



The Impact of Chief Audit Executive's Leadership Style and Senior Management Support for Internal Audit Function on Corporate Governance Effectiveness with the Moderating Effect of Audit Committee Characteristics: Evidence from Yemen

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ABSTRACT

The objective of this paper is to determine the relationship between the Chief Audit Executive's (CAE) leadership style and senior management support for the internal audit function (IAF) as determinants of IAF quality and corporate governance (CG) effectiveness in Yemeni commercial banks. This article also investigates the extent to which the characteristics of the audit committee (AC) influence the link between CAE leadership style, support senior management for IAF, and CG effectiveness. 16 Yemeni commercial banks made up the sample. In this study, non-probability sampling was used. The responses to 158 questionnaires provided by the heads and employees of internal audit, the heads and members of audit committees, the chief executives, and the financial managers served as the foundation for the findings. Smart PLS 3 was used to analyse the data and test the hypotheses. The PROCESS macro approach was also utilised to evaluate the influence of AC characteristics on the association between CAE leadership style, senior management support for IAF, and CG effectiveness. An affirmative substantial correlation was found between CAE leadership style and senior management support for IAF, and CG effectiveness. Furthermore, the study found that AC characteristics favourably influence the association between CAE leadership style and CG effectiveness. However, AC characteristics do not alter the association between senior management support for the IAF and CG effectiveness. The findings improve the IAF's quality of determinants to enhance CG in developing countries, such as Yemen.

Keywords: Yemen, Commercial banks, AC characteristics, CAE leadership style, Senior Management Support, CG Effectiveness.

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1. INTRODUCTION

Following corporate frauds and the worldwide economic crisis, authorities have paid close attention to CG (Soh & Martinov-Bennie, 2011). CG contributes to financial and economic stability. Even though CG is important for all firms, it is considerably more critical for banks and the banking industry than other economic sectors. According to Fernandes et al. (2018), CG in banks has received more attention than in non-financial organisations, as interest in CG in banks was fuelled by the importance of banks to the economy as well as the high costs of governance failures in banks. In other words, inadequate CG was a major factor in the demise of a vast number of important financial institutions all around the globe.

The BASEL Committee stressed the vital role of CG in banks, noting that efficient CG is critical to the banking sector and a healthy economy. Banks play a significant role

in the economy by facilitating the transfer of funds from savers and depositors to activities that support enterprises and help drive economic growth (BCBS, 2015). Furthermore, strong CG is associated with greater profitability, sales growth, and reduced capital expenditures in most situations (Drobetz et al., 2003). Effective corporate governance attributes have been demonstrated to have a significant effect on information quality (Elghuweel et al., 2017). An effective CG structure also aids in the prevention of conflicts of interest between executives and shareholders and shareholders and other parties involved (Oino, 2019). Recent research by Fakhfakh and Jarboui (2021) suggests that good company governance reduces audit risk. Based on these results, it appears that good corporate governance provides a framework for internal and external oversight, which in turn helps reduce agency concerns. According to Kassem (2022), strong corporate governance has the potential to reduce the risk of fraud, help prevent fraud, and

uncover several types of fraud, including corporate fraud, insider fraud, and asset diversion. Companies with strong governance structures, as stated by Yang and Wang (2011), are more likely to engage in proactive voluntary disclosure. As Wilson (2006) points out, however, bad CG might lead to the loss of market faith in the ability of banks to effectively control their holdings and commitments. Furthermore, the fraud risk, the opportunity to commit fraud, and the chance of discovery are all increased by ineffective corporate governance (Kassem, 2022). As a result, the financial system's strength and its sensitivity to uncertainties and hazards are determined by the effectiveness of CG processes in financial institutions.

Many academics stressed the importance of internal auditing in improving company governance. According to the CG model introduced by the Institute of Internal Auditors (IIA) and the BASEL Committee on Banking Supervision, the effectiveness of IAF is one of the four significant pillars of CG, besides audit committee (AC), executive management, and external auditor (BCBS, 2012; IIA, 2000). By increasing the efficacy and reliability of the internal control system, enhancing the risk mitigation process, and strengthening CG processes, IAF quality aids in the improvement of CG (Coram et al., 2008; Karagiorgos et al., 2010; Sarens et al., 2009; Van Peurse, 2004). On the same level, Pickett (2011) claims that the IAF is effective if it can fulfil its duty or increase the quality of financial reports by enhancing governance, risk management, and internal control.

