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The Effect of Sustainability Disclosure According to the GRI-G٤ Standards on Firm Value

Mohammad Khaled Abed Alhyasat
World Islamic Sciences and Education University
- Faculty of Finance & Business- Accounting.
mohhyasat123@yahoo.com

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Abstract:

The study aimed to investigate the effect of sustainability disclosure according to the GRI-G4 standards on firm value, by following the analytical descriptive approach. The study sample included (33) Jordanian industrial companies listed on the Amman Stock Exchange during the period (2018-2021). Data related to the disclosure items on the economic, environmental and social sides were collected from the annual reports of the industrial companies of the study sample, also the firm value was measured by the Tobin's Q. The study concluded that there is a statistically significant effect of the sustainability disclosure according to the GRI-G4 standards and its dimensions on the firm value. The study recommended that all industrial companies must to sustainability disclose in accordance to the GRI-G4 standards, and adopting activities and practices that contribute to increasing and maximizing the value of the company.

Keywords: Sustainability, affect, GRI-G4, Standards, Firm, Value.

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أثر الإفصاح عن الاستدامة وفقاً لمعايير مبادرة التقارير العالمية GRI-G٤ في قيمة الشركة

محمد خالد عبد الحياصات
قسم المحاسبه - كليه المال والأعمال - جامعه العلوم الاسلاميه
mohhyasat123@yahoo.com

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الملخص

هدفت الدراسة إلى البحث في أثر الإفصاح عن الاستدامة وفقًا لمعايير GRI-G4 على قيمة الشركة، ذلك باتباع المنهج الوصفي التحليلي. واشتملت عينة الدراسة على (33) شركة صناعية أردنية مدرجة في بورصة عمان خلال الفترة (2018-2021). وتم جمع البيانات المتعلقة ببنود الإفصاح عن الجوانب الاقتصادي والبيئي والاجتماعي من تقارير السنوية للشركات الصناعية عينة الدراسة، كما تم قياس قيمة الشركة بنسبة Tobin's Q. وتوصلت الدراسة إلى وجود أثر ذي دلالة إحصائية للإفصاح عن الاستدامة وفقًا لمعايير GRI-G4 وأبعاده على قيمة الشركة. واوصت الدراسة بضرورة إلزام جميع الشركات الصناعية بالإفصاح عن الاستدامة وفقاً لمعايير مبادرة التقارير العالمية GRI-G4، وتبني الأنشطة والممارسات التي تسهم في زيادة قيمة الشركة وتعظيمها.

الكلمات المفتاحية: الإفصاح عن الاستدامة، الجانب الاقتصادي، الجانب البيئي، الجانب الاجتماعي، قيمة الشركة. (5 كلمات)

1.1 Introduction

The issue of the report on environmental pollution occupies an important place in modern accounting thought. The impact of this is related to the financial position and competitive position of the economic units. It results in an increase in environmental liabilities and an increase in the number of lawsuits due to its violation of environmental laws. The study of the American Association of Certified Public Accountants (AICPA) stressed the need to increase the scope of accounting disclosure of environmental activities with the need to apply corporate governance, which helps to increase the sustainable development of the company and give transparency. Therefore, companies that wish to improve the quality of their profits have to have community acceptance through Disclosure of sustainable development practices because of their positive effects on narrowing the information gap between management and investors (Rodrigue, et, al, 2013)

Therefore, many companies around the world have begun to move towards adopting and applying global indicators and initiatives to prepare annual reports and others according to the principle of sustainability. Among the most important of these initiatives at the global level is the Global Sustainability Disclosure Initiative (GRI), which does not aim to make a profit, but rather aims to enhance and increase the sustainability of economic companies in their dimensions (institutional, economic, environmental, social) and raise the quality of their reports, as it provides a comprehensive and integrated framework to achieve sustainability disclosure and preparing reports for all economic units and companies on a large scale around the world, as this initiative was established by the Global Sustainability Standards Board (GSSB). The annual reports prepared in accordance with GRI standards contain financial side by side non-financial data and information that serve multiple stakeholders, whether internal or external, about the performance of firm or organization to achieve the objective of sustainable development. This makes theoretical issues as tangible and specific, which helps in understanding the of developments in sustainability impacts on the activities of organizations and their strategy (GRI, 2013).

