corporate governance do not include sustainability clauses, and there is no mechanism to identify sustainability in the corporate governance of an organization. Muscat Stock Market (MSM) had 115 companies listed at the end of August 2020. MSM divides companies into three categories: (1) financial, (2) industrial, and (3) services. The MSM requests that organisations comply with corporate governance codes and submit material information to the website.

## 2.5. Underlying Theories

Applicable theories associated with this study are the Fraud Triangle theory, Agency theory and Institutional theory. These theories are explained below:

### 2.5.1. Fraud Triangle Theory

Fraud is the major barrier to the achievement of SCG, and the Fraud Triangle theory (FTT) establishes reasoning informing why a fraudster commits a fraud (Torpey, Walden & Sherrod, 2011). FTT defines three dimensions, presented in Table 1, for any fraud to occur.

**TABLE 1**

Fraud Triangle Dimensions

| Dimension | Description |
|---|---|
| Pressure | Fraudsters' personal motivations or incentives. |
| Rationalization | Fraud is committed with an intention that the fraudster believes to be his/ her right and is also in the best interest of the society. |
| Opportunity | The fraudster should be capable of committing fraud, i.e., being able to govern the system or bypass internal controls. |

**Source:** Association of Certified Fraud Examiners (2018)

FRA can provide a pressure assessment and the consequences it may have on an organization. IA can identify fraudsters through its skills and knowledge via profiling or by observation and can mitigate the consequences of fraud. As part of the rationalization process, FRA develops controls, assesses the level of risk, and considers the impact on the organization. The FRA, when properly implemented, will show all areas in which fraud can take place, as well as its level of severity (Abdullahi & Mansor, 2015). Opportunities are only available when internal controls are weak. With the assistance of IA and reinforcement of FRA, these control lapses can be strengthened.

### 2.5.2. Agency Theory

Afza and Nazir (2014) explain agency theory as the process by which shareholders entrust certain experts with several responsibilities in order to achieve organizational success while solving conflicts of interest. Corporate governance is implemented by enlisted agents such as EM, IA, the BOD and related committees (Baatwah et al., 2015), which eventually leads to the achievement of the SCG. According to the Agency Theory, the ultimate responsibility for corporate governance rests with the agents who are hired by the principals. It is also the duty of organizational and governance management to ensure transparent results and safeguard shareholder interests, and such a responsibility can be met only by achieving SCG and utilizing IA. In addition, IA can contribute to the resolution and mitigation of agency conflicts and agency costs.

### 2.5.3. Institutional Theory

According to the Institutional Theory, organizations must conform to the demands of their institutional environment (Voet, 2020). Institutional environments shape organizations through intimidating and normative mechanisms. Due to fraud being the main barrier to attaining SCG, institutions have created pressure to develop controls such as fraud risk assessment (FRA) and establish assurance functions such as internal audit activity (IA). Additionally, this theory provides the standards for corporate behaviour (Scott, 1987) as well as their attitude toward controlling the environment and controlling efforts. As defined by this theory, managerial accountability is evaluated based on institutional effects as it considers the process by which rules, guidelines, and policies are developed (Aguilera, 2005; Puffer & McCarthy, 2015). It is based on the institutional theory that the role of governance management in preventing corporate corruption is directed toward creating SCG and satisfied shareholders (Lombardi et al., 2019).

## 3. RESEARCH METHODOLOGY

Using IA as a mediator, this study aims to identify the relationship and impact of FRA and IA on SCG. An analysis of public listed companies is conducted using a quantitative cross-sectional survey design. Previous studies have been used to develop the questions, i.e. questions were adopted and adapted from past studies. Participants in this study were those who could answer on behalf of the organization, such as the members of BOD and related committees and senior/ executive management, which included the CEO, CFO, COO, and head of internal audit departments. This study uses a five-point Likert scale logic along with multiple choice questions of 'yes' and 'no'. From strongly disagree to strongly agree, the Likert scale ranges from 1 to 5. There are separate question sections for SCG, FRA, and IA. These sections outline the research's definition and purpose. The sample size is determined by G*Power3, which suggests 74 organizations with an effect size of 0.15. The sample size of 74 organizations is necessary for a power of 0.95 and for a significance level of 0.05; however, 115 companies have been contacted for the purpose of this study.

