

-RESEARCH ARTICLE-

## THE IMPACT OF AUDITOR'S EXPERTISE, COMPANY SIZE AND ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) ON LEVEL OF ENVIRONMENTAL AUDITING: MODERATING THE ROLE OF CORPORATE GOVERNANCE

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### —Abstract—

Considering the increasing concern about environmental issues discussed in this paper, environmental auditing has emerged as a prominent issue attracting the attention of both academics and policymakers. Based on this context, this study aims to identify the determinants that influence the extent of environmental auditing, such as auditors' expertise, company size, and private companies' adoption of Environmental Management Systems (EMS) in Iraq. Furthermore, corporate governance is explored as a probable moderator between auditors' expertise, company size, EMS, and the level of environmental auditing for Iraqi private organizations. The survey was utilized for data collection by sending out questionnaires to auditors practising in the field of private sector organizations in Iraq. Regarding other items and factors, we have employed the SPSS-AMOS software tool to assess the linkage and connection among those variables. According to our research, it can be claimed that there is an association between the competence of the auditor, enterprise size, environmental management systems, and the level of environmental audit in Iraqi private sector companies. Moreover, according to this research, it may be concluded that the role of corporate governance as a major

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moderating variable toward auditors' expertise, the size of the company, the level of EMS, and environmental auditing in the Iraq private sector. To summarize, there are a few suggestions that can be provided for policymakers in terms of regulatory developments aimed at further improving environmental auditing criteria. Among others, one can point out elevating the auditor's proficiency level, defining the adequate company size, or ensuring an EMS's effectiveness.

**Keywords:** Auditors' Expertise, Company Size, Environmental Management System, Level of Environmental Auditing, Corporate Governance.

## Introduction

The current study analyses the corporate social responsibility impact on sustainable business practices in Iraq. Iraq is a country that encounters noticeable geopolitical and economic challenges. Moreover, the rising concept of environmental auditing within institutions is credited to its importance as a vital element for companies targeting substantial donations to global sustainability programs through their day-to-day operations. Our research aspires to assume this development by investigating the linkage between the use of Environmental Management Systems (EMS), the company's size, and auditor knowledge levels. Furthermore, our research also seeks to evaluate the impact of corporate governance on these variables and their linkages with the level of environmental audit. Examining these considerations can help by adding valuable sources of knowledge to decision-making about the government's procedures and setting the foundation for an eco-friendly environment for different businesses in Iraq. Meanwhile, the context of Iraq was desired because of its rich history and cultural uniqueness, which shaped a specific economic status (Liu et al., 2023). Therefore, our study desires to highlight the implication of these factors on environmental auditing, by recognising the obstacles that organizations in Iraq countenance and understanding the potential opportunities that might exist. The present study lays down the following hypothesis based on a linear correlation among Iraqi firms' environmental audit, auditors' proficiency (PROF), company size and EMS installation status (EMS-Y): The first factor, also emphasized in other distinct previous research is the competence of auditors. A body of literature argues that quality auditing is positively related to experienced or highly qualified auditors as indicated in the second hypothesis (Betti & Sarens, 2021). The findings also suggest that more experienced environmental auditors are expected to rely on leverage increasingly for identifying and prioritizing environmental risk in organizations they audit. The second factor on the list of important factors is size. The other determinant factor that can explain the success of environmental auditing is the size firm (Wong et al., 2020). Those with the means to do so can enact innovative environmental practices and establish comprehensive auditing industries. Studies show that larger firms frequently utilise sophisticated management structures which, among other things, improve the effectiveness of environmental audits. Stakeholder contributions remain a significant funding source for these firms'

environmental responsibility initiatives, accounting for some of the largest parts of their respective budgets. A third factor could be the presence of an EMS, i.e., an Environmental Management System How does this impact EMS? Keeping an eye on the effects of all these on the environment is very essential. It is proof that the company's continued commitment to sustainability reveals that its environmental audit programmes are successful (Voinea et al., 2020). It was our goal to uncover the criteria, critical drivers and practices of environmental audits as well as elucidate how corporate governance has a function in the dynamics of these. Therefore, our main objective is to verify whether EMS has an influence on EA and in this case, how much are the organizations that have a robust EMS committed to environmental conservation. This is something that we can measure by looking at the sustainable practices they implement in their audits. Second, we explore the moderating impact of organisational culture on dynamics involving EA and auditor experience, company size, and EMSs.