Therefore, the disclosure of sustainability process aims at assessing the economic, social and environmental operations and aspects of the establishment or organization, in addition to communicating the efforts and progress made in the company›s sustainability measures to stakeholders (Lozano, R. 2013). Moreover, it can be considered as a pivotal or vital step to realize and achieve smart, sustainable and overall comprehensive growth for the company that matching between long-term profitability and social justice law and environmental attention and care (EUROPEAN COMMISSION. 2013). Therefore, this study highlights the importance of disclosing sustainability according to Global Reporting Initiative and its standards (GRI-G4) in company value.

1.2 Problem of the study

The recent collapses of many international companies have raised doubts about the ability of traditional financial reports to show the real performance of the company and give a complete picture of all its activities (Kaveen, et, al. 2013). So, many companies tended to adopt business strategies and increasing their numbers, depending on the increasing awareness of investors of the importance of sustainability reports and the increasing pressure on the part of non-governmental organizations and stakeholders to disclose these items in the reports, in addition to improving the reputation and image of the company, so current research problem lies in answering these questions:

The first main question: Is there an effect of the disclosure of sustainability

based on the standards of GRI-G4 on the firm value?

This question stems from the sub-questions:

1. 1- Is there an effect of the disclosure of economic sustainability based on the standards of the GRI-G4 on the firm value?
2. 2- Is there an effect of the disclosure of environmental sustainability based on the standards of GRI-G4 on the firm value?
3. 3- Is there an effect of the disclosure of social sustainability based on the standards of the GRI-G4 on the firm value?

1.3 Objectives of the study

By virtue of research questions, the research is an endeavor to achieve the objectives:

The first main objective: To determine the impact of the disclosure of sustainability based on the standards of GRI-G4 on firm or company valuation.

The following sub-goals derive from this objective:

1. 1- To show the effect of the disclosure of economic sustainability based on the standards of GRI-G4 on firm or company valuation.
2. 2- To show the effect of the disclosure of environmental sustainability based on the standards of GRI-G4 on firm or company valuation.
3. 3- To show the effect of the disclosure of social sustainability based on the standards of the GRI-G4 on the value of the company.

1.4 Significance of the study

Current research significance stems from that the subject of the study is a vital topic which is related to the importance of sustainable reports, as it is one of the main pillars of the process of preparing financial reports and creating value for the firm as the main driver of that value and the importance of disclosing sustainability with its dimensions. Also, the importance of the study lies in showing the level of disclosure of sustainability based on the GRI-G4 and its effect on adding and creating the firm value. Moreover, the field of research in the field of sustainability reports is of great importance, whether in the academic field or professional practice.

1.5 Hypotheses of the study

Based on mentioned questions of the study, the hypotheses are formulated as:

The main hypothesis: There is no effect of sustainability disclosure according to the GRI-G4 standards on the value of the firm.

From this hypothesis the following sub-hypotheses are derived:

1. 1- There is no effect of the disclosure of economic sustainability based on the standards of GRI-G4 on the value of the firm.
2. 2- There is no effect of the disclosure of environmental sustainability based on the standards of GRI-G4 on the firm.
3. 3- There is no effect of the disclosure of social sustainability based on the standards of GRI-G4 on the firm value.

1.6 Previous studies

(Roberts, D. H. & Koeplin, J. P. 2007) studied the case of sustainability reports in Portugal. Content analysis was used to highlight whether companies disclose sustainability based on Global Reporting Committee's guidelines (GRI). The study showed that 40% of the report preparers show a strong interest in the reporting process. The study also showed that the sustainability reports are prepared depending on the guidelines of the Global Reporting Committee (GRI) are still in their early stages.

While another study aimed to identify the extent of social and environmental disclosure in the annual reports of Jordanian companies and to indicate whether the level of disclosure is affected by the size of government ownership and the industrial sector. Sixty companies from the industrial and service sectors were studied. The study concluded that 85% of firms disclose environmental and social information in one way or another. Also, the most disclosed topics are human resources, while environmental issues were at the lowest level. In addition, the study indicated that there is a significant positive correlation between the size of the company and the social and environmental disclosure. The study also indicated that there is no relationship between the type of industry and the level of social and environmental disclosure (Ismail, K. N. I. K. & Ibrahim, A. H, 2009).

While a study by (Schiehlé, T. & Wallin, J. 2014) aimed to identify the most important indicators of the global initiative GRI, which Swedish industrial companies prefer to disclose and report on. They studied a sample of 30 major industrial companies.