Strong internal control and risk management systems, as well as a desire to cut down on internal and external agency expenses, are what push businesses to establish an IAF, as stated by Ismael & Roberts (2018). These findings support the case for the usefulness of IAF as an internal corporate governance instrument and for the usefulness of UK governance standards in gauging the efficacy of internal control systems. In addition, Chen et al. (2020) demonstrate that an IAF may improve the quality of internal controls, which in turn can improve operational efficiency. The ability to monitor, as shown by an internal audit, also has a significant impact on avoiding corporate fraud, as Zeng et al. (2020) note. This occurs when the chief audit executive is afforded greater visibility and authority within the organisation. In addition, improved internal auditing leads to better financial reporting, which in turn leads to better corporate governance, as stated by Kaawaase et al. (2021). Furthermore, the level of security and cybersecurity auditing performed by IAF is substantially and favourably connected with IAF competency related to governance, risk, and control (Islam et al., 2018).

The debate over what factors contribute to the success of IAF is ongoing (Drogalas et al., 2015; Lenz & Hahn, 2015), and there have been demands to broaden knowledge, particularly in developing nations (Alzeban & Gwilliam, 2014; Endaya & Hanefah, 2013, 2016; Mihret & Grant, 2017; Yee et al., 2008). Furthermore, the CAE leadership style and senior management support for IAF did not receive much attention when analysing the efficacy of the IAF. Furthermore, although recent research (Abdullah et al., 2018; Abernathy et al., 2014; Alzeban, 2015; Gebrayel et al., 2018) indicates the importance of AC characteristics in enhancing the effectiveness of IAF. To our knowledge, no

research has been conducted on the correlation between CAE leadership style, senior management support for IAF As drivers of the quality of the IAF, and CG effectiveness, as well as the role of AC characteristics in modifying this association. Consequently, the current study is to determine if the leadership style of CAE and the support of senior management for IAF are associated to the enhancement of CG. In addition to the influence of AC characteristics on this connection.

This article adds new contribution to the present internal audit literature by investigating the role of determinants of IAF quality in enhancing CG. It fills a gap in previous research regarding the relationship between determinants of IAF quality and CG effectiveness in Yemen, and the moderate role of AC characteristics, thereby highlighting the importance of determinants of IAF quality, and AC characteristics as a moderating variable.

This paper is organised as follows: Section 2 deals with the process of doing a literature review and formulating hypotheses. Section 3 covered the methodology. Section 4 holds the empirical findings. As for the findings, they are discussed in detail in Section 5. Eventually, researchers came to the conclusion in the last section.

2. REVIEW OF LITERATURE AND HYPOTHESIS DEVELOPMENT

2.1 Theoretical framework

The relationship between IAF and CG is frequently explained using the theory of agency. The essential premise of agency theory is the existence of a contractual relationship between two individuals, or "agents" and "owners," wherein the owners appoint the agents to perform services on their behalf (Jensen & Meckling, 1976; Muda & Dharsuky, 2015). Managers (agents) are given authority by owners (shareholders) to run the company and make decisions. Both owners and management have lofty expectations for the company's financial performance. Owners anticipate big returns on investment, while management anticipates substantial salary for their work (Muda et al., 2018). Because corporate managers are presumed to care more about maximising their own profits (opportunistic behaviour) than the shareholders' (owners'), this, according to agency theory, causes a conflict of interest between owners (shareholders) and agents (managers) (Davidson et al., 2005; Hillman et al., 2011; Lin et al., 2011). Managers' opportunistic behaviour can include, but is not limited to, financial report manipulation (Ittonen et al., 2010; Xie et al., 2003). Agency theory suggests a degree of oversight and procedures be put in place to shield investors from management's self-interest (Al-Matari, 2019). CG mechanisms reduce the agency problem because they encourage open communication, protect shareholders' interests, and deter managers from acting in their own self-interest. The IAF is one of these mechanisms (Bushman & Smith, 2001; Shleifer & Vishny, 1997). According to agency theory, the IAF plays a central role in the corporate governance mosaic by bridging the gap between managers and agents in terms of information asymmetry issues (Fadzil et al., 2005; Sarens & Abdolmohammadi, 2011). IAF is regarded as one of the most important pillars that improve the efficacy of CG and

is a critical component in establishing a solid governance system.

Advocates of the agency theory contend that top management funds the IAF to ensure the board that the internal control framework, risk management procedure and governance processes are effective. Considerations from agency theory suggest that certain traits of internal audit personnel may enhance the IAF's capacity to maintain and assess an efficient internal control system (Oussii & Boulila Taktak, 2018). Because of this, the internal audit function has the potential to be extremely important in reducing the gap between owners and management, which lowers agency issue, and enhancing CG.