PLS-SEM was used to analyse the data. The data was gathered from the twenty-seven questions asked of respondents, three of which were demographic questions. Respondents were asked to answer questions on an internet-based platform. The link was shared via email, LinkedIn, and WhatsApp. The measurement model should be evaluated to determine "if the study meets the requirements for further assessment of the structural model." According to Ramayah et al., (2016), the measurement model is evaluated using PLS-SEM, and Table 2 shows the acceptable value of the measurement model."

**TABLE 2**

Acceptable Values for Model Evaluation- Measurement Model Analysis

| Measurement/ Assessment | Index Utilized in PLS-SEM | Tolerable Values |
|---|---|---|
| Ensure validity for internal consistency | Composite reliability (CR). | CR is greater than or equal to 0.70. |
| Factor loading/ Indicator reliability | Indicator Loading | Outer loadings are greater than or equal to 0.5. |
| Ensure validity of the convergent dimension | Average Variance Extracted (AVE) | AVE is greater than or equal to 0.5. |
| Ensure validity of the discriminant dimension | HTMT Criterion | HTMT should be less than 0.85. |

**Sources:** Henseler, Ringle and Sarstedt (2015) and Ramayah, Cheah, Chuah, Ting, and Mumtaz (2016).

Subsequent to the measurement model assessment, the next step is to assess the structural model in PLS-SEM. Acceptable values of assessment model measurement are presented in Table 3.

**TABLE 3**

Tolerable Values for Model Evaluation- Structural Model Analysis.

| Assessment | Name of Index | Acceptable Values |
|---|---|---|
| Collinearity | Variance inflators factor (VIF) | VIF < 5 |
| Path Coefficient" | Path Coefficient | t value>2.33 and p-value <0.05 |
| R-square" | Coefficient of determination | 0.26- Substantial, 0.13- Moderate and 0.02- Weak. |
| f-square | Effect size | Large 0.16-0.35, Medium 0.03-0.15 and Small 0.02 |

**Sources:** García-Carbonell, Martín-Alcázar and Sánchez-Gardey (2015) and Hair, Hult and Ringle (2017)

Testing of the path relationship on the research model and the rules described in Tables 2 and 3 are mandatory in order to determine whether the relationship is statistically significant and also confirm the framework of the research study (Hair et al., 2017).

## 4. RESULT

In this study, FRA and SCG are evaluated along with IA as a mediator. A questionnaire was distributed to all 115 companies for this study, and those who were capable of responding were selected to participate as respondents. Compared to the suggested sample size of 74 by G*Power, the responses were received from 80 companies, which represents 70% of the overall organizations and goes beyond the sample size. A web-based tool is used to collect data, which is then analyzed utilizing PLS-SEM.

### 4.1. Demographic Profile of Respondents

According to the survey, most respondents are male, come from the industrial sector, and are in executive/senior management roles. An excellent mix of responses was received, and the demographic breakdown is presented in Table 4.

**TABLE 4**

Demographic Profile

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| Question | Response | Percentage |
|---|---|---|
| Gender | Male | 96% |
| | Female | 4% |
| Sector | Financial | 29% |
| | Industrial | 43% |
| | Services | 28% |
| Position in organization | Board of Directors | 21% |
| | Audit and Risk Committee member | 16% |
| | Nomination and Remuneration Committee member | 4% |
| | Executive/ Senior Management | 31% |
| | Chief/ Head of Internal Audit/ Risk Officer | 28% |

**Sources:** Calculate by the author

## 4.2. Assessment of Measurement Model

Measurement model assessment is performed as per the tolerable values defined in Table 2 and are presented in Table 5 and Figure 1.

