

INTERNATIONAL JOURNAL

International Journal of Energy Economics and Policy

ISSN: 2146-4553

available at http: www.econjournals.com

International Journal of Energy Economics and Policy, 2020, 10(2), 417-426.



# Role of Environmental Awareness in the Application of Environmental Accounting Disclosure in Tourism and Hotel Companies and its Impact on Investor's Decisions in Amman Stock Exchange

## Mousa Mohammad Abdullah Saleh<sup>1</sup>, Omar A. A. Jawabreh<sup>2\*</sup>

<sup>1</sup>Department of Financial and Administrative Sciences, Al-Balqa Applied University, As-Salt, Jordan, <sup>2</sup>Department of Hotel Management, Faculty of Tourism and Hospitality, The University of Jordan, Amman, Jordan. \*Email: o.jawabreh@ju.edu.jo

Received: 21 August 2019

Accepted: 28 December 2019

DOI: https://doi.org/10.32479/ijeep.8608

#### ABSTRACT

The present study aims at examining the level of environmental awareness in the management of tourism and hotels companies listed in the Amman stock exchange, its role in the application of environmental accounting disclosure, and to examine the impact of investment decisions on environmental accounting disclosure. To achieve this objective, a sample is chosen from two categories: tourism and hotels management category which consists of 12 financial managers and a major accountant in those companies, and the category of investors in these industrial companies which consists of 47 investors are randomly selected. In order to collect the data, a questionnaire is distributed to each of the hospitality companies and investors in these companies. The study shows that there is a good level of environmental awareness among the management of companies. However, there is a fear of applying the environmental accounting disclosure due to the lack of certainty of the importance of application and the benefits of it, and the lack of appropriate qualification of accountants to apply environmental accounting disclosure. The study shows that there is a large deficiency in the activation of such legislation.

**Keywords:** Environmental Accounting, Amman Stock Exchange, Environmental Awareness **JEL Classifications:** Q56,R 50,Q0

# **1. INTRODUCTION**

The issues of environmental accounting and disclosure of environmental accounting information have been a growing issue in recent decades in response to societal pressures stemming from increased environmental awareness of individuals and organizations. As a result of the absence of standards, laws and regulations that require companies to disclose environmental accounting information. This lead to the contrariety of scope and importance of this information. Therefore, this study explains the effect of this environmental accounting information on an external party about the company (the investor). The present paper aims at exaplaining the investors' benefit of environmental accounting information in the financial statements to make appropriate investment decisions related to environmental accounting information disclosed by the company's management.

The main objective of this study is to attempt to address three dimensions (environmental awareness, environmental accounting disclosure, investor's decisions). This study will attempt to measure the environmental awareness and its contribution to the application of environmental accounting disclosure and investor's decisions in Amman stock exchange. These three dimensions are not available in any previous study (to the best knowledge of the researcher).

This Journal is licensed under a Creative Commons Attribution 4.0 International License

Saleh and Jawabreh: Role of Environmental Awareness in the Application of Environmental Accounting Disclosure in Tourism and Hotel Companies and its Impact on Investor's Decisions in Amman Stock Exchange

The problems of the environment resulting from the economic activity of tourism and hotles companies have received more attention from researchers. The studies focus on the negative effects resulting from pollution caused by these companies in various forms such as (air pollution, water, soil, reflection on human health etc.). Also, the society asks the companies to act in a more responsible manner. All groups would like to know the impact of these units in the environments in which they work in order to adjust their performance through appropriate decision making. A number of studies have been conducted about environmental accounting and its importance, obstacle to apply it in tourism and hotels companies. The focus of most of these studies on the management of these companies, so that the management of these companies have their reasons and justifications for how to disclose and the amount to be disclosed in the financial statements. The researcher clarifies the role of environmental awareness in the application of environmental accounting disclosure, the perspective of investors on the importance of disclosure of environmental accounting information and the impact of this information in making investment decisions towards companies.

The application of environmental accounting disclosure will lead to long-term profits for a company through optimal utilization of energy and inputs. The researcher finds that there is insufficient interest by the banks in the level of environmental disclosure in the tourism and hotel companies. The granting of credit is not related to the environmental condition of the company. Besides the companies that disclose their environmental data may enjoy a competitive advantage distinguish them from the rest of the companies. Environmental disclosure of tourism and hotel companies contributes to improve the pricing of services and raise the efficiency of the cost system in these companies (Azhar and Meiryani, 2019; Meiryani and Dezie, 2019).