Based on the preceding discussion, we can clearly see that agency theory is a pivotal and effective theory that can explain the relationship between the determinants of the quality of the internal audit function and the effectiveness of corporate governance. Therefore, it is helpful to employ agency theory while developing a theoretical basis for research.

2.2 CAE Leadership Style

The role of the chief audit executive (CAE) is crucial in attracting and cultivating talent, improving internal audit effectiveness, and delivering value to the organisation (Hoos et al., 2015). A vital characteristic of the CAE is the leadership style (Burnaby et al., 2007). To define a leader's style, terms like "transformational," "transactional," and "laissez-faire" are widely employed (Bass, 1999). Rewarding followers for achieving expectations is a common tactic used by transactional leaders whereas inspiring and intellectually urging followers to act for the greater good is used by transformative leaders (Bass, 1999; Burns, 1978). Employee dedication, excellent organisational, team, and individual performance are all important predictors of transformational leadership results (Casida & Parker, 2011; Dvir et al., 2002; Johnson, 1992; Wang et al., 2011). In addition, the CAE must be a transactional leader (Eagly et al., 2003). And creates clear objectives and targets, and outlines the monetary and non-monetary rewards for achieving them (Hargis et al., 2011; Jing & Avery, 2008).

The findings of an empirical study conducted by Dal Mas & Barac (2018) confirm that CAE leadership style holds a significant effect on IAF effectiveness. According to Lenz (2013), the quality of leadership shown by the chief audit officer has a substantial effect on the efficacy of internal auditing processes. Furthermore, Erasmus & Coetzee (2018) claim that charismatic leadership elicits emotional responses, inspires vision, and engages followers in order to attain common goals through collective action. Hence, it is evident that CAE leadership style affects IAF's contribution to CG effectiveness, leading to the following hypothesis:

H1: There is a positive and significant relationship between CAE leadership style and the IAF's contribution to CG effectiveness.

2.3 Senior Management Support

The ability of the IAF to operate effectively depends on senior management's cooperation (Ahmad et al., 2009). Senior management support is critical and vital for establishing and activating the IAF and enabling the fulfilment of the internal auditors' tasks (Alzeban & Gwilliam, 2014; Dellai & Omri, 2016). In order to have a successful internal audit, an internal audit must have senior management support to hire and educate qualified and experienced employees, as well as build a connection with external auditors (Alzeban & Gwilliam, 2014).

According to Cohen & Sayag (2010), senior management support is the most important factor for successful IAF, since administrative support was significantly connected to the three dimensions of internal audit effectiveness (audit quality, evaluations of regulators, and contribution to adding value). According to Soh & Martinov-Bennie (2011), internal audit's relationship with senior management in terms of funding and lines of reporting is critical to its effectiveness. Similarly, Endaya & Hanefah (2016) say that senior management support for IAF is critical for the efficacy of internal audits, and has a moderating impact on the direct association between the competence of the internal auditor and the internal audit effectiveness. Furthermore, Ahmad et al. (2009) discovered that appropriate administrative support for the IAF, including enough resources in terms of personnel and funding, affected the implementation of internal audit recommendations significantly.

When there is little administrative support, auditing is seen as an inconsequential aspect of senior management's agenda, and this creates a negative attitude among the parties being audited (Mihret & Yismaw, 2007). Additionally, the IAF's effectiveness may be hampered by a lack of administrative assistance and insufficient resources for the internal audit department (Ahmad et al., 2009; Onumah & Krah, 2012). Furthermore, the IAF loses its impartiality and independence if management does not support it. Without management assistance, it is impossible to hire qualified staff and to promote the careers of internal auditors (Dellai & Omri, 2016). Hence, it is evident that senior management support for IAF affects IAF's contribution to CG effectiveness, leading to the following hypothesis:

H2: There is a positive and significant relationship between senior management support for IAF and IAF's contribution to CG effectiveness.

2.4 AC Characteristics

By influencing resource allocation choices and IAF reporting lines, AC has a substantial effect on the IAF's quality (Gramling et al., 2004). The involvement of AC in the work of internal auditors increases the IAF's overall performance (Arena & Azzone, 2009). Furthermore, AC's specialised assessments of internal audit activities are crucial in enhancing the IAF's overall quality, particularly the overall quality of the various stages of internal auditing (Abdullah et al., 2018).

AC must be of high quality in order to play its essential role in improving the effectiveness of the IAF. The number of members, independence, and financial expertise of AC, as well as the regularity with which it meets, have all been established in previous studies to be indicative of the AC's quality (Al-Jaifi et al., 2017; Alzeban, 2015; Carcello & Neal, 2000).