This research provides significant empirical insights for improving Internal Audit (IA) in Iraqi firms and facilitating the institutionalization of the Corporate Governance (CG) concept along with sustainability development efforts. The significance of this research is in identifying gaps in the academic realm. First, the an absence of studies concerning environmental audit measures within the Iraqi context, which offers valuable insights into a politically and economically unique region with diverse cultural dynamics. Secondly, despite the extensive literature on environmental auditing globally, there is no cohesive study has yet been conducted that states the interplay between auditor experience, firm size, EMS, and corporate governance. To fill these gaps, the research project employed a detailed methodology, integrating a unified model that took into account the interconnections between these elements and their impact on sustainability practices. Furthermore, by selecting Iraq as a representative case study, this study sheds light on environmental auditing on a global scale. Subsequently, the research will introduce the literature review, methodology discussion, and empirical analysis sections to test the hypothesis process.

### **Literature Review**

The competency of the auditor is what determines whether environmental auditing will be effective in companies based in Iraq. As a result of the current complex and shifting Iraqi market conditions, an institutional structure that integrates sustainability into an organization's processes and capabilities is fundamental. The circumstances such as those prevailing in Iraq, the controversial issues relating to geopolitics and economy, classical problems of air pollution and water shortage crystallizing uniquely are imposing impediments for setting an appropriate standard for environment auditing at the same time allowing any change thereupon. A study by Boiral et al. (2020) Its findings are good evidence that auditors with special knowledge in the field of environmental issues run into less difficulty than those without and acquire more useful skills. Professionals will still be responsible for upholding the authenticity and validity

of environmental audits so sustainability monitoring and responsible business practices is not sacrificed in a financially bound space. Auditors help organizations that are committed to following regional and global sustainability regulations while auditing companies based on standards determined according to the complexities of environmental legal frameworks by providing transparency and corporate responsibility. Clearly, the well-established legal framework to ensure compliance with certain laws matters for specific issues including that of the environment seen in the contrasting Iraq example. Plays the auditor's role of being not only an overpower, but also advising organizations to adhere to better practices and encouraging them to try new technologies, and methodologies that can reduce adverse environmental impacts.

Highly regarded as an important part of sustainable efforts around the globe, auditors in Iraq are anticipated to showcase that through their board's skills they positively contribute to their companies on corporate social responsibility (CSR). On the other hand, that is a good signal because companies have already become more concerned with environmental disputes, especially climate change but need to prove their commitment through sustainability and transparency. (That shows strong goodwill to stakeholders, too.) "the results of environmental audits need to act as more than professional attributes, rather serve as enablers doing away with a culture within organizations built on strong management systems in particular for contingency against emerging challenges" (Castka et al., 2020, p. 1). In closing, it is of the utmost importance that our next economy be able to feed off of such assessments because the information revealed from these could prove operationally adverse not just for firms but also in the context of society's evolutionary fabric. Therefore, we ask:

**H1:** *Auditors' expertise has a positive impact on the level of environmental auditing.*

Integrating sustainability into the strategic vision and future direction of the Iraqi business landscape reflects that policies and practices developed for this functional area are contextualized and suited for Iraqentl. This takes into consideration the specific geopolitical and economic conditions of Iraq, as well as its long-term ecological problems e.g., air pollution and consequent water shortage, etc. As Boiral et al. (2019) pointed out by Carlin and Finch, (2012), one of the key benefits is that auditors can more efficiently take on these challenges when they know environmental conditions since it makes them better prepared for such fields. The quality of environmental audits is improved by auditors to ensure reliability. In the throes of economic concerns, their voices can be drowned out and so we may forget that there is more to such people than making a buck. According to Boiral et al. (2020) auditors are sustainability gatekeepers and agents of responsible business practice who also commit to the implementation of sustainable operations.