The application of environmental accounting disclosure will lead to long-term profits for a company through optimal utilization of energy and inputs. The researcher finds that there is insufficient interest by the banks in the level of environmental disclosure in the tourism and hotel companies. The granting of credit is not related to the environmental condition of the company (Alan and Tennyson, 2007; Dian et al., 2019; Imaduddin et al., 2019; Lucky et al., 2017). Besides the companies that disclose their environmental data may enjoy a competitive advantage distinguish them from the rest of the companies. Environmental disclosure of tourism and hotel companies contributes to improve the pricing of services and raise the efficiency of the cost system in these companies.

The main objective of this study is to identify the role of environmental awareness in the application of environmental accounting disclosure and its importance to investors in tourism and hotels public shareholding companies. The researcher seeks to achieve the it through the sub-objectives of clarifying the impact of both the level of management awareness of environmental issues and legal legislation related to environmental accounting disclosure on the application of environmental accounting disclosure.

The problem of the study is the presented environmental accounting disclosure by some companies in the financial statements is limited

to simple observations that show the company's achievements and its contribution to the environment. The most companies may show their good side to the environment. Many parties need to disclose these commitments and environmental costs which may be caused by the company as a result of the behavior of it towards the community and the need to disclose the revenues that may be derived through the preservation of the environment, the incentives and government exemptions that the company may get as a result of the preservation of the environment. This study is also interested in showing the importance of environmental accounting disclosure by investors and the quality of needed environmental information by the investor.

The researcher tries to answer the following questions:

- 1. Does the level of management's understanding of environmental matters affect environmental accounting disclosure?
- 2. Does the existence of legal legislation related to environmental accounting disclosure affect environmental accounting disclosure? Does this legislation, if any, motivate companies to disclose environmental accounting?
- 3. What is the impact of environmental accounting information on the financial performance of tourism and hotel companies?
- 4. What is the effect of environmental accounting information on the pricing of products produced by tourism and hotel companies?

#### **2. LITERATURE REVIEW**

Jordanian tourism and hotels public shareholding companies face difficulties in applying environmental accounting disclosure due to factors related to legislation and the level of management's awareness of the importance of environmental disclosure and other factors related to the company such as the size of the company and the volume of profits. There is a lack of sufficient awareness by some of the companies and their employees of environmental legislations. There is a need for consultants and experts in the environment regarding the costs of decontamination and to calculate these costs and deal with them as accounting in a study by Al-Thaher and Al-Bahlul, 2011; Mousa et al., 2018).

Several studies have recommended increasing the environmental awareness of the public and the users of the financial statements in response to the increasing pressure exerted by government bodies and agencies through environmental legislation and regulations (Abdullah and Tudor, 2006; Ahmed and Ronald, 2001; Al-Beraidi and Rickards, 2003; David and Kerry, 2011; Divesh, 2001). As a result of the importance of legislation and accounting standards in the application of environmental accounting disclosure, many studies have attempted to highlight the strength of legal and regulatory restrictions that focus on environmental disclosure in the country where the company is located. It also noted the importance of complying with the accounting standard relating to environmental accounting disclosure. In countries that are committed to environmental disclosure systems, they are more concerned with environmental issues, and therefore country-specific legislation significantly affects compliance with accounting standards. Therefore, we may find that there is a requirement by some standards and legislation for companies to disclose environmental accounting, but this may be limited to the disclosure of certain items almost in the form of a narrative of some information is not necessary as in (Elena et al., 2011; Eljayash, 2015).

It is worth mentioning that there is the so-called optional environmental accounting disclosure, which is a departure from legal frameworks and guiding standards by expanding environmental accounting disclosure, is clearly related to the size of the company (Kamal, 2015; Lulu, 2016).

The researcher notes that many studies agree that the importance of legislations to oblige companies to disclose environmental accounting information. A question is raised here about the importance of this environmental disclosure for investors in Amman stock exchange and whether this disclosure will affect the investor's decisions. This disclosure will affect on increasing the competitiveness of companies, as the disclosure of environmental accounting contributes to correct investor's decisions and put them in the right direction and also affects on the performance of the investor's future (Abdul and Al-Sharif, 2016; Saleh et al., 2012; Al-Dosar, 2011; Francisco et al., 2014; van de Dion and Vieira Dion, 2014).