Some academics offered empirical evidence that AC which comprises independent members and at least one financial expert, provides a better interchange of information with the CAE and is better able to evaluate the IAF's audit outcomes (Raghunandan et al., 2001). Furthermore, a firm with an effective AC can supply a strong indication to probable clients that the company is under robust supervision through highly experienced independent directors who meet regularly (Al-Jaifi et al., 2019). Furthermore, in their empirical study in Egypt to look at the impacts of AC characteristics on earnings management, Soliman & Ragab (2014) discovered that AC independence, financial knowledge, and frequent meetings hinder the earnings management process. Moreover, the inclusion of independent members with experience in AC, and regular meetings between AC and senior internal auditors affect the process of implementing recommendations (Alzeban & Sawan, 2015).

Sharma et al. (2011) show how the AC moderates the relationship between the auditor's economic value to the client and profit management. According to the study's conclusions, auditor independence problems can be mitigated by AC in order to ensure financial reporting quality. Similarly, Al-Rassas (2015) observed that the size, independence, and frequency of AC meetings impact the link between the IAF and the efficacy of profit-management practises. This finding also demonstrates that IAF can boost the firm's profit quality level when AC is highly effective. In addition, the findings show that when AC's performance is bad, the IAF is not able to properly manage the company.

In 2013, the Republic of Yemen's guidelines for bank governance stipulated that the chairman and a plurality of AC's members have to be independent. It was also stipulated that AC must include at least one member with experience in accounting and auditing, and that AC must hold at least four meetings per year, with no member of the AC having fewer than three members (CBY, 2013). AC is in charge of looking at the performance and appropriateness of IAF, as well as the scope and programmes of internal audit, and the results of internal audit reports, in accordance with the rules. Thus, this study claims that AC characteristics moderate the relationship between CAE leadership style and senior management support for the IAF and the IAF's contribution to CG effectiveness, leading to the following hypothesis:

H3a: AC characteristics moderate the relationship between CAE leadership style and IAF's contribution to CG effectiveness.

H3b: AC characteristics moderate the relationship between senior management support for IAF and IAF's contribution to CG effectiveness.

Based on the foregoing, Figure 1 summarises, the presumed links between the determinants of the quality of IAF and CG effectiveness, and the role of the AC characteristics in adjusting this relationship.

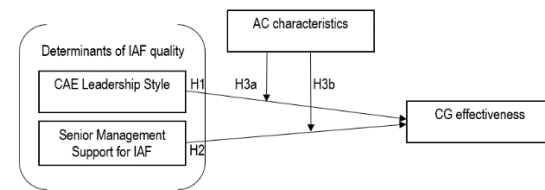


Figure 1. conceptual framework

3. METHODOLOGY

3.1 Research Design

In the context of research, design refers to the methods utilised to gather and analyse data that are relevant to the study questions or hypotheses being investigated (Crotty, 2009). In most situations, quantitative and qualitative research methods are used. The current study employed a quantitative approach to examine the relationship between CAE leadership style and senior management support for IAF, and the IAF's contribution to CG effectiveness. The questionnaire form was selected as the primary method for gathering study data in order to meet the study's objectives and provide answers to its questions. This is due to the fact that questionnaires have a high response rate and are one of the simplest and most suited instruments for exploratory and field research. The questionnaire, according to Sekaran and Bougie (2016), is the most crucial and effective method for gathering data. In addition, the questionnaire list was used to collect data in many previous research of this type (e.g. Abdullah et al., 2018; Alzeban, 2015; Drogalas et al., 2015; Endaya & Hanefah, 2016). February through April of 2021 was the time frame for the survey. The researchers used the Smart PLS-SEM 3.3.3 version to measure the variables and assess the study hypotheses.

3.2 Sample

There were sixteen commercial banks from Yemen participating in this survey, eleven of which were conventional banks and five Islamic banks. Internal audit heads and employees, AC heads and members, chief executives, and financial managers from these institutions are included in the research sample. The questionnaire was conducted over a three-month period, from February 20, 2021 to May 20, 2021. There were two hundred and twenty-one questionnaires sent out, with 174 returned, 45 not returned, and 16 considered unfit for research. The entire number of viable questionnaires was then used, resulting in 158 responses (72 percent). For this investigation, 158 responses were deemed adequate. Men account for the majority of replies (135 out of 158) 85.4 percent of the total. There were 57 people who answered the survey who were between the ages of 31 and 40, which makes up the majority of those who responded (or 36 percent). With 25.5 percent of the total (40 participants), the 41-50 age group comes in second. On the other side, the majority (57 persons) of the 158 people who replied to the poll had more than 15 years of experience, while just seven had less than one year of experience.