**TABLE 5**

Measurement Model Assessment

| Indicators | Indicator Loading Range | Composite Reliability | Average Variance Extracted |
|---|---|---|---|
| FRA1 to 5 | 0.6 to 0.83 | 0.829 | 0.501 |
| IA1to 6 | 0.675 to 0.867 | 0.917 | 0.651 |
| SCG1 to 13 | 0.591 to 0.769 | 0.914 | 0.500 |

**Sources:** Calculate by the author

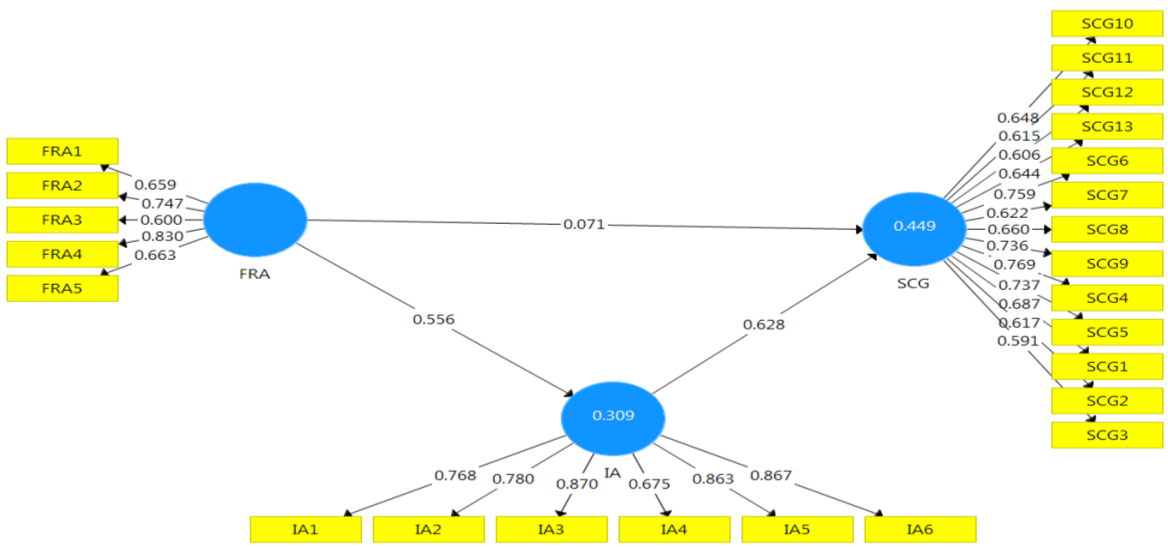


**Figure 1:** *Value of Outer-loading and* $R^2$

It appears that all the parameters are following the measurement model. Indicator reliability is above 0.5 for all indicators. As a result, the CR and AVE for FRA are 0.829 and 0.501, respectively, for IA, they are 0.917 and 0.651, and for SCG, they are 0.914 and 0.5. In Table 6, the HTMT values are below 0.85, which is within the threshold, demonstrating its discriminant validity.

**TABLE 6**

Heterotrait-monotrait (HTMT) Ratio

| Variable | FRA | IA | SCG |
|---|---|---|---|
| FRA | | | |
| IA | 0.548 | | |
| SCG | 0.371 | 0.651 | |

**Sources:** Calculate by the author

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### 4.3. Assessment of Structural Model

After the measurement model has been assessed, the structural model can be evaluated according to the rules in Table 3. The results are shown in Figure 1 and Table 7. VIF values are below 5, indicating that there is no issue of collinearity. $R^2$ values are above 0.26 and are considered as strong. Effect size values of the $f^2$ are small for FRA → SCG; however, $f^2$ for FRA →IA and IA →SCG are large as values are above 0.35.

### 4.4. Significance of the direct effect

The researcher used PLS-SEM for bootstrapping 80 samples with 5000 sub-samples in order to assess the significance of the direct effect. The path coefficient is used to determine the significance level of direct effects. In Figure 2 and Table 7, we display the significance of direct effect – path coefficients.

