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The Impact of Environmental Accounting Disclosure on Sustainable Development Dimensions in Iraqi Economic Units

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Abstract.

This study aims to highlight the role of environmental accounting disclosure in the dimensions of sustainable development (environmental, social, and economic) within Iraqi economic units. The descriptive approach was used to present the theoretical findings of the research. The study's results were obtained by distributing 90 questionnaires to a group of accounting professors and legal auditors, as this method of data collection is suitable for this type of research. Sixty-eight questionnaires were received, of which 60 were valid for analysis, while 8 were excluded due to their unsuitability.

After statistically analyzing the collected data, the study concluded that environmental accounting disclosure plays a positive and effective role in the environmental, social, and economic dimensions that constitute sustainable development. This is demonstrated by a statistically significant effect (at the 0.05 level) of environmental accounting on all the aforementioned dimensions within Iraqi economic units.

1. Introduction

With the Increased interest in the environment issues and the emergence of the sustainable development concept, the need for environmental accounting, and disclosure has become a significant and modern trend that has garnered considerable attention in various countries. This is due to the increasing role of the environment in our lives and the interplay of numerous factors affecting the environment by industrial and service companies. This has led to pollution impacting surrounding communities. Recently, many companies have faced criticism for their poor environmental and social performance, despite achieving remarkable economic success. Consequently, these companies are now subject to an increasing number of environmental regulations aimed at creating a pollution-free environment. This has prompted their senior management to recognize the importance of incorporating the environmental dimension into managing environmental issues and addressing the growing challenges they face, which necessitate continuous improvement to achieve higher levels of production efficiency. [1]

To implement environmental accounting, a set of requirements must be met to provide decision-makers with information on environmental costs. This will give a comprehensive picture of the company's environmental performance, supporting the goals of sustainable development. [2]

2. Research Problem

The research problem is to identify the extent to which environmental accounting disclosure contributes to enhancing the dimensions of sustainable development in Iraqi economic units.

To address the various aspects of this topic, the following sub-questions can be posed:

1. Does environmental accounting have an impact on sustainable development from a social perspective in Iraqi economic units?

2. Does environmental accounting have an impact on sustainable development from an economic perspective in Iraqi economic units?
3. Does environmental accounting have an impact on sustainable development from an environmental perspective in Iraqi economic units?

3. Research Objectives.

The research objectives are:

1. Measuring the impact of environmental accounting disclosure on promoting the dimensions of sustainable development in Iraqi economic units.
2. Evaluating the relationship between environmental accounting and sustainable development.
3. Testing the impact of environmental accounting on each dimension of sustainable development.

4. Research Hypothesis

The main research hypothesis is: "Environmental accounting has a statistically significant impact on the dimensions of sustainable development in Iraqi economic units." From this main hypothesis, the following sub-hypotheses can be derived:

1. Environmental accounting disclosure has a statistically significant impact on the social dimension of sustainable development in Iraqi economic units.
2. Environmental accounting disclosure has a statistically significant impact on the economic dimension of sustainable development in Iraqi economic units.
3. Environmental accounting disclosure has a statistically significant impact on the environmental dimension of sustainable development in Iraqi economic units.

5. Research Methodology

The researcher adopted a descriptive-analytical approach, which describes and analyses the phenomenon by drawing on the literature and previous studies in the field, then describes its constituent items and analyses the questionnaire results. were obtained by distributing ninety questionnaires to a group of accounting professors and legal auditors. Sixty-eight questionnaires were received, of which sixty were valid for analysis, while eight were excluded due to their unsuitability.

6. literature review

Al- Sarraf and Al- Ta'i,(2022) [1]"The Impact of Accounting Disclosure of Sustainable Development on the Quality of Financial Reports of Iraqi Economic Units" – An Applied Study on a Sample of Banks Listed on the Iraq Stock Exchange. Study objective: to demonstrate the impact of accounting reporting of sustainable development on the quality of accounting reports. The dimensions of sustainable development disclosure were measured using a questionnaire and the banks' financial reports. Seventy questionnaires were presented to a group of employees at the banks included in the research sample. The study concluded that accounting reporting of substantial risks (whether economic, environmental, or social) and anticipated risks that banks may face in their financial reports leads to sound decision-making.

Bira and Ali (2024) [2], "The Impact of Green Accounting on Improving Environmental Auditing, to Achieve Sustainable Development," aim to demonstrate how green accounting improves environmental auditing to achieve sustainable development. The study concluded that accounting plays an influential role in achieving economic development from the necessary accounting information disclosed by the accounting system, which has adopted a new direction, namely, the environmental direction.

Salem et al. (2024) [3] "Smart Leadership and its effect on Achieving Sustainable Development: A practical study in the Babylon Business Incubator" aimed to explore the influence of smart leadership on achieving sustainable development goals. To achieve the research objectives, the researchers distributed a questionnaire to employees at the Babylon Business Incubator, and 30 valid questionnaires were obtained for statistical analysis. The data were analysed using the statistical

program (Smart PLS V.4). The study concluded that smart leadership influences the achievement of sustainable development by directing the Babylon Business Incubator towards projects that rely on renewable energy, circular economy practices, social innovation, and community empowerment. Smart leaders work to stimulate positive environmental, economic, and social impacts while enhancing organisational competitiveness and resilience.

Ammar & Hamid (2025) [4] "The Impact of Accounting Disclosure of Sustainable Development Dimensions on the Quality of Financial Reports in Libyan Commercial Banks" This study aimed to identify the impact of accounting disclosure of the dimensions of sustainable development (economic, social, environmental, and technological) on the quality of financial reports in Libyan commercial banks. The study employed a descriptive-analytical approach, utilising a questionnaire distributed to bank managers, their assistants, and financial staff in the sample. A total of 63 questionnaires were distributed, of which 56 were returned, representing a response rate of 88.8%. The study concluded that disclosing the dimensions of sustainable development positively impacts the quality of financial reports in commercial banks, particularly the social and technological dimensions. The results demonstrated a strong correlation between disclosing these two dimensions and the quality of financial reports. Based on these findings, the study recommended enhancing the level of accounting disclosure of the dimensions of sustainable development in commercial banks.