3.2.1 Sampling Method

The researcher chose the intended sample. Intentional sampling, also known as non-random sampling, is a type of sampling that the researcher deliberately chooses to meet the needs of his research. It is used in the case of small and homogeneous communities, where the researcher chooses the vocabulary deliberately, and it is used in the case of small and congener (Azzam, 2006). As a result, this sample is of the sort of “hypothetical or deliberate sample,” or expert sample, in which participants are selected based on their expertise or comprehension of the study’s topic rather than demographic traits (Ilker, 2016). It was decided to utilise a sample of this type because of the complexity of the questionnaire, which needs expertise and familiarity with principles of CG and the elements that determine IAF quality. Table 1 presents an overview of the study sample as well as the number of questionnaires distributed and received:

Table 1 Distributed and Retrieved Questionnaires and Recall Ratio

NO	Responders	Distributed Questionnaires	Accepted Returned Questionnaire	Response Rate
1	Heads of ACs	16	6	%37
2	AC members	45	35	%78
3	CEOs	16	11	%69
4	CFOs	16	12	%75
5	CAEs	16	10	%62
6	Internal Auditors	112	84	%75
	total	221	158	

3.3 Measurement

In this study, independent variables are represented by CAE leadership style and senior management support for IAF. The dependent variable is represented by the effectiveness of CG. The moderating variable is represented by the AC characteristics. According to previous studies, 15 factors were taken to measure CAE leadership style, according to Erasmus & Coetzee (2018), and seven factors when measuring senior management support for IAF (Alzeban & Gwilliam, 2014; Dellai & Omri, 2016; Drogalas et al., 2015). It was also possible to identify 11 factors as proxies for measuring the effectiveness of CG. Based on past research, these proxies were developed (Hung & Tuan, 2019; Sarens et al., 2012; Vadasi et al., 2019). In addition, four factors were selected to quantify AC characteristics (Alzeban & Sawan, 2015; Vadasi et al., 2019). These characteristics are represented by the size of

AC, its independence, having a member with financial experience, and the frequency with which AC meets. Likert scales were used to score all of the research variables, where 1 = strongly disagree and 5 = strongly agree. Since it is thought to be the best scale for increasing average scores, preserving measuring method reliability, and being most relevant, this scale was selected (Dawes, 2008; Krosnick & Fabrigar, 1997).

4. FINDINGS

As a means of verifying and testing the variables and hypotheses, PLS-SEM 3.3.3 was employed. We've checked the items were tested for reliability, discriminant validity, and convergent validity for each of these study variables. The path coefficients and R2 have also been determined. The intensity and direction of the correlations between the variables are represented by path coefficients. The degree of variance in the dependent variable caused by the independent variables is also shown by R2 value.

4.1 Measurement Model

The items used must be exact in order to get valid measurements of the latent variables. As a consequence, the items' reliability, convergent validity, and discriminant validity were assessed. The results reveal that all of the measurement models fulfil the fundamental requirements. Furthermore, larger loading factors for outer loading factors indicates greater reliability. In fact, based on the recommendations made by Hair et al. (2014), the outer loading of each construct was tested in order to assess the measurement model. Items with an exterior loading of greater than 0.60 were preserved as a general rule. As can be seen in Table 1, all of the items in this investigation had outside loading values larger than 0.60.

Cronbach's alpha and composite reliability are two more data consistency metrics that allow for more precise data consistency assessment. The degree to which all items on a single (sub) scale assess the same variable is referred to as internal consistency reliability (Sun et al., 2007). according to Hair et al. (2010), composite reliability must be above 0.70. As result, the findings reveal that the components have a high level of internal consistency in this investigation. Furthermore, Chin (1998) recommended that the AVE of each latent structure be greater than 0.50 to ensure convergent validity. Table 1 shows that all variables' AVE test values were above (0.5), indicating sufficient convergent validity. A summary of the measurement model is shown in Table 2.

We also looked at discriminative validity to evaluate how closely the variables were related. Discriminant validity is a method of determining how different one variable in a study framework is from another (Madawaki & Ahmi, 2021). AVE and HTMT are required for determining discriminative validity (J. Hair et al., 2017). According to Fornell and Larcker (1981), in order to achieve sufficient discriminant validity, the square root of AVE for a single variable must be greater than the correlations between latent components. HTMT estimates the genuine correlation between two separate constructs. If the result of HTMT is below one, discriminative validity is indicated (Henseler et al., 2015). All AVE and HTMT values suggest that all constructs have discriminant validity. As shown in Table 3, all AVEs were

more than the required value. Also, Table 4 shown that HTMT is below one, confirming the test's discriminant validity. The measurement model, on the other hand, appears to be both trustworthy and valid, based on the findings that have been published. As a result, we may conclude that the present measurement approach utilised in this study is suitable for application in other studies. Figure 2 illustrates the results of the assessment of the measurement model.

