



Internal Audit Effectiveness and Audit Committee Characteristics: Empirical Evidence from Pakistan

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ABSTRACT

Internal audit function (IAF) is a critical component of corporate governance mechanisms, and researchers have argued that internal audit effectiveness (IAE) is of utmost importance to serve the purpose. The study attempts to contribute to a better understanding on the role of audit committee (AC) characteristics (i.e., AC size, AC meeting frequency, AC expertise and AC independence) as a driver of IAE in public limited companies listed in Pakistan stock exchange (PSX). Two sets of questionnaires were distributed in 400 listed companies, whereas 162 completed sets in all respects with a response rate of 41% were received back. The collected data was analyzed using PLS-SEM. The results of the study indicated a positive influence of AC size and AC meeting frequency on the IAE of the listed companies. At the same time, the responses failed to establish any significant relationship between AC independence and AC expertise on the IAE.



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1. Introduction

Owing to the recent financial scandals and corporate collapses, considerable research has devoted to the advancement of IAF (Alzeban & Gwilliam, 2014; Arena & Azzone, 2009; A. Cohen & Sayag, 2010; Endaya & Hanefah, 2013, 2016; Lenz & Hahn, 2015; Mihret & Yismaw, 2007). An effective IAF provides benefits to almost every stakeholder and is an essential component of strong corporate governance (Lenz & Hahn, 2015). According to a survey conducted by KPMG on 750 fraudsters worldwide, weak internal controls are the primary determinant of financial fraud which contributes to almost 61 per cent in fraudulent corporate activities (*Global profiles of the fraudster: Technology enables and weak control fuel the fraud*, 2016).

After the initial alarm bells rung by Enron, WorldCom and Arthur Andersens in the early 20th century, Toshiba rattled the world with yet another accounting scandal. The 140-year-old Japanese corporation was in the headlines as the investigators found that the earnings have been overstated by 1.2 billion dollars (Bhattacharyya, 2015). Even though Toshiba being pioneers in adopting the corporate governance reforms, and the firm met the corporate governance standards, the failure indicated that merely possessing corporate governance structures does not guarantee acceptable corporate governance practices. Unlike the early scandals of the 20th century where the stakeholders were not sure about where to put the responsibility, the independent investigation committee, quickly looked at possible failures of the IAF in Toshiba, where the investigation team found that the AC at Toshiba was neither independent of management nor the members possess essential financial knowledge (Bhattacharyya, 2015).

In accordance with aforementioned debate, the capital market and corporate sector of Pakistan has also been hit by these scandals, time and again cases of fraud, mismanagement of assets, inappropriate decision-making and bypassing of standard operating procedures is unearthed.

Despite an extensive range of studies on IAE, inconclusive arguments are developed by prior studies regarding its determinants. Thus, there is a need to discover further what other underexplored factors that could influence the IAE (Arena & Azzone, 2009) as there is no consensus regarding the optimal framework for IAE (Endaya & Hanefah, 2013).

The seminal work of (Berle, 1932) indicated the issues arise from the separation of ownership and control may negatively affect organizational performance. One of the major problems could be the opportunistic behaviours of managers and their fascination toward rent extraction (Eisenhardt, 1989). In this scenario, AC plays a vital role in restricting managers by improving IAF as well as overall accountability (Lipman, 2006).

In both private and public-sector organizations, ACs provide assurance on compliance and financial related issues through efficient use of resources, accountability and scrutiny (Magrane & Malthus, 2010). A wide range of academic literature believes that effective AC can improve overall internal control systems in an organization. AC play an essential role in monitoring management disclosure policies (Bin-Ghanem & Ariff, 2016; Dhaliwal, Naiker, & Navissi, 2010; Madi, Ishak, & Manaf, 2014), enhancing public confidence by improving the credibility of financial reports (Bédard & Gendron, 2010; J. R. Cohen, Hoitash, Krishnamoorthy, & Wright, 2013), reducing information asymmetry (Li, Mangena, & Pike, 2012), reduce audit risk (Contessotto & Moroney, 2014) and restrict earnings management (Lin, Hutchinson, & Percy, 2015). Generally, ACs are composed of independent directors with adequate financial and accounting expertise who are free from the influence or pressure of organizational management. They ensure that IAF works properly by safeguarding the objectivity and independence of internal auditors, mediating conflicts between auditors and management and enhancing communication between auditors and board of directors (Lin et al., 2015). Hence, AC characteristics could directly influence the IAE.