Several studies have dealt with environmental accounting disclosure and its impact on both the financial performance and pricing decision of the company. The environmental performance of some companies has been compared with their financial performance (Farah and Riyad, 2001). The studies examine the envronmental issue of the companies through environmental auditing and environmental monitoring. The studies focus on the role of internal auditing and monitoring of accounting in performing an important role towards the environmental auditing and environmental monitoring were identified Mujahid, 2014; Muna, 2014; Noemi and Raffaele, 2010).

Some studies have attempted to develop environmental models such Saidi, 2014; Noemi and Raffaele, 2010; Shale and Rantšo, 2019), which have developed a greenwash model. It aims at extracting a variety of expectations about disclosure, limiting conflicting results on environmental disclosure and encouraging companies to disclose their environmental performance. It is worth mentioning that the most important feature of this study is the attempt to address three dimensions (environmental awareness, environmental accounting, investor's decisions). This study attempts to measure environmental awareness and its contribution to the application of environmental accounting disclosure, in contributing to the decisions of the investor in Amman stock exchange, and these three dimensions were not available in any previous study (to the best knowledge of the researcher). The level of awareness of the environmental management of the company which means the extent of knowledge and environmental awareness among the management and employees of tourism and hotel companies, the importance of the environment and its elements, and the necessary care to reduce environmental pollution by these companies and the extent of the use of devices and necessary equipment to preserve the environment. Several studies have been conducted on this variable, such as Thomas and John, 2011; Al-Taher, 2010; Ashkar and Refaat, 2011; Eljayash, 2015). They conclude that there is insufficient awareness of environmental standards and legislations by some companies and employees and the need to consult with some environmental experts on the costs of decontamination. This study identifies previous studies on this variable by asking detailed questions about the level of environmental knowledge in companies to identify the strengths and weaknesses of Managing companies in terms of knowledge and to ask specific questions about the environmental regulations and level of environmental training of these companies about the presence of environmental professionals, which has not been addressed in those previous studies.

This variable was used to direct questions about environmental legislation in order to identify the impact of this legislation and directly on environmental disclosure. This variable was studied through 18-25 in questionnaires.

Some studies such as Al-Dosar, 2011; Yahya, 2015; Elena et al. (2011), dealt with the variable environmental legislation without direct questions about environmental legislation. Some studies also address accounting standards and international auditing standards and considered them within legislation (Yingjun and Indra, 2014).

This study is characterized by direct questions to the sample of the study on the role of environmental legislations and their importance in the application of environmental accounting disclosure, and the development of these legislations and their suitability to contribute to reduce environmental pollution.

This study examines the environmental accounting disclosure variable by showing the effect of each of the independent variables, namely, the level of the company's management of environmental issues and environmental legislation on the application of environmental accounting disclosure, and examining the impact of this disclosure on financial performance, required funding and pricing of products.

The study of this variable, and in this way is the most prominent characteristic of this study. Many of the previous studies have studied these variables, but each separately, that is they do not meet in a previous study.

Several studies have measured the impact of environmental accounting disclosure on the financial performance of tourism and hotel companies such as (Hassan, 2014). The researcher examines the relationship of environmental performance to financial performance in industrial companies in Kirkuk. In contrast to the current study that has collected several variables.

# **3. METHODOLOGY**

This study depends on the analytical descriptive approach. The researcher distributes a questionnaire designed specifically for this study to collect the required data. The survey takes the views of both management and investors on the importance of environmental accounting disclosure and its impact on investor decisions.

The questionnaire includes two main sections:

Section 1: Includes questions aims at obtaining general data on the sample in order to determine the demographic characteristics of the sample.

Section II: includes questions aims at obtaining information on the impact of environmental accounting disclosure on the decisions of investors in the Amman stock exchange.

#### 3.1. Hypotheses of the Study

This study examines the following hypotheses:

- 1. There is a statistically significant relationship between the level of management awareness of environmental matters and the disclosure of environmental accounting information
- 2. There is a statistically significant relationship between the existence of legal legislation related to environmental accounting disclosure and the disclosure of environmental accounting information
- 3. There is a statistically significant relationship between the disclosure of environmental accounting information and the financial performance of companies
- 4. There is a statistically significant relationship between the disclosure of environmental accounting information and the pricing of services provided by the company.

#### **3.2.** Population of the Study

The population of the study consists of two parts.

Section I: Consists of 12 Jordanian tourism and hotels public shareholding companies listed on the Amman Stock Exchange. The questionnaire is distributed to the study sample composed of the financial managers of these companies.