The study concluded that the size of the company positively affects the sustainability reporting process. In addition, the number of employees and their turnover rate positively affects the sustainability disclosure process.

Another study by (Vinke, J. 2014) was conducted to show what are the social and institutional factors that affect the current situation related to the disclosure of social and environmental reports for listed companies in the United Arab Emirates and how they affect the possibility of change. The study concluded that 26 companies out of 148 submitted reports on sustainability. Also, the level of disclosure about sustainability in the UAE is generally low, in addition to the existence of a number of issues that impede the institutionalization process.

(Altarawneh, G.A. 2015) studied 18 Jordanian companies. This study concluded that there are deficiencies in the environmental disclosure of companies, whether in the form of separate reports or included in the annual reports. The study by (Zahid, M. et. Al, 2016) aimed to investigate the quality of reports related to the various dimensions of sustainability (economic, environmental and social) in Malaysian companies. The study sample consisted of 113 companies listed in real estate investment funds and the real estate sector for the period between 2010-2013. The study showed that there was a discrepancy in the quality of the disclosure of the dimensions of sustainability, with a lowest level in environmental dimension, while the focus was on the social dimension the highest. Moreover, most companies disclose sustainability just to comply with relevant regulations and instructions.

Moreover, (Almatarneh, 2019), aimed at showing the disclosure of sustainability operations influence on the financial performance of the 13 Jordanian mining and extractive industries that are listed on the Amman Stock Exchange. The study assured that there is a weakness in the degree of disclosure of some firms. Also, the financial performance of these firms is affected by disclosure level of the various dimensions of the sustainability. Another study by (Baqer and Matar, 2020) aimed to identify the extent to which GRI criteria (and ESG indicators) are used in the Bank of Baghdad and the International Bank. The research found that economic units in the local environment are weak in their reporting level of sustainability in the text of to (ESG indicators) and (GRI standards). The highest level of reporting on sustainability reaches (63%) for the economic pillar, and the lowest level of reporting was (0%) for the governance pillar. This indicates the interest in the economic axis at the expense of other axes of sustainability.

(Ahmed, 2020) aimed to discover the extent to that firms disclose sustainable development in yearly financial reports in light of the requirements of the Global Reporting Initiative (GRI) by analyzing the content of yearly financial reports for a sample of companies registered in the Egyptian Stock Exchange. It included three sectors which are banks, telecommunications and real estate. The results indicated that companies disclose the sustainable development of their activities in their annual reports. Also, the Egyptian companies› disclosure of the sustainable development of their activities did not meet the requirements of the Global Reporting Initiative (GRI).

As for (Abbas and Al-Dabbas, 2020), their study aimed to measure the environmental and social performance indicators of the contents of the management reports prepared on their environmental and social performance by comparing the actual performance with the indicators set within the standards of (GRI) in Iraqi cement companies. The most important results were that the overall evaluation rate for the environmental axis reached 6% for disclosure of related information, while the overall evaluation rate for the social axis reached 4%. Thus, this shows a very low evaluation rate for these axes. On the other hand, (Al-Obaidi, 2021) aimed to look for the quality of potential relationship between environmental performance disclosure and sustainability reports quality in the context of GRI standards. Findings reached to significant relationship environmental performance disclosure and sustainability report quality. Also, (Hassan and Jawad, 2021) aimed to clarify the role of international assurance standards in enhancing the credibility of sustainability reports. The results showed the contribution of adopting and implementing international assurance standards in order evaluating the content of the «auditor's report». Ultimately, it will reflect on activating the credibility of sustainability reports as a result of what it contributes to in ensuring the application of standards for confirming sustainability reports to give them confidence and credibility.

Theoretical framework

2.1 The concept and importance of the disclosure of sustainability based on the standards of GRI-G4

The sustainability report is a major demand of stakeholders, including investors, with the aim of measuring and disclosing the performance of economic units and taking responsibility before internal and external parties, as the way to disclose reports has been determined through the Global Reporting Initiative). This body is known as an independent international organization that helps companies and distinct organizations to take into consideration responsibility for their activities and operations impacts, by providing them with a common international and global language by defining global standards for sustainability reporting that make any organization able to understand and report its effects on the economy, the environment and individuals in a credible and comparable manner. This leads to increase the transparency about their participation in sustainable development beside to the reporting firms, as these standards are of great importance to stakeholders, including investors, policy makers, capital markets and civil society organizations. (Zabin et al., 2022)