**H2:** *Companies' size has a positive impact on the level of environmental auditing.*

It was evaluated in one study that the reason why organizations with an Environmental Management System conduct regular audits is because they have realized that their work activities are harmful and damaging to the natural environment (Neugebauer et al., 2010). EMS is a system that takes an environmental audit approach to identify, monitor and manage all of the organization's aspects with respect to the environment in its core systems. Finally, this work also highlights the importance of resource prioritization through an implementation approach that is inspired and driven by transparency and accountability in addition to cultivating a learning environment as ideal for sustainable production-centric systems. Therefore, adapting programs that are described within EMS and practices monitored by organizational environmental audits is one "avenue of opportunity" to address climate issues for any Organization in Iraq's perspective. For example, this is explained in detail by two citations (Mungai et al., 2020; Wagner, 2020). In coordination with businesses orienting their processes according to global sustainability standards, EMS is a central component for sustainable activities to set ecological objectives and monitor progress on a regular basis (Hussain et al., 2023). In order to help fulfil this research aim, the purpose of this text is thus to explore and establish an empirical relationship between complexity in environmental audits on the one side and EMS dimensions, which can be comprised of the level of integration into organizations processes; comprehensiveness thereof; or impact on audit practices. The positive impact of EMS on environmental accounting supports that as it is rightly observed, in the recent global focus and praise of business as a concept, all revolves around its sustainability with ethical issues being given much attention. At the same time, for Iraq specifically, there might be certain strategic advantages to adopting EMS as part of its military strategy since such an approach can help with addressing some environmental problems that currently undermine its relationships with other states. Kristensen et al. (2021) "EMS is a key tool that the companies must incorporate, to achieve maximum performance standards. The concept of the high level of performance includes being environmentally responsible and also acting as steward generation towards complying with prescribed norms". The research is important and relevant for a large number of scholars, experts, and organizations which promote the introduction of sustainability to the core business processes and activities that are in line with development strategies implemented by firms as well as by local authorities and other stakeholders. The findings of Kadhim et al. (2020) also outlined the necessity to exhibit a direct relationship between an organization that has implemented EMS and its environmental performance; the Importance of environmental auditing in business sustainability, as well as EMS benefits in Iraq's unstable business setting among others. Based on these arguments;

**H3:** *EMS has a positive impact on the level of environmental auditing.*

From the auditor's experience and audibility levels, business entities in Iraq's business environment have also resulted in standardization and oversight. In this way, it was

possible to define the relationship between decision-making areas. According to [Corderi et al. \(2023\)](#), adequate and strong corporate governance frameworks would complement the positive effects of auditors' experiences. Geopolitical complexity, the culture of accountability and transparency, as well sustainability have impacted the governance functions. Further, the environmental report audit must have stakeholders and other governance mechanisms that are crucial to it; however, they should not be concluded as issues arising from the process of the audit while addressing future actions without compromising independence or objectivity. "In a country in transition like Iraq, all stakeholders have an obligation to make the best possible use of scarce resources and for correspondents that means having already ensured that they provide everything relevant to any request on environmental impact before lodgment is made." Implicit is making systems, where information like this will eventually be needed by each department in spite of explicit conversations or not. To advance environmental sustainability and further a broader governance agenda in Iraq by means of the methodologies used for auditing the environment.

**H4:** *Corporate Governance works as a moderator between the auditor's expertise and level of environmental auditing.*

[Liakh and Spigarelli \(2020\)](#) maintain that well-organized corporate governance will be able to provide large companies with significant opportunities to implement vast environmental audits as some preventive means against the loss of finance such an enormous organization can face. Furthermore, [Corderi et al. \(2023\)](#), this refers to governance in terms of how government structures surrounding company size influence stakeholder engagement—it is also referred to as the impact of governing structure on the extent, transparency and makeup of board activity. Note that although these influences do not act independently, it has been noted by management.

Effective governance of large companies involves channelling resources to conduct an exhaustive environmental auditing forward. This, in turn, will deliver a culture that is ethically responsive to its related environmental impacts ([Camilleri and Armakolas 2015](#)). Hence, corporate governance combined with real environmental audits will be extremely useful in utilizing the potential of giant firms and will help in the development of such a system where ecology is not only social responsibility but also quality assurance for competent corporate governance in Iraq. Therefore, we argue that;

**H5:** *Corporate Governance works as a moderator between company size and the level of environmental auditing.*

The moderation effects results of the study indicate that corporate governance is an important factor in impacting companies' extent towards performing environmental audits and having Environmental Management Systems (EMS) in Iraq. Thus, to verify EMS credibility and boost successful strategic orientations following defined

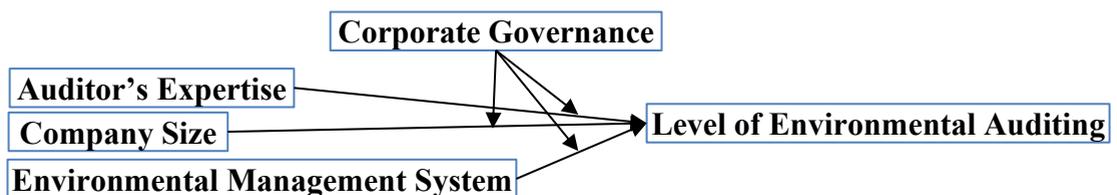
parameters for specific Iraqi businesses, a powerful governance framework is also an absolutely vital requirement. Corsi and Arru (2021); Liakh and Spigarelli (2020) have also studied ISO 14001 compliance with Brazilian regulations, proving that corporate governance may act as a mechanism enforcing an organization's regulators' requirements and may trigger EMS adoption in audits. Alnajjar and Algarbawi discuss how governance components, more specifically board oversight together with stakeholder management, may help to alleviate the adverse effects of environmental auditing concerning its unlikely employment context being Iraq's economic along geopolitical position at the time. Considering all these factors, it is our submission that good governance remains in the nub of facilitating effective environment auditing practices in Iraq.

**H6:** *Corporate Governance works as a moderator between EMS and the level of environmental auditing.*

### Research Methodology

First and foremost, what matters is the key point of influence on auditor training: auditors' competence level, company size itself or the use of an Environmental Management System (EMS). Finally, we relate the mediating function of corporate governance for these factors and their association with EMS mainly in private firms inside Iraq as well. To accomplish our research purposes we applied the survey technique., which is measured by:

Five questions on the level of audit expertise (Supriadi et al., 2021), four questions for company size impact (Buer et al., 2021). Six questions for the EMS and corporate governance components (Ramos et al., 2020), and lastly five askers for the stage of environmental auditing (Marrucci & Daddi, 2022). The researcher collected primary data from auditors associated with private sector companies in Iraq through personally distributed questionnaires, resulting in a total of 546 surveys.



**Figure 1:** Theoretical Model.

Out of the total number of surveys distributed (545), 292 responses were considered valid, leading to an estimated response rate of 53.48%. The study tests the correlations between variables and constructs using the analyzing software SPSS-AMOS which is Frequently used as the top choice for basic data analysis, as it is proficient in producing dependable results even when dealing with complex models or large data (Hair et al.,

2020). Finally, the research estimated three predictors: auditors' expertise (AE), company size (CS), and environmental management system (EMS) presenting a response variable, the level of environmental auditing (LEA), and a moderating variable, corporate governance (CG). A thorough list of these variables is demonstrated in Figure 1.

### Research Findings

The composite reliability (CR) was assessed for all items with a limit of 0.70 where higher values are considered to have strong reliability. In addition, The average variance extracted (AVE) and factor loadings for each variable gave values greater than 0.50. However, upon analyzing the data through both ascending and descending dimensionality, it was perceived that the values were low and fell below AVE. This indicates high levels of correlation among the items and is evident in the specific values provided in Table 1.

**Table 1: Convergent Validity.**

Constructs	Items		Loadings	CR	AVE	MSV	ASV	
Auditor's Expertise	AE1	<---	AE	0.753	0.924	0.713	0.517	0.159
	AE2	<---	AE	0.995				
	AE3	<---	AE	0.723				
	AE4	<---	AE	0.988				
	AE5	<---	AE	0.712				
Company Size	CS1	<---	CS	0.831	0.908	0.711	0.638	0.293
	CS2	<---	CS	0.823				
	CS3	<---	CS	0.865				
	CS4	<---	CS	0.854				
Environmental Management System	EMS1	<---	EMS	0.997	0.957	0.793	0.638	0.239
	EMS2	<---	EMS	0.635				
	EMS3	<---	EMS	0.996				
	EMS4	<---	EMS	0.991				
	EMS5	<---	EMS	0.634				
	EMS6	<---	EMS	0.993				
Corporate Governance	CG1	<---	CG	0.800	0.930	0.688	0.517	0.245
	CG2	<---	CG	0.850				
	CG3	<---	CG	0.837				
	CG4	<---	CG	0.795				
	CG5	<---	CG	0.873				
	CG6	<---	CG	0.820				
Level of Environmental Auditing	LEA1	<---	LEA	0.590	0.852	0.542	0.280	0.155
	LEA2	<---	LEA	0.866				
	LEA3	<---	LEA	0.661				
	LEA4	<---	LEA	0.873				
	LEA5	<---	LEA	0.644				

The Fornell-Larcker criterion was used in revealing the correlation among variables. The criterion contains that in each column, the first value is always larger than

subsequent values. This indicates that there isn't a high correlation existing between variables.

