

Determinants of Sustainability Reporting under a Global Reporting Initiative: Empirical Evidence from Iraq

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The aim of this paper is to reveal the determinants that affect the level of reporting of sustainability accounting in its economic, social, environmental and governance dimensions from the perspective of the Global Reporting Initiative (GRI.G4). The study adopts the method of analysing the content of the annual financial reports (2016 - 2017) for all sectors operating in the Iraq Stock Exchange (8) and by (100) companies. The results show that there is variation in the level of reporting of deportation as well as a weakness in the level of reporting and that the most important determinants affecting the discrepancy of reporting consist of the types of sector and disclosure instructions applied in the market and the accounting system adopted, and the fact that the sector size did not have a significant impact on the level of reporting sustainability accounting . The research recommends the support of companies listed in the Iraqi market for securities that adopt initiatives to report sustainability accounting by various means and provide facilities to ensure its sustainability.

Keywords: *Sustainability Accounting, Sustainability Reporting, Factors Affecting Sustainability Accounting Reporting*

Introduction

There is recent interest in achieving global sustainable development.. Accounting literature seeks to preserve resources for future generations and reduce depletion. In 2010, a study was initiated to establish the Sustainability Accounting Standards Board (SASB). This was preceded by the release of the conceptual framework for sustainability accounting. This interest has been accompanied by similar attention by certain economic units in adopting the dimensions of sustainability in their environmental, social and economic performance and in complying with governance requirements . Many States have adopted a sustainability reporting approach in their annual reports, giving stakeholders enhanced information to support their decisions.

Sustainability accounting is important at all levels because it addresses the needs of present generations without wasting the resources of future generations. The concept of sustainable development was popularised in the second half of the twentieth century by the World Commission for Environment and Development (WCED). As the term emerged in the Brundtland Report on Sustainable Development) it was referred to as the mobilisation of effort to solve the problems of humankind, the depletion of resources and the abuse of human beings as well as changes affecting nature, climate and humankind. The WCED's definition was distinctive at the time but limited to external sustainability of social and environmental systems and did not address entity sustainability (Gary, Fagerström, & Hassel, 2011). The Organisation for Economic Co-operation and Development (OECD) presented a definition similar to the one by the WCED as development involving the integration of three socio-economic and environmental objectives to maximise the well-being of present generations without compromising the capacity and needs of future generations (OECD, 2002). We believe that sustainability is a broader concept. It does not stop at preserving resources currently available in all forms and categories to ensure continuity for future generations. Rather, it is to achieve post-sustainability through a continuous dynamic generated by the entity to maintain long-term sustainability through indicators that reflect continuing ability.

Several studies have addressed the reporting of sustainability accounting in its economic, social, environmental and governance dimensions. In the Arab environment, sustainability has been a major focus of research trends. (Almagtome, 2015) (Once & Almagtome, 2015) (Al-Wattar, Almagtome, & AL-Shafeay, 2019) (Almagtome, Almusawi, & Aureaar, 2017) (Almagtome & Khaghaany, 2017), (Once & Almagtome, 2014). Llena and Talalweh (2015) analysed the sustainability performance of thirty Islamic financial institutions in Jordan and identified some of the factors that can influence reporting practices of sustainability accounting in their social and environmental dimensions through analysis of their sustainability reports. One of the most important findings of the research is that there are some factors to report sustainability accounting such as company size, culture, geographical



location and the experience of executives. Yaldo (2015) aims to report sustainability accounting from GRI and G4, using advanced programming systems based on the OWL language. The research found that a number of companies in the Australian environment have adopted GRI.G4 sustainability accounting reports. Of the 200 research sample companies, only 16.33% issued sustainability reports. Bhattacharyya (2016) aims to test the level of reporting of sustainability accounting in both its social and environmental aspects in the reports of (47) Australian companies (large and small) and according to the requirements (GRI 2002) of five different industries. The most important finding of the study is that the report was low concerning small Australian companies, and in higher in the industrial sectors than any other sectors while the variables (age, size of audit companies that carry out the task of audit companies) had no significant impact on the level of social and environmental reporting.

Based on the above, it is clear that the research reviewed in different foreign environments focused on reporting some of the dimensions of sustainability accounting as well as factors affecting the reporting of sustainability accounting from partial rather than macro dimensions, where it was limited to the study of factors affecting the social or environmental dimensions or both, as in research conducted by Liena & Talalweh (2015) and Bhattacharyya (2014). Some research has addressed sustainability reporting from the Global Reporting Initiative (GRI) perspective as Yaldo (2015), but has not examined the determinants of sustainability accounting reporting. The current research is an update of the contemporary research agenda on reporting sustainability accounting, but it expands the sample as the sectors operating in the Iraqi market for the entire stock and for the period of 2016 - 2017. Some variable emerged in this study, such as the issuance of a special governance guide by the Central Bank of Iraq (CBI) in early 2017, as well as different research on sustainability reporting. The testing of some determinants affecting GRI reporting and its new release (G4) did not receive attention by employing accounting research and applying its findings in the Iraqi environment, as well as examining sustainability as a conceptual framework for sustainability accounting from an accounting perspective.