Analyzing AC characteristics, researchers have considered several dimensions such as size, independence, expertise and meeting frequency. These characteristics are essential to assess the overall quality of AC. However, previous studies in the reference of Pakistan have ensured the effect of AC characteristics only on firm performance (Bhatti, Farhan, Ahmad, & Sharif, 2019; Hassan, 2014; Q. R. Yasser & Mamun, 2015). Therefore, this study will effectively contribute to the existing body of knowledge by testing the effect of AC characteristics on IAE in the capital market of Pakistan empirically.

2. Literature Review

2.1. Internal Audit Effectiveness

Mihret and Yismaw (2007) carried research to evaluate the state of internal audit (IA) in Ethiopian higher education institutions. The authors proposed a new perspective to gauge the effectiveness of the IAF. The model suggested that IAE is dependent on four potential aspects which are management support, auditee attributes, organizational setting and IA quality. The findings revealed ineffectiveness in terms of proficiency, limitations to the scope of work, planning and recommendations at Ethiopian higher education institutions. The results indicated that the most crucial factors to influence IAE were management support and audit quality.

Yee, Sujun, James, and Leung (2008) conducted a study in Singapore to evaluate the IAE. The main aim of the study was to assess the IA practices through the perceptions of managers in Singapore. The focus was to determine if the managers viewed the IAF as a critical ally to the management or just as an overseer to ensure compliance with the regulations.

The results indicated a positive outcome with regards to perceptions about the IAF which was not the case in Ethiopia (Mihret & Woldeyohannis, 2008; Mihret & Yismaw, 2007) and Saudi Arabia (Al-Twajjry, Brierley, & Gwilliam, 2003). The authors found that the IAF is improving and is considered as an essential part of the organization as a value-adding service. The authors also found that in general, the managers were happy with the role played by internal auditors and the function can play an even significant role given the scope of services is enlarged to include operational areas.

Arena and Azzone (2009) conducted a study in the Italian companies where their study attempts to explore the organizational antecedents of IAE. The authors argue that considering the recent changes in the role and expectations from the internal auditors, the importance of IA has explicitly increased as a risk management tool. The researcher proposes a model where interaction level between the internal auditor and auditing committee, the audit activities, procedures and competencies, and resources of the IA team be seen as independent variables, while the audit effectiveness was seen as the dependent variable. The results of the study suggest that given these changing roles, the auditors are expected to acquire new skills so that they are better able to perform the new role and assist in risk management of the company.

A. Cohen and Sayag (2010) argued that not much academic research had been conducted on the concept of IAE. So, they carried out a study to determine the IAE by exploring the determinants of effectiveness. They proposed a model of determinants that consists of six dimensions that they assumed potential drivers of effectiveness, namely, quality of audit work, the sector of the organization, top management support, career and advancement, professional proficiency of internal auditors and organizational independence. One key observation of the authors was that most of the prior researches focused on the perceptions of external auditors on the effectiveness of the IA and whether they used the work of internal auditors, indicating the confidence in the work performed by the internal auditors. The authors, however, considered managers' perceptions as equally significant and therefore established a scale on which the IA's efficacy could be calculated based on the expectations of the management. The authors collected data from one hundred and eight organizations in Israel that had an IAF. Two sets of questionnaires were distributed. One for general managers inquiring about the effectiveness of the IAF and the other for internal auditors, with questions concerning the determinants of the IAE. The results indicated that the most significant among all the factors was the management support on the effectiveness, which was the key highlight of the study that the perception of the top management support for auditors will result in higher IAE. The study also finds a positive relationship among greater organizational independence, greater IA quality and IAE. At the same time, career development and professional proficiency did not have any significant correlation with auditing effectiveness. In light of the findings, the author indicates the need for further research on the quality of the auditing and organizational independence as determinants of IAE.

Soh and Bennie (2011) researched in Australia to explore the possible determinants of IAF and the primary role and responsibilities of the IAF in the Australian companies. The prevailing performance appraisal practices of IAE were also examined.

The outcome of the research highlights a substantial shift and an expansion in the role of the internal auditors. They were meanwhile pointing out the change in perception about the IAE as well. However, the authors note that evaluation mechanisms to gauge the performance of the internal auditors have not emerged simultaneously. Hence the gap between changing roles of the internal auditors and the lack of appraisal mechanisms in accordance with new roles is creating difficulty in assessing the effectiveness of the function with regards to stakeholder's expectations.