Sustainability reports are defined as a clear and explicit announcement by the establishments to stakeholders about the practices they carry out in all their economic and environmental activities and the extent of their commitment to their responsibilities towards society, giving a clear picture of the risks that the establishment is exposed to in its path and providing more transparency for its operations. (Hughen, 2014)

On the other hand, (Hassan and Jawad, 2021) defined sustainability reports as the reports submitted by the administration on a voluntary basis and confirmed by the auditor. The aim of these reports is to provide internal and external stakeholders with financial results and fact side by side non-financial facts, these results and facts linked and related to the economic, social, environmental dimensions, in addition to technological and political (governance) dimensions of the economic unit and to determine the size of the risks and opportunities that it can affect its future performance. Sustainability reports are of great importance represented by developing the vision and strategy of the facility for sustainability, improving management systems and internal operations, setting goals and contributing to creating financial value for the facility, as well as increasing the awareness and motivation of employees, improving reputation, gaining trust and respect, increasing investors' awareness of sustainability issues and contributing to rationalizing investment decisions. (Youssef, 2016)

In the context of the desire to organize the process of providing sustainability information, a study (Touche & Deloitte, 2011) monitored that the report of economic units on sustainability activity is linked to pressure from government parties and stakeholders to reduce the effects of the negative gap represented by the need for appropriate and reliable information on (GRI) principles and requirements to develop a sustainability report in accordance with what guarantees the expression of the main constituent pillars of sustainability activity, whether economic, environmental, or social, to meet the wishes of stakeholders. The process of reporting on sustainability prompted the global stock exchanges and financial markets to consider it a prerequisite for registration.

The study (Radonjic & Vieira, 2020) confirmed the importance of disclosing the activities of environmental innovations within the sustainability reports of the large European economic units. It was found through analyzing the qualitative content of the sustainability reports of the European economic units for the purpose of classifying research and development expenditures and the Dow Jones Sustainability Index. The results of the analysis showed sustainable reporting a general lack of direct reference to the term environmental innovations and the benefits of using them. This requires guidance on how to report them. (Torelli, et al. 2020) believes that assessing the relative importance of the content of the sustainability report and the involvement of stakeholders is the engine through which economic units can choose the non-financial matters and issues to be contained in non-financial reports in a way that serves the expectations of all stakeholders in light of stakeholder theory. This is done through the relationship potentially occurred between applying principle of materiality in non-financial reports and stakeholder participation processes, through applying the GRI and/or the guidelines of the International Reporting Council that enhance their direct participation, in order to reach a high level of application of materiality and good quality of stakeholders' interest reporting. (Adaui loza & mion, 2019) believes that mandatory non-financial disclosure faces implications for the quality of sustainability reports, because it provides markets with data on their social, environmental and governance performance. Consequently, the quality of multidimensional sustainability reports affects factors such as credibility and building trust between stakeholders and the economic unit.

A study by (Landau, et, al. 2020) and another study by (Adaui Loza & Mion, 2019) confirmed that the inserted reporting of environmental and social governance and financial data in the integrated annual report (IR) provides better insight and adds value to the company, especially with regard to the characteristics of confirmation that leads to improve the quality of reports and thus mitigating the negative impact on the market value.

2.2 Dimensions of sustainability according to the standards of the Global Reporting Initiative GRI-G4 in the firm value

According to the (GRI), non-financial indicators in sustainable development reports should include three main groups: economic indicators, environmental indicators, and social indicators. It includes four sub-indicators: indicators related to human rights, indicators related to the rights of employees and workers, and indicators related to product responsibility and finally indicators related to corporate responsibility towards society in general. The first version of the Global Reporting Initiative (GRI) was issued in 2000 and is called G1. The second version was issued in 2002 during the World Summit on Sustainable Development, and it is called G2. The third version it was released in 2006 and is called 3G. Finally, the fourth edition of the Global Reporting Initiative, called G4, was released in July 2013, and the transition from G3 to G4 took place after 12/31/2015, as sustainable development reports, which will be published after that date, must be prepared according to G4 indicators. (Das, N, et al. 2013)

The dimensions of sustainability based on GRI were represented by three dimensions, namely:

- «The environmental dimension» which is related to information linked and reflect the effect of firms on the environment, and how to measure and reveal it. Its aims at developing firm or organization performance within environmental sustainability framework in long run relaying on management systems in firms that take into consideration a new tool in environmental sustainability (krivacic & Jankovic, 2017)
- «The economic dimension»: The concept of sustainable economic development has increasing attention in recent years by firms, along with the conception of social and environmental development, due to the great economic impact on environmental and also, social dimensions. So, result of the increasing economic growth in manufacturing and industrial sector and the consequences of emissions resulted from this sector operational processes, and because of its unfavorable negative influences and impacts on the environment, there has become a serious concern by people because of pollution of air and water, and also to natural resources depletion. Thus, it is put by these companies to reduce the impact of economic growth, keep the environment and the future generations' rights. (Raji and Abbas, 2019)
- «Social dimension»: It is a concept that is related and linked to information present and related to the impact of corporate activities, actions and operations on whole society, as it aims at gaining social justice by distributing natural resources side by side economic resources, these objectives are achieved by developed cultures, human rights respect, in addition to equally diversification and participation (Farid 2017), these aspects can be represented

the dimensions of social aspect where it is embodied social justice and indicate its reflects, to a large extent, the quality of life that can be measured by concerning in population living below the line of poverty, percentage of the unemployed, overall public health, level of education, protection from crime, and rates of population growth. There is a strong close link between them and the sustainable development and its principles (Al-Jawrain 2017).

The researcher believes in importance of accounting disclosure on sustainable development practices is due to its role in developing the company›s reputation and increasing its competitive place in the market, and providing financial and also non-financial information as an important indicator of the performance of the dimensions of sustainability. It is beneficial to assess the expected market value of firm or company in the future, and to provide present and potential investors and creditors with the necessary information to make investment decisions, and minimize asymmetries in information between investors and other groups and stakeholders.

Study methodology

The research followed the method based on description and analysis, and used quantitative tools and methods to analyze data in order to achieve the objectives of the study.

3.1 Population and sample

The population included the Jordanian industrial public shareholding companies, which numbered until end of 2022 (46) company distributed into (9) sub-sectors (https://www.ase.com.jo).

The study sample included (33) industrial companies meeting the pre-defined inclusion criteria, as follow:

1. The firm (company) should be listed in Amman Bursa during period (2018-2021).
2. Availability of all data necessary to measure the variables.
3. That the company›s fiscal year expires at the end of the year.

3.2 Sources of information collection

The study relied on secondary sources to collect information related to the subjects of the study. These sources were books, researches, articles, periodicals, pamphlets, and previous studies that were obtained from libraries and websites, in addition to financial statements, annual reports, and information on Jordanian manufacturing (industrial) companies listed on the Amman Bursa for the period (2018- 2021) which are published on the Amman Bursa website and researched companies' websites.

3.3 Measure the study variables

First: level of disclosure of sustainability

It represents the level of disclosure of sustainability in its three dimensions (the economic side, the social side, and the environmental side) in the financial reports of industrial companies (i) for the fiscal year (t). This variable was measured through the following procedures:

1. Determine the sustainability disclosures that are included in the financial reports of the companies representing the sample.
2. Preparing an index for disclosures about each of the dimensions of sustainability contained in the financial reports of the study sample companies, so that each paragraph of the disclosure takes a value of (1) if the company discloses it, otherwise the value is zero.
3. The values of the sustainability disclosure items were collected for each company and for each year, and then the total was divided by all items as contained in the Sustainability Disclosure Index to reach the level of sustainability practices for each industrial company and for each year:

$$LSuD_{it} = \frac{NoDSu_{it}}{TDS}$$

where:

LSuDit: Sustainability disclosure level of the company (i) for the period (t).

NoDuSit: The disclosed items number of sustainability for the company (i) for the period (t).

TDS: Total overall number of sustainability disclosed items.

The items (indicators) of the disclosures adopted by the study were determined based on the (GRI) standards. And according to the (G4) version, the three dimensions include (83) indicators distributed as follows: the economic aspect (9) indicators, the environmental aspect (34) indicators, and the social aspect (40) indicators.

Second: Firm value

The firm value represents the dependent study variable, measured by Tobin's Q ratio (a measure to predict the market value of the company and its future performance), and it was calculated by the following formula (Karahan & Gezen, 2022):

Tobin›s Q = Company›s market value / Asset›s book value

Where the value of the Tobin Q ratio of less than one indicates that the value of the company›s assets exceeds its market value. Where the value of the Tobin Q ratio of more than one indicates that the market value of the company exceeds its assets value and has better investment (Fu et al., 2016).

