



## Developing and Validation of an Audit Committee Competency Model and assessing Its Impact on Sustainability Reporting used a Mixed Exploratory Approach

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### ABSTRACT

One of the key factors in long-term business success is the effective implementation of a well-developed corporate governance framework. One of the most important pillars of this framework is the audit committee. Companies with an effective audit committee are more likely to prepare sustainability reports. To ensure impartiality, the skills and competencies of the audit committee are crucial for the effectiveness of the committee in performing its duties. This study aims to develop and validate the audit committee's competency model and investigate its impact on sustainability reporting using a mixed exploratory approach. First, to identify the competencies of audit committee members, a qualitative method based on grounded theory was applied through semi-structured interviews with 15 auditing professionals, using the snowball sampling method. The competency model of audit committee members was then presented. In the quantitative phase, the model was tested using structural equation modeling based on responses from 92 experts in the field of audit committees. The results of the quantitative study indicate that the competency model significantly influences sustainability reporting. Specifically, the presence of competent audit committees enhances attention to social responsibility and sustainable development issues. Furthermore, the committee takes steps to safeguard the interests of various stakeholders who rely on the company's accounting information. Additionally, the audit committee plays a crucial role in improving the reporting process, ensuring transparency, and providing reliable information and reports.

**Keywords:** Audit committee competency, Willingness for Sustainability Reporting, mixed exploratory approach

## 1. Introduction

Long-term business success relies heavily on the effective implementation of a well-developed corporate governance framework. A key component of this framework is the audit committee, which plays a crucial role in addressing information asymmetry and enhancing the quality of corporate reporting (Buallay & Al-Ajmi, 2019). Agency theory, as proposed by Jensen and Meckling (1976), suggests that individuals act in their own self-interest, often leading to conflicts between resource providers (such as shareholders) and managers. To mitigate these conflicts, shareholders appoint a board of directors to oversee management decisions and ensure accountability. The board, in turn, establishes internal monitoring mechanisms, such as audit committees, to enhance transparency and improve corporate governance. Audit committees are responsible for closely monitoring managerial activities, particularly in the realm of financial and sustainability reporting. By promoting high-quality reporting practices, these committees strengthen accountability and ensure the responsible management of corporate resources (Tumwebaze et al., 2021). Their role is essential in providing accurate financial information, which supports informed decision-making by stakeholders (Buallay & Al-Ajmi, 2019). The foundation of agency theory is the maximization of shareholder wealth, requiring managers to disclose sufficient information to satisfy investors. However, modern businesses operate within complex environments where the expectations of stakeholders—such as customers, financial institutions, and regulatory bodies—often exceed those of shareholders. Organizations are increasingly expected to align with societal values and ethical standards (Guthrie et al., 2007). When they fail to meet these expectations, governance bodies, including audit committees, must step in to bridge the gap. Organizations frequently encounter challenges, such as skill gaps, that can hinder their ability to adapt to dynamic environments. However, continuous learning and innovation enable employees to acquire new skills that align with evolving business needs (Lawler, 1994). Given the rapid pace of change in today's corporate landscape, organizations are placing greater emphasis on human resource development. Competency models serve as valuable tools in this regard, helping businesses identify current and future

skill requirements to enhance productivity and reduce operational costs (Hoshiar & Rahim Nia, 2012).

For an organization to implement a competency-based approach in human resource management, it must first define the key competencies required for each role and develop a structured model to assess them (Cochran, 2009). The primary objective of competency-based frameworks is to ensure that organizations can effectively recruit, train, and retain top talent. Dubois et al. (2004) emphasize that high-performing organizations must strategically align competencies with their mission and long-term objectives. This approach is particularly relevant for audit committees, as they play a vital role in ensuring regulatory compliance and ethical financial practices. When audit committees operate effectively, they enhance corporate governance by promoting voluntary reporting and fostering a culture of transparency. Companies with well-structured audit committees are more likely to produce unbiased and reliable sustainability reports (Tumwebaze et al., 2021). Therefore, the objective of this study is to identify the key competencies required for audit committee members in Iranian companies, using grounded theory as a methodological framework. Additionally, this research examines the impact of these competencies on the willingness of organizations to engage in sustainability reporting. The following sections provide a theoretical foundation and a review of relevant literature, followed by a detailed discussion of the research methodology. The findings are then analyzed in both qualitative and quantitative contexts, and the final section presents conclusions and implications for future research.