Literature Review

Sustainability: Origin and Concept

The Global Sustainability Reporting Initiative (GRI) was appropriate for all sectors, activities, geographical locations and types of units (GRI, 2016). However, there is a discrepancy in global reporting of the dimensions of sustainability accounting (environmental, social as well as economic and governance) as reporting from the GRI.G4 perspective was not mandatory but voluntary. For the purpose of improving reporting on sustainability accounting, several conferences were held to support listed companies and large corporations to report sustainability accounting by launching sustainability accounting indicators at the global market level and ranking companies accordingly (Deegan, 2002).



However, there is still an expectation from stakeholders regarding the quality and scale of the unit activities. The level of reporting about the sustainability dimension, especially with regards to the social dimension found that there is a positive relationship between some characteristics of the units and the level of reporting regarding the social dimension such as age, type of industry and size (Maczkowiack, et. al. , 2012). Zhou et al. (2011) provide evidence from the Chinese environment that the relationship between the social and environmental dimension of sustainability accounting is in direct harmony with factors such as company size, equity ownership and age of the company as well as the company's preference for voluntary disclosure.

Zhou et al. (2011) found that after the Danish Parliament imposed a law recommending it to report on social sustainability, 97 % of major Danish companies reported on social sustainability, including indicators related to social sustainability. In the same direction, the Securities Exchange Commission (SEC) in the United States under item (303) of the Disclosure of Important Impacts Regulation issued by the Committee on compliance with environmental laws and the disclosure of the dimensions of sustainability was obliged in 2010 Father's List. The mandatory reporting of some environmental indicators such as climate change risk in financial reports (Reid et al., 2010) and the local environment, reporting on governance and the social and environmental dimension are almost limited due to the absence of regulatory frameworks, regulations and governmental and professional regulations that are required (Ben-Gal, Tal, & Tel-Zur, 2006). From the above it is clear that reporting on sustainability accounting is governed by many determinants that are regulated by them including company size , capital, type of sector, industry, instructions and age of the company.

Sustainability Dimensions in Accounting

Sustainability accounting has been linked to accounting from multiple perspectives including social and environmental accounting and their ability to provide information to support units in their path to sustainability (Schaltegger, Etxeberria, & Ortas, 2017). Sustainability accounting is also defined as an information system that measures the social, environmental, and economic performance of the unit and reports results to assess contributions to sustainable development (Irwin, et. al. , 2016). Sustainability is the process of collecting, analysing, classifying and reporting sustainability information. Stacchezzini, Melloni, and Lai (2016) consider that they follow environmental resources and activities and use the resulting information for environmental decision-making in order to look for negative environmental impacts. Creating an adequate definition of sustainability accounting which reflects the definitional and procedural meaning has faced many challenges. Possible names have included (Accounting for Sustainability, Accounting for External Variables or Total Cost Accounting. Accounting and sustainability revolve around identical dimensions as an



information system (Caugansean, 2006). It is a system that provides information to stakeholders through financial and non-financial reporting, voluntary and mandatory disclosure and due to changes in the business environment, the demand for environmental, social and economic information has increased.

Sustainability is provided by economic units because of their impact on the future performance of units (Cuganesan, 2006). Sustainable development is an information system for measuring environmental, social and environmental performance. One of the most important pillars of sustainability in accounting is continuity and consistency and the hypothesis of the continuity of economic unity, which is based on the idea an economic unit is established to do its job and continue to do so in the future. They remain sufficient for an indefinite period of time to exploit available economic resources as planned and foreseen, not according to the intention of the owners of property rights to liquidate them or significantly reduce the volume of their operations affecting the nature of the Unit's business (IAS, 1984: 5) as well as the International Federation. IFAC Standard 570 for the Continuity of Assumption paragraph (4) indicates that the unit's endurance unit means that there is an expectation that it will be able to continue for a period of (12) months in the absence of information to the contrary. IASA (570), 2003, 383-395.