Analysis of Previous Studies:

Previous studies have addressed topics closely related to this study. For example, Al-Sarraf and Al-Ta'i's study examined the impact of accounting disclosure on sustainable development and the quality of financial reports. Their study concluded that disclosing the main risks—whether economic, social, or environmental—that banks may face in their financial reports contributes to sound decision-making. Their study differed from the current study in that it addressed accounting disclosure in its entirety, while the current study focuses on environmental disclosure. The similarity between the two studies lies in their focus on the impact on the dimensions of sustainable development. Both studies concluded that disclosure has a clear impact on sustainable development.

Bera and Ali's study discussed the impact of green accounting on improving environmental auditing for sustainable development. Their study concluded that implementing green accounting and environmental auditing in economic units is essential, as it helps them measure, disclose, and analyse their environmental, social, and economic performance, thus contributing to sustainable development. Their study differed from the current study in that it examined how green accounting impacts environmental auditing. However, the similarity between this study and the current study is that both found a clear impact on the dimensions of sustainable development, whether through environmental auditing or environmental disclosure.

The study by Salem et al. aimed to explore the impact of good leadership on achieving sustainable development goals. Their study concluded that good leadership influences the achievement of sustainable development, as good leaders work to stimulate positive environmental, economic, and social impacts while enhancing the competitiveness and resilience of companies. This study differs from the current study in that it demonstrates the impact of good leadership on sustainable development. In contrast, as mentioned previously, the current study focuses on environmental disclosure and its impact on development. Both studies, however, measured the extent of the impact on the dimensions of sustainable development and concluded that there is a clear impact on these dimensions. Finally, the study by Ammar and Hamid focused on accounting disclosure of the dimensions of sustainable development (economic, social, environmental, and technological) and its impact on the quality of financial reports in Libyan commercial banks. The study concluded that there is a strong correlation between the disclosure of social and technological dimensions and the quality of financial reporting. This study differed from the current study in that it measured the impact of disclosing sustainable development dimensions only on the quality of financial reporting in banks. However, it was similar to the current study in that both focused on the dimensions of sustainable development and measured their influence on and impact on other variables.

The contribution of this study is evident in its focus on the impact of environmental disclosure on the dimensions of sustainable development (social, economic, and environmental), which differed from the objectives of previous studies. The results showed that environmental accounting has a statistically significant impact on the economic, social, and environmental dimensions of sustainable development, indicating its influence on all aspects of sustainable development.

7. Theoretical Concepts

7.1. Environmental Accounting

There has been growing interest in environmental protection at all levels, coupled with increasing demand for economic and financial data on the environment and natural resources over the past two decades. Environmental accounting has played a significant role in providing various entities with this data at all levels. [5]

Environmental accounting has been defined as "the identification, measurement of environmental costs and their integration into business decisions, and then the disclosure of this Information for investors" [6]

Environmental accounting is also defined as a method for measuring and reporting on company information with environmental impact to meet the needs of stakeholders in society, both inside and outside the company, in a way that enables monitoring and evaluation of its environmental performance." [7]

The researcher believes that environmental accounting is the presentation, measurement, and disclosure of relevant environmental information to enable informed decision-making by stakeholders concerned with environmental issues.

7.1.1. Environmental Accounting Objectives

Environmental accounting is based on a set of objectives, which are: [14]

1. To strive to eliminate the negative environmental impacts of traditional accounting.
2. To identify environmental costs & revenues outside the traditional accounting system in a preferential manner.
3. To develop new methods for evaluating performance & communicating environmental information internally and externally.
4. To prepare clearer and more transparent financial statements & reports on environmental activities & practices.

7.1.2. The Importance of Environmental Accounting:

Environmental accounting is important in assisting economic units, as follows:[9]

1. It helps managers make decisions that reduce environmental costs and burdens.
2. It expands the scope of investment evaluation and analysis to include potential environmental impacts.
3. It leads to a better understanding of environmental costs and the performance of operations and products, enabling accurate pricing.
4. It assists in developing and implementing an environmental management system for the company as a whole.
5. As accounting is a social science, it must address the problem of environmental pollution and resource depletion. Failure to do so will hinder the development of this science compared to other disciplines such as economics and management.
6. It helps rationalise administrative decisions and ensure the accuracy of accounting information upon which these decisions are based. This is achieved by assisting in comparing administrative alternatives and weighing compliance with environmental programs.
7. Accounting derives its existence from societal recognition of its results through its functions of measurement and providing financial and economic information to the community. The continued demand for accounting and auditing services necessitates meeting the growing need for environmental and social information alongside financial information.

7.1.3. Financial data related to environmental costs and benefits [10]

1. Financial data related to environmental benefits include tax exemptions on assets related to environmental activities, grants from international environmental protection organisations, increased profits resulting from reduced production costs, and grants for combating environmental pollution.
2. Financial data related to environmental costs includes the costs of recycling hazardous waste from industrial processes and disposing of waste using sound scientific methods, in addition to current and anticipated financial burdens resulting from companies violating environmental protection laws and regulations.

7.1.4. Quantitative and technical data related to the environmental methods adopted by the economic entity to fulfil its environmental responsibility[11]

1- The technical policies used by the company to reduce current and future pollution to internationally permissible levels, such as recycling waste to use it in manufacturing complementary products.
2- The technical policies used by companies to utilise alternative resources to reduce pollution, such as alternative energy sources for electricity generation.