## 2. Theoretical Foundations and Literature Review

### 2.1 Audit Committee and Competency

The audit committee plays a crucial role in corporate governance by overseeing the work of both internal and external auditors. Its responsibilities include recommending independent auditors for shareholder approval, determining audit fees, and, if necessary, dismissing auditors. The committee also monitors audit frequency, reviews audit reports, and ensures that management takes appropriate corrective actions in response to identified deficiencies. Non-compliance with policies, laws, and regulations, as well as other

issues highlighted by auditors, must be addressed promptly to uphold corporate integrity. A well-structured and properly functioning audit committee benefits all stakeholders. Following the approval of the audit committee charter in 2012, Iranian [listed companies on the Tehran Stock Exchange and over Exchange](#) were mandated to establish audit committees. These committees are responsible for monitoring financial reporting, overseeing internal control systems, and ensuring compliance with accounting principles. Additionally, they supervise both internal and independent auditors, mitigating the risks of accounting misstatements, fraud, and financial misrepresentation. To fulfill these responsibilities effectively, audit committees must possess key competencies (Alavi & Ghaemi, 2016).

The concept of competency is multifaceted and widely discussed in academic literature. While definitions vary, competency is generally understood to encompass a combination of knowledge, skills, and personal attributes that enable individuals to perform effectively in their roles (Mojab et al., 2011). It remains one of the most important expressions of organizational literature, although all those definitions are broadly similar and basically focus on job roles and responsibilities (Clark & Armit, 2010). But by examining it, we come to the conclusion that there is no single definition and certain terminology about competence (Karami and Salehi, 2008). But there are common and recognizable points in all these definitions that competence includes knowledge, skills, individual characteristics or a combination of these factors, and also competence is those characteristics of employees that form the foundation of their successful career behaviors and lead to superior performance and Their effectiveness in the job becomes a task or condition. In the context of audit committees, competency ensures that members can make informed decisions, uphold corporate accountability, and enhance overall governance standards. Competency should be both observable and measurable, as it directly influences employees' career success and job performance. Effective competencies contribute to superior decision-making and organizational efficiency (Zahedi & Sheikh, 2009). Given its critical importance, competency assessment has evolved into a structured methodology used across various industries. Historically, competency-based approaches in human resource management date back

to the Roman era, where military training emphasized specific skills and attributes required for soldiers. In modern management, competency-based models were first introduced in the late 1960s and early 1970s by Harvard psychologist David McClelland, whose research laid the foundation for structured competency assessment.

The competency-based methodology was formally introduced by Hay-McBer, a consulting firm co-founded by McClelland. This approach gained widespread acceptance following the publication of Richard Boyatzis's book, *The Competent Manager* (1982). Boyatzis expanded on McClelland's framework, highlighting the role of competencies in organizational success and leadership effectiveness. Since then, competency models have been extensively applied in business, government, and educational institutions across North America and beyond. In audit committees, competency-based approaches help ensure that members are equipped with the necessary expertise to fulfill their oversight responsibilities effectively. Organizations that adopt these models can enhance governance, strengthen financial oversight, and improve overall corporate accountability.

The Competent Manager model, based on McClelland's approach and the concept of competencies as drivers of organizational success, gained significant attention and popularity in North America. Shortly after, the book on competencies was published in *Modern Society* in Britain. The publication of these two books shifted the discussion on competencies from an academic and scientific basis—previously of interest only to a select group of researchers—to practical application among operational managers, consultants, and human resource specialists.

The popularity and adoption of the competency approach peaked in the early 1990s and continue to this day, significantly impacting many organizations (Qaraipour, 2008). In the present research, the definition of competency, which is widely accepted by human resource specialists, is considered.

## **2.2 The Relationship Between the Audit Committee and Willingness for Sustainability Reporting**

Since the introduction of the Global Reporting Initiative, sustainability reporting has emerged as a key

research area focusing on non-financial disclosure. According to its guidelines, sustainability reporting is a process that helps organizations set goals, measure performance, and manage changes toward a sustainable global economy (Abdi et al., 2019). As corporate sustainability reporting has become a fundamental business activity, it is now considered a core management area alongside marketing, accounting, and financial management (Crane et al., 2008). Persons (2009) argues that the disclosure of information required by investors is closely related to the quality of the audit committee. He suggests that improving the quality of the audit committee enhances transparency in information presentation. Consequently, a high-quality audit committee is expected to disclose accurate and complete information, thereby influencing corporate sustainability reporting and information disclosure.

Additionally, when sustainability reporting is deeply embedded in an organization's culture, managers and employees are more inclined to publish information about their performance. This suggests that the audit committee has a significant impact on corporate sustainability reporting (Minai Anaghizi, 2019). Since the audit committee is a key tool in corporate governance, its quality contributes to increasing a company's value by leveraging the expertise and efficiency of its members. Moreover, an increase in company value is often linked to enhanced market credibility and reputation, which can be strengthened through sustainability reporting (Daghiliene, 2013). Therefore, based on its responsibilities, the audit committee plays a crucial role in determining the quality and extent of information disclosure in corporate sustainability reporting.

### 2.3 Empirical Background of the Research

Considering the above discussions, some of the most relevant studies in this field are briefly mentioned below:

Gorshunov et al. (2021) conducted a study titled "Four Competencies of an Audit Committee Manager," which examined the impact of audit committee directors' competencies on monitoring and reducing financial corruption. Their findings suggest that the presence of an audit committee manager with four key competencies—*independence, management experience, financial expertise, and stock ownership—*

*significantly reduces the likelihood of financial corruption. Additionally, the study highlights that when these competencies are distributed among multiple committee members rather than concentrated in a single audit manager, their overall effectiveness may vary.*

Tumwebaze et al. (2021) investigated the effectiveness of the audit committee by examining its influence on internal audit performance and sustainability reporting methods. Their research findings indicate that the efficiency of both the audit committee and internal audit performance is positively and significantly associated with sustainability reporting practices. Furthermore, they discovered that while audit committee effectiveness is strongly linked to economic and social sustainability indicators, its relationship with environmental sustainability indicators appears to be relatively weaker.

Buallay and Al-Ajmi (2019) studied the role of the audit committee in the sustainability reporting of companies in Persian Gulf countries. Their research revealed a negative relationship between financial expertise and sustainability reporting. However, they found that the independence of committee members and the frequency of meetings play a crucial role in determining the extent of voluntary disclosure. Furthermore, they suggested that the development of information disclosure requirements is likely to improve sustainability reporting.

Amjadian and Gholami Jamkarani (2022), in their research titled "Effective Factors on Effective Audit Committees," investigated and developed a model for assessing the effectiveness of audit committees in a localized context. Their results identified sixteen key factors contributing to audit committee efficiency, including: *sufficient financial and non-financial experience of members, influence and authority of audit committee members, presence of independent auditors in the audit committee, publication of annual audit committee performance reports for shareholders, submission of scheduled reports to the board of directors, reporting on past events, publication of board meeting minute, size of the audit committee, frequency of audit committee meetings, tenure of audit committee members, independence of the audit committee, establishment of an efficient internal audit unit to collaborate with the audit committee, creation of administrative procedures for document review, increasing awareness of the audit committee*

,providing additional training for audit committee members. These factors contribute significantly to the efficiency and effectiveness of audit committees.

Ghaemi et al. (2019) conducted research to examine the effect of audit committee characteristics on internal controls and profit management. Their study focused on companies listed on the Tehran Stock Exchange, with a statistical sample of 54 firms. Using statistical regression analysis to test their hypotheses, they found a negative and significant relationship between the size and expertise of the audit committee and weaknesses in internal controls and profit management. However, they found no significant relationship between audit committee size and profit management.

Barzegar et al. (2018) studied the impact of audit committee characteristics on corporate social responsibility (CSR) disclosure. Their findings suggest that an effective audit committee enhances the credibility of both financial and non-financial reporting, including CSR disclosure. By overseeing the reporting process, a well-functioning audit committee can improve the level of voluntary disclosure of information, particularly in the area of social responsibility.

### 3. Research Methodology

This research employs an exploratory mixed-method approach, combining qualitative and quantitative methods. The qualitative part utilizes the grounded theory approach to develop an audit committee competency model. One of the main reasons for selecting this method is its reliance on real data, which enables the development of new theories through a scientific approach. Researchers use grounded theory when little is known about a research domain or when no existing theoretical framework sufficiently explains the relationship between specific constructs and the behaviors under investigation. Additionally, this method is effective when the researcher aims to understand participants' perceptions and experiences in a specific context or when the goal is to develop a new theory (Abol-Maali, 2011). Accordingly, in the first phase, grounded theory is used to gain a deep understanding of experts' perceptions and insights regarding audit committee competency, presented in the form of a paradigm model. Data for this phase were collected through semi-structured interviews with 15 experts, including:

directors and board members of audit organizations, audit committee directors and members, stock and non-stock publishers, partners of audit institutions or members of the public accountants' community, university faculty members with experience in the audit committee field. Participants were selected using the snowball sampling method, and sampling continued until theoretical saturation was achieved. It is noteworthy that, due to the interviewees' interest in the research topic and their willingness to contribute to the study, each interview lasted an average of 45 minutes. Among the 15 interviewees, 12 held a Ph.D., while 3 had a master's degree.

In the quantitative phase, a questionnaire was developed based on the qualitative model to measure experts' level of agreement with the proposed framework. The structural equation modeling (SEM) approach was used to test the resulting model. In this phase, a key hypothesis was formulated: "Audit committee competency has a significant effect on the willingness to report sustainability."

To quantify the qualitative variable of audit committee competency and test the extracted model, a researcher-developed questionnaire was used. The questionnaire was designed based on:

- 1) The proposed model from the qualitative phase
- 2) Theoretical foundations and previous research
- 3) Experts' opinions

A 27-item questionnaire was created, incorporating categories identified in the qualitative phase. Since sustainability reporting is a voluntary practice, willingness to implement it was considered a predictor of actual behavior. To measure this variable, the Thoradeniya et al. (2015) questionnaire, consisting of four items, was employed. To evaluate participants' responses, a 5-point Likert scale was used, ranging from "completely disagree" to "completely agree." The questionnaire was divided into two main sections: 1. Demographic variables 2. Items related to the main research topic.

For the quantitative phase, a convenience sampling method was applied, similar to survey-based studies (e.g., Sadraii et al., 2022). A total of 92 completed questionnaires were collected and analyzed. To assess the reliability of the questionnaire, Cronbach's alpha coefficient was calculated. Since the coefficient exceeded 0.7 for all questions, the data collection tool demonstrated acceptable reliability. Additionally, to verify the validity of the questionnaire, five experts in

the field of research (e.g., Sadraei et al., 2021; Rostami et al., 2019) reviewed it. They confirmed that the questionnaire was comprehensive, appropriately structured, and sufficiently challenging, ensuring its validity.

## 4. Research findings

### 4-1: Findings of the Qualitative Part of the Research

In a systematic approach to data grounded theory, the foundation emphasizes the use of data analysis steps, including open, central, and selective coding, to develop a logical model with a visual representation of the generated theory (Strauss & Corbin, 1998). These three types of coding are used in this research. In the present study, the recorded interviews were analyzed line by line and phrase by phrase to examine the conceptualization of categorization. Based on the similarity of conceptual relationships and shared characteristics among open codes, relevant concepts and categories were identified. All interviews and quotations were thoroughly reviewed, and the data were continuously compared to ensure accuracy. For this purpose, after repeatedly and carefully reading the transcribed interviews, meaningful units were identified, introduced, explained, and named. As a result of this line-by-line analysis, the researcher identified 174 conceptual labels, which were then classified based on their similarities.

When concepts were compared with one another, and it was found that they were related to similar phenomena, broader categories were identified, allowing for a higher-level classification of concepts. Ultimately, 18 sub-categories and 9 main categories were identified. In the core coding stage, the central phenomenon explored in this research is the enhancement of the competence of audit committee members. Since the competency model of the audit committee is the primary focus of this study, most of the interview discussions and collected data revolve around this central theme. The findings highlight that increasing the competence of audit committee members is the core category in the research model, with other categories linked to it. Selective coding was then applied to analyze the communication patterns between these categories, following the principles of open coding and axial coding as described by Strauss and Corbin (1998). In the continue, the paradigm

model of audit committee members' competence, derived from the data grounded theory, is presented.

### 4-2: Findings of the quantitative section

In this section, based on the findings of the qualitative section and to test the extracted model, a hypothesis has been developed as follows;

hypothesis: The competence of the audit committee has a significant effect on the willingness to report sustainability.

#### Structural model for research hypothesis

To check the model fit, we use measurement model fit, structural model fit, and general fit. In order to check the reliability of the measuring model, the research examines the coefficients of factor loadings, Cronbach's alpha coefficients and composite reliability. The criterion value for the appropriateness of factor load coefficients is 0.4 (Davoudi & Rezazadeh, 2013). In Table 1, all the coefficients of the factor loadings of the questions are greater than 0.4, which indicates the appropriateness of this criterion.

According to the data analysis algorithm in PLS, after measuring the factor loadings of the questions, two composite reliability indices and Cronbach's alpha were used to check the reliability of the research variables. According to Fornell and Larcker (1981), composite and Cronbach's alpha should be 0.7 or higher, which indicates the adequacy of internal stability, and it is also the second criterion for examining the fit of convergent validity measurement models, which examines the correlation of each construct with the questions. Fornell and Larcker (1981) introduced a critical value of 0.5 for this criterion. This means that the value of AVE<sup>1</sup> above 0.5 shows acceptable convergent validity (Davoudi & Rezazadeh, 2013) The results of which are shown in Table 2. According to the findings of the mentioned table, Cronbach's alpha and composite reliability have adopted a suitable value (higher than 0.7), which can confirm the appropriateness of the reliability of the research, and also the average value of the extracted variance is higher. It is from 0.5, which indicates the appropriate convergent validity of the model.

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<sup>1</sup> - Average Variance Extracted

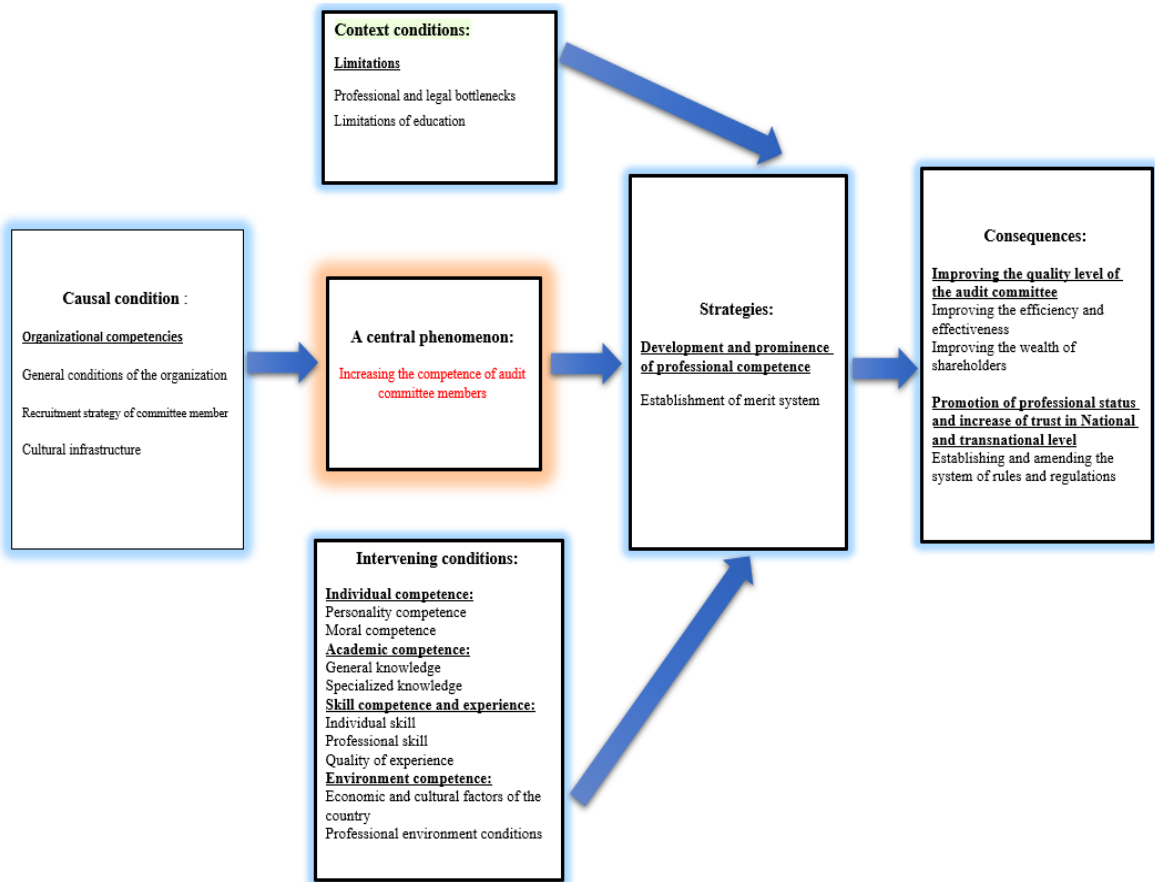


Figure-1 Paradigm Model of Competency of Audit Committee Members

Table 1: Coefficients of factor loadings of the research

Agent	Abbreviation sign	Question number	Factor load
Causal condition	A	1	0.920
		2	0.937
		3	0.903
Context condition	B	4	0.870
		5	0.898
Intervening condition	C	6	0.859
		7	0.918
		8	0.956
		9	0.933
		10	0.921
		11	0.944
		12	0.944
		13	0.927
Strategies	D	14	0.896
		15	0.965
		16	0.973

		17	0.965
		18	0.886
		19	0.956
		20	0.974
		21	0.959
		22	0.962
		23	0.950
		24	0.831
<b>Consequences</b>	<b>E</b>	25	0.904
		26	0.991
		27	0.978
<b>Sustainability reporting</b>	<b>Y</b>	28	0.898
		29	0.936
		30	0.925
		31	0.952

**Table2: results of combined reliability test and Cronbach's alpha**

Current variables	Abbreviation sign	Alpha > 0.7	CR > 0.7	AVE > 0.5
<b>Causal condition</b>	A	0.913	0.945	0.852
<b>Context condition</b>	B	0.720	0.877	0.781
<b>Intervening conditions</b>	C	0.878	0.881	0.851
<b>Strategies</b>	D	0.886	0.989	0.890
<b>Consequences</b>	E	0.787	0.792	0.975
<b>Sustainability reporting</b>	Y	0.906	0.911	0.861

### Divergent validity of research

Acceptable divergent validity of a model indicates that a construct in the model has more interaction with its indicators than other constructs. Fornell and Larcker (1981) state that divergent validity is at an acceptable level when the AVE for each construct is greater than the shared variance of the measure between that construct and other constructs in the model. (Davari & Rezazadeh, 2013). The results of the research model are presented in table (3). Based on the results, the root mean value of the common values of all the first-order constructs is greater than the correlation value between them, which indicates the appropriate variance validity and good fit of the research measurement models. Also, each construct in the research model interacts more with its indicators than other constructs, so the divergent validity of the research is confirmed.

The second criterion for checking the fit of the structural model in a research is the  $R^2$  coefficients related to the endogenous (dependent) hidden variables

of the model.  $R^2$  is a measure that shows the effect of an exogenous variable on an endogenous variable and three values of 0.19, 0.33 and 0.67 is considered as the criterion value for weak, medium and strong values of  $R^2$  (Davari & Rezazadeh, 2013). according to Table 4, the value of  $R^2$  has been calculated for the endogenous structures of the research, which can be suitable according to the three criterion values. To verify the fit of the structural model, in order to check the predictive power of the model, a criterion called  $Q^2$  is used, and three values of 0.02, 0.15 and 0.35 for  $Q^2$  indicate weak, medium and strong predictive power about the structure. according to the results of this criterion in Table 4, it can be concluded that the model has strong predictive power.

Also, to check the fit of the overall model, the GOF criterion is used, and three values of 0.01, 0.25 and 0.36 have been introduced as weak, medium and strong values for GOF (Davari & Rezazadeh, 2013). According to the value obtained for GOF to the extent of 0.446, a very good fit of the overall model is confirmed.

**Table 3: the matrix of divergent validity assessment by Fornell and Larcker method**

	A	B	C	D	E	X	Y
A	0.923						
B	0.332	0.884					
C	0.157	0.091	0.922				
D	0.168	0.319	0.173	0.943			
E	0.280	0.132	0.262	0.192	0.988		
X	0.409	0.412	0.641	0.817	0.467	0.621	
Y	0.402	0.265	0.148	0.266	0.203	0.359	0.928

**Table 4: The results of the R<sup>2</sup> criterion for the endogenous structure**

Current variables	Abbreviation sign	R <sup>2</sup>	Q <sup>2</sup>
Sustainability reporting	Y	0.229	0.202

**Table 5: Community and R<sup>2</sup> of research variables**

Latent variables	Abbreviation sign	Community	R <sup>2</sup>
Causal condition	A	0.852	0.000
Context condition	B	0.781	0.000
Intervening conditions	C	0.851	0.000
Strategies	D	0.890	0.000
Consequences	E	0.975	0.000
Sustainability reporting	Y	0.861	0.229

**Table 6: The fitting results of the overall model**

Community	R <sup>2</sup>	GOF
0.868	0.229	<b>0.446</b>

### Statistical test of the research hypothesis

In this part, we will examine the test of research hypotheses using pls software;

As presented in the figure, it can be said that the standardized coefficient (path coefficient) between the two variables (audit committee competency and sustainability reporting) is B= 0.359 and the significance coefficient (T- Value) between these two variables is T= 6.142 (mor than the absolute value 1.96), which is confirmed to be significant at the confidence level of %95. It can be concluded that there is a significant relationship between the audit committee competency and sustainability reporting and therefore this hypothesis will be confirmed.

These results can be interpreted in such a way that the competences of the audit committee can lead to the desire for sustainability reporting. The result of this claim is that the dimensions of the competences of the audit committee, obtained according to the interviews conducted with experts, can influence the willingness

of companies to report on sustainability. In other words, if the audit committee has the necessary competence in the organization, it motivates the organization to submit sustainable reports, which in turn increases the growth of capital, environmental protection, and increases social trust, etc.

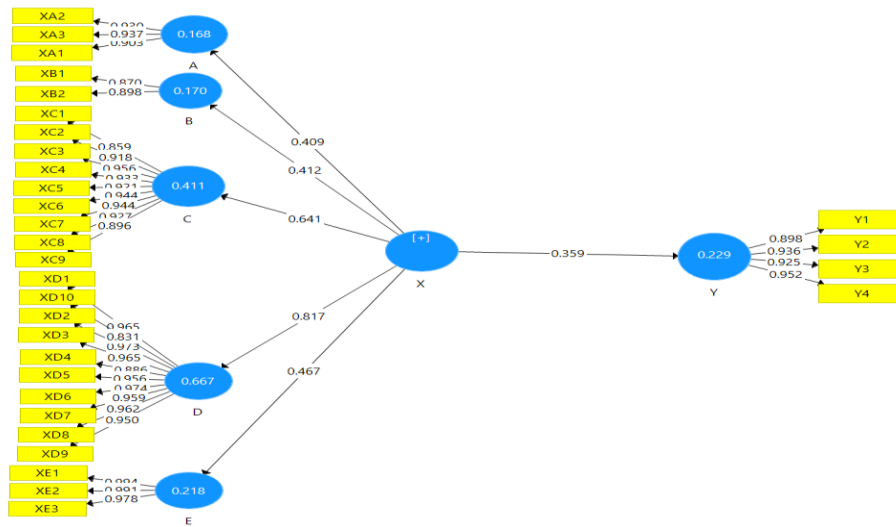


Figure 2. The structural model of the research hypothesis with factor loading coefficients

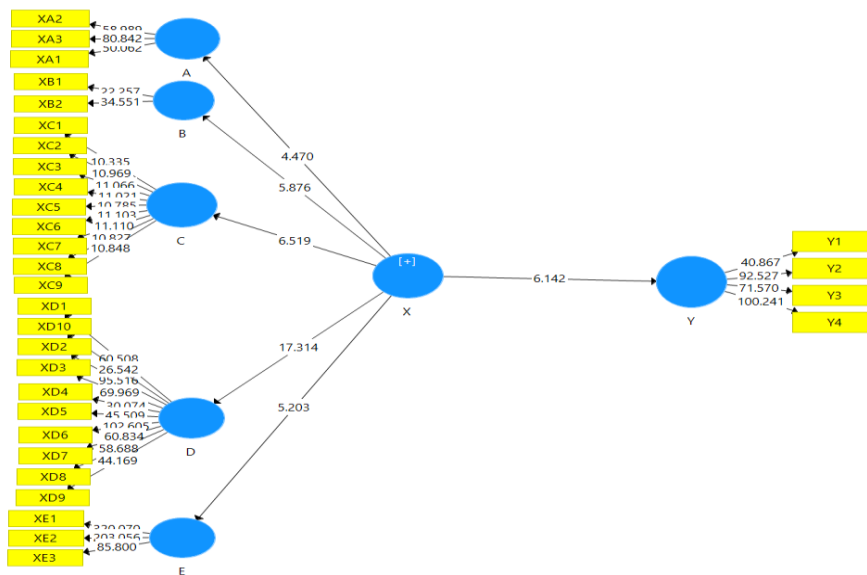


Figure 3. The structural model of the research hypothesis with significant coefficients

## 5. Discussion and Conclusion

Corporate governance has brought significant changes to the business environment, particularly in the accounting and auditing profession. In recent years, increased attention has been given to the role of audit committees as one of the most critical pillars of corporate governance. As an essential element of a well-functioning governance framework, the audit committee is expected to enhance the board of

directors' supervisory role, improve financial reporting quality, reduce asymmetry problems, and strengthen the independence and objectivity of auditors. Furthermore, it plays a vital role in enhancing risk management practices and improving decision-making processes (Samaha et al, 2015). Extensive research has examined the impact of audit committees on financial reporting quality and voluntary disclosure, highlighting their role in providing board members

with timely and relevant financial information to support informed managerial decisions (Vafeas, 2005). This study aimed to design a comprehensive competency model for audit committee members and assess its impact on the desire for sustainability reporting. To achieve this, a mixed-method research approach was employed, integrating both qualitative and quantitative methodologies.

The qualitative phase of the study involved analyzing research data through three stages of coding, which in this regard, the main categories and sub-categories extracted from the research data were analyzed and presented as a model of competence of audit committee members in the form of a paradigm model. As mentioned, the category of the need to increase the competence of the members of the audit committee has been extracted as a central category. This central category is affected by the causal conditions of organizational competencies. On the other hand, the strategic interactions that have been extracted for developing the competency model of audit committee members according to expert interviews include the development and prominence of professional competence, which is influenced by intervening conditions that moderate the relationship between the central category and strategies, and also the background conditions in which the phenomenon or central category occurs include limitations. The last category cluster in the extracted pattern is the results. This category states that in case of effective implementation of the central category in this research, results such as improving the quality level of the audit committee and enhancing the status of the profession and increasing trust at the national and transnational levels will occur.

Although previous research has explored audit committee characteristics, this study has identified several additional factors that had not been thoroughly addressed in domestic or international literature. These factors include the strategy for recruiting members, the level of participation and teamwork culture within the committee, the adequacy of financial compensation, and the lack of specialized educational content designed specifically for audit committee members. Unlike prior research, this study considers the specific governance context of Iran, providing a more comprehensive and localized understanding of audit committee competencies. The insights gained from this research offer valuable implications for

policymakers, regulatory bodies, and organizations seeking to enhance the effectiveness of audit committees in ensuring high-quality corporate governance.

The most important achievement of this research can be considered to be the achievement of a paradigm model of audit committee competence, and the components of the paradigm model extracted from the current research include 18 categories, which have relative integrity and comprehensiveness in the form of 9 main categories and 174 concepts. In addition, based on the findings of the research, increasing the competence of the members of the audit committee as the basic core is the most important finding of the research. As well the competency model in the audit committee provides a methodical framework for evaluating the committee's performance for their strengths and weaknesses. In fact, the audit committee competency model specifies what characteristics the audit committee should have in the environmental conditions of the country so that they can adhere to their profession in order to better present the goals of the audit committee. According to the pattern obtained from the research, it can be concluded that despite the fact that more than a decade has passed since the existence of an audit committee in Iran and the absence of a competency committee and benefiting from its benefits, it is necessary to pay attention to these factors in the process of selecting members of the committee, developing guidelines and developing quality standards for employment at the macro level and at the level of organizations and educational institutions. The members of the audit committee should believe that in the life cycle of the profession, attention is paid to their abilities and competences, in this way, the members of the audit committee gain confidence in their job and do not easily violate the principles and rules of professional conduct, and finally, these categories and relationships that were mentioned narrate the competence model of the audit committee in Iran.