Endaya and Hanefah (2013) contended that to build a conceptual framework of the IAE communication theory, agency theory and institutional theory as suitable and proposed a model in which IA department performance and the characteristics of internal auditor directly influence the effectiveness of IA and organizational member support plays a moderating role in the mechanism mentioned above. It is also suggested by them to use the theoretical framework proposed by them in future studies.

Alzeban and Gwilliam (2014) conducted a study in Saudi Arabia to assess factors influencing IAE. The effectiveness of the IA was measured based on the perceptions of the managers of the audited departments in terms of improvement in organizational productivity, implementation of audit recommendations, the achievement of set goals and objectives, evaluation and enhancement of risk management and internal control mechanisms, ability to plan and make recommendations for improvements. The researchers collected data from 79 public sector organizations in Saudi Arabia.

The results of the research indicated management support as a key driver of effectiveness, as rated highly both by the internal auditors and the management. Providing enough resources, employing skilled and experienced staff, having an independent IA department and enhancing the relationship with external auditors are all linked to management support.

In the last decade, the literature about IAE is explored by Lenz and Hahn (2015). They examined the micro and macro factors that affect the effectiveness of IA. Four dimensions related to micro factors are proposed in their model, which are IA processes, IA relationships, IA resources and organizational aspects. On the other hand, macro factors composed of three institutional forces, i.e. mimetic force (consulting firm's prescription and learning from the others good practices), normative force (consulting professional bodies) and coercive force (acquiescence with law and regulations). They suggested that the study of the relationship between senior management and the IA is a crucial area of research.

According to Endaya and Hanefah (2016), IAE is a key issue for all of the stakeholders, e.g. for the prime customers: AC and the board; senior management (guarantees the quality and the authenticity of IA that it covers principal business risk); external auditors (directly interested in the work of IA) and for the internal auditors themselves. However, there is a conflict of interests among those clusters, for example, AC and external auditor assure the controls. Whereas, the senior management demands control and consultations both from the internal auditors.

The results are fascinating as the impact of senior management on the IAE is confirmed. Moreover, it also ensures the moderating role of senior management on the relationship among the characteristics of the internal auditors and IAE. Lenz, Sarens & Hoos (2017) conducted a study in the German corporate sector where they studied the relationship between Chief audit executives, senior management and IAE. The research helps bifurcate between ineffective vs effective IAFs, moreover, helps understand the cause of this difference by studying interpersonal, personal and organizational factors in Germany. The results of the study highlight the interaction between chief audit executives and senior management is a crucial driver of IAE.

Given the brief literature review conducted above, it is evident that there is no consensus among the researchers on the issue of IAE, and there exists a gap in the limited previous research. The studies conducted have resulted in mixed results mainly because different studies used different perspectives, different criteria and as well as focused on different sectors (private sector, government ministries and public sector). Goodwin (2004) found that there is a difference in the status of IAF between the two sectors. The author emphasizes that the two sectors are different in essence and in terms of abilities, size, legislations and laws, which is also true in a developing country like Pakistan. Further, as discussed earlier, different theories have been used. Mihret, James, and Mula (2010) argue that few generally accepted methods to evaluate IAE exist yet. Nevertheless, the limited literature suggests that IAE is perhaps affected by the context in which IA operates.

Therefore, numerous academic studies (Al-Twaijry et al., 2003; Arena & Azzone, 2009; Endaya & Hanefah, 2013; Goodwin, 2004; Mihret & Yismaw, 2007; Yee et al., 2008) have emphasized the need for further and comprehensive research to delineate the issue of IAE. The gap highlighted above could be reduced by an exploration of antecedents of IAE in the developing countries.

2.2. Audit Committee characteristics

Worldwide corporate scandals in the business environment led to a heightened need for accountability. Searching solutions to the corporate collapses of the early twentieth century, internal control systems and organization's risk management systems were the centre of public policy debates to improve corporate governance (Sengur, 2011). The formation of public listed companies highlighted the issue of separation of ownership and management, and the emphasis on the requirement of a robust corporate governance system (Moloi, 2008). The separation of ownership and control gave rise to an agency relationship which considers managers as the agents of the owners, who are tasked to manage on behalf of the owners. However, the managers are expected to act in the best interest of the owners, which is not always the case.

The agency problems are meant to be solved through adequate corporate governance measures, where the focal point of the governance systems is the board of directors, who are responsible for overseeing the affairs and performance of the company and are accountable to the shareholders. AC is one of the critical tools and mechanisms of corporate governance practices. ACs have always had a fundamental significance in corporate governance reforms over the years. ACs emerged as an important corporate governance tool to fight the miss use of authority and manipulative behaviour by the top management, which led to manipulation of accounting policies, financial reporting defalcations and financial scandals (Kalbers & Fogarty, 1998). Hence AC is an essential component of an effective internal control system.