Sustainable development and sustainability accounting are based on international financial and professional accounting frameworks and standards (Guidance for Higher Education, 2003: 15). IASB is the basis for in a numbers of statements. Financial disclosure and disclosure (IAS 6, 1995, 1-13) This conforms to the Business Continuity Management (BCM) standard. Business continuity is the ability of the entity to continue and fulfil its core functions during and after natural and abnormal circumstances (Randeree, Mahal, & Narwani, 2012). Moreover, the sustainability agenda as noted by the Australian Institute of Certified Accountants (CPA) is the requirement to report through accounting reports to ensure the continuity of the unit. The Sustainability Accounting Report (2010) shows that units cannot have an opportunity for continuity. It does not take into account the inclusion of sustainability dimensions in its reports through a correct understanding of sustainability issues and their impact on business continuity. In addition, sustainability accounting is based on the fact that economic unity equates to an economic and social entity and contractual relationships. It derives its main pillars from a conceptual framework, building from the theory of stakeholders which calls for the adoption of the concept of social unity as a more effective alternative to the accounting unit (Accounting Entity) to make the concept more comprehensive and focus management attention on all stakeholders. Moreover, it is not limited to owners and therefore the analysis will move to the stage of sustainable financial reporting under sustainability reports to include content for all stakeholders (Palea, 2018). According to their values and expectations, they are based on the theory of legitimacy, i.e.,



the activities carried out by the unit are commensurate with the propositions of the community to achieve sustainable performance (Johansson & Lundberg, 2012).

In its Statement No. 1, FASB defines reporting (Financial reporting concepts in economic units) as the activities it adopts to serve the needs of users of financial information (FASB, 2007) and that the objectives of reporting in accounting are to provide useful information to stakeholders with accurate reporting of unit resources, events and circumstances that affect those resources and their viability. International sustainability reporting initiatives have served as a conceptual framework for reporting such information, and the Global Reporting Initiative (GRI) aims at sustainability and reporting by incorporating environmental, social and governance as well as economic dimensions into financial reporting. The GRI.G4 initiative is the latest of its fourth edition (G4). It is concerned with the guidelines for reporting sustainability by units and presents principles and disclosures for the standards to be applied by the units when preparing sustainability accounting reports. It contains explanations on how to apply the principles on which the report is based and guidelines for various dimensions of performance (economic, social, environmental and governance). (3) General Standards and (33) Specific and Specific Standards (Lambooy, Hordijk, & Bijveld, 2014).

In the Iraqi environment, there is a growing interest in sustainable development in the current stage of relevant legislative bodies represented by the issuance of legislation and laws that concern environmental and social dimensions and governance guides as well as the economic dimension. Its annual reports have framed the sustainability dimension reporting framework, accounting research streams have seen increased interest in sustainability and their intellectual frameworks, while interest in holding accounting conferences and issuing periodicals regarding sustainability accounting and reporting has increased or some sectors. However, this concern has not been reflected in the financial reports issued by companies listed on the Iraq Stock Exchange, where the website of the market (www.isx.iq.net) lacks reports on sustainability accounting from professional and academic accounting bodies and the Global Financial Reporting Initiative (GRI) version (GRI.G4). Moreover, there are determinants that affect the (weakness, variability) of reporting sustainability reports in the financial market. Internal and external determinants of sector type, market disclosure instructions, applicable accounting system and sector size can influence the level of sustainability accounting reporting from the Global Sustainability Reporting Initiative perspective. According to the agenda's recent issue (G4), the most influential determinant on reporting the dimensions of sustainability accounting as the research aim to test the impact of certain determinants on reporting sustainability from the perspective of (GRI) is the analysis of annual financial reports for all sectors in the Iraq Stock Exchange. In addition to reviewing the debate on developments in accounting, in adopting the concept of sustainability accounting, the practical importance is to explore the reporting of sustainability

accounting from the perspective of the Global Initiative for Reporting Sustainability to the 8 sectors operating in the Iraqi Stock Exchange and by (100) companies listed in the Iraq Stock Exchange. In addition to testing the impact of some determinants (influential / non-influential) on sustainability reporting, sustainability accounting and reporting dimensions are the result of the inevitable interaction of accounting information system with environmental, social and economic variables and governance. This report will examine the following two primary hypotheses: -

1. There is variation in the level of sustainability reporting from the GRI.G4 perspective in the annual reports of sectors listed on the Iraq Stock Exchange.

2 - There is a significant relationship between the determinants of sustainability reporting (sector type and the prevailing market disclosure instructions, the accounting system applied and the size of the sector) and the level of sustainability reporting from the perspective of GRI.G4 and arises from the following secondary hypotheses:

1. There is a significant relationship between specific types of sectors and the level of sustainability reporting in annual reports of sectors listed on the Iraq Stock Exchange.

2. There is a significant relationship between specific (disclosure instructions applied in the market) and the level of sustainability reporting from the perspective of (GRI.G4) for sectors listed on the Iraq Stock Exchange.

3. There is a significant relationship between the specific (accounting system applied) and the level of sustainability reporting from the perspective of (GRI.G4) for sectors listed on the Iraq Stock Exchange.

4. There is a significant relationship between the specific (size of the sector) and the level of sustainability reporting from the perspective of (GRI.G4) for sectors listed on the Iraq Stock Exchange.

Materials and Methods

For securities, the Iraqi market as a research community of regular markets which operate under Law No. (74) amended the regulation for the year (2004) as well as other supporting laws including Company Law No. (22) for the year (2002), and the activities of various sectors within. It includes the following sectors :banking, industrial, tourist hotels, services, agriculture, investment, insurance and communications and organises financial reporting for all sectors - Instructions No. (8) for the year (2011) amended titled (Disclosure of Listed Companies). Table (1) shows the number of companies listed in each sector as well as the percentage of what the sector constitutes from the total sectors listed in the market. All sectors listed in the market have been taken into consideration and therefore the research sample represents the whole community.

Table 1: Sample companies distributed into sectors

#	Sector	No. of Companies	%
1	Banks	36	% 36
2	Industrial	25	% 25
3	Hotels and Tourism	10	% 10
4	Services	10	% 10
5	Agricultural	6	% 6
6	Investment	6	% 6
7	Insurance	5	% 5
8	Telecommunications	2	% 2
Total		100	% 100

The limitations of the research are represented in all sectors operating on the Iraq Stock Exchange and represented by (8) sectors and (100) companies, while the time limits for research (2016 - 2017) by virtue of the time period witnessed some variables, including the issuance of a governance guide for the banking sector issued by The Central Bank of Iraq, as well as obliging the banking sector to apply international accounting standards instead of the common accounting system. The content analysis examines the first main research hypothesis: (there is a variation in the level of reporting on sustainability accounting from a (GRIG4) perspective in the annual reports of sectors listed on the Iraq Stock Exchange). The content of the financial reports of all companies listed on the Iraq Stock Exchange will be analysed to test the level of reporting regarding various dimensions of accounting including sustainability (economic, social, environmental, and governance) as stated in the Global Initiative (GRI) with its latest release being (2016) (G4). Table (2) shows the non-disclosed indicators and requirements for each criteria as the economic dimension includes (6) paragraphs and each paragraph includes (13) Overall indicator (27) including a requirement while the environmental dimension (8) includes paragraphs (34) index and total (72) includes a requirement in terms of social (15 dimensions) containing paragraphs (29) index and a total of (46) requirements.

For the purpose of calculating the degree of what has been reported from the perspective of (GRI.G4), an equation will be adopted according to which the total paragraph that was disclosed and considered as the numerator of the fraction and considering the denominator of the fraction is a total requirement for each indicator attributed to (100).

$$SRS = \frac{\text{disclosed items}}{\text{total items}} \times 100 \quad (1)$$

Where;



SRS. *Sustainability reporting score*

Disclosed items: *Sustainability items disclosed by the firm in year i.*

Total items: *Total sustainability items available in sustainability index*

For the purpose of testing the impact of some factors on the level of reporting on sustainability accounting from the perspective of (GRIG4) for the sectors listed on the Iraq Stock Exchange, search variables will be measured as follows:

First: Independent variables: represented by factors affecting reporting regarding sustainability accounting, which include: -

1. Type of Sector: Represented by all sectors operating in the market, as previously mentioned in Table (1), and denoted by Type.
2. Market Disclosure Instructions D: These are the instructions issued by the Market Disclosure Authority, and its symbol is (D). It includes the amended Instructions No. (8) for the year (2011) - Disclosure Instructions for Companies Listed on the Stock Exchange and Instructions No. (13) Form and Content of Annual Data Quarterly for the year (2010) and instructions No. (14) for the year (2011), disclosure requirements.
3. The applied accounting system (SF): The companies listed in the market are joint stock companies and apply a unified accounting system in their accounting practices with the exception of the banking sector, which in the year (2017) adopted and applied international accounting standards according to the instructions of the Central Bank of Iraq and symbolised by SF.
4. Sector size (SZ): There is a difference in the size of sectors and their companies listed on the market, denoted by SZ.

Second: Dependent Variable (YGRI)

The reporting of sustainability accounting was reached under the indicators of the Global Reporting Initiative (GRIG4) according to Tables (2-5) and it is a dependent variable as its result is not specified and depends on the values of independent variables.

1- The research model used to measure the effect of factors on reporting on sustainability accounting from a perspective (GRIG4) for the purpose of testing secondary research hypotheses. The research model was formulated to measure the correlation and impact of independent factors on the level of reporting on sustainability accounting from the perspective of (GRIG4).

$$Y=a+B_1Type+B_2D+B_3SF+B_4Sz \quad (2)$$



Where;

Y: dependent variable reporting sustainability accounting from a perspective (GRIG4), the percentage of which is determined from Tables (2-5)

A: The value of the constant, which is the level of reporting, without taking into account influencing factors

B: slope of independent changes (i) in year (t)

Type: an independent variable representing all sectors operating in the market, as mentioned in Table (1) (i) in Year (t)

D: Represents all instructions issued by the Disclosure Authority on the Iraq Stock Exchange (i) in year t

SF: represents the accounting system applied by sectors (i) in year (t)

SZ: represents sector size (i) in year t.

Results

The aim of this paper is to examine the determinants of sustainability reporting practices in Iraq using a disclosure index extracted from the global reporting initiative G.4. Table 2 indicates the results of sustainability disclosure of Iraqi companies during the years 2016-2017 using three sustainability pillars, which are economic, social, and environmental indicators.

Table 2: Indicated and non-disclosed indicators according to (GRI.G4)

Indicators included in each item	Reporting requirements for each item	Years / Sector															
		Banks		Manufacturing		Tourism		Services		Agriculture		Insurance		Investment		Telecommunications	
		2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Economic																	
1. Economic performance	8	3	4	1	0	3	3	3	4	3	3	2	2	3	4	3	4
2. Market share	4	2	2	1	0	3	3	2	3	3	3	2	1	2	1	2	2
3. Indirect economic impacts	4	1	1	3	3	1	1	1	1	1	1	1	1	2	2	1	1
4. Purchase practice	1	0	1	0	1	0	0	1	1	0	1	1	1	0	1	1	1
5. Anti-corruption and service	8	5	5	0	1	0	0	2	2	2	2	2	2	1	2	2	3
6. Behavior towards competitors	2	0	0	2	2	1	1	1	1	1	1	0	1	0	0	1	0
	27	11	13	7	7	8	8	10	12	10	11	8	8	8	10	10	11
Environmental																	
1. The materials used are environmentally friendly	2	0	1	0	1	2	2	1	1	0	1	0	0	0	0	1	1
2. Recycled waste	6	0	0	2	2	1	1	0	0	1	1	0	0	1	1	1	1
3. Energy	12	1	1	2	2	1	1	0	0	0	1	0	0	1	1	6	6
4. Biodiversity	8	0	1	1	0	1	1	2	2	4	2	1	1	2	1	3	3
5. Emissions	25	0	0	0	0	0	0	1	2	2	3	0	0	0	0	5	5
6. Liquid and solid waste	11	0	0	0	0	3	3	3	3	0	1	0	0	0	0	6	6
7. Environmental compliance	2	0	0	1	1	1	1	2	2	2	2	1	1	2	2	2	2
8. Environmental assessment of suppliers	6	0	0	1	1	1	1	2	2	2	2	1	1	2	2	2	2
	72	1	3	7	7	13	13	10	12	11	13	2	2	6	5	28	28
Social																	
1. Employment and work turnover	7	3	3	1	1	2	2	1	1	3	3	1	1	0	0	3	3
2. The relationship with the administration	2	2	2	2	2	0	0	0	0	1	1	1	1	0	0	1	1
3. Occupational Health and Safety	8	1	1	0	0	3	3	1	1	2	2	1	1	2	2	2	2
4. Training and education	4	4	4	0	0	3	3	1	1	1	1	0	0	3	3	1	1
5. Diversity and equal opportunity	3	2	2	1	1	2	2	0	0	1	1	1	1	2	3	2	2
6. Non-sexual discrimination	2	2	2	2	2	2	2	0	0	1	1	0	0	0	1	0	0
7. Freedom of association	1	1	1	1	1	0	0	1	1	0	0	0	0	1	1	1	1
8. Child labor	3	1	1	0	0	0	0	2	2	1	1	0	0	0	1	1	1
9. Forced labor	2	1	1	0	0	2	2	2	2	1	1	0	0	0	0	1	1
10. Security practices	2	2	2	0	0	0	0	2	2	0	0	0	0	2	2	1	1
11. Human Rights Assessment	2	2	2	1	1	0	0	0	0	0	0	0	0	1	1	1	1
12. Evaluating suppliers and their effects on society	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
13. Customer health and safety	3	2	2	0	0	0	0	1	1	0	0	0	0	3	3	1	1
14. Customer privacy	3	2	2	0	0	1	1	0	0	0	0	0	0	1	1	1	1
15. Social and economic compliance	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	46	26	26	8	8	13	13	11	11	10	10	4	4	15	15	17	17

Source: prepared by authors

Based on analysis of Table (2), it is clear that there is a variation in the level of reporting on sustainability accounting from the perspective of (GRI.G4) and by sectors and dimensions.

Table (3) shows the rates of reporting according to what has been achieved from the requirements based on the analysis of annual financial reports for the two years between (2016 - 2017). According to analysis of Table (2) it is clear that there is variation in the level of reporting on sustainability accounting from the perspective of (GRI.G4) and by sectors and dimensions. Table (3) shows the rates of reporting according to what has been achieved from the requirements based on the analysis of annual financial reports for the two years between (2016 - 2017).

Table 3: Ratios of reporting dimensions (economic, social and environmental) from the perspective of (GRI.G4) and for the years (2016-2017)

Sector type	Economic %		Environmental %		Social %	
	2016	2017	2016	2017	2016	2017
Banks	% 40.70	% 48.1	% 1.38	% 4.16	% 56.52	% 56.52
Industrial	% 25.90	% 25.9	% 9.72	% 9.72	% 17.39	% 17.39
Hotels and Tourism	% 29.62	% 29.62	% 18.00	% 18.00	% 28.20	% 28.26
Services	% 37.00	% 44.4	% 13.88	% 16.66	% 23.91	% 23.91
Agricultural	% 37.90	% 40.70	% 15.27	% 18.00	% 21.37	% 21.37
Insurance	% 29.6	% 29.6	% 2.77	% 2.77	% 8.09	% 8.69
Investment	% 29.6	% 37.00	% 8.33	% 6.94	% 32.60	% 32.60
Telecommunications	% 37.00	% 40.70	% 38.88	% 38.88	% 36.95	% 36.95

Source: prepared by authors

According to Table (3), it is clear that the percentage of reporting on the economic dimension from the perspective of (GRI.G4) varies between sectors, where the banking sector recorded the highest percentage (48.10%) in the year (2017), although weak, it is better than during (2016). This may be due to the activation of the Anti-Money Laundering and Terrorist Financing Law and the establishment of penalties for perpetrators of financial crimes No. (39) for the year (2015), while other sectors have achieved varying and low levels of reporting, while regarding the field of reporting on the social dimension, banks achieved the highest rate of reporting for the year (2016). During(2017), this reached (56.52%), due to interest in training and education, given that the years between (2016-2017) constitute the transition to implementation to international accounting standards. Therefore there is a need to train and qualify bank workers for these developments, and the telecommunications sector achieved the highest rate of reporting on the environmental dimension at a rate of (38.8%) for the two years between (2016-2017), indicating an interest in the environmental aspect by virtue of environmental laws and legislations that govern the work of the telecommunications sector. Based on the above, it is clear that there is a difference in the degree of reporting of companies listed on the Iraq Stock Exchange and the dimensions of sustainability (economic,

environmental and social), as well as concerning public disclosures which include governance, consisting of (18) indicators (13) of which are related to governance. On the other hand, (5) indicators are related to other matters, with a total reporting requirement of (25) items, as shown in Table (4).

Table 4: Reporting general disclosures to sectors operating on the Iraq Stock Exchange

Indicators included in each item	Reporting requirements for each item	Years / Sector															
		Banks		Manufacturing		Tourism		Services		Agriculture		Insurance		Investment		Telecommunications	
		2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
1. Governance Structure (Manual)	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Delegation of authority	1	0	1	0	0	1	1	0	0	0	0	0	0	1	1	2	2
3. Executive responsibility for environmental and social issues	2	1	1	0	0	0	0	0	0	1	1	0	0	1	1	1	1
4. Consult with stakeholders regarding economic and social issues	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
5. Formation of governance committees	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6. President and members of governance	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7. Conflict of interest	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8. The role of the governance body in developing, approving and updating the goal and value of the company and its strategies	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1. Efficient governance body	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Defining and managing environmental and social impacts	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Defining and managing environmental and economic impacts	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4. Auditing environmental and social matters	1	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	0
5. The role of the Governance Authority in preparing sustainability reports	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6. Wages policy	2	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
7. The process of determining salaries and wages	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0
8. Projects for stakeholders in wages	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
9. Total annual identification percentage	1	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
10. The percentage increase in the total annual compensation rate	1	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
Total	25	10	11	3	3	6	6	2	2	2	2	0	0	3	3	4	4
Total indicators (27 + 72 + 45 + 25) from Tables 2 and 3	169	% 40	% 44	% 12	% 12	% 24	% 24	% 8	% 8	% 8	% 8	% 5	% 5	% 12	% 12	% 16	16 %

Source: prepared by authors

Table (4) shows reporting on public disclosures (reporting on governance) for sectors operating on the Iraq Stock Exchange for the period between (2016-2017). Table 5 illustrates the percentage of reporting on public disclosures for sectors operating on the Iraq Stock Exchange.