3.4 Statistical treatment

Eviews program was adopted data analysis using the following statistical tools and tests:

1. Averages (means), standard deviations, and max and min values: to describe the variables.
2. Linear person coefficient: to test the multicolinearity.
3. (D-W) coefficient: to test the existence of the autocorrelation.
4. Regression analyses: to test hypotheses.

Description of variable and testing of hypotheses

4.1 Description of variables

First: Description of the independent variable (disclosure of sustainability)

The disclosure of sustainability included the following three dimensions: economic side, environmental side, and social side. The variables have been described as follows:

Table (1): Description of the disclosure of sustainability

(%) Scale	Economic side	Environmental side	Social side	Sustainability disclosure
Mean	47.141	23.962	14.632	28.578
standard deviation	11.435	13.648	8.869	10.529
Max value	88.889	73.529	55.000	72.473
min value	33.333	5.882	10.000	20.180

Table (1) indicates that the general mean for the disclosure of economic side is

(47.141%), with standard deviation is (11.435%). The max observed value (88.889%), and the min value was (33.333%). The values indicate that there is a difference between the companies in disclosing the economic side, which may be due to the different orientations and motives of the companies' managements in disseminating information related to their financial and economic activities and operations, how they manage risks and the ability to continue in the market.

Also, the previous table shows that the general mean for the disclosure of environmental side is (23.962%), with standard deviation is (13.648%). The max observed value (73.529%), and the min value was (5.882%). The values indicate that there is a difference between the companies in the percentage of disclosure of environmental side, and this may be due to the different interests of the companies' departments in disclosing the environmental fields.

It is easy to perceive from table (1) the general mean for the disclosure of social side is (14.632%), and its standard deviation is (8.869%). Moreover, the max observed value (55,000%), and the min value was (10,000%). The values indicate that there is a difference between the companies in the percentage of disclosure of the social side, which may be due to the inclusion of the social dimension on many items related to women, human rights and financial corruption, which the industrial companies do not disclose, but they disclose only their activities towards society.

Also, the previous table indicates that the general mean for sustainability disclosure is (28.578%), with standard deviation is (10.529%). The max observed value was (72.473%), and the min value was (20.180%). And the values indicate that there is a difference between the companies in the percentage of sustainability disclosure, and it is also clear that sustainability dimensions disclosure level is still low and below the global initiative for sustainability reports.

Second: Description of the dependent variable (firm value)

The firm value variable was measured by the Tobin's Q ratio during the period (2018-2021). This variable has been described as follows:

Table (2): Description of the firm value

(%) Scale	Firm Value
Mean	1.850
standard deviation	8.930
Max value	104.784

min value	0.117

Table (2) shows that the mean of the Tobin's Q ratio in the companies is (1.850), with standard deviation is (8.930), the max observed value was (104.784), and the min value was (0.117). It is clear from the values that there is a large discrepancy in the value of the company among the Jordanian industrial companies during the period, and this may be due to the difference in the size of the industrial companies and the size of their expected future profits, and the difference in the performance of their departments in exploiting the investment opportunities available in their environment.

4.2 Testing hypotheses

To testing hypotheses, the study relied on simple and multiple linear regression analysis to answer the study' questions, and before conducting hypothesis testing, it was confirmed that the data show no collinearity (linear extension) using correlation matrix and the Variance Inflation coefficient Factor (VIF). On the other hand, the existence of the autocorrelation was tested by Durbin-Watson test. The following is a presentation of the procedures that were carried out before hypothesis testing:

4.2.1 Multicollinearity Test

The phenomenon of multiple linear correlations indicates that there are highly linear correlations between the independent variables, which increase the value of R2 beyond its real value, and to verify this, the Pearson correlation coefficient and the variance inflation coefficient were measured for independent variables, and the results as below:

Table (3): Pearson Correlation Coefficient Values

variables	economic side	environmental side	Social side
economic side	1.000		
environmental side	0.714**	1.000	
Social side	0.732**	0.770**	1.000

The Pearson correlation coefficient values presented in Table (3) indicate that there is no high linear correlation between the independent variables, as they were all less than (0.80 ±) (Guajarati, 2004).