**TABLE 7**

Significance of Direct Effect - Path Coefficient

| Variable Path | Beta | Standard Deviation | T Statistics | P values | $R^2$ | $f^2$ | Decision |
|---|---|---|---|---|---|---|---|
| FRA → IA | 0.556 | 0.084 | 6.634 | 0.00 | 0.309 | 0.447 | Supported |
| FRA → SCG | 0.071 | 0.107 | 0.661 | 0.254 | | 0.006 | Not Supported |
| IA → SCG | 0.628 | 0.103 | 6.113 | 0.00 | 0.449 | 0.495 | Supported |

**Sources:** Calculate by the author

The beta value for all the relationships is positive, showing a direct relationship. Nevertheless, the relationship between FRA and SCG cannot be regarded as significant, as the t-value is lower than 2.33 and the p-value is higher than 0.05. Furthermore, the effect size of 0.006 suggests a relationship is not significant. A significant relationship exists between FRA and IA, as t values are greater than 2.33 and p values are less than 0.05.

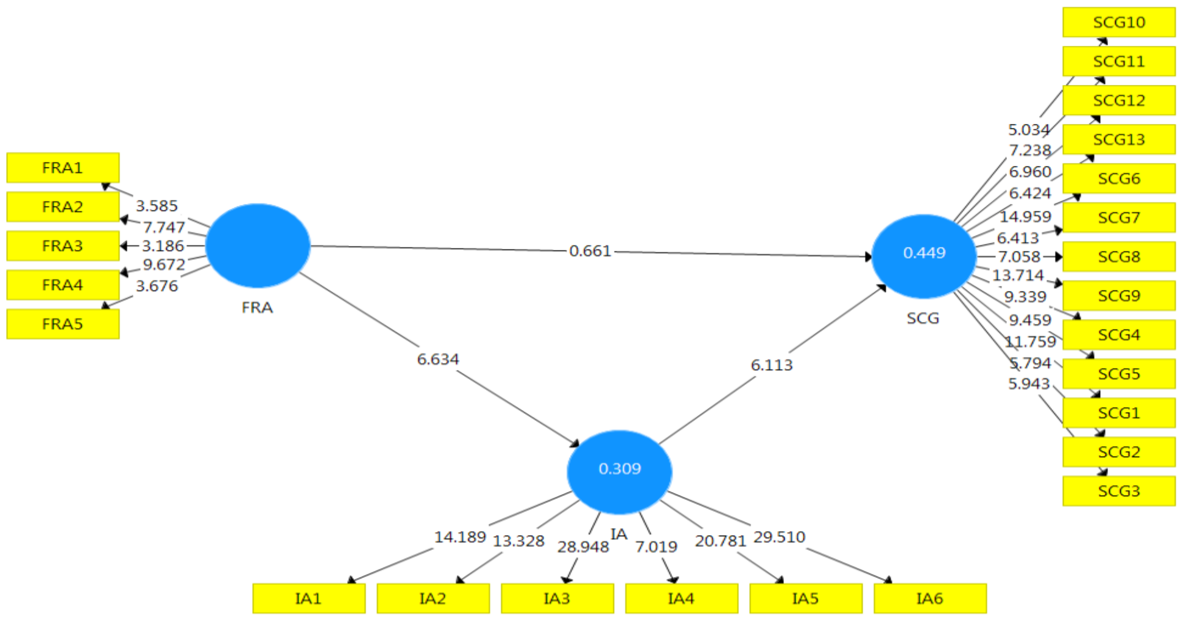


**Figure 2:** *Direct Effect - Path Coefficient and t-values*

### 4.5. Assessment of Mediating Variable

Bootstrapping is performed with a two-tail test with 5000 sub-samples and a significance level of 0.05 (Hair et al., 2017; Ramayah et al., 2016). Mediation occurs when the indirect relationship between independent and dependent variables is statistically significant. Table 8 demonstrates the indirect significance:

**TABLE 8**

Testing on Mediation

| Relation | Beta | Standard Deviation | T Statistics | P values | Decision Supported |
|---|---|---|---|---|---|
| FRA→ IA→SCG | 0.349 | 0.079 | 4.395** | 0.00 | Yes |

It is evident from Table 7 that FRA is not having a significant impact over SCG; however, Table 8 defines that IA mediates the relationship between FRA and CGM as the T-value is greater than 2.33 and the p-value is lower than 0.05. IA, as an activity and part of Agency theory, explains the relationship between control, which is FRA and system, which is SCG.