Table 2. Measurement model: Loadings, Reliability and Convergent Validity, Cronbach's Alpha, and AVE

Variables	Items	loading	Cronbach's alpha	CR	AVE
CG Effectiveness (CGE)	CGE1	0.794	0.935	0.94	0.60
	CGE2	0.793			
	CGE3	0.769			
	CGE4	0.738			
	CGE5	0.833			
	CGE6	0.670			
	CGE7	0.814			
	CGE8	0.699			
	CGE9	0.795			
	CGE10	0.817			
	CGE11	0.844			
CAE leadership style	LEAD1	0.736	0.933	0.94	0.51
	LEAD2	0.746			
	LEAD3	0.693			
	LEAD4	0.696			
	LEAD5	0.754			
	LEAD6	0.731			
	LEAD7	0.667			
	LEAD8	0.713			
	LEAD9	0.617			
	LEAD10	0.697			
	LEAD11	0.733			
Senior management support for IAF	SUP1	0.665	0.870	0.90	0.56
	SUP 2	0.675			
	SUP 3	0.701			
	SUP 4	0.792			
	SUP 5	0.859			
	SUP 6	0.763			
	SUP 7	0.788			

Notes: AVE = average variance extracted; CR = composite reliability

Table 3. Discriminant validity (Fornell-Larcker criterion)

	CGE	LEAD	SUP
CGE	0.718		
LEAD	0.717	0.7810	
SUP	0.687	0.752	0.830

Table 4. HTMT ratio

	CGE	LEAD	SUP
CGE			
LEAD	0.774		
SUP	0.747	0.907	

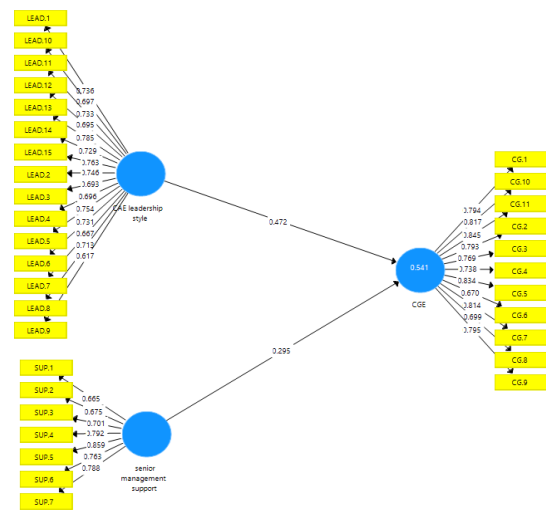


Figure 2. Measurement Model Assessment

4.2 Structural Model:

4.2.1 Test the Main Hypotheses

To investigate the connection between the research variables and test the study hypotheses, the structural model uses the PLS technique. t-statistics, path coefficients, and R2 are all included in this analysis. The route coefficients show how strong and which way the associations are going, while the t-statistics and standard errors show how much of an influence there is. The model's explanatory power may also be determined by R2, which calculates the amount of variation in the dependent variable that can be explained by the model's independent variables.

As shown in Figure 2, the R2 values from the study's findings reveal that the proposed framework accounts for roughly 54 percent of the variance in CG effectiveness. To put it another way, independent variables may explain around 54 percent of the variance in CG effectiveness, showing that the suggested framework has a fair degree of explanation (Chin, 1998). As a result, the explanatory power of the proposed model is satisfactory in this situation.

When it came to path structure, the researchers employed the bootstrapping approach to evaluate the expected correlations empirically; 2000 bootstrap samples have been used to determine the significance of the path coefficients. Table 3 lists the t-values, p-Values, and path coefficients for each of the relationships. A positive and statistically significant relationship was found between CAE leadership style and the contribution of the IAF to CG (path coefficient =0.460; t=4.415; p<0.001). This means that when CAE

leadership style improves, the contribution of the IAF to CG will also improve, which makes H1 acceptable. In the same way, the relationship between senior management support for IAF and the contribution of the IAF to enhancing CG was

positive and statistically significant (path coefficient =0.303; t=2.755; p<0.001), indicating that when senior management support for IAF increases, the contribution of the IAF to enhancing CG will increase, which makes H2 acceptable.

Table 3 displays the findings of hypothesis testing.

Hypotheses	Relations	Path coefficient	Std. error	t-value	P-Value	Decision
H1	LEAD → CGE	0.460	0.104	4.415	0.000**	Supported
H2	SUP → CGE	0.303	0.110	2.755	0.006**	Supported

Table 3. Path Coefficients, Standard Deviation, T-value, P-value, and Hypothesis Testing Result

Note: Significant level **p < 0.05\

4.2.2 Test the Moderation Hypothesis

In this research, a multiple regression model had been used to test the potential moderation of AC characteristics between CAE leadership style, senior management support for IAF, and the contribution of the IAF to CG effectiveness. SPSS add-on called PROCESS macro developed by Hayes (2012) was used to examine potential moderation of AC characteristics.

The results of data analysis have been shown in Table 4, which reveal that the effect of AC characteristics is a positive effect on moderating the relationship between CAE leadership style, and the contribution of the IAF to enhancing CG ($\beta = 0.397$; $t = 2.667^*$; $p = 0.008$), which indicates that there is a significant positive overlap effect of AC characteristics, between CAE leadership style, and the contribution of the IAF in enhancing CG. Table 4 shows the moderating impact of AC characteristics between CAE leadership style and the contribution of the IAF to strengthening CG. As a result, hypothesis H3a was confirmed.

Table 4. The Moderate Effect of AC Characteristics Between CAE Leadership Style and CG Effectiveness

Model	Coeff β	S.E	t-value	p-value	LI(CI)	UP(CI)
Constant	5.009	1.298	3.859	0.0002	2.445	7.573
CAE Leadership Style	-0.1022	0.305	2.424	0.0153	-0.706	0.501
AC Characteristics	-1.8156	0.636	-2.851	0.0049	-3.073	-0.557
CAE Leadership Style * AC Characteristics	0.3971	0.148	2.667*	0.0083	0.103	0.691

Note: * shows the level of significance i.e. P-Value< 0.05, t- value at 0.10 sig. level is 1.645 (Hair et al., 2019; Ramayah et al., 2017)

Table 5 shows that the moderate influence of AC characteristics has no significant effect on the connection between senior management support for IAF and the IAF's contribution to enhancing CG ($\beta = 0.285$; $t = 1.827$; $p = 0.069$). This implies that AC characteristics had no effect on

the relationship between senior management support for IAF and the IAF's contribution to enhancing CG. As a consequence, the hypothesis H3b was shown to be false.

Table 5. The Moderate Effect of AC Characteristics Between Senior Management Support for IAF and CG Effectiveness

Model	Coeff β	S.E	t-value	p-value	LI(CI)	UP(CI)
Constant	4.309	1.424	3.026	0.0029	1.495	7.122
Senior Management Support	0.055	0.329	0.166	0.8677	-0.706	0.706

AC Characteristics	-1.327	0.678	-1.958	0.0520	-3.073	0.011
Senior Management Support *AC Characteristics	0.2853	0.158	1.827*	0.0695	-0.0231	0.593

Note: * shows the level of significance i.e. P-Value < 0.05, t- value at 0.10 sig. level is 1.645 (Joseph F Hair et al., 2019; Ramayah et al., 2017)

4.3 Discussion of results

This research aims to see if there's a link between CAE leadership style and senior management support for IAF as drivers of IAF's quality and CG effectiveness in Yemeni commercial banks. The extent to which the AC characteristics impact the relationship between CAE leadership style, senior management support for IAF, and CG effectiveness is also investigated in this paper.

In terms of the audit chief's leadership style, the findings demonstrated a favourable and statistically significant association between the audit chief's leadership style and the efficacy of CG, so H1 is supported. These findings are agreeing with those of Martino et al. (2021), who found that CAE leadership skills are closely and positively correlated with IAF participation in CG operations, and they concluded that this finding supports the opinion that CAE with excellent leadership skills assist the IAF in transitioning from a back-the-scenes player to a critical player in improving CG practises.

Regarding senior management support for IAF, the study discovered a positive and substantial link between senior management support for IAF and CG effectiveness, indicating that H2 is supported. This outcome is agreeing with past research findings (Alzeban & Gwilliam, 2014; Drogalas et al., 2015, 2018). For example, Drogalas et al. (2018) highlighted the relationship between the internal audit quality factors and CG effectiveness in Greek companies listed on the Athens Stock Exchange. According to the study's findings, the administrative support of internal audit is favourably and quite connected to the efficacy of CG. Alzeban and Gwilliam (2014) discovered that management support for IAF is a critical element influencing the perceived IAF effectiveness from the perspectives of both management and internal auditors. Drogalas et al. (2015) indicate that senior management support for internal audit has a favorable impact on the efficacy of internal audit in the Greek firm environment. Thus, in the context of Yemeni commercial banks, the findings of this study show that senior management support for IAF, such as providing qualified employees, adequate funds, supporting plans for training and qualifying internal auditors, and providing legal protection for them, in addition to granting them unrestricted access to review all of the bank's work, leads to better CG in Yemeni commercial banks.