In an effort to ensure true and fair financial reporting and an effective auditing system, regulatory bodies require companies to formulate an AC. An effective AC is at the heart of good corporate governance. A vital responsibility of the AC is to warrant that the performance of the corporation is as per the goals and objectives set by the owners and that the statement of affairs presented by the management can be trusted and reflects the true and fair view of the company. Corporate governance has been the subject of many pieces of research with a vast literature available on how different organizations are governed and how different policies safeguard the interests of various stakeholders. The forefront of this study is to examine the effect of AC characteristics on the IAE in the listed companies in PSX. The Code of Corporate Governance (2019) in Pakistan outlines mandatory requirements in terms of constitution, composition and operations of the AC. Given the mandatory requirements set by the Code of corporate governance (2019), the quality of the AC is dependent on the size of the committee, meeting frequency, independence and expertise of the AC.

2.3. Audit Committee Size

An essential element which is taken under consideration while determining the size of the AC is the number of members in the committee (Hsu & Petchsakulwong, 2010; Nuryanah & Islam, 2011; Obiyo & Lenee, 2011). In the absence of effective control mechanisms, the shareholder's interest might be compromised, and the top management might be able to perform in personal interests rather than the shareholder's (Fama & Jensen, 1983). The agency theory suggests that if there happens to be opportunistic management. Then in its presence, the top management recedes in making decisions that satisfy its interests rather than preferring the shareholders' interests (Jensen & Meckling, 1976). Hence, an effective and efficient AC must exist to be able to eliminate this conflict of interest and ensure a positive, sustainable performance for the organization (Klein, 2002; Rahmat, Iskandar, & Saleh, 2009).

Coleman and Biekpe (2007) researched to examine how does an organization's performance is linked by the AC size. Researchers analyzed the data from 103 of the listed companies in Nigeria, South Africa, and Ghana between 1997 and 2001. Firm performance and AC size were found to be positively associated with each other.

Q. Yasser, Entebang, and Mansor (2011) conducted a study in Pakistan, where they analyzed the data from 30 public limited companies. The authors compared two performance measures to the size of the AC, i.e. return on equity and profit margin. Their results also indicated a positive association between AC size and organizational performance.

Further, it is contended that financial reporting quality is significantly enhanced by the AC size hence resulting in an improved financial performance by the firm. Felo, Krishnamurthy, and Solieri (2003) also found a positive association between AC size and a firms financial reporting quality. On the contrary, research findings by Mak and Kusnadi (2005) found no evidence of a significant relationship between firm performance and AC size in Malaysia and Singapore.

2.4. Audit Committee Independence

The independence of directors is considered a critical indicator of the effectiveness of AC. The larger the proportion of independent outside directors in the AC, the more this AC is expected to effectively monitor the financial performance of the corporation. A committee with a large proportion of independent directors is considered as well-structured, active and well-functioning (Menon & Williams, 1994; Xie, 2001). Abdullah, Shah, and Hassan (2008) and Kang and Kim

(2011) refer to AC independence as a proportion of non-executive directors as compared to executive directors. Rahmat et al. (2009) argue that independence of the AC is dependent on the number of independent directors, greater the number, greater the independence of the AC.

Similarly, Swamy (2011) argue that throughout the auditing process, AC members play an important role in maintaining corporate governance practices. Moreover, it was found that firms mainly comprising of internal directors and absence of AC were more likely to commit fraud as compared to firms in the same industry with independent directors and active ACs (Abdullah et al., 2008). As the independent directors of the AC, using several monitoring procedures could regularly check the faulty behaviour of executives, AC is considered a critical element of corporate governance. As argued by J. R. Cohen, Gaynor, Krishnamoorthy, and Wright (2011), Most significantly, the success of an AC derives from its independence. By keeping a check on the manipulative, self-centred activities of executives, an independent AC could ensure a reliable financial reporting process. Worldwide governance codes enable businesses to set independent ACs. Bouaziz and Triki (2012), as well as Arslan, Zaman, Malik, and Mehmood (2014), found that in the presence of independent ACs, the accuracy of audit reports is increased, and firm performance is enhanced. The presence of an independent AC would minimize corporations' fraud (Yunos, Ahmad, & Sulaiman, 2014). Sarkar (2013) argued that independent committee members could impartially evaluate financial statements, total assets, sales and components such as equity, which are the real indicators of a firm's financial position and performance.