7.1.5. Accounting Disclosure of Environmental Performance

The interest in environmental accounting disclosure stems from the fact that information related to environmental performance is financial and quantitative in nature. making it directly impact the company's financial position and the outcomes of its activities. Environmental accounting disclosure has been defined as "the set of information related to the performance and activities of the company's environmental management and the resulting financial impacts in the past, present, and future. " [8]. It has also been defined as "the method or approach by which a company can inform the public and its various stakeholders about its different activities with environmental implications, and financial statements or their accompanying reports are a suitable tool for achieving this".

Therefore, the researcher believes that environmental accounting disclosure is the presentation and disclosure of information related to environmental activities, included in the financial reports and statements of the economic unit, to help users of accounting information make sound decisions, and is considered evidence of the economic unit’s fulfilment of its environmental and social obligations. [4]

7.1.6. Environmental accounting disclosure requirements

Increasing the amount of information disclosed in financial statements and reports makes them more useful to users. This depends on the extent to which accounting standards keep pace with changes and the needs of decision-makers. For information to achieve its purpose, it must meet a set of criteria, including: [12]

1. Shareholder power: There is a relationship between privatisation and disclosure; the more privatised a company is, the more it discloses its environmental performance. Investors also pay attention to companies that disclose their social and environmental performance.
2. Management's perception of the quality of environmental and social performance: Companies are reluctant to disclose poor social and environmental performance information, as they perceive it as giving the impression that they are not environmentally friendly.
3. Ownership structure: The level of environmental performance disclosure is expected to decrease when the owners control the directors' board.
4. The presence of a specialised audit committee and an independent board of directors give companies an incentive to disclose their social and environmental performance.
5. Foreign ownership: The differences in values and culture, along with the separation of management, encourage companies to disclose their social and environmental performance. Furthermore, highly profitable companies are more willing to disclose environmental information because they can bear the costs of removing pollution generated by their operations without adversely affecting their financial position, whereas less profitable companies cannot. Similarly, companies that own older production assets are motivated to disclose the extent of those assets'

negative environmental impact, thereby reassuring investors that they are committed to environmental protection.[13]

7.2. Sustainable Development (SD)

The Concept & Definition of Sustainable Development (SD):

Sustainable development(SD) aims to meet the needs of the present without compromising the ability of future generations to meet their own needs. It seeks to strike a balance between economic growth, environmental protection, & social responsibility justice [3]. It has also been defined as: expanding people's choices & capabilities through the formation of social capital, to meet the needs of the present generation in the best possible way, without compromising the needs of future generations. [12]

Furthermore, it has been defined as the process that demonstrates the necessity of achieving economic growth consistent with environmental indicators, based on the premise that economic development & environmental conservation are complementary processes. [1].

The researcher believes that sustainable development is the absolute consideration of the rights of future generations through the proper application of social, economic, and environmental dimensions when meeting current needs.

7.2.1. Sustainable Development Goals: Sustainable development(SD) seeks to achieve a set of goals as follows [15]

1. Implementing fundamental changes to the infrastructure and superstructure of society without harming the surrounding environment.
2. Raising public awareness of existing environmental problems and fostering a feeling of responsibility towards them, while encouraging their active participation in decision-making for the preparation, implementation, and monitoring of SD programs & projects.
3. Achieving equity or social justice.
4. Fostering human development within society and working towards building a knowledge-based society, including human development, providing knowledge, information resources, and learning opportunities, and encouraging innovation.
5. Creating job opportunities. Macroeconomic policies, as well as sectoral development policies, can encourage the emergence of new economic initiatives aligned with sustainable development through incentives that promote more sustainable patterns of consumption and production at the national level.

7.2.2. Sustainable Development (SD) Principles: [16]

7.2.2.1. Participation

This means giving individuals the opportunity to fully and effectively participate in or influence decision-making processes, thereby increasing their sense of belonging and enabling them to participate in the development process actively.

7.2.2.2. Good Governance and Accountability

This means subjecting authorities, those in power, and administrators to the principles of transparency, accountability, dialogue, oversight, and responsibility to avoid corruption and other factors that could hinder sustainable development.

7.2.2.3. Solidarity

This refers to solidarity between generations and different social groups, achieved through preserving the environment and natural resources, preventing the accumulation of debt for future generations, and ensuring equitable shares of growth for all social groups.

7.2.2.4. Protecting Biodiversity and Conserving Natural Resources

This principle involves protecting plant and animal life from extinction, preventing the depletion of natural resources, and encouraging the use of renewable energy.

7.2.2.5. Achieving Knowledge

Measures must be taken to promote education and access to information that stimulates innovation, awareness, and the active participation of all for sustainable development.

7.2.2.6. Cost Inclusion

This means that the value of goods and services must reflect all costs throughout their life cycle, from design and consumption to final disposal. Responsible production and consumption: Changes must be made in production and consumption so that the latter are more socially and environmentally sustainable, adopting environmental efficiency by avoiding waste and making good use of resources.

7.2.3. Dimensions of Sustainable Development

Sustainable development has three fundamental dimensions, presented as follows:[17]

7.2.3.1. Environmental Dimension

This refers to preserving natural resources and their beauty, air and soil quality, climate change, and biodiversity through efficient use. The environmental dimension calls for the rational use of natural resources to ensure sustainable development. Natural resources should be used in ways that preserve biodiversity and protect landscape values, ensuring that their regenerative capacity is not exceeded. Non-renewable resources should be used in a way that ensures their continued effective use in the long term by replacing them with other available or manufactured materials.

7.2.3.2. Social Dimension

The social dimension of sustainable development focuses on human beings and providing for their basic needs, both now and in the future, such as housing, education, and health. This dimension also focuses on achieving justice and equality, firstly between the current generation and future generations, and secondly among the peoples of the world.

7.2.3.3. Economic Dimension

This refers to a sustainable economic system that seeks to produce goods & services to satisfy human needs and achieve continuous well-being without harming the environment by changing production methods. Current consumption patterns rely on natural resources in an unsustainable manner, waste these resources, and necessitate the development of new, effective methods to achieve sustainable economic development and meet economic needs without harming the environment or increasing pollution.