To ensure and confirm the above result, the values of the Variance Inflation Factor (VIF) were calculated for each variable, and the results as below:

Table (4): Variance Inflation Coefficient Values

variables	VIF
economic side	1.245
environmental side	2.124
Social side	4.557

Table (4) shows that the values of VIF were between (1-10) and this confirms the validity of the previous result (Gujarati, 2004).

4.2.2 Autocorrelation

One of the conditions for regression is that data should be free from autocorrelation, which indicates that there is a correlation between random errors, which weakens the predictive ability of the regression mode. To verify this, the Durbin-Watson (D-W) test was applied, where the value of coefficient (D-W) that is close to or equal to the number 2 indicates that this problem does not exist (Guajarati, 2004), and the results as below:

Table (5): D-W Coefficient Values

hypothesis	D-W value	score
H0	1.743	There is no autocorrelation
H01	1.747	There is no autocorrelation
H02	1.839	There is no autocorrelation
H03	1.827	There is no autocorrelation

The values of the (D-W) coefficient in Table (5) indicate that there is no autocorrelation phenomenon, as the values were between (1.743-1.839), which is close to (2).

4.2.3 Hypothesis testing

Multiple linear regressions analyze (for the main hypothesis) and simple (for the sub-hypotheses) were performed to test the hypotheses and to find out the relationships between them.

Main hypothesis H0: "There is no effect of sustainability disclosure according to the GRI-G4 standards on the value of the company".

Table (6): *Results of testing HO

dependent variable	Coefficients				
	Statement	B	standard error	t	Sig t*
Firm value	Economic side	0.049	0.008	6.082	0.000
	Environmental side	-0.005	0.009	-0.529	0.597
	Social side	-0.026	0.013	-2.086	0.039
	Regression constant	-0.781	0.225	-3.472	0.001
R^2	0.324				
$AdjR^2$	0.308				
F	21.057				
Sig. F*	0.000				

Table (6) showed that the R2 was (0.324), and this indicates that predictors (independent) variables can explain (32.4%) of variation or change in (firm value), and value of (F) was (21.057) with significance level (0.000), and this indicates the model significance.

Also, previous table showed that the value of B at (economic side) was (0.049) and the value of t at (6.082) with significance level (0.000), which indicates a significant effect of it. The value of B at (environmental side) was (-0.005), and the value of t at (-0.529), with a significance level of (0.597), which indicates that there is no significant effect of it. The value of B at (social side) was (-0.026), and the value of t at (-2.086), with a significance level of (0.039), which indicates a significant effect of it.

Based on this, it can be said: "There is an effect of sustainability disclosure according to the GRI-G4 standards on the value of the company".

First sub-hypothesis H01: "There is no effect of the disclosure of economic sustainability according to the standards of the Global Reporting Initiative GRI-G4 on the firm value".

Table (7): *Results of testing H01

dependent variable	Coefficients				
	Statement	B	standard error	t	Sig t*
Firm value	Economic side	0.052	0.004	13.631	0.000
	Regression constant	-1.003	0.130	-7.689	0.000
R^2	0.581				
$AdjR^2$	0.578				
F	185.812				
Sig. F*	0.000				

Table (7) showed that R2 was (0.581), and this indicates that the economic side explained (58.1%) of the change in (firm value), value of (F) was (185.812) with the significance level (0.000), and this indicates the model significance. Also, previous table showed the value of B at (economic side) was (0.052) and the value of t at (13.631) at a level of significance (0.000), which indicates a significant effect of it. Based on this, it can be said: "There is an effect of the disclosure of economic sustainability according to the standards of the Global Reporting Initiative GRI-G4 on the firm value".

The second sub-hypothesis H02: "There is no effect of the disclosure of environmental sustainability according to the standards of the Global Reporting Initiative GRI-G4 on the firm".

Table (8): *Results of testing H02

dependent variable	Coefficients				
	Statement	B	standard error	t	Sig t*
Firm value	Environmental side	-0.020	0.005	-3.923	0.000
	Regression constant	1.891	0.153	12.337	0.000
R^2	0.103				
$AdjR^2$	0.096				
F	15.389				
Sig. F*	0.000				

Table (8) showed that R2 was (0.103), and this indicates that the environmental side explained (10.3%) of the change in (firm value), value of (F) was (15.389) at the significance level (0.000), and this indicates the significance of the model. Also, previous table showed that the value of B at (environmental side) was (-0.020) and the value of t at (-3.923) at a level of significance (0.000), which indicates a significant effect of it. Based on this, it can be said: "There is an effect of the disclosure of environmental sustainability according to the standards of the Global Reporting Initiative GRI-G4 on the firm".