Vicknair, Hickman, and Carnes (1993) reiterated that expectation by suggesting that the more independent the AC is, the more effective it would perform, as internal executive directors would have the power to excessively influence and interfere in the workings of the internal and external auditors.

2.5. Audit Committee Expertise

The investors lost trust in the equity markets due to financial scandals (e.g. Enron, WorldCom) as a result of fraudulent accounting. In light of the scandals, the investment community launched measures that focused on AC's role in improving the market's transparency. The regulatory bodies in the United States recommended listed companies to formulate ACs in 1972; however, this was made a mandatory requirement in 1978 (Goddard & Masters, 2000). Due to several accounting scandals, the lawmakers were forced to rethink about the working of the ACs, composition and independence from executive teams was given particular reconsiderations. Both The Blue Ribbon Committee (1999) and The Cadbury Report (1992) recommended that directors may not just be independent but also possess an adequate amount of expertise in the field of accounting and auditing to be a member of an AC. SOX(2002) also shared similar concerns and suggested that the AC members may not only be independent, but at least one member of the committee must have adequate experience in the financial field.

Abdul Rahman and Haneem Mohamed Ali (2006) argue that the prime goal for the formation of the AC is to monitor the financial reporting process of the company. Hence, it is of the utmost importance that the members of the AC are experienced and competent in financial aspects. The chances of detecting material misstatements are significantly increased in the presence of AC whose members possess financial expertise (DeZoort & Salterio, 2001). The Blue Ribbon panel argues that in the absence of financial knowledge in the AC members, the committee may be merely ceremonial. And for better performance of the ACs, the members should have a financial and corporate background for increased effectiveness.

2.6. Audit Committee Meeting Frequency

It is commonly believed that the effectiveness of the ACs is directly related to the number of meetings, the more the ACs meet, the more effectively they will be able to monitor, whereas the ACs that rarely meet have a lesser chance to effectively monitor the management's performance. The AC's activity is determined by the average number of meetings held in a year (Menon & Williams, 1994; Xie, 2001).

A significant attribute to the AC's monitoring effectiveness is the frequency by which the AC meets. Anderson, Mansi, and Reeb (2004) stated that the role of the AC is to monitor the internal control systems and provide information to the stockholders, which is true and accurate in nature. Hence the AC supervises the management's assessment of business risk and reinforces the IAF (Hsu & Petchsakulwong, 2010).

Among the AC factors, the most widely assessed factor is the frequency of meetings by the AC. The same has been used as a proxy for AC activeness as well (Hsu & Petchsakulwong, 2010; Khanchel, 2007). A study by Vafeas (1999) argued that a critical element in the effective operations of the board is the level of activity and that this level of activity also affects firms value. An AC must maintain a minimum level of activity to meet its objectives of control effectively (Bedard, Chtourou, & Courteau, 2004). Bedard et al. (2004) also argued that firms with a low level of AC activity are more likely to suffer from financial statement fraud.

An overview of the academic literature confirms that the level of activity by the AC, measured in terms of the frequency of the meetings held by the AC, brings numerous advantages to an organization's shareholders. Among those advantages are an enhanced degree of supervision over the organization's financial reporting process (Carcello, Hermanson, Neal, & Riley, 2002) and greater transparency, which in essence means that the shareholders would be in a better position to forecast earnings more effectively and frequently (Laksmana, 2008). As stated by Abbott, Parker, and Peters (2004), a firm's financial accounting process are improved by frequent meetings by the AC, which leads to superior performance by the firm.

Hence, the frequency of meetings between the AC and the internal auditors is of immense importance, as the increased interaction between the two would lead to a better understanding of the accounting and auditing issues as they arise, which will in return enable the AC to enhance the IAF with their support and hence increasing the effectiveness of the IAF itself. Consequently, an AC with a greater frequency of meetings has a better chance of minimizing financial fraud (Abbott et al., 2004; Read & Raghunandan, 2001). Menon and Williams (1994) conclude that firms with a low frequency of AC meetings are more likely to suffer from ineffective supervision. This was also supported by evidence found by Beasley, Carcello, Hermanson, and Lapedes (2000) that the firms found to be involved in earnings misstatements and fraudulent activities, had fewer meetings than their non-fraudulent counterparts. Whereas ACs which meet more often are more likely to better identify management risk, administer financial reporting and monitor internal controls. Thus, IAE is increased with AC activity.