7.2.4. The Relationship Between Environmental Accounting & Sustainable Development(SD)

Environmental accounting automatically encourages and supports sustainable development. The measurement of environmental costs by accountants, their reporting in financial reports, and the company's subsequent payment of these costs to compensate for the resulting damages reduce negative environmental impacts. This contributes to environmental protection, leading to improved and effective environmental performance for the company and its community. Consequently, development occurs across various economic, social, environmental & even technological fields. This is the foundation of (SD), ensuring continuity and meeting current needs while also providing opportunities for future generations to participate in this development. To achieve these benefits, internationally recognised bodies have adopted plans and legislation to ensure the application of environmental accounting. These bodies have established and mandated environmental responsibility, requiring companies to compensate for losses caused by their environmental activities. Furthermore, sustainable development plays a role in environmental cost accounting. Achieving sustainable development helps protect environmental resources and optimise the use of agricultural land, demonstrating the alignment and interconnectedness of the two concepts[18]

8. Experimental Work

To gather the essential data for the study, a questionnaire was designed to assess the impact of environmental accounting on the dimensions of sustainable development. The questionnaire was structured around several axes, each with a specific number of items. It was distributed to several accounting professors and legal auditors. The first axis, environmental accounting, included 7 items, while the second axis, dimensions of sustainable development, included 15 items. All questionnaire items were measured using a five-point Likert scale.

Table (1): Answers and their weights

The answer	Absolutely agree	Approve,	Neither agree nor disagree	Dissent,	Completely disagree
Assigned weight	5	4	3	2	1
Average	4.2-5	3.4-4.2	2.6-3.4	1.8-2.6	1-1.8

Instrument validity: To ensure the questionnaire's validity and reliability, it was administered to a pilot sample drawn from the study population, comprising auditors and university professors. This step aimed to identify any potential weaknesses or gaps in the questionnaire. Based on the responses from this pilot sample, Cronbach's alpha coefficient was calculated to assess the internal consistency of the questionnaire items. The results of this coefficient are presented in the table below.

Table (2): It shows the reliability of the instrument and the validity coefficient

Statement	Number of statements	Reliability coefficient	Validity coefficient
Total axes	22	0.740	0.860

Study population and sample: The questionnaire was primarily directed to auditors and university professors. The study sample was selected at random. 90 questionnaire forms were distributed, 68 of which were returned. 60 forms were suitable for analysis, and 8 were cancelled because they were not suitable for analysis, as presented in the table:

Table (3) Questionnaire distribution

Distributed questionnaire	returned questionnaires,	cancelled questionnaires,	questionnaires available for analysis
90	68	8	60

Statistical analysis methods: To analyse the questionnaire data, SPSS (Statistical Package for the Social Sciences) was used for its high precision in identifying relationships and producing reliable results. The analysis focused on frequencies, arithmetic means, standard deviations, and Cronbach's alpha coefficient. In addition, linear regression was applied to examine the relationships between independent and dependent variables.

8.1. Analysis of the questionnaire axes

1. To analyse the statements related to the first axis, "Environmental Accounting," the arithmetic means and standard deviations of the responses of the study sample members were calculated.

Table (4) Mean, Standard Deviation and Sample Trend with Relation to the First Axis

Sequence	Section	Mean	SD	Level of agreement
1	There are environmental laws, regulations, and standards that must be applied within the company.	4.416	0.6539	Agreed
2	Paying attention to and measuring environmental activities demonstrates the company's understanding of environmental accounting.	4.45	0.4889	Agreed
3	Having measurement and disclosure models helps the company implement environmental accounting.	4.516	0.4573	neutral
4	The company is facing difficulty in measuring environmental costs.	4.483	0.5251	Agreed
5	The company does not have an accounting system that complies with the requirements for publishing environmental information.	4.466	0.4564	Agreed
6	Environmental information is disclosed within the company's financial statements.	4.65	0.2991	Agreed
7	The disclosure of environmental information demonstrates the company's commitment to environmental regulations and legislation.	4.5	0.4237	Agreed
Sample direction for the first axis		4.4972	0.4720	Agreed

The table (4) indicates that the study sample was in agreement on the environmental accounting axis, consistent with the study results. The overall mean score for this axis was 4.49, with a standard deviation of 0.47. The mean scores for each item ranged from 4.416 to 4.65, while the standard deviations were between 0.29 and 0.65, reflecting levels of agreement ranging from neutral to agree strongly.

2. To analyse the statements relating to the second axis, namely "Dimensions of sustainable development (economic, social & environmental)", the arithmetic means, and standard deviations of the responses from the study sample were calculated as follows:

Table (5): Mean, Standard Deviation and Sample Trend with Relation to the Second Axis