Section II: Consists of investors in tourism and hotels companies where the names of investors are obtained through the brokerage offices accredited by the Amman exchange and the questionnaire is distributed to all investors in these companies to express their views on the importance of environmental accounting disclosure for them.

#### 3.3. Data Collection

Two types of data have been relied on:

- 1. Secondary data: Data derived from the available related literature to the environmental accounting disclosure in some books, periodicals and previous studies related to the subject
- 2. Preliminary data: The data collected through the distribution of the questionnaire to industrial companies and investors in these companies.

#### 3.4. Statistical Methods

To test the hypotheses of the study, the statistical analysis of the data that emerged from the questionnaire questions was carried out using the Statistical Package for Social Science (SPSS), which is known as the SPSS, and adopted the following statistical methods:

1. Test the degree of reliability and stability of the data of the study tool reliability analysis:

The Cronbach's coefficient alpha reliability test was used to measure the reliability of the questionnaire questions and to analyze the internal consistency of the study instrument data. Alpha is interpreted as the internal stability coefficient between the responses. Therefore, the statistically accepted value of this parameter is 60% If it is less, the credibility is weak, and the value of alpha is between zero and one true.

#### 3.4.1. Measures of central tendency

The measures of central tendency enable us to determine the location of the point at which all values are centered, that is, they are moving towards or approaching a given value in the center, according to the measured scale, to give a certain indication of a community through the calculated sample data. The arithmetic mean and its proportion as one of these measures.

#### 3.4.2. The mean

The mean of the responses of the study sample was used to test the hypotheses of the study. A default mean of 3 was used according to the Likert quintile, which is equivalent to 60% (5 + 4 + 3 + 2 + 1)/5 = 3, The computational arguments of each paragraph with this medium in order to accept or reject the hypothesis.

#### 3.4.3. Measurement of dispersion

Scattering measures show the extent to which statistical data are distributed quantitatively, ie, their distance from the center. The deviations or differences of vocabulary are measured from one of the levels or criteria that is usually one of the averages.

#### 3.5. Standard Deviation

This measure is used to indicate the amount of dispersion of values from this arithmetic mean. The standard deviation was used to measure and measure the extent of the dispersion of the responses of the study sample members to the arithmetic mean. The higher the standard deviation, the greater the response to the arithmetic mean.

#### **3.6.** Percentages

This measure is used to divide the data by a certain percentage, as it was used to summarize data relating to the personal aspects of the sample members.

Frequencies use duplicates to describe views and general trends and give them order by importance from the point of view of the members of the study sample.

Level: The following equation was adopted ([5.1]/3 = 133)

- A from 1-2.33 low
- B from 2.34 to 3.67 average
- C from 3.68 5 high.
- 1. Test "T" to test hypotheses

The Cronbach's t Alpha test was used to measure the reliability of the questionnaire questions and to analyze the internal consistency of the study instrument data. Alpha is interpreted as the internal stability coefficient between the responses. Therefore, the statistically accepted value of this parameter is 60% if it is less, the credibility is weak, and the value of alpha is between zero and one true.

 Test the degree of credibility and consistency of the data in the questionnaire: In order to ascertain the credibility of the questionnaire

and to ascertain the clarity and wording of the paragraphs, the researcher presents them to a number of faculty members of the Faculty of Business Administration at several Jordanian universities. All of them present valuable observations enriching the research in order to take out the questionnaire in its final form.

2. Test the degree of reliability of the data in the questionnaire according to the Cronbach's alpha factor: To verify the stability and reliability of the data in the designed questionnaire, in which the rejection or acceptance of the questionnaire is determined, the Cronbach factor (alpha) is used. As mentioned earlier, the value of the alpha factor is between 0 and 1 and the minimum statistically acceptable of the stability factor is (60%) in this type of studies, and the closer the value of Kronbach (alpha) of one, the greater the degree of consistency and consistency of the answers, the greater the credibility of the questionnaire is good, and the results can be generalized. The following table shows the results of this test for the individual variables of the study variables, and for the variables as a whole:

Table 1 shows that the value of the Cronbach factor (alpha) for the responses of the sample to the questionnaire's sections for each part of the hypotheses is greater than the minimum acceptable of alpha factor (60%). The factor for all questionnaire sections is >60%. This indicates that there is a high degree of credibility in the responses, and there is also internal consistency between the paragraphs of the questionnaire. Therefore, this questionnaire is adopted as the primary source of field study data. Therