DOI: 10.58423/2786-6742/2024-6-346-360

UDC 657:334.722

Waleed Khalid SALIH

Doctor of science in Accounting and Auditing,
Associate Professor, Department of Accounting,
College of Administration and Economics, University of Anbar,
Anbar, Iraq
ORCID ID: 0000-0003-0176-3395

ORCID ID: 0000-0003-0176-3395 **Scopus Author ID:** 57208532571

Tariq Tawfeeq Yousif ALABDULLAH

PhD, Associate Professor,
Department of Management Information System,
College of Administration and Economics, & Economic Studies
Department - Basrah & Arab Gulf Studies Center,
University of Basrah,
Basrah, Iraq
ORCID ID: 0000-0003-1494-6983

Scopus Author ID: 56275199100

DOES AUDIT COMMITTEE EFFECT ON RELATION BETWEEN EFFECTIVENESS AND EFFICIENCY OF AUDITING AND SUSTAINABLE DEVELOPMENT IN PRIVATE SECTOR COMPANIES

Анотація. Сучасне економічне середовище зосереджено на сталому розвитку як розвитку, який відповідає потребам сьогодення, не ставлячи під загрозу здатність майбутніх поколінь задовольняти свої потреби. У цьому дослідженні була зроблена спроба вивчити вплив найважливіших факторів, які сприяють сталому розвитку, в середовищі компаній приватного сектору Іраку. Концептуальну основу цього дослідження було розроблено з використанням теорії управління, а також пояснення зв'язку між досліджуваними змінними. Наукові основи, застосовані в цьому дослідженні, спрямовані на те, щоб зрозуміти, що означає концепція сталого розвитку для ряду інших бенефіціарів, які несуть відповідальність за оцінку важливості сталого розвитку в приватному секторі Іраку. Цільова група в поточному дослідженні стосується зовнішнього аудитора в іракському приватному секторі. У цьому дослідженні було запропоновано чотири гіпотези з метою перевірки зв'язку між досліджуваними змінними. Популяція дослідження складалася з 362 зовнішніх аудиторів, а вибірка дослідження становила 186 із рівнем відповідей 72%. Анкета була роздана особисто цільовій вибірці з метою допомоги відібраній вибірці в інтерпретації деяких неоднозначних питань. У дослідженні використовувалася технологія Smart PLS4 для перевірки даних, отриманих з вибірки дослідження. Модель дослідження показала високу пояснювальну силу. Виявилося, що три шляхи від моделі дослідження були значущими в напрямку, запропонованому дослідженням у його гіпотезах. У цьому дослідженні вдалося продемонструвати найважливіші фактори, які можуть сприяти сталому розвитку іракських компаній, що працюють у приватному секторі. Результати дослідження показали, що аналіз шляхових коефіцієнтів показав, що комітети з аудиту, ефективність та результативність аудиту та культура організації позитивно впливають на сталий розвиток. Дослідження показало, що основними факторами, які можуть



сприяти сталому розвитку приватного сектора в Іраку, ϵ необхідність посилення роботи аудиторських комітетів і проведення аудитів з високим рівнем ефективності та результативності. У цьому контексті це дослідження передбачає, що особи, які приймають рішення, повинні серйозно поставитися до згаданих факторів для досягнення важливих результатів у процесі аудиту.

Ключові слова: Аудиторська комісія, ефективність та результативність аудиту, сталий розвиток.

JEL Classification: M42

Absztrakt. A jelenlegi gazdasági környezet a fenntartható fejlődésre összpontosít, mint olyan fejlődésre, amely a jelen szükségleteire válaszol anélkül, hogy veszélyeztetné a jövő nemzedékeinek azon képességét, hogy kielégítsék szükségleteiket. Ez a tanulmány megkísérelte tanulmányozni a fenntartható fejlődést elősegítő legfontosabb tényezők hatását az iraki magánszektor vállalatainak környezetében. Ebben a tanulmányban a fogalmi keretet a kormányzás elméletének felhasználásával, valamint a vizsgálati változók közötti kapcsolat magyarázatával dolgoztuk ki. A kutatásban alkalmazott tudományos alapok célja, hogy betekintést nyújtsanak abba, hogy mit jelent a fenntartható fejlődés fogalma számos más kedvezményezett számára, akik felelősséggel tartoznak a fenntartható fejlődés fontosságának értékeléséért az iraki magánszektorban. A jelenlegi tanulmány célcsoportja az iraki magánszektor külső auditorához kapcsolódik. Ebben a tanulmányban négy hipotézist javasoltak a kutatási változók közötti kapcsolat tesztelésére. A vizsgálati populáció 362 külső auditor, a vizsgálati minta pedig 186 volt, a válaszadási arány 72%. A kérdőívet személyesen juttattuk el a megcélzott mintához, hogy segítsük a kiválasztott mintát néhány félreérthető kérdés értelmezésében. A vizsgálat során Smart PLS4 technológiát használtak a kutatási mintából nyert adatok tesztelésére. A vizsgálati modell nagy magyarázóerőt jelzett. Úgy tűnt, hogy a kutatási modellből három út volt jelentős abban az irányban, amelyet a tanulmány hipotéziseiben javasolt. A tanulmányban sikerült bemutatni azokat a legfontosabb tényezőket, amelyek elősegíthetik a fenntartható fejlődést a magánszektorban működő iraki vállalatoknál. A tanulmány eredményei azt mutatták, hogy az útegyütthatók elemzése azt mutatta, hogy az audit bizottságok, az ellenőrzés hatékonysága és eredményessége, valamint a szervezeti kultúra pozitívan befolyásolja a fenntartható fejlődést. A kutatás rámutatott, hogy az iraki magánszektor fenntartható fejlődését elősegítő fő tényezők az auditbizottságok munkájának megerősítése és az ellenőrzések magas szintű hatékonysága és eredményessége. Ebben az összefüggésben ez a tanulmány azt sugallja, hogy a döntéshozóknak komolyan kell venniük az említett tényezőket, hogy fontos eredményeket érjenek el az ellenőrzési folyamatból.

Kulcsszavak. Audit Bizottság, Az ellenőrzés hatékonysága és eredményessége, fenntartható fejlődés.

Abstract. The current economic environment has focused on sustainable development as development that responds to the needs of the present without compromising the ability of future generations to meet their needs. This study attempted to study the impact of the most important factors that promote sustainable development in the environment of Iraqi private sector companies. The conceptual framework in this study was developed using governance theory as well as explaining the relationship between the study variables. The scientific foundations applied in this research aim to provide insight into what the concept of sustainable development means to a number of other beneficiaries who bear the responsibility of evaluating the importance of sustainable development in the Iraqi private sector. The target population in the current study relates to the external auditor in the Iraqi private sector. In this study, four hypotheses were proposed for the purpose of testing the relationship between the research variables. The study population was 362 external auditors, and the study sample was 186, with a response rate of 72%. The questionnaire was distributed personally to the targeted sample for the purpose of helping the selected sample in interpreting some ambiguous questions. The study used Smart PLS4 technology to test the data obtained from the research sample. The study model



indicated high explanatory power. It appeared that three paths from the research model were significant in the direction suggested by the study in its hypotheses. This study succeeded in showing the most important factors that can help promote sustainable development in Iraqi companies operating in the private sector. The results of the study indicated that the analysis of path coefficients indicated that audit committees, the efficiency and effectiveness of auditing, and the culture of the organization positively affect sustainable development. The research indicated that the main factors that can promote sustainable development in the private sector in Iraq are the need to strengthen the work of audit committees and conduct audits with a high level of efficiency and effectiveness. In this context, this study suggests that decision makers should take seriously the factors mentioned to achieve important results from the audit process.

Keywords: Audit Committee, Efficiency and Effectiveness of Auditing, sustainable development.

Problem description. Applying governance in organizations and companies requires some principles, such as granting the Board of Directors the right to manage in the long term, as well as establishing controls to ensure that the best organized elements are selected to the Board of Directors [14]. The supervision of the Audit Committee of the Board of Directors, in addition to the cooperation of the external auditor in auditing the company's annual financial statements and setting internal controls over financial reports, is considered one of the guiding principles in applying corporate governance [8].

Audit committees play a crucial role in enhancing independence and transparency within organizations and also contribute to enhancing the effectiveness of auditing. These committees are responsible for overseeing the financial reporting process, ensuring the integrity of the organization's financial statements, and maintaining effective internal controls [4]. One of the primary responsibilities of the audit committee is to enhance the independence and effectiveness of the external auditors. This can be achieved by selecting and appointing auditors who have sufficient expertise and experience to complete the work. Audit committees also help maintain objectivity and integrity in the audit process [3].

Audit committees are responsible for reviewing the effectiveness of the organization's internal controls, which are designed to protect assets, prevent fraud, and ensure the accuracy of financial reporting [2]. By actively participating in evaluating and improving these controls, audit committees help reduce the risks of material errors in the financial statements and thus achieve the efficiency and effectiveness of the audit [18]. Many organizations suffer from a clear weakness in managing their wealth, which causes the company to lose or become unable to compete. The depletion of non-renewable natural resources also limits the amount of natural capital that future generations inherit, which jeopardizes their ability to satisfy their basic needs [23].

In relation to the above studies, the corporate management crisis continues, researchers are trying to propose solutions to it that differ according to their intellectual references, doctrinal and ideological affiliations, and political orientations. Looking at some successful models of countries that were able to achieve prosperity and stability for their people, we will find that the common factor among them is their adoption of

[©] W. K. Salih, T. T. Yo. Alabdullah



successful development experiences, regardless of the nature of their political system [42].

As is known, the United Nations put forward the Millennium Sustainable Development Goals a few years ago. It likely forms the basis for ensuring the stability and prosperity of companies. It can be said that achieving sustainable development is considered the most important factor in the growth of private companies [19]. The absence of sustainable development leads to an inevitable result, which is an increase in non-traditional risks to the economy, and this would pose a threat to the lives, success or continuity of companies [15].

Literature Review. This section is categorized into two; first, a review of the literature findings of the audit committee, and second, a discussion of literature findings concerning the efficiency and effectiveness of auditing.

Audit Committee and Efficiency and Effectiveness of Auditing. Manipulation and fraud in financial reports are among the most important reasons that led to the establishment of audit committees in companies, as the role of audit committees focuses on reducing cases of fraud and manipulation, increasing the effectiveness of internal control systems, strengthening the independence of the auditors, and thus strengthening confidence in the process of preparing and auditing financial statements [22].

The continuous improvement in the efficiency and effectiveness of auditing lies in the audit committees' follow-up of the work of the external auditor, as the audit committees focus on meeting with the external auditors individually and periodically to discuss issues that the committee or auditors believe should be discussed confidentially [20].

Moreover, audit committees are considered one of the important mechanisms in assisting the Board of Directors in carrying out its responsibilities related to supervising the process of preparing and presenting financial statements [22]. It also helps in reviewing important accounting issues and matters and financial reports. In addition, reviewing the audit results in cooperation with management and external auditors will improve the efficiency and effectiveness of the audit [4].

Lastly, the continuous improvement in the efficiency and effectiveness of auditing lies in the audit committees' follow-up of the work of the external auditor, as the audit committees focus on meeting with the external auditors individually and periodically to discuss issues that the committee or auditors believe should be discussed confidentially [32]. in this regard, the following hypothesis is proposed.

H1: The audit committees positively influence on efficiency and effectiveness of auditing.

Audit Committee and Sustainable Development. The Audit Committee is one of the important committees because of the role it plays in supervising and controlling the process of preparing the financial statements, evaluating the internal control systems, and strengthening the independence of the internal auditor, which increases the quality and integrity of the financial statements[36], which will be reflected in the efficiency of the Board of Directors in strengthening the company's position by increasing the confidence of users of financial Statements[4].



Moreover, prior research lends mixed support for the association between the characteristics or effectiveness of the audit committee, and outcomes related to sustainable development [34]. Overall, past studies have documented inconclusive evidence on the association between Audit Committee and sustainable development. The existence of an audit committee is one of the main features that indicate the application of good governance rules, as this committee works to establish a culture of commitment and accountability within any institution, regardless of the nature of its activity or size [20]. The autors [24] also found an existence of a good relationship between the audit committee and the effectiveness of the effectiveness of external and internal audit is important for both parties. While ensuring the need for internal audit departments to adhere to the laws and implement the tasks and responsibilities specified in accordance with regulations and instructions [19]. In addition to the existence of a role for the audit committee in improving the internal audit work plan in companies.

In a related study, H.Bin-Abbas & S.H.Bakry [10] documented mixed associations between the proxies of audit quality, AC characteristics and financial reporting quality in many countries. Specifically, they examined whether Audit committees must play a preventive role in the control and risk management system [36], improve audit effectiveness, and ensure that attention is directed toward control mechanisms and policies that prevent financial and operational disasters and achieving sustainable development. Based on the above, the following hypothesis will be tested:

H2: There is a positive association between audit committee and sustainable development.

Efficiency and Effectiveness of Auditing and Sustainable Development. The efficiency and effectiveness of auditing is of particular importance in the private sector in general and in joint-stock companies in particular, as it is the first line of defense to protect private funds and investors, ensure their optimal use, and provide the best services to members of the community that deals with the company, and because it is an effective and efficient tool in developing policies and increasing production efficiency. In order to enhance sustainable development by preserving the company's funds [12].

Moreover, the need for oversight emerged because goals, plans, and studies are performed by individuals, and they may perform them under different circumstances and tools [7]. The reason for establishing a control system in organizations is to help them achieve their goals [36]. The system contains a set of policies and procedures that are designed to provide management with appropriate assurance that the objectives it deems essential for the organization will be achieved by enhancing the efficiency and effectiveness of auditing [1].

It was only recently, that auditing efficiency and effectiveness have risen to the positions of top mechanisms utilized to assess adherence with the established quality standards and enhance sustainable development. Added to this, Hence the idea that administrative support, efficiency and effectiveness have a significant impact on the performance of organizations operating in the private sector [29].

Theoretically, the issue of the efficiency and effectiveness of auditing and its impact on sustainable development is indispensable because companies, especially in the private sector, still face many challenges. Therefore, in this context, the effectiveness



and efficiency of auditing should be seen as playing a major role in private companies by helping them achieve the goals of the organizations, especially in an unstable work environment, as happens in the Iraqi environment [5]. In this issue, the following hypothesis has been assumed:

H3: Efficiency and effectiveness of auditing has a positive effect on sustainable development.

Organizational Culture and Sustainable Development. Organizational culture is considered one of the challenges that organizations face because it has a positive impact on employee performance. Creating a successful organizational culture improves recruitment efforts and also raises the company's success rates [34]. Some see the organization's culture as focusing on the values, beliefs, and meanings that the organization's members use in order to understand how the organization's success and uniqueness over competitors are generated [40].

The culture of the organization is important in many practical and professional fields in various sectors of work, especially in the private sector, far from the control of the state and the public sector [26], as the culture of the organization is considered a clear and comprehensive guide for managers and employees [35], as it helps them formulate a set of ideas that are appropriate to the nature of work in the organization as well. These ideas greatly enhance the achievement of the organization's goals, which helps in achieving sustainable development [6].

In a related study, [23]. The principles, dimensions of organizational culture and its goals are an important basis in the process of building organizational goals and their success, which is the essence of sustainable development[36]. The success of the organization, its continuous development, and the management of change in it cannot be applied in isolation from the understanding [18], behaviour, and beliefs of its individuals and from the values and dimensions of the prevailing organizational culture within the organization. There is integration and connection between all of them [34].

Working to develop the dimensions of organizational culture within the organization is necessary and very important because of its role in achieving the organization's goals and its impact on achieving sustainable development [38]. As such, the following hypothesis is proposed:

H4: There is a positive relationship between organizational culture and sustainable development.

Governance Theory. "Corporate governance" is the internal policies in any organization that include the system and people, and which serve the needs of shareholders and third parties by directing and monitoring the organization's management activities [31].

It is also a system for organizing, operating and controlling the company with the aim of achieving long-term strategic goals (in a sustainable manner) to satisfy shareholders, creditors, employees [34], customers and suppliers. Governance theory seeks to comply with legal and regulatory requirements, as well as meet local environmental requirements and community needs [21].

Governance theory focuses on the positive impact of corporate governance on various stakeholders (beneficiary parties) by strengthening the economy, and thus sound corporate governance as a tool for economic and social development [27].

In addition to the above, this theory explains the following point of view. All parties in corporate management have an interest [36], whether direct or indirect, in the actual performance of the organization. Managers and managing employees receive salaries, benefits and reputation, while they receive a return on shareholders' capital [2]. For customers obtaining goods and services is important. Suppliers receive compensation for their goods or services. In return these individuals provide value in the form of natural, human, social and other forms of capital [30].

It is clear from reviewing previous studies that governance theory has been able to prove its success in explaining and analysing the basic factors affecting the governance structure in private companies [18].

The theory can be used to highlight the existence and role of the efficiency and effectiveness of auditing in achieving sustainable development. There is a significant impact of audit committees on the efficiency of auditing and sustainable development, as well as the importance of the organization's culture because of its role in enhancing the success of any organization [31].

Conceptual Framework. In light of governance theory discussed, the following framework are developed. Governance theory is used to develop the theoretical framework and all relation between dependent variables and independent variables in this paper. In this research, governance theory explains why sustainable development is so important and how it can be enhanced by finding the factors that most influence it [19].

In the proposed study model, there are several relationships, the first of which is the impact of the efficiency and effectiveness of auditing on achieving sustainable development. Secondly, the impact of audit committees in promoting sustainable development and the efficiency and effectiveness of auditing [18].

The last relationship is the impact of the organization's culture on achieving sustainable development. Figure 1 explains the details of the relationship between the research variables, which were not discussed previously.

Methodology. The conceptual framework in this study was developed using governance theory as well as explaining the relationship between the study variables. The scientific foundations applied in this research aim to provide insight into what the concept of sustainable development means to a number of other beneficiaries who bear the responsibility of evaluating the importance of sustainable development in the Iraqi private sector [35].



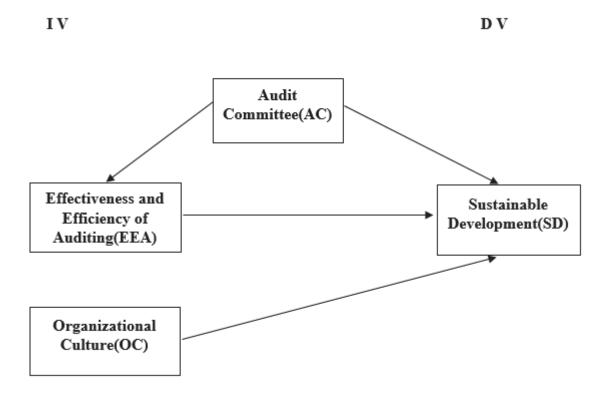


Fig.1. Conceptual Framework of Governance Theory.

Source: own editing.

The research targeted 362 external auditors in Iraq. A random sample of 186 external auditors was followed [37]. The questionnaire was collected through a questionnaire that contains indicators to measure the impact of the study variables. 134 of them were received. That is, a response rate of 72%. The next step was to ensure the validity and reliability of the questionnaire.

The questionnaire was distributed personally to the targeted sample for the purpose of helping the selected sample in interpreting some ambiguous questions. The current research used the quantitative approach to data analysis, where the data was analyzed using Smart PLS 4. This program was used for the purpose of conducting statistical analysis and obtaining accurate and fast results.

Research results.

The study focuses on **Inner VIF Values.** It is a measure of the degree of multicollinearity in a set of multiple regression variables. Essentially, it evaluates the extent to which each independent variable in the model is linearly related to the other independent variables. Overall, understanding (VIF) and its role in determining multicollinearity is an important aspect of regression analysis that can help ensure accurate and reliable results [28].

A high (VIF) value indicates that the independent variable may be redundant and may be dropped from the model. (VIF) is calculated as the ratio of the variance of the estimated regression coefficient of the independent variable divided by the variance of



the estimated coefficient assuming that the independent variables are uncorrelated with each other [16]. (VIF) values can be calculated for each independent variable in a model, allowing variables that may contribute to multicollinearity to be identified.

[16] have explained that the (VIF) value should be less than 5. In this study, the results ranged between 1.000 and 1.038 which indicates that (VIF) has a good level (Table 1).

T 1/110 1

Table 1.

Table 2.

inner vir values					
	AC	EEA	oc	SD	
AC		1.000		1.019	
EEA				1.038	
ос				1.019	
SD					

Coefficient of determination (R-square). The coefficient of determination is used in statistical models whose main goal is to predict the results that will appear in the future or the process of testing hypotheses, on the basis of other relevant information and data obtained. The coefficient of determination provides an important measure of the reproducibility of the results obtained in the model [9].

R-square values

The coefficient of determination is explained by the percentage of variance in the dependent variable, which in this research is represented by sustainable development, which can be predicted through the independent variable (or variables), which are the efficiency and effectiveness of auditing, in addition to the audit committees and finally the culture of the organization.

In this research, SmartPLS was used to obtain R2 values. Based on the shape? The results of this research appear that the internal structure has an R2 value that was, according to the results, 0.530. [13]. revealed that when R2 values are higher than 0.26, this indicates that the study model fits the data. Hence, we note that the results obtained conformed to scientific standards.



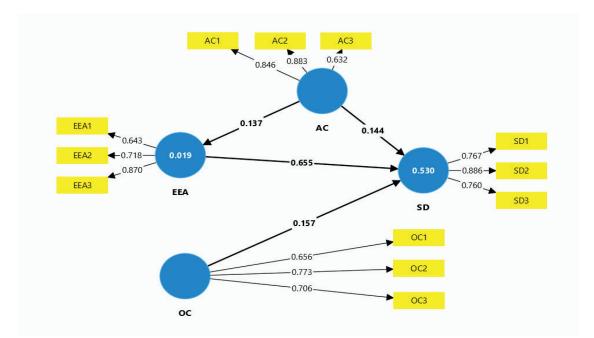


Fig.2. R-square values

Model Fit. There are several method to evaluate the criteria provided of the model, including SRMR The former refers to the difference between the model implied correlation matrix and the observed correlation. [17]. stated that a value that is less than 0.10 reflects a good fit, also he indicated that a value that would be less than 0.10 would indicate good fit. Here, the results of the study are consistent with what was stated above.

In addition, the second refers to NFI, which is the standard suitability index and is the result of 1 minus the Chi². The results must be between 0 and 1, and the closer to one the better [25]. The result was closer to one as it shown in the table (3).

Table 3.

	Widder III
Criteria	Saturated Model
SRMR	0.083
NFI	0.562

Model fit

Effect Size f2. In statistical operations, we note that the effect size is a value through which the strength of the relationship between two variables in a population is measured, that is, between the independent variable and the dependent variable.

Likewise, in statistical models, including the multiple regression model, where the dependent and independent variables are continuous, one of the important and most common methods for calculating the effect size of each variable or structure is Cohen's f2. The size of the effect was classified as small effect, medium effect, or large effect, as shown in the table (4).



Table 4.

Effect Size f2

Effect Size	f2
Small	≥ 0.02
Medium	≥ 0.15
Large	≥ 0.35

The results of the statistical analysis of the research were as shown in the table (4) the effect size f 2 exceeding 0.35 is being large [13].

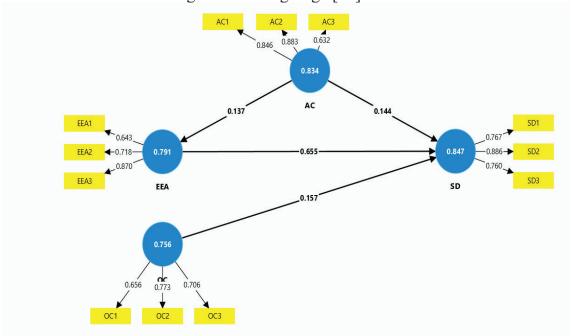


Fig.3. Effect Size f2

Path Coefficients and Hypotheses Testing. Path analysis is a form of statistical analysis that examines the effect of independent variables on the dependent variable. This method allows us to estimate the importance and size of causal links between variables. Through the structural model, each path linking two variables will be represented by a hypothesis. It was confirmed through the research results that the path coefficients are statistically significant through the use of smoothing techniques.

Table 5.

Structural model assessment

	Hypothesis	Path	STDEV	T-	P values	Decision
	Pathway	coefficients		values		
H1	AC - > EEA	0.137	0.115	1.188	0.235	Not supported
H2	AC -> SD	0.144	0.078	1.847	0.065	Supported
Н3	EEA - > SD	0.655	0.058	11.234	0.000	Supported
H4	OC - > SD	0.157	0.081	1.947	0.052	Supported

Note: *p<0.1, **p<0.05, ***p<0.01



Table (5) shows the four direct proposed hypotheses tested and the results reveal that audit committee (AC) had no significant effect on Effectiveness and Efficiency of Auditing (EEA) at the level of significance of $0.01(\beta=0.137, t=1.188, p>0.1)$, indicating that H1 is rejected.

Moreover, audit committee (AC) had a significant effect on sustainable development (SD) (β = 0.144, t=1.847, p<0.1), supporting H2. Also effectiveness and efficiency of auditing (EEA) was found to have a significant effect on sustainable development (SD) at the level of significance of 0.01 (β = 0.655, t=11.234, p<0.01) and therefore, the third hypothesized relationship H3 is supported. Lastly, Organizational culture (OC) had a significant effect on sustainable development (SD) (β = 0.157, t=1.947, p<0.1), supporting H4.

To summarize, the examination of the effects of audit committee (AC), efficiency and effectiveness of auditing (EEA), organizational culture (OC) on sustainable development (SD) showed that it was significant and Hypothesis H2, H3, H4 were accepted.

On the other hand, hypotheses H1 are rejected as audit committees(AC) had not significant effect on efficiency and effectiveness of auditing (EEA). Table 6 contains the summary of the results obtained in testing the proposed hypotheses.

Summary of hypotheses analysis

Table 6.

Нур	Results	
<i>H1</i>	The audit committees positively influence on efficiency and effectiveness of	Not
	auditing.	Supported
H2	There is a positive association between audit committee and sustainable development	Supported
Н3	Efficiency and effectiveness of auditing has a positive effect on sustainable development.	Supported
H4	There is a positive relationship between organizational culture and sustainable development.	Supported

Conclusions and prospects for further research. The current economic environment has focused on sustainable development as development that responds to the needs of the present without jeopardizing the ability of future generations to meet their needs.

Sustainable development research and the factors affecting it are new relative to other topics, and are still in their infancy and require extensive exploration by researchers. Based on this fact, the current study works to study and test the important determinants that can affect the promotion of sustainable development, especially in private companies in Iraq.

The study model indicated high explanatory power. It appeared that three paths from the research model were significant in the direction suggested by the study in its hypotheses. The research indicated that the main factors that can promote sustainable development in the private sector in Iraq are the need to strengthen the work of audit committees and conduct audits with a high level of efficiency and effectiveness, and



finally with the spread of a cultural environment towards achieving the organization's goals.

This study succeeded in showing the most important factors that can help promote sustainable development in Iraqi companies operating in the private sector.

The results of the study indicated that the analysis of path coefficients indicated that audit committees, the efficiency and effectiveness of auditing, and the culture of the organization positively affect sustainable development. In this context, this study suggests that decision makers should take seriously the factors mentioned to achieve important results from the audit process.

This research has future implications and requires more studies. In the context of the private sector, it could include more studies, as the literature has shown that it is full of determinants, for example (strategic planning, enhancing supervision and leadership of all kinds, and finally administrative motivation and justice), as the current study was not able to study them. Testing these other factors enables the formation of a broad framework to enhance the sustainable development process.