Environmental dimension				
Sequence	**Section**	**Mean**	**SD**	**Level of agreement**
1	The company aims to promote the sustainable and efficient use of land, forests, energy and mineral resources.	4.5	0.4915	Agreed
2	The company employs several methods to reduce environmental damage, including minimising air, water, and soil pollution.	4.466	0.4903	agree
3	The company undertakes projects to produce healthy, environmentally friendly products.	4.466	0.4564	Agreed
4	The company has an effective environmental management system that aims to achieve its environmental goals.	4.45	0.5567	Strongly agree
5	The company seeks to conduct its activities in a way that minimises environmental damage to the surrounding area.	4.516	0.4234	Agreed
Sample direction for the environmental dimension		4.4796	0.48366	Agreed
social dimension				
Sequence	**Paragraph**	**Arithmetic Mean**	**Standard Deviation**	**Degree of Agreement**
1	The company is committed to improving community health, combating viruses, and preventing their spread.	4.466	0.4564	Neutral
2	The company contributes to developing programs that promote work-life balance.	4.533	0.3887	Agree
3	The company strives to develop plans and programs to reduce poverty and unemployment in the local community.	4.55	0.4211	Agree
4	The company supports charities, cultural centres, and sports clubs.	4.466	0.5581	Agree
5	The company is committed to the education, development, and professional growth of its human resources.	4.467	0.4903	Neutral
Sample trend towards the social dimension		4.4964	0.46292	Agree
Economic dimension				
Sequence	**Section**	**Mean**	**SD**	**Degree of Agreement**
1	The company works to satisfy basic needs by increasing production and improving its quality.	4.417	0.5183	Agreed
2	Through sustainable development, the company seeks to correct imbalances in income distribution, thereby eliminating disparities among individuals.	4.4	0.5152	agree
3	The company aims to increase the sector's role in development according to market mechanisms.	4.5	0.4576	Agreed
4	The company promotes a culture of sustainable development and educates its employees about its importance.	4.45	0.5228	Strongly agree
5	The company strives for resource efficiency and sustained, moderate economic growth.	4.483	0.4573	Agreed
Sample trend towards the economic dimension		4.45	0.49424	Agreed
Sample direction for the second axis		4.4753	**0.48027**	**Agreed**

The table (5) indicates that the study sample was in agreement on the dimension axis of sustainable development (economic, social, and environmental), consistent with the study's findings. The overall mean score for the second dimension was 4.47, with a standard deviation of 0.48. The mean scores of the sample's responses to the items on this scale ranged from 4.4 to 4.53, while the standard deviations ranged from 0.38 to 0.55, reflecting agreement from neutral to strong agreement.

8.2. Testing the research hypotheses

The research hypothesis will be examined by testing sub-hypotheses related to the dimensions of sustainable development (economic, social, and environmental). If environmental accounting is found to have an impact on all these dimensions, this will indicate that it influences sustainable development, as described below:

8.2.1. Testing of the first hypothesis

The first research hypothesis states that "there is a statistically significant effect, at a significance level of 0.05, of environmental accounting on the economic dimension of sustainable development."

To test this hypothesis, it was reformulated into a null hypothesis and an alternative hypothesis, as follows:

1. Null hypothesis (H0): At a significance level of 0.05, environmental accounting has no statistically significant effect on the economic dimension of sustainable development.
2. Alternative hypothesis (H1): Environmental accounting has a statistically significant effect, at a significance level of 0.05, on the economic dimension of sustainable development.

Table (6): Summary of the regression model for the first sub-hypothesis

Structure	Correlation Coefficient	Coefficient of Determination	Modified coefficient of determination
1	.334	.112	.088

From Table 6, we note that the correlation coefficient between environmental accounting and sustainable development (economic dimension) was positive (0.334), and the coefficient of determination was 0.112. We conclude from this that (12%) of the change that occurred in the dependent variable, the economic dimension, was due to the independent variable, environmental accounting, and the remaining percentage of the change that occurred in the dependent variable, which is equivalent to (88%), was due to other factors that were not included in the model.

Table (7): Testing the first sub-hypothesis using ANOVA

Sources of variance	Total sum of squares	number of degrees of freedom	Mean square	Computed F-value	sig
Regression	0.599	1	0.599	7.30	0.009
Errors	4.752	58	0.082		
Sum	5.351	59	\		

Table 7 presents the analysis of variance for the first sub-hypothesis, which is used to evaluate the overall significance of the model and the explanatory power of the variables by comparing the Sig value with the significance level of 0.05. As the Sig value is 0.009, which is less than 0.05, the model is considered to be statistically significant.

Table (8): Regression Parameters for first Sub-Hypothesis

Regression parameters	regression parameter values	t-test value	sig
B0	3.156	6.78	.000
B1	0.275	2.70	.009

Table 8 shows the regression parameters for the variables, the t-test value, and the significance value for each parameter, so that the estimated regression equation becomes as follows:

$$Sustainable\ Development\ (Economic\ dimension) = 3.156 + 0.275\,X \quad (1)$$

The constant (B_0) is (3.156), representing the value of the dependent variable (the economic dimension of sustainable development) when the independent variable (environmental accounting) is zero. The slope coefficient of the independent variable is 0.275, indicating that a one-unit increase in environmental accounting is associated with a 0.275-unit increase in the economic dimension of sustainable development. Furthermore, the Sig value is less than the significance level of 0.05, confirming the statistical significance of the effect of environmental accounting on the economic dimension of sustainable development.

Based on the results above, the null hypothesis is rejected, and the alternative hypothesis is accepted, indicating a statistically significant effect of environmental accounting on the economic dimension of sustainable development at the 0.05 significance level.

8.2.2. Testing of the Second Hypothesis

The second research hypothesis posits a statistically significant effect of environmental accounting on the social dimension of sustainable development (significance level of 0.05).

To test this hypothesis, it was reformulated into a null hypothesis and an alternative hypothesis, as follows:

1. - Null hypothesis (H0): There is no statistically significant effect of environmental accounting on the social dimension of sustainable development at the significance level of 0.05.

2. -Alternative Hypothesis H1: There is a statistically significant effect of environmental accounting on the social dimension of sustainable development at the 0.05 level of significance.

Table (9): Summary of the regression model for the second sub-hypothesis

Model	Correlation Coefficient	Coefficient of Determination	Modified coefficient of determination
1	.710	.504	.495

The table (9) indicates that the correlation coefficient between environmental accounting and sustainable development (social dimension) is positive, with a value of 0.710. The coefficient of determination (R^2) is 0.504, suggesting that approximately 50.4% (≈51%) of the variation in the dependent variable (the social dimension) can be explained by the independent variable (environmental accounting). The remaining 49.6% (≈49%) of the variation is attributed to other factors not included in the model.