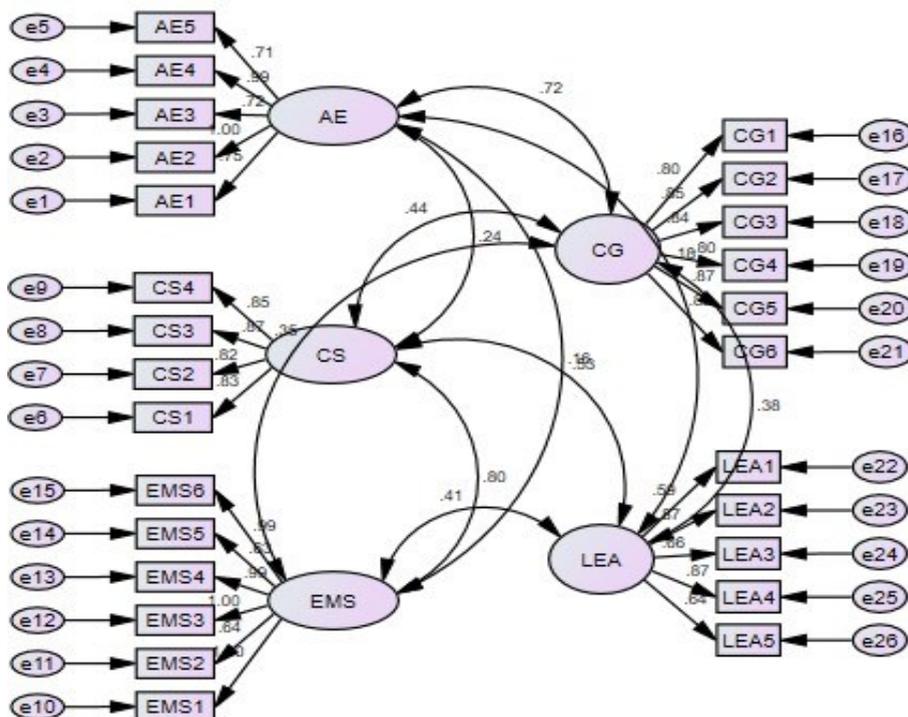
**Table 2: Discriminant Validity.**

	CG	AE	CS	EMS	LEA
CG	0.830				
AE	0.719	0.844			
CS	0.442	0.243	0.843		
EMS	0.353	0.160	0.799	0.891	
LEA	0.377	0.181	0.529	0.408	0.736

The outcome explains an exceptional fitting model, as proven by the RMSEA (Root Mean Square Error of Approximation) value, which is less than 0.05. Additionally, the TLI and CFI values were both greater than 0.90 — these statistics are displayed in detail in Table 3, confirming the model's goodness of fit. Information on these values can be found in Table 3.

**Table 3: Model Good Fitness.**

Selected Indices	Result	Acceptable level of fit
TLI	0.976	TLI > 0.90
CFI	0.978	CFI > 0.90
RMSEA	0.002	RMSEA < 0.05 good; 0.05 to 0.10 acceptable

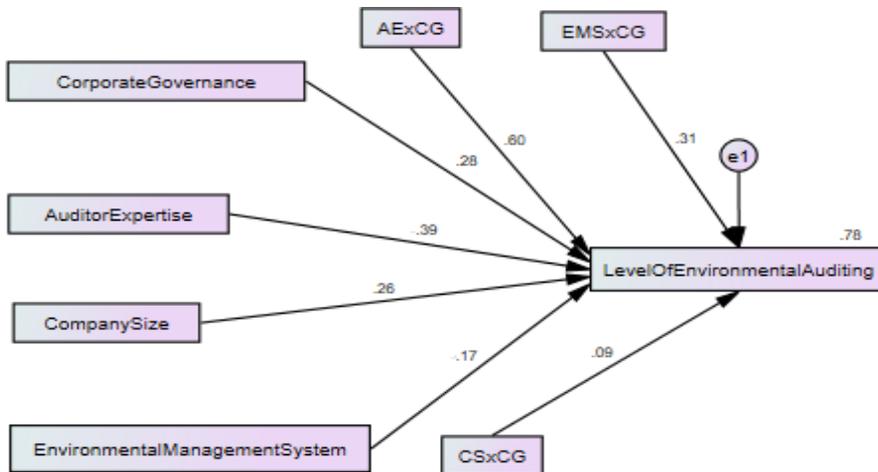


**Figure 2: Measurement Assessment Model.**

The current study revealed the elements that are associated with the environmental audit level in the private sector in Iraq, proving the validity of hypotheses H1, H2, and H3, which relate to auditors' expertise, company size, and EMS, respectively. Furthermore, the study has detected corporate governance as a moderator in these relationships, as defined in hypotheses H4, H5, and H6. All of these relationships are systematically described in the current study. Table 4 presents details on these relationships.