In light of the agency theory, the role of AC is of the utmost importance to the success of IA. The AC is tasked to warrant that internal auditors are free from any influence of the management being audited, hence, ensure that the auditors can work independently and objectively. The AC also ensures that the auditors have all the required resources and unrestricted access to information that is necessary to fulfil its mandate and is equipped to perform in accordance with appropriate professional standards for internal auditors (IIA's Code of Ethics and ISPPIA). The AC is also responsible for the termination or appointment of the head of IA. Further, the chair of the committee has a direct role in the appraisal of the head of IA and his remuneration. Thus, it is proposed that the quality of the AC could enhance the IAE

Given the literature findings above, the hypotheses of the study are as follows:

H1: There is a positive relationship between IAE and the AC size.

H2: There is a positive relationship between AC independence and IAE.

H3: There is a positive relationship between AC expertise and IAE.

H4: There is a positive relationship between the level of AC meeting frequency and IAE

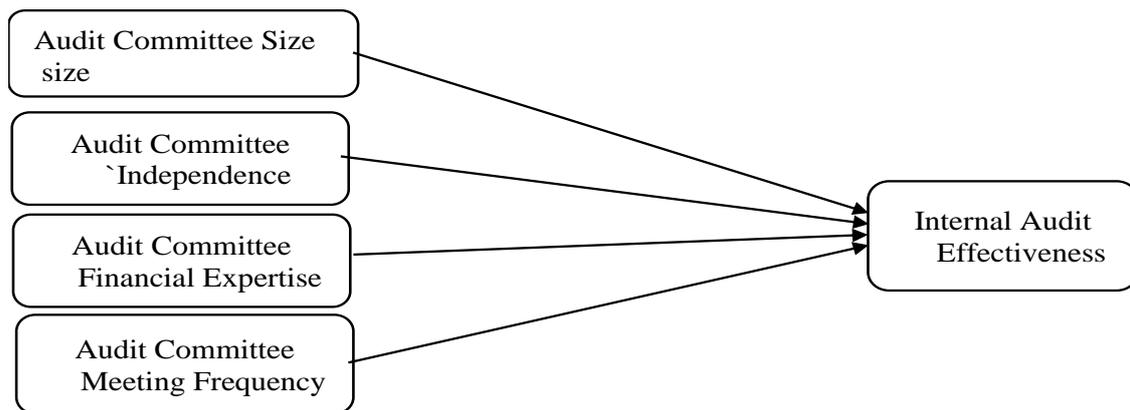


Figure 1: Theoretical Model

3. Methodology

This study is designed to investigate the relationships between independent variables (AC size, AC meeting frequency, AC expertise and AC independence) to a dependent variable (IAE). The unit of analysis for this study is organizational (public listed companies in PSX). Two sets of questionnaires were distributed. One to measure the dependent variable, IAE, to be filled by the general managers of the company. The first questionnaire consisted of two sections, the first section covered the demographic information regarding qualification, gender, experience. Whereas, the second section contained questions related to the IAE, the items of this section of the questionnaire were adapted from the scale developed by Alzeban and Gwilliam (2014). The authors developed a 15-item scale to measure the perceived effectiveness of the IAF. The scale contains questions to measure aspects of IA including improvement and evaluation of risk management, ability to plan, assessment of the consistency of outcomes with recognized goals and objectives, enhancement of the organization’s productivity, evaluation of internal control systems, execution of audit recommendations, and recommendations for improvement.

The second set of questionnaires was developed to cover the independent variables, addressed towards the chief internal auditors of the listed companies. The questionnaire is divided into two sections. Where the first section covers the demographic information regarding qualification, age, gender, experience, position. The second and concluding section obtains information about the AC characteristics. The section contains a total of 4 questions, one each to determine the size of the AC, frequency of meetings between the head of the internal auditor and the AC, financial expertise of the AC members and independence of the AC members.

PLS SEM was used to analyze the effects of the main constructs. Where the contribution of each exogenous variable is stated in terms of standardized beta values (chin,1998). The present study ran a bootstrap at 5000 bootstrap samples for the 162 responses at a significance level of $p < 0.05$ to test the hypothesis proposed (Hair, Hult, Ringle, & Sarstedt, 2013).