Table (10): Analysis of variance for the second sub-hypothesis

Sources of variance	Total Sum of Squares	Statistical Degrees of Freedom	Mean of Squares	Calculated F-value	sig
Regression	2.693	1	2.693	58.80	0.000
Errors	2.651	58	0.046		
Sum	5.344	59	\		

Table (10) presents the analysis of variance of the second sub-hypothesis, which allows us to evaluate the overall significance of the model and the explanatory power of the variables by comparing the p-value (Sig.) to the significance level of 0.05. With a p-value of 0.000, which is less than 0.05, we conclude that the model is statistically significant.

Table (11): Regression Parameters for the Second Sub-Hypothesis

Regression parameters	regression parameter values	t-test value	sig
B0	1.977	5.69	.000
B1	.583	7.67	.000

Table (11) shows the regression parameters for the variables, the t-test value, and the significance value for each parameter, so that the estimated regression equation becomes as follows:

$$Sustainable\ Development\ (Social\ dimension) = 1.977 + 0.583\ X \quad (2)$$

We find that the constant (Bo) is 1.977, indicating the value of the dependent variable (the social dimension of sustainable development) when the independent variable (environmental accounting) is zero. We also find that the slope parameter for the independent variable was 0.583. This indicates that a one-unit change in environmental accounting (the independent variable) leads to a 0.583 change in the social dimension of sustainable development. Furthermore, the sig value was less than the significance level of 0.05. Therefore, we conclude that environmental accounting has a significant effect on the social dimension of sustainable development.

Based on the results above, the null hypothesis is rejected, and the alternative hypothesis is accepted, indicating that environmental accounting has a statistically significant effect on the social dimension of sustainable development at the 0.05 significance level.

8.2.3. Testing of the third Sub-hypothesis

The third hypothesis of the study proposes that "environmental accounting has a statistically significant effect on the environmental dimension of sustainable development at a significance level of 0.05".

To test this hypothesis, the following null and alternative hypotheses were formulated.

1. Null hypothesis (H0(: There is no statistically significant effect of environmental accounting on the environmental dimension of sustainable development at the significance level of 0.05.
2. Alternative hypothesis (H1): Environmental accounting has a statistically significant impact on the environmental dimension of sustainable development at the significance level of 0.05.

Table (12): Summary of the regression model for the third sub-hypothesis

Design	Coefficient of Correlation	R^2	Adjusted R-squared
1	.381	.145	.130

The table (12) shows that the correlation coefficient between environmental accounting and sustainable development (environmental dimension) is positive, with a value of 0.381. The coefficient of determination (R^2) is 0.145, indicating that approximately 14.5% (≈ 15%) of the variation in the

dependent variable (environmental dimension) can be attributed to the independent variable (environmental accounting). The remaining 85.5% (≈ 85%) of the variation is due to other factors not included in the model.

Table (13): Analysis of variance for the third sub-hypothesis

Sources of variance	Sum of squares	degrees of freedom	mean squared	Calculated F	sig
Regression	0.727	1	0.727	9.82	0.003
Errors	4.288	58	0.074		
Sum	5.015	59			

Table (13) presents the analysis of variance of the third sub-hypothesis, allowing us to evaluate the overall significance of the model and the explanatory power of the variables by comparing the p-value (Sig.) to the significance level of 0.05. With a p-value of 0.000, which is less than 0.05, we conclude that the model is statistically significant.

Table (14): Regression Parameters for the Third Sub-Hypothesis

Regression parameters	regression parameter values	t-test value	sig
B0	2.959	6.70	.000
B1	.304	3.13	.003

Table 14 shows the regression parameters for the variables, the t-test value, and the significance value for each parameter, so that the estimated regression equation becomes as follows:

$$Sustainable\ Development\ (Environmental\ dimension) = 2.959 + 0.304\,X \quad (3)$$

We find that the value of the constant (Bo) reached (2.959), which indicates the dependent variable (the environmental dimension relating to sustainable development) at a given value of the independent variable (environmental accounting) is equal to zero. We also find that the slope parameter of the independent variable was 0.304. This indicates that, in environmental accounting, each one-unit change in the independent variable corresponds to a 0.304 change in the environmental dimension of sustainable development. Also, the value of sig was less than the significance level of 0.05. From this, we conclude that environmental accounting has a significant effect on the environmental dimension of sustainable development.

According to the results, the null hypothesis is rejected, and the alternative hypothesis is accepted, indicating that environmental accounting has a statistically significant impact on the environmental dimension of sustainable development at the 0.05 significance level.

9. Discussion

Environmental accounting is one of the most important branches of modern accounting, aiming to provide quantitative environmental information to users of accounting information interested in the environmental impacts of companies on their surroundings. When companies adopt this type of accounting, they assume a significant responsibility towards society, including disclosing to the public the extent of the impacts they have caused, the degree of their responsibility for them, and the methods they use to mitigate them. These impacts affect all dimensions (social, economic, and environmental) and contribute to achieving sustainable development. After conducting the necessary statistical analyses on the collected data to achieve the research objectives and answer the research question, and based on the theoretical framework and the results of hypothesis testing, this study examined the role of disseminating environmental accounting information in the dimensions of sustainable development and its effectiveness in achieving the desired results. Many studies have discussed topics closely related to this study. However, the current research differs in its objectives, as it focuses on the role of environmental disclosure in the dimensions of sustainable development. The results showed that environmental accounting has a statistically significant impact on the economic, social, and environmental dimensions of sustainable development, indicating its influence across all aspects of this development at the 0.05 significance level. The research recommends that Iraqi economic units, especially industrial ones, adopt environmental accounting disclosure of their daily operations and focus on the dimensions of sustainable development in all stages of production. The research also recommends that economic units pay attention to governance as a supervisory

dimension, given its effective role in enhancing the quality of environmental accounting disclosure and supporting sustainable development.

10. Supplementary material

(None).

11. Author's Contributions

The researcher Mohammed Zuhair Majeed edited and printed the theoretical section of the research, and then carried out the applied section and interpreted the results.

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(None).

13. Data availability statement

The researcher collected data.

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The author declares no conflict of interest.

16. Declaration of generative AI use

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References

[1] Al-Sarraf, S. N. M., & Al-Taie, B. F. K. (2022). The impact of accounting disclosure of sustainable development on the quality of financial reports in Iraqi economic units: An applied study on a sample of banks listed on the Iraq Stock Exchange. Journal of Al-Rafidein University College for Sciences, 52(2), 206–217. https://doi.org/10.55562/jrucs.v52i2.553

[2] Bira, N. K., & Ali. A. A. (2024), The impact of green accounting on improving environmental auditing to achieve sustainable development. Journal of Administration and Economics, 49(146). https://doi.org/10.31272/jae.i146.1342

[3] Salem, H. H., Mohsen, R. M., & Reda, N. N. (2024). Smart leadership and its impact on achieving sustainable development: An applied study in the Babylon Business Incubator. Journal of Administration & Economics, 49(147), 27–34. https://doi.org/10.31272/jae.i145.1277

[4] Ammar, A. S. A. & Hamed, A. M. A.S,(2025) The Impact of Accounting Disclosure of Sustainable Development Dimensions on the Quality of Financial Reports in Libyan Commercial Banks) Vol. 8 No. 1 (2025) https://doi.org/10.37375/esj.v8i1.3265

[5] Chichan, H.. F, and abdullah, T. T, Y, (2021),. Does, environmental management accounting matter in promoting sustainable development(SD)? A study in Iraq. Journal of Accounting-Science, 5(2), 110–122. https://doi.org/10.21070/jas.v5i2.1543

[6] Burritt. R, L., Herzig, C., Schalteger, S,, & Viere, T.. (2019) Diffusion of environmental management-accounting for cleaner production: Evidence from some case studies.. Journal of Cleaner Production, 224., 479–491. https://doi.org/10.1016/j.jclepro.2019.03.227

[7] Wahyuni, W,, Meeutia, I., and Syamsurijal,, S. (2019),. The effect of green accounting-implementation in improving the environmental-performance of mining & energy companies in Indonesia. Binus Business Review., 10 (2) , 131–137. https://doi.org/10.21512/bbr.v10i2.5767

[8] Deegan,.C. (2013). The accountant will have central role in saving the planet really, a reflection on green accounting & green eyeshades twenty years later., Critical Perspectives on Accounting., 24 (6),, 448–458. https://doi.org/10.1016/j.cpa.2013.04.004

[9] Krajnc, D., and Glavic, P. (2005). A model for integrated assessment of sustainable development(SD). Resources, Conservation & Recycling, 43(2), 189–208. https://doi.org/10.1016/j.resconrec.2004.06.002
[10] Dumay,, J., Guthrie,, J., and Farneti, F.. (2010) . GRI sustainability reporting guidelines for public & third sector organizations: A critical review.. Public Management Review, 12 (4), 531–548. https://doi.org/10.1080/14719037.2010.496266
[11] Al_Sarraf, S. N. M., and Al_Taie, B. F. (2022.). The impact of governance mechanisms in the accounting-disclosure of the sustainable development(SD) of Iraqi economic units. Journal of Economics & Administrative-Sciences, 28(132), 233–251.
[12] Fatah, N. A., & Anwer, H. (2023). The impact of environmental accounting in financial performance: Evidence from oil companies on Iraq. Qalaai Zanist Scientific Journal., 7, (4), 1011–1032. https://doi.org/10.25212/lfu.qzj.7.4.45
[13] Sabir, J. R. A., Hamawandy, F. M. H., & Majeed, N. (2021). "The impact of the sustainable development(SD) dimensions, In the quality of financial reports".
[14] Erach, B., & Siege, H. (2013). "Dimensions of sustainable development(SD) for education for sustainable development(SD).https://ges.engagement-global.de/files/2_Mediathek/Mediathek_Microsites/OR-Schulprogramm.
[15] United Nations. (2012). Report of the United Nations(UN) conference on sustainable development(SD) (Rio+20). United Nations.
[16] Agyemang, A., Kongkuah, M., and Musah, M. (2023.). Assessing the impact of environmental accounting disclosure in corporate performance in China. Environmental Engineering and Management Journal, 22(2), 389–397. https://doi.org/10.30638/eemj.2023.030
[17] Giampietro,, M., Aspinal, R,J., Ramos_Martin, J., and Bukkens., S. G. (2014.). Resource accounting for sustainability assessment. Routledge. https://doi.org/10.4324/9781315866895
[18] Kadim, B.A & Raji, S. M (2022). The role of environmental disclosure in economic units to achieve sustainable development - a case study in the Diwaniyah Municipality Directorate" 11th International Conference on Economic and Administrative Reform. https://doi.org/10.21928/uhdicearnc/11