Furthermore, the study employed structural equation modeling (SEM) to test the proposed competency model and evaluate its relationship with sustainability reporting. The results demonstrated a positive and significant correlation between audit committee competence and the inclination toward sustainability reporting. The quantitative findings, obtained through surveys, validated most of the

components and themes identified in the qualitative phase, further reinforcing the notion that the competencies of audit committee members play a critical role in shaping financial transparency and sustainability practices. The research hypothesis was supported by the data, confirming that audit committee competencies including individual knowledge, skills, experience, and environmental awareness positively influence corporate sustainability reporting. As an internal control mechanism, the audit committee is instrumental in safeguarding the interests of various stakeholders who rely on corporate financial disclosures. By enhancing the reporting process and ensuring transparency, audit committees contribute to improved accountability and corporate responsibility.

What is certain is that the use of the qualitative strategy of the grounded theory in the direction of the development of the competency model of the audit committee is a new action in the researches of this field and has received less attention in the past, and it is the most important point of difference between this research and the previous researches. Therefore, the mentioned paradigm model which is extracted from the research data cannot be compared with a similar model and similar research method. However, in some researches that have been conducted in the field of the characteristics and role of the audit committee, such as kamyabi and Boj Mehrani (2016), Amjadian and Gholami Jamkarani (1401), Herranz et al (2022), Bilal et al. (2018), Gorshunov et al (2021), Factors such as experience, sufficient number of meetings of the audit committee, procurement of additional training, sufficient expertise, independence of the committee, auditing the power of the committee members have been taken into consideration, it is also compatible for The structural equation modeling method was used to fit the obtained model, and the results of this research are in line with the research results of Shoukati Zalu Abi (2019) and Buaily and Al-Ajmi (2019) who found that the characteristics of the audit committee are effective in sustainability reporting.

Undoubtedly, every research is not free from challenges and problems in its implementation, this research was not an exception and its conduct was faced with limitations. The most important limitation of the current research is related to the research approach, since in qualitative research, the desired phenomenon in the context in which it occurs is studied. Therefore, the possibility of generalizing the

results and findings of the research to other conditions and situations is limited, so it is not easy to generalize the results of the current research to other fields. Also, in order to conduct interviews, auditors with high work experience in the field of audit committee were needed, and finding such people and taking time from them was difficult and limited. Another limitation of the research is that the results of the research are highly dependent on the researcher's observations, and considering that there is no numerical data, the validity of the researcher's conclusions cannot be controlled. Another limitation related to this type of research is the possibility of biases and It is the personal judgments of the researcher who has tried to minimize various biases and personal judgments with the methods of acceptability test. Also, in this research, the necessary information to test the hypothesis has been collected through a questionnaire. As a result, one of the limitations of the research is the inherent limitations of the questionnaire, including the individual's mental states when completing the questionnaire, spending time and honesty in answering, which is one of the basic conditions for the health of the research.

Given the findings of this study, it is recommended that policymakers and regulatory bodies take proactive steps to improve audit committee competence. This could be achieved through regulatory reforms, professional training programs, and the establishment of independent oversight mechanisms to ensure that audit committees meet high standards of competency and effectiveness. It is also suggested that organizations implement structured recruitment processes to ensure that audit committee members possess the necessary expertise and skills. Compensation structures should be reviewed to reflect the responsibilities and workload of audit committee members, thereby increasing their motivation and commitment to their roles.

Furthermore, audit committees should be encouraged to engage in continuous professional development programs, including specialized training in financial oversight, risk management, and corporate sustainability practices. Regulatory bodies should also consider establishing a professional association for audit committee members, which could serve as a platform for knowledge exchange, continuous education, and professional certification. Such measures would enhance the overall effectiveness of

audit committees and improve corporate governance practices. Boards of directors should prioritize competence-based selection criteria when appointing audit committee members and ensure that adequate resources are allocated to support their activities and also to prevent legal obligations and to align the company's plan with the plans of the audit committee to encourage them to improve their competence to increase productivity. Also, according to the result of the research that the audit committee competency has a positive and significant relationship with the willingness to report company's sustainability, It is suggested to the managers to pay attention to the quality and effectiveness of the audit committee in order to increase the responsibility of the company in sustainability reporting and to include it in their plan in order to attract the opinion of investors and align with the development of the environment and increase the value of the company.

It is suggested to the future researchers that since this research is the first study on the competence of the members of the audit committee, therefore, in other fields of accounting and auditing, such as the community of certified accountants, they should examine the competences of the members, which will increase the promotion of the accounting profession. It is suggested that in future researches, they should identify the weaknesses in the laws that cause the presence of the audit committee non-competency. Also examine the effect of audit committee competencies on other sustainability reporting factors and test the effect of other variables on it.

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