4. Results and Discussion

**Table 1:
Summary of Hypothesis**

Hypothesis	Relationship	Std Beta	Std Error	T- Value	p- Value	Decision
H1	AC Size -> IAE	0.3038	0.084	3.617	0	Supported
H2	AC IND -> IAE	0.0265	0.091	0.291	0.385	Not Supported
H3	AC EXP -> IAE	0.0377	0.081	0.465	0.321	Not Supported
H4	AC MeetFreq -> IAE	0.1672	0.097	1.724	0.042	Supported

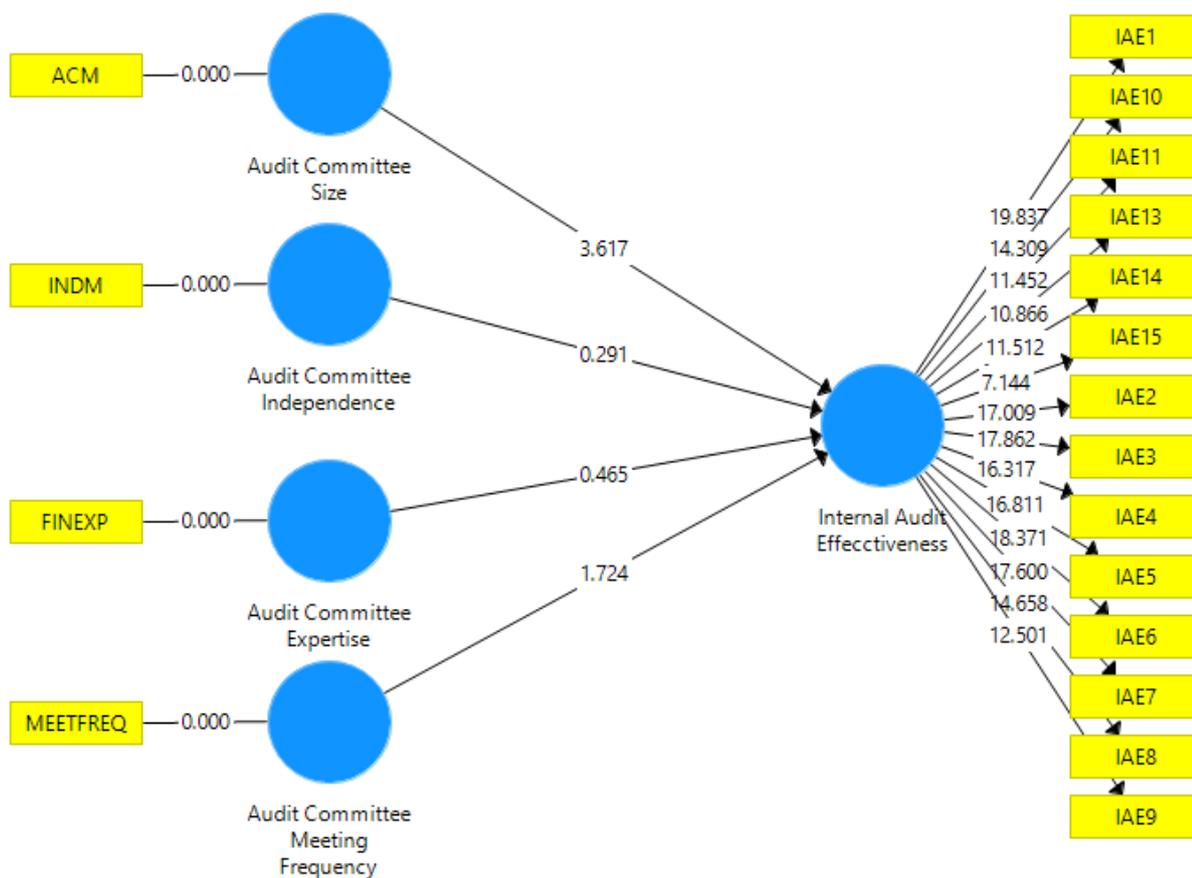


Figure 2: Measurement Model

As per the study proposition, the results of the H1 revealed a positive association between the AC size and the IAE, as the results show the t-value of this hypothesized relationship is 3.617 which is more than the threshold value of 1.645, which explains that in the listed companies of Pakistan, IAE is significantly influenced by the AC size. These findings are similar to the past researcher's findings Majiyabo, Okpanachi, Nyor, Yahaya, and Mohammed (2018) which also reported that the AC size significantly influences the IA quality of the auditors. It is, therefore, supported by Felo et al. (2003) that the AC size enhances the financial reporting quality substantially, effectively strengthening the firm's financial performance. These results also supported by the Q. Yasser et al. (2011), who conducted a study in Pakistan, where they analyzed the data from 30 listed companies in the PSX. The authors compared the size of the AC to two performance measures, i.e. profit margin and return on equity. They also found a positive relationship between firm performance and AC size. On the other hand, a study conducted by Mak and Kusnadi (2005) found no evidence of a significant relationship between AC size and firm performance in Malaysia and Singapore, but in the broader context literature support our findings that AC size positively related to the IAE.

Contrary to the expectations, the results of the H2 reported an insignificant relationship between AC independence and IAE. As the results show that the t-value of this hypothesized relationship is 0.291, which is less than the threshold value of the 1.645. which shows insignificant relationship between AC independence and the IAE in the listed companies of Pakistan. The above result contradicting with the findings of Krishnamoorthy and Maletta (2016) AC independence have a positive influence on the auditor's IAE. Other studies also postulated that AC independence contributes to enhance the effectiveness of the audit and improve audit quality. For instance, Sarkar (2013) argued that independent committee members could impartially evaluate financial statements, total assets, sales and components such as equity, which are the real indicators of a firm's financial position and performance. Vicknair et al. (1993) strengthened that argument by stating that the more the AC is independent, the more effective

it will perform, as internal executive directors would have the power to excessively influence and interfere in the workings of the internal and external auditors.

However, the results of this study are not supported by the above arguments in the context of Pakistan. The possible explanation of this could lie in the corporate governance regulations, as the Code of corporate governance in Pakistan requires by law a mandatory requirement of at least one independent member in the AC. However, when we analyze the collected data, we find that almost all the companies have merely fulfilled the minimum criteria of one independent member and only a handful of companies have more than one independent members on AC. Hence the real effect of variation in independent members could not be assessed, resulting in an insignificant relation.

The results of the H3 reported interesting and surprising results that AC financial expertise did not influence the IAE as the results show that the t-value of the hypothesized relationship is 0.465 that is far behind the threshold value of 1.645, which indicates that AC financial expertise did not influence the IAE in the listed companies operating in Pakistan. These results are similar to the previous study conducted by Ghafran and O'Sullivan (2017), who claims that AC expertise has no significant effect on the IA quality. They also submitted that in the case of smaller listed companies, but not for the larger companies, financial exercising is relevant in terms of a more intensive audit. Armstrong, Guay, and Weber (2010) support this claim that different kinds of businesses may have different financial knowledge needs. Armstrong et al. (2010) in particular, recommends that companies seeking to track their financial statements more closely should use the financial experience to help do this.

This is not shocking, as we expect the consistency and clarity of financial reporting in Pakistan's listed companies in any instance to be of a high standard and the financial experience would be unlikely to improve it further. In comparison, as we noted previously, ACs of big organizations are smaller and autonomous, and they meet more regularly, indicating that they show better AC oversight and thus miss the ability to improve their control by offering financial expertise. The opposite is valid for small companies, which are willing to pay for lower fees if more aggressive oversight by financial analysts is undertaken (Armstrong et al., 2010).

The H4 results are aligned with the proposition of this study that AC meeting frequency has a positive association with the IAE. As the results show t-value of this hypothesized relationship is 1.724, that is above the threshold value of 1.645, which explains the significant positive relationship between AC meeting frequency and the IAE in the public listed companies of Pakistan. Similar findings reported by the Khudhair, Al-Zubaidi, and Raji (2019) who also noted that the AC meeting frequency positively influences the audit quality. They further claimed that the monthly AC sessions are related to enhancement and accountability of higher audit results.

The implication of this hypothesized relationship also correlates to the Sharma, Naiker, and Lee (2009)'s statement, that the frequent recurrence of AC groups is an essential determinant of their adequacy and a crucial part in solving vital management power problems relevant to organizational matters. There is a possibility of a high-quality standard and AC meetings on a daily basis, according to the Khudhair et al. (2019) though reinstatement or monitoring is diminishing. Moreover, in the context of the agency theory, this relationship advocates the AC meeting frequency mitigating agency conflicts and reducing information asymmetry by improving IAF, which consequently enhances the IAE.

5. Conclusion

The research objectives on examining the relationship between AC characteristics (namely AC size, AC independence, AC expertise, and AC meeting frequency) and IAE have been achieved and the proposed hypotheses are being supported by the results generated except for audit committee independence, and audit committee expertise. Based on the result from PLS-SEM analysis, AC size and AC meeting frequency has the greatest and noteworthy influence on IAE, whereas AC independence, and AC expertise do not significantly influence auditor's internal audit effectiveness. In a nutshell, the auditors and the statutory bodies should pay more attention on developing the characteristics of audit committee characteristics (audit committee size, and meeting frequency) in order to enhance the internal audit effectiveness of the auditors working in listed companies in Pakistan.

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