المصادر

[1] الصراف، س. ن. م.، والطائي، ب. ف. ك. (2022). أثر الإفصاح المحاسبي عن التنمية المستدامة في جودة التقارير المالية في الوحدات الاقتصادية العراقية: دراسة تطبيقية على عينة من المصارف المدرجة في سوق العراق للأوراق المالية .مجلة كلية الرافدين الجامعة للعلوم، 52(2)، 206-217 . https://doi.org/10.55562/jrucs.v52i2.553
[2] بيرة، ن. ك.، وعلي، أ. أ. (2024). أثر المحاسبة الخضراء في تحسين التدقيق البيئي لتحقيق التنمية المستدامة .مجلة الإدارة والاقتصاد، 49.(146) https://doi.org/10.31272/jae.i146.1342
[3] سالم، ح. ح.، محسن، ر. م.، ورضا، ن. ن. (2024). القيادة الذكية وأثرها في تحقيق التنمية المستدامة: دراسة تطبيقية في حاضنة أعمال بابل .مجلة الإدارة والاقتصاد، 49(147)، 27-34. https://doi.org/10.31272/jae.i145.1277
[4] شيحان، ح. ف.، وعبد الله، ت. ت. ي. (2021). هل تساهم محاسبة الإدارة البيئية في تعزيز التنمية المستدامة؟ دراسة في العراق .مجلة علوم المحاسبة، 5(2)، 110-122. https://doi.org/10.37375/esj.v8i1.3265
[5] بوريت، ر. ل.، هيرزيغ، س.، شالتيجر، س.، وفيري، ت. (2019). انتشار محاسبة الإدارة البيئية من أجل الإنتاج الأنظف: أدلة من بعض دراسات الحالة .مجلة الإنتاج الأنظف، 224، 479-491. https://doi.org/10.21070/jas.v5i2.1543
[6] عمار، أ. س. أ. وحامد، أ. م. أ. س. (2025) أثر الإفصاح المحاسبي عن أبعاد التنمية المستدامة على جودة التقارير المالية في البنوك التجارية الليبية، المجلد 8، العدد 1 (2025) https://doi.org/10.1016/j.jclepro.2019.03.227
[7] واهيوني، و.، ميوتا، إ.، وسيااميوسريجال، س. (2019). أثر تطبيق المحاسبة الخضراء في تحسين الأداء البيئي لشركات التعدين والطاقة في إندونيسيا . بينوس بيزنس ريفيو، 10(2) ، 131-137. https://doi.org/10.21512/bbr.v10i2.5767
[8] ديجان، س. (2013). سيكون للمحاسب دور مركزي في إنقاذ الكوكب - حقاً، تأمل في المحاسبة الخضراء والنظارات الخضراء بعد عشرين عاماً . الآفاق النقدية للمحاسبة، 24(6)، 448-458. https://doi.org/10.1016/j.cpa.2013.04.004
[9] كراينك، د.، وجلافيتش، ب. (2005). نموذج للتقييم المتكامل للتنمية المستدامة .الموارد والحفظ وإعادة التدوير، 43 (2)، 189-208. https://doi.org/10.1016/j.resconrec.2004.06.002
[10] دوماي، جيه.، جوثري، جيه.، وفارنيتي، إف. (2010). المبادئ التوجيهية لإعداد تقارير الاستدامة (GRI) لمنظمات القطاع العام والثالث: مراجعة نقدية .مجلة الإدارة العامة، 12 (4) ، 531-548. https://doi.org/10.1080/14719037.2010.496266
[11] الصراف، س. ن. م.، والطائي، ب. ف. (2022). أثر آليات الحوكمة في الإفصاح المحاسبي عن التنمية المستدامة للوحدات الاقتصادية العراقية .مجلة العلوم الاقتصادية والإدارية، 28 (132) ، 233-251.
[12] فتاح، ن. أ.، وأنور، هـ. (2023). أثر المحاسبة البيئية في الأداء المالي: أدلة من شركات النفط في العراق .مجلة قلعة زانست العلمية، 7 (4) ، 1011-1032. https://doi.org/10.25212/lfu.qzj.7.4.45
[13] صابر، ج. ر. أ.، هماوندي، ف. م. هـ.، ومجيد، ن. (2021). "أثر أبعاد التنمية المستدامة في جودة التقارير المالية".
[14] إيراش، ب.، وسيج، هـ. (2013). "أبعاد التنمية المستدامة للتعليم من أجل التنمية المستدامة".
[15] الأمم المتحدة. (2012). تقرير مؤتمر الأمم المتحدة للتنمية المستدامة (ريو+20). الأمم المتحدة.
[16] أجييمانج، أ.، كونجكوا، م.، وموسى، م. (2023). تقييم أثر الإفصاح عن المحاسبة البيئية في أداء الشركات في الصين .مجلة الهندسة والإدارة البيئية، 22(2)، 389-397. https://doi.org/10.30638/eemj.2023.030
[17] جيامبيترو، م.، أسبينال، ر. ج.، راموس مارتن، ج.، وبوكينز، س. ج. (2014). محاسبة الموارد لتقييم الاستدامة .روتليدج. https://doi.org/10.4324/9781315866895
[18] كاظم، ب.أ وراجي، س. م (2022) دور الإفصاح البيئي في الوحدات الاقتصادية لتحقيق التنمية المستدامة - دراسة حالة في مديرية بلدية الديوانية" المؤتمر الدولي الحادي عشر للإصلاح الاقتصادي والإداري. https://doi.org/10.21928/uhdicearnc/11

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أثر الافصاح المحاسبي البيئي على أبعاد التنمية المستدامة بالوحدات الاقتصادية العراقية

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المستخلص

تهدف هذه الدراسة إلى إبراز دور الإفصاح عن المحاسبة البيئية في أبعاد التنمية المستدامة (البيئية والاجتماعية والاقتصادية) في الوحدات الاقتصادية العراقية. وقد استخدم المنهج الوصفي في عرض النتائج النظرية للبحث وقد تم الحصول على نتائج الدراسة من خلال توزيع 90 استبيانًا على مجموعة من أساتذة المحاسبة والمدققين القانونيين، اذ ان هذا الجانب لجمع البيانات هو الملائم لمثل هذه البحوث. تم استلام 68 استبيانًا، منها 60 استبيانًا صالحة للتحليل، بينما تم استبعاد 8 استبيانات لعدم ملاءمتها.

بعد التحليل الإحصائي للبيانات المجمعة، خلصت الدراسة إلى أن الإفصاح عن المحاسبة البيئية له دور إيجابي وفعال في الأبعاد البيئية والاجتماعية والاقتصادية التي تُشكل التنمية المستدامة، وذلك من خلال وجود تأثير ذي دلالة إحصائية عند مستوى دلالة 0.05 للمحاسبة البيئية على جميع الأبعاد المذكورة في الوحدات الاقتصادية العراقية.

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