Table 5: Percentage of reporting on public disclosures (reporting on governance) for sectors operating on the Iraq Stock Exchange for the period between (2016-2017)

Sector type	Sector performance reporting for governance	
	2016	2017
Banks	% 40	% 44
Industrial	% 12	% 12
Hotels and Tourism	% 24	% 24
Services	% 8	% 8
Agricultural	% 8	% 8
Investment	% 12	% 12
Insurance	% 0	% 0
Telecommunications	% 16	% 16
Total	% 25	% 100

Source: prepared by authors

Based on Table (5), it is clear that there is a disparity in reporting on public disclosures - after governance, the banking sector achieved the highest percentage (44%) for the year (2017) and (40%) for the year (2016), which is due to the adoption by Iraqi banks of the principles of governance according to Governance evidence issued in (2017), while the services and agriculture sector achieved the lowest percentage (8%) for the two sectors. Table (6) shows the average level of reporting percentages of sustainability accounting in the Iraq Stock Exchange for the years (2016-2017) from the perspective of (GRI.G4).

Table 6: Average reporting percentages for sustainability accounting from the perspective of (GRIG4) on the Iraq Stock Exchange for the years (2016-2017)

Sector name	Mean of economic reporting ratio	Mean of environmental reporting ratio	Mean of social reporting ratio	Governance	Mean of total sustainability reporting
Banks	% 44.4	% 2.77	% 56.52	% 42	36.42
Industrial	% 25.90	% 9.72	% 17.39	% 12	16.15
Hotels and Tourism	% 29.62	% 18.00	% 28.26	% 24	24.97
Services	% 40.7	% 15.27	% 23.91	% 8	21.97
Agricultural	% 38.85	% 16.63	% 21.37	% 8	21.21
Insurance	% 29.6	% 2.77	% 8.69	% 0	10.26
Investment	% 33.3	% 15.27	% 32.60	% 12	23.29
Telecommunic	% 38.85	% 38.88	% 36.95	% 16	32.67

ations					
The average for each sector	%35.15	%14.91	%28.21	%15.25	23.32

Source: prepared by authors

According to the above table, it is evident that the general average for reporting on sustainability accounting in the fields of economics, and social and environmental dimensions as well as governance from the perspective of (GRI.G4) is different for each sector, therefore the first primary research hypothesis is accepted. In addition, the correlation coefficient and multiple regression between the main variables and the simple multiple regression between the dependent variable and the four independent factors were used. Table (7) shows the results of correlation and effect between search variables.

Table 7: Correlation and effect results between search variables

Independent variable	Abbreviation	Correlation	<i>F</i>	<i>R</i> ²	<i>B</i>	Dependent variable
Sector type	<i>Type</i>	0.58	4.6	0.50	0.68	Level of reporting on sustainability accounting
Market Disclosure Instructions	<i>D</i>	0.73	11.8	0.32	0.61	Level of reporting on sustainability accounting
Accounting system	<i>F_s</i>	0.55	5.8	0.29	0.65	Level of reporting on sustainability accounting
Sector size	<i>S_z</i>	0.20	2.1	0.14	0.43	Level of reporting on sustainability accounting

(**) Significant correlation at significance level (0.05) and confidence limits (95%)

Based on analysis of Table (7) and testing the relationship between influencing factors and the level of reporting on sustainability accounting in financial reports, and through testing the correlation and impact between each of the factors affecting reporting and the level of reporting, the relationship between the sector type and the reporting level shows a positive relationship, which means that there is a significant statistical correlation between sector type and the level of reporting on sustainability accounting, as the correlation coefficient of the relationship (0.58) is at the level of significance (0.05) which is significant. On the other hand, there is positive correlation between the instructions of market disclosure *D* and the reporting of sustainability accounting as it reached (0.73) which is a significant moral and positive correlation and the correlation coefficient between the accounting system *F_s* and the

reporting of sustainability accounting (0.55). A strong correlation exists when value A (0.05) and the correlation between the sector size SZ: and the level of reporting on sustainability accounting (0.20), which is a positive relationship with a significant level (0.05), which is a weak correlation. Accordingly, the second main research hypothesis is accepted. "There is a significant relationship between factors affecting reporting (sector type, market disclosure instructions applicable to the accounting system and sector size) and the level of reporting on sustainability accounting from the perspective of GRIG4. Table (7) also indicates that it is clear that the calculated value of (F) of the model reached (4.6) which is greater than the (F) table value of (4.19) at the level of significant significance (0.05), which means that there is a statistically significant effect of (sector type) At the level of (5%) with a degree of confidence (95%), and by the determination factor ($R^2 = 0.5$), it is clear that (Sector Type) explains (50%) of changes that occur in the level of reporting on sustainability accounting from the perspective of (GRIG4). The other (50%) is attributed to further variables not included in the regression model. (B) indicates the significance of the parameter and confirms the result of the regression estimation. Accordingly, the first secondary research hypothesis derived from the primary hypothesis is accepted. The second (there is a statistically significant relationship between sector type and the level of reporting on sustainability on the Iraq Stock Exchange). In the same direction, it is clear from Table (7) that the calculated value of (F) for the model was (11.8), which is greater than the value of the table (F) of (4.19) at the level of significance of (0.05). Accordingly, the second secondary hypothesis derived from the hypothesis is also accepted.