References

- 1. Abdelrahim, A., & Al-Malkawi, H. A. N. (2022). The influential factors of internal audit effectiveness: a conceptual model. *International Journal of Financial Studies*, 10(3), 71.
- 2. Alabdullah, T. T. Y., Hussein, Z. A. A. (2023). Risk Management, Female Leadership and Project Management Performance: A study in Oman. *International Journal of Scientific and Management Research*, 6(6), 77-94.
- 3. Alabdullah, T. T. Y., Awang, M. I., Sobirov, B., Multazam, M. T., & Wardana, M. D. (2023). Proceedings of of the International Conference on Intellectuals' Global Responsibility (ICIGR 2022).
- 4. Alabdullah, T. T. Y., Ibrahim, S., Ahmed, E. R., & Salih, W. K. (2023). Exploring the Relationship of Audit Committee Meetings, Independency, CEO Duality, and Firm Performance: A Study in Kuwait. *International Journal of Business and Technology Management*, 5(S5), 127-144.
- 5. Alodat, A. Y., Al Amosh, H., Khatib, S. F., & Mansour, M. (2023). Audit committee chair effectiveness and firm performance: The mediating role of sustainability disclosure. *Cogent Business & Management*, 10 (1), 2181156.
- 6. Al-taee, S. H. H., & Flayyih, H. H. (2022). The impact of the audit committee and audit team characteristics on the audit quality: Mediating impact of effective audit process. *International Journal of Economics and Finance Studies*, 14(03), 249-263.
- 7. Asnaashari, H., & Khodabandehlou, F. (2023). Lean Six Sigma, effectiveness, and efficiency of internal auditing. *International Journal of Lean Six Sigma*. DOI: 10.1108/IJLSS-03-2023-0058
- 8. Assoratgoon, W., & Kantabutra, S. (2023). Toward a sustainability organizational culture model. *Journal of Cleaner Production*, 400, 136666.
- 9. Baatwah, S. R., & Aljaaidi, K. S. (2021). Dataset for audit dimensions in an emerging market: Developing a panel database of audit effectiveness and efficiency. Data in Brief, 36.
- 10.Bin-Abbas, H., & Bakry, S. H. (2014). Assessment of IT governance in organizations: A simple integrated approach. *Computers in Human Behavior*, 32, 261-267.
- 11. Cameron, A. C. & Windmeijer, F. A. (1997). An R-squared measure of goodness of fit for some common nonlinear regression models. *Journal of Econometrics*, 77(2), 329-342.
- 12. Cheung, K. Y., & Adelopo, I. (2022). Audit committee financial expertise, accrual, and real earnings management. *Journal of Corporate Accounting & Finance*, 33(3), 102-118.