**Table 4: Path analysis**

Relationships		Beta	S.E.	C.R.	P
Level of Environmental Auditing	<--- Corporate Governance	0.381	0.038	9.963	0.000
Level of Environmental Auditing	<--- Auditor Expertise	0.532	0.038	13.998	0.000
Level of Environmental Auditing	<--- Company Size	0.358	0.038	9.426	0.000
Level of Environmental Auditing	<--- Environmental Management System	0.213	0.035	6.075	0.000
Level of Environmental Auditing	<--- CS x CG	0.022	0.007	3.081	0.002
Level of Environmental Auditing	<--- AE x CG	0.142	0.007	21.499	0.000
Level of Environmental Auditing	<--- EMS x CG	0.075	0.007	11.017	0.000



**Figure 3: Structural Assessment Model.**

## Discussions

Comprehensive, the study sheds light on the complex dynamics that underlie environmental auditing in Iraq, especially given the geopolitical dynamism and economic vagaries of this particular region. Iraq is an especially interesting case for two reasons. Iraq has negotiated difficult geopolitics while at the same time engaging in a substantial amount of economic restructuring\_expression? as well “This study’s main contribution is documenting the vital effect of auditor expertise in on-the-job experience upon the level and quality of environmental auditing by Iraqi businesses-pillar” In the context of environment-related problems, which is often pushing out environmental issues in favour on economic ones by most, auditors’ specialization can become a crucial agent for firms that are dealing with intricate situations regarding their impact

on the environment ([Rounaghi, 2019](#)).

According to [Kroon et al. \(2021\)](#) Auditors specialized in the matters of environment significantly support identification and evaluation by virtue, which enables a comprehensive and lucrative environmental audit process. “This is in line with a global trend, reflecting the need for increasing specialized expertise in different sustainability-related practices” ([Scoones et al., 2007, p. 1](#)). Auditing employs auditors who are knowledgeable in the field of environmental science to make sure that it conducts comprehensive audits capable of recognizing key risks and opportunities. This is particularly important in countries such as Iraq, where sustainable business and energy practices increasingly become more common even during times of economic transformation.

The second main finding of the study relates to the increased environmental audit levels linked to the size of companies in Iraq. As revealed by [Trujillo-Gallego et al. \(2021\)](#), the bigger companies obviously have more resources at their disposal. It can be justified that the bigger companies might spend more money on environmental audits given that more corporate human and financial resources are provided to these companies. As claimed by [Hock-Doepgen et al. \(2021\)](#), large companies are generally more aware of and more generous in this regard since they are required to explicitly focus on their environmental opportunities and dangers in relation to the scope of their operations, and this is what is recommended by extensive environmental audit criteria that are broadened. This is known to happen in the scale of their environmental auditing process. This study enhances our knowledge of the impact of business scale on sustainability practices, especially in a financial development setting where Iraqi companies, in particular, recognise the need to address economic concerns while maintaining their responsibilities towards the environment.

The second major discovery of the study is that the high level of environmental audit is, in the opinion the size of companies in Iraq. According to [Trujillo-Gallego et al. \(2021\)](#), the larger companies have, in fact, greater resources. It is reasonable to think that larger companies are prepared to spend larger sums of money on environmental audits because they have a bigger corporate human and financial resources than these companies. As [Hock-Doepgen et al., \(2021\)](#) explained, large companies are generally more conscious and generous in this way because they are forced to consider the environmental risks and changes in the size of their operations. These large amounts of environmental audits have also been generalised. This is known to be applicable in the case of the scale of the environmental auditing in the process. This study has contributed to our understanding of the way that business size affects sustainability processes, especially in an environment where Iraqi companies, in response to their growth expectations, are looking for economic success while at the same time spending other requirements in the environment.