The third sub-hypothesis H03: "There is no effect of the disclosure of social sustainability according to the standards of the Global Reporting Initiative GRI-G4 on the firm value".

Table (9): *Results of testing H03

dependent variable	Coefficients				
	Statement	B	standard error	t	Sig t*
Firm value	Social side	0.021	0.002	8.676	0.000
	Regression constant	0.795	0.054	14.681	0.000
R^2	0.029				
$AdjR^2$	0.022				
F	4.036				
Sig. F*	0.047				

Table (9) showed that R2 was (0.029), and this indicates that the social side explained (2.9%) of the change in (firm value), value of (F) was (4.036) at the significance level (0.047), and this indicates the model significance. Also, previous table showed that the value of B at (social side) was (0.021) and the value of t at (8.676) at a level of significance (0.000), which indicates a significant effect of it. Based on this, it can be said: "There is an effect of the disclosure of social sustainability according to the standards of the Global Reporting Initiative GRI-G4 on the firm value".

Results and Recommendations

5.1 Results

The following results were reached:

1. The average disclosure about sustainability in industrial companies during (2018-2021) was (28.578%). This indicates that the disclosure of the sustainability by industrial companies is still in the beginning, as the disclosure process is still few and falls short of the requirements of the Global Initiative for Sustainability Reports.

2. Despite the decrease in the average industrial companies' disclosure of the economic side, which amounted to (47.141%), it ranked first. This indicates the interest of Jordanian industrial companies in areas related to economic performance, competitiveness, position in the market, the economic effects of activities and operations on society as a whole, and the changes that occurred in systems to improve performance, and the strategies followed in that development.

3. The average percentage of disclosure of the environmental side in industrial companies decreased during the period (2018-2021) at a rate of (23.962%). This

may explain that industrial companies usually disclose positive environmental activities, and avoid negative activities resulting from their operations, for fear of accountability and fines.

4. The average percentage of disclosure about the social side in industrial companies decreased during (2018-2021), at a rate of (14.632%), and it ranked last in the percentage of disclosure. This indicates the low level of interest of industrial companies in areas related to the social side, and the disclosure of their social responsibility, the reason for this decline may be due to the presence of many items related to the fields of women, human rights, and financial corruption, and these areas are not disclosed by Jordanian industrial companies.

5. Main hypothesis results showed there is an effect of sustainability disclosure according to the GRI-G4 standards on the firm value, where the significant effect appeared in each of the economic and social sides, while this effect did not appear on the environmental side, and this does not negate the importance of this side in the firm value, but rather shows that the economic and social sides are more important in the firm value.

6. The testing the hypotheses branching showed there is an effect of the disclosure of economic, environmental and social sustainability according to the standards of the Global Reporting Initiative GRI-G4 on the firm value, when studied individually. The researcher believes that the presence of this effect indicates the importance of disclosing the items and areas of sustainability related to the economic side in terms of their ability to achieve economic growth, generate profits, and maximize shareholder wealth, and areas related to the environmental side in terms of its responsibility in protecting and preserving the environment and reducing energy waste and pollution emissions, and areas related to the social side in terms of information related to its human resources, occupational health and safety, its orientations in development, training and education, its relations with suppliers, ensuring the safety of its products for society in generating and maximizing firm value, and generating and investing various investment opportunities, by building a positive image of the company and improving its reputation.

5.2 Recommendations

The researcher suggests these recommendations:

1. Requiring all industrial companies to disclose sustainability in accordance with the standards of the Global Reporting Initiative GRI-G4, to raise the level of disclosure and transparency, and to confirm the compatibility of its activities with the goals of society.
2. Educating industrial companies about the importance of disclosure about sustainability and the positively impact of this disclosure on companies' mental market image and drawing up their future policies.
3. Increasing the disclosure of sustainability, and qualifying accountants to prepare sustainability reports in accordance with the global framework for these reports according to the principle of disclosure, and emphasizing the importance of these reports, in raising the value of the company and achieving its goals.
4. Inclusion of industrial companies with a department specialized in sustainability within their organizational structure.
5. The managements of Jordanian industrial companies adopt activities and practices that contribute to increasing and maximizing their value, because of their role in increasing their investment and competitiveness.

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