- 13. Chin, W. W. (2009). Bootstrap cross-validation indices for PLS path model assessment. In Handbook of partial least squares: Concepts, methods and applications (pp. 83-97). Berlin, Heidelberg: Springer Berlin Heidelberg.
- 14. Coetzee, P., & Lubbe, D. (2014). Improving the efficiency and effectiveness of risk-based internal audit engagements. *International Journal of Auditing*, 18(2), 115-125.
- 15. Cohen, J. (2013). Statistical power analysis for the behavioral sciences. Routledge.
- 16. Edelenbos, J., & van Meerkerk, I. (Eds.). (2016). Critical reflections on interactive governance: Selforganization and participation in public governance. Edward Elgar Publishing.
- 17. Elmashtawy, A., Che Haat, M. H., Ismail, S., & Almaqtari, F. A. (2023). Audit committee effectiveness and audit quality: the moderating effect of joint audit. *Arab Gulf Journal of Scientific Research*. https://doi.org/10.1108/AGJSR-09-2022-0202
- 18. Hair, J. F. (2014). AMOS covariance-based structural equation modeling (CB-SEM): guidelines on its application as a marketing research tool.
- 19. Henseler, J., Hubona, G. & Ray, P. A. (2016). Using PLS path modeling in new technology research: updated guidelines. Industrial Management & Data Systems, 116(1), 2-20.
- 20. Hussain, H. N., Alabdullah, T. T. Y., & Jamal, K. A. M. (2023). Time Management as a Critical Success Factor in the Oil Industry of Basra Governorate: An Accounting Information Systems Study. International Journal of Scientific and Management Research, 6(6), 59-76.
- 21. Hussain, H. N., Alabdullah, T. T. Y., Ries, E., & Jamal, K. A. M. (2023). Implementing Technology for Competitive Advantage in Digital Marketing. International Journal of Scientific and Management Research, 6(6), 95-114.
- 22. Kalembe, D., Kaawaase, T. K., Nkundabanyanga, S. K., & Kayongo, I. N. (2023). CEO power, audit committee effectiveness and earnings quality. *Journal of Accounting in Emerging Economies*. DOI: 10.1108/JAEE-09-2022-0277
- 23. Kapucu, N., & Hu, Q. (2020). Network governance: Concepts, theories, and applications. Routledge.
- 24. Komal, B., Ye, C., & Salem, R. (2022). The impact of audit committee effectiveness on firms' outcomes in China: a systematic review. *International Journal of Accounting & Information Management*, 30(5), 583-599.
- 25. Kurylo, L., Kurylo, I., Shulga, I., & Horodetska, I. (2020). Environmental legal culture as a factor in ensuring sustainable development of society. *European Journal of Sustainable Development*, 9(1), 220-220.
- 26. Liu, X., Lobo, G. J., Yu, H. C., & Zheng, Z. (2023). Multiple directorships and audit committee effectiveness: Evidence from effort allocation. European Accounting Review, 32(5), 1273-1306.
- 27. Lohmoller, J. B. (1989). Latent Path Modeling with Partial Least Squares. Heidelberg: Phsyica-Verlag.
- 28. Lubis, F. R., & Hanum, F. (2020, December). Organizational culture. In 2nd Yogyakarta International Conference on Educational Management/Administration and Pedagogy (YICEMAP 2019) (pp. 88-91). Atlantis Press.
- 29. Michaud, M., & Audebrand, L. K. (2022). One governance theory to rule them all? The case for a paradoxical approach to co-operative governance. Journal of Co-operative Organization and Management, 10(1), 100151.
- 30. Murray, L., Nguyen, H., Lee, Y. F., Remmenga, M. D. & Smith, D. W. (2012). variance inflation factors in regression models with dummy variables. Annual Conference on Applied Statistics in Agriculture. Kansas State University.
- 31. Murthy, U. S., Park, J. C., Smith, T., & Whitworth, J. (2023). Audit efficiency and effectiveness consequences of accounting system homogeneity across audit clients: A new form of knowledge spillover? *The Accounting Review*, 98(2), 389-418.
- 32. Nguyen, T. T. U., Nguyen, P. V., Huynh, H. T. N., Vrontis, D., & Ahmed, Z. U. (2024). Identification of the determinants of public trust in e-government services and participation in social media based on good governance theory and the technology acceptance model. *Journal of Asia Business Studies*, 18(1), 44-61.



- 33. Partelow, S., Schlüter, A., Armitage, D., Bavinck, M., Carlisle, K., Gruby, R. L. etc. (2020). Environmental governance theories: a review and application to coastal systems.
- 34. Qaderi, S. A., Ali Ghaleb, B., Qasem, A., & Waked, S. S. S. (2024). Audit committee effectiveness and integrated reporting quality: Does family ownership matter? *Cogent Economics & Finance*, 12 (1), 2291893.
- 35. Sachs, J. D., Kroll, C., Lafortune, G., Fuller, G., & Woelm, F. (2022). Sustainable development report 2022. Cambridge University Press.
- 36. Salih, W. K., Hla, D. T., & Khamis, A. H. (2017). An Empirical Analysis on the Impact of Internal Review (IR) on Efficiency and Effectiveness of Audit (EEA): An Insight into Iraqi Federal Board of Supreme Audit. *International Journal of Business Research*. DOI: 10.18374/IJBR-17-3.7
- 37. Salih, W. K., Hla, D. T., & Ahmed, E. R. (2015). Peer Review Effectiveness on Quality Assurance Review Programs by auditors in Public Sector. In International Conference on Contemporary Issues in Accounting and Finance (CoCIAF) (Vol. 8, p. 10).
- 38. Sekaran, U. (2003). Research methods for business: A skill building approach. New York: John Wille, y pp.-311.
- 39. Shenzhen, S. T., Nnawulezi, U., Abakporo, P. C., Adenikiju, O. etc. (2024). Managing Africa's cultural institutions for global impact and sustainable development. *Journal of Infrastructure, Policy and Development*, 8 (4), 3168.
- 40. Singhania, A. K., & Panda, N. M. (2023). Does an effective audit committee influence firm performance?—The moderation role of knowledge intensity. Corporate Governance: *The International Journal of Business in Society*.
- 41. Teasley, M. L. (2017). Organizational culture and schools: A call for leadership and collaboration. Children & Schools, 39 (1), 3-6.
- 42. Widyanti, R., Rajiani, I., & Basuki, B. (2023). Green knowledge management to achieve corporate sustainable development. *Journal of Infrastructure, Policy and Development*, 8(2).
- 43. World Health Organization (2020). Ending the neglect to attain the Sustainable Development Goals: a road map for neglected tropical diseases 2021–2030. World Health Organization