According to the findings, the relationships between auditor experience, firm size, environmental management systems (EMS), and the extent of environmental audit are subject to an institution of corporate governance. This remark underscores the fact that the efficacy of these determinant variables is conditional upon organizational control mechanisms, which adds intricacies to the model (Corderoy et al., 2023). Corporate governance plays a pivotal role in setting the allocation of resources, compliance with norms and enforcement of policies, and establishing control and accountability within firms. The adoption of efficient governance systems can aid EMS implementation, augment the creation of auditor experience, and foster environmental audit extent.

As for the result, also the effects of the association between auditor experience, firm size, EMS, and the environmental audit extent to an instance of corporate governance are all influenced by institutional underpinning. This indicates that the effectiveness of these variables working as determinants is also dependent upon organisational control. This introduces complexity to our model. Corporate governance is an institutional arrangement that determines the distribution of power, rights, managerial and organizational resources gives directives for compliance, influences enforcement, and sets conditions of control and accountability in corporations. Adopting effective corporate governance structures can facilitate the implementation of EMS, intensify the effectiveness of auditor experience development and enhance the extent of environmental audit.

Finally, the study yielded informative findings explaining which factors are influential in developments relating to environmental auditing for businesses located within Iraq. This underlines the importance of auditor specialization, firm size and EMS in terms of audit quality regarding environmental audits. It also highlights the critical role of corporate governance in the mitigation of such associations, thus expanding our knowledge base on how organizations can handle their environmental duties more efficiently. Considering the aforementioned, such findings are relevant for Iraqi businesses that struggle to address the issues of economic reformation and incorporate environmental concerns into their practices.

## **Implications**

The results of this study are important to numerous industrial sectors since one may provide information that is critical for the optimization of operational procedures. Improving the proficiency and potential of auditors in addition to investing in an enterprise can ensure improved quality and productivity of environmental audits. Larger corporations Like this with their pockets full of money are the ideal candidates to be on top conducting thorough environmental audits. The organizations generally have standardized procedures based on which they ensure that their Environmental Management Systems (EMS) work at optimal levels. It means that practices are

dependent on several factors, including strong corporate governance to underpin and strengthen EMS” This interaction between precisely listed elements in the particular circumstances of Iraq is the essential key to gaining some clues for policymakers reliant on passing sustainable legislation within their scopes. This contribution adds authenticity to the conversation on CSR by foregrounding the exceptional context of Iraq. In fact, this work empowers dialogue concerning possibilities and achievable realities.

Furthermore, the results of studies such as this are indeed priceless for governing bodies that require producing laws. This study further develops the key role of auditor specialization, company activity and implementation quality of the EMS on improving EAs effectiveness concerns in this setting. These insights can be applied to the development of policy that is intended to generate sustainable business practices. Regulations could reinforce a business’s ability to manage its environmental impacts by acting as an amplifier of auditor proficiency and supporter in the implementation of a more robust EMS. 'Our way of doing things meets international sustainability standards, but, at the same time, it also overcomes the very specific requirements and barriers that companies have to tackle in Iraq. The paper presents a complete framework for the development of environmental auditing, proving helpful to enterprises and authorities when encouraging companies to carry out their corporate social responsibility through environmentally friendly business conduct.

### **Limitations**

While the research provides important insights, it is also necessary to understand its limitations. First, the use of cross-sectional data does not allow us to make causal claims in this respect. This type of data only provides a single snapshot in time, which means that it can be difficult to understand if changes in one variable, lead directly and causally to changes in another Longitudinal research, which studies how these correlations change and evolve over time by measuring the same variables repeatedly over an extended period. Finally, the narrow focus of the study on Iraq considerably constrains its generalizability. It should be noted that Iraq has a unique legal, cultural, and economic system; these results may not be transferable to other settings.

I would also critique that most of the outcomes drawn from this study are limited within a student learning environment, as opposed to more industry-centered contexts. This would imply that the study might be inadequate for capturing comprehensive insights and actual issues related to how industries struggle in adopting environmental auditing practices. First, various aspects specific to industries, such as regulatory compliance, trading and technological developments can increase the reliance on support from or taken by environmental auditing. Acknowledging these limitations informs the reader more about this study’s reach and how that might reflect on the research outcomes. The

limitation of this study is that it weakens some aspects requiring further research focusing on longitudinal data, developing the basic model to gain more insight, and removing conceptual inadequacy factors.

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