We tested whether AC traits modify the association between CAE leadership style, senior management support for IAF, and CG effectiveness in Yemeni commercial banks using the moderator effect model. Based on these findings,

the present investigation hypothesized (H3a and H3b). The study outcomes showed that AC characteristics influenced the link between CAE leadership style and CG effectiveness positively and substantially, confirming the H3a hypothesis. This implies that the stronger the AC's effectiveness, the greater the CAE leadership style's contribution to improving CG is expected to be. This indicates that having AC with the appropriate competence, such as size, independence, financial knowledge, and regular meetings, boosts the CAE's contribution to CG performance. One of the most important explanations for this result is that the effective AC, through direct supervision on the heads of internal audit, encourages them to enhance their leadership style. Internal audit chiefs, for example, should be pushed to make internal auditors happy and proud, help them grow and improve their skills, and help them do their jobs by giving them clear instructions and giving them incentives and advantages, they deserve.

Moreover, the results of the study showed that AC characteristics do not modify the relationship between senior management support for IAF and CG effectiveness. That is, the efficiency of the AC does not lead to modifying the relationship between senior management support for IAF and CG effectiveness, contrary to the belief that AC characteristics do. As a result, hypothesis H3b was ruled out. Perhaps the most likely reason for this outcome is that the IAF receives independent support from senior management in terms of providing it with the necessary resources, both in terms of funding and qualified personnel. This indicates that this support is not affected by the competence of AC and thus may not necessitate the supervision and follow-up of AC.

5. CONCLUSION AND IMPLICATIONS

The primary purpose of this research is to look into the relationship between CAE leadership style, senior management support for IAF as drivers of the quality of IAF, and the IAF's contribution to promoting CG in an emerging market environment. The study also aimed to determine the impact of AC characteristics on moderating the relationship between CAE leadership style, senior management support for IAF, and the IAF's contribution to promoting CG. The outcomes of this study add to a growing corpus of research on the importance of determinants of IAF quality in improving CG. To determine the contribution of determinants of IAF quality to increasing CG, research hypotheses are developed. The empirical findings show that a CAE leadership style and senior management support for IAF are both positively and significantly connected to CG effectiveness. Similarly, the findings show

that AC characteristics moderate the association between CAE leadership style and the IAF's contribution to strengthening CG, but do not moderate the relationship between senior management support for IAF and the IAF's contribution to enhancing CG.

We think that our research has proven how important the CAE leadership style approach and senior management's support for IAF are in enhancing CG. In addition to how AC characteristics influence the relationship between the CAE leadership style and IAF's contribution to enhancing CG.

The results of the current study provide several significant contributions. In terms of research, this study adds to the growing body of publications on the relationship between the determinants of IAF quality and the assistance of the IAF to improve CG effectiveness. It supports the importance of IAF determinants and their ability to contribute to CG effectiveness. In terms of practise, our findings indicate that boosting the CAE leadership style and senior management support for IAF will result in greater CG effectiveness by increasing the efficacy and efficiency of operations and activities and maintaining the bank's compliance with regulations. In addition to promoting integrity and ethical values and enforcing banks' asset protection stringent procedures, which lead to the generation of accurate and non-misleading financial reports are promoted. In terms of regulatory bodies, our findings show that re-examining how to improve CAE leadership style and senior management support for the IAF leads to an increase in the IAF's contribution to improving the CG.

The results of this study indicate that, when viewed in light of the agency theory, CAE leadership style and senior management support for IAF serve as important factors in enhancing CG. According to agency theory, the IAF bridges the information asymmetry gap between managers and agents, playing a key part in the corporate governance mosaic. Because they promote open communication, safeguard shareholders' interests, and prevent managers from acting in their own self-interest, CG methods lessen the agency problem.

According to the findings of this research, the possibility of AC characteristics influencing the relationship between the CAE leadership style and the IAF's contribution to improving CG is critical in strengthening CG. Thus, this highlighted the value of AC features in supporting CG.

There are various limitations to our study, which should be noted when interpreting the results. Firstly, it focused just on the banking sector, forgetting to consider the other sectors of Yemen's economy. This will prompt the researchers to include all of Yemen's economic sectors in their next research, which will be more comprehensive. Secondly, the IAF may have additional characteristics that were not included in our model but which may increase the contribution of the IAF to CG. Future studies may thus examine the effects of other IAF determinants on CG effectiveness, including the use of risk consulting services, the presence of a supportive control environment, and the performance of quality assurance and improvement.

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