The second hypothesis indicates that there is a statistically significant relationship between prevailing disclosure instructions in the market and the level of reporting on sustainability accounting from the perspective of (GRI.G4) in the annual reports of companies listed on the Iraq Stock Exchange. This means that there is a statistically significant effect of (market disclosure instructions at the level of significance of (5%) with a degree of confidence (95%), by means of the determination coefficient ($R^2 = 0.32$),. It is clear that market instructions (32%) regarding changes in the level of reporting on sustainability dimensions are explained, while the percentage (78%) is due to the contribution of other variables not included in the regression model, as shown by the marginal slope coefficient of the slope angle of adult ($B = 0.61$). Any binding or modifications in the disclosure instructions will lead to an increase in the level of reporting by (61%) while B) indicates the significance of the parameter and confirms the estimate of the regression coefficient. The third secondary research hypothesis, derived from the second main hypothesis states that (There is a statistically significant relationship between the applied accounting system and the level of reporting on sustainability accounting from the perspective of (GRI.G4)) has been accepted in the annual reports of companies listed on the Iraq Stock Exchange. Based on the analysis of Table (7), it is clear from the calculated value of (F) that it reached (5.8) which is greater than the (F) table value of (4.19) at the level of significance (0.05) which means that there is a statistically

significant effect of (applied accounting system). At the level of reporting of a significance value of (5%) and with a degree of confidence (95) the coefficient of determination ($R^2 = 0.29$) H (the applied accounting system) explains (29%) of the changes that occur at the level of reporting according to (GRIG4), while (71%) is attributed to the contribution of other variables not included in the regression model, as shown by the marginal slope coefficient ($B = 0.65$) according to which any change in the accounting system will affect the direction of the reporting level by (65%). (B) indicates the significance of the parameter and confirms the result of estimating the regression coefficient.

The fourth secondary hypothesis is derived from the second main hypothesis, which states (there is a statistically significant relationship between (sector size) and the level of reporting on sustainability accounting from the perspective of (GRIG4)) is not accepted. It is clear from the previous table that the value of (F Calculated for the model reached (2.1) which is less than the tabular value (F) of (4.19) is at the level of significance (0.05). This means that there is no statistically significant effect of (sector size) on the level of reporting at the level of significance (5%) and with a degree of confidence (95%), and by means of the determination coefficient ($R^2 = 0.34$), it is clear that the effect of the sector size explains (14%) the changes that occur at the camel? level. The percentage of (66%) attributable to the contributions of other factors are not included in the regression model.

Conclusions

The Global Reporting Initiative (GRI) to report on dimensions of sustainable accountability is the roadmap for achieving economic viability. The results indicate that all sectors operating on the Iraq Stock Exchange in all sectors suffer from variation and weakness in reporting on sustainable accounting, which indicates its weak contribution to achieving sustainable development. In addition, there are factors that affect the decrease and variation in the level of reporting on sustainability accounting (such as the type of sector and the instructions for disclosure adopted in the market and the accounting system applied), but the size of the sector was low. Weak research interest in sustainability accounting and employing the dimensions of the Global Sustainability Reporting Initiative (GRI) is one of the important variables in local accounting research trends. Therefore, it is necessary to support the companies listed on the Iraq Stock Exchange that adopt initiatives to report on sustainability accounting, including the (GRI.G4) initiative, by various means and providing facilities to ensure the sustainability of these companies. Furthermore, it is important to disseminate sustainability awareness amongst investors and stakeholders on the Iraq Stock Exchange and create reports on sustainable accounting as an urgent requirement for assessing the ability of companies listed in the market to achieve sustainable development. In addition, it is recommended to reconsider listing and disclosure instructions on the Iraq Stock Exchange by including reporting on sustainable accounting as one of the main conditions for listing and one of the



disclosure requirements. For future research, it is important to test factors other than those tested by current research, which may affect the level of reporting on sustainability accounting on the Iraq Stock Exchange. Moreover, communication through adopting research agendas that focus on sustainable accounting and its dimensions in research and graduate studies programs is also recommended



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