## 5. DISCUSSION

This study added to the existing body of knowledge by providing a framework for the SCG and its impact on fraud. This study establishes that FRA has no significant influence over SCG because control can be changed and violated by EM. However, with the assistance of IA, fraud can be controlled and SCG achieved. It is worth noting that previous studies only verified the impact of one factor/ constituent of SCG, and the impact was verified with either control or assurance activity; however, this study verified all four constituents of SCG, and the impact of FRA and IA was verified simultaneously. There are a few studies whose findings can be linked to the current study and compared. This finding is consistent with the findings of Boros and Fogarassy (2019) and Drogalas, Arampatzis, and Anagnostopoulou (2016), who found that risk controls, or FRA, have a positive relationship with risk mitigating activity, or IA, and that IA has a strong positive relationship with corporate governance. FRA is a policy which is amended over time, and usually, fraud occurs when these policies are not complied with. IA verifies the compliance with policies, and for this reason, there is a significant direct relationship between FRA and IA. Moreover, and in accordance with Fraud Triangle theory, pressure, incentive and motive are required to be monitored by activity available within the organization, i.e. IA. This result is consistent with the study conducted by Boros and Fogarassy (2019), where it is stated that risk controls which are FRA has a positive association with mitigating risk activity, which is IA.

IA, as an activity and part of the governance codes, contributes significantly to the achievement of SCG. IA is the agent of agency theory, providing shareholders with much-needed security and satisfaction. IA performs and executes a task that is directly related to organisational strategies and thus significantly aids in the achievement of SCG. The findings of this study are consistent with those of Drogalas et al., (2016), who found that IA has a strong positive association with corporate governance. As previously stated, FRA is a control, and there are numerous opportunities for management to override the controls; additionally, controls change over time, and they can never remain constant. Institutional theory requires that rules, regulations, and controls be updated in order to meet organisational needs, but there is a possibility that FRA controls are not amended or updated, resulting in a direct but insignificant relationship with SCG. The mediation results are consistent with the findings of Mohd-Sanusi, Rameli, Omar, and Ozawa (2015), who found that fraud control programmes have no significant impact on corporate governance due to constant changes in the regulatory environment, non-updating of policy, and management overriding of controls.

## 6. LIMITATION, AND FUTURE RESEARCH OF THE STUDY

This study is only for the Sultanate of Oman, but future studies for other Gulf countries are possible. Another limitation of this study is that it only includes publicly traded companies, whereas future research could include private companies as well. Furthermore, this study used responses from governance management, whereas future research can consider organisational management perspectives.

## 7. CONCLUSION

This study makes significant contributions to sustainable governance systems in addition to providing practical application to companies not only in Oman but globally. SCG compliance is required for publicly traded companies, and it is also an international requirement. The conceptual framework developed in this study is supported by three major theories: Agency theory, Fraud triangle theory, and Institutional theory. Agency theory supported the cause-and-effect relationship between IA and SCG, while Fraud triangle theory supported the influence of FRA on SCG. The SCG is explained by institutional theory, which determines that the SCG is dependent on many factors and can be achieved by FRA and IA. Similarly, this study is expected to make a significant contribution to a better understanding of IA in the context of SCG. Companies will benefit from the study's findings and conclusions because they will be able to update their codes to include SCG principles; additionally, this study will assist organisations in identifying and closing activity and strategic gaps. All aspects of sustainability goals should be integrated into organisational corporate governance in order to achieve total sustainability. FRA-provided controls, which are monitored by IA, help to prevent fraud by detecting potential threats, implementing controls, and developing mitigating policies. Fraud is a high-risk possibility that can only be mitigated and regulated by the FRA and IA. Furthermore, it is the SCG that may help organisations achieve sustainable operations and businesses reach their full potential by providing benefits not only to themselves or their shareholders, but to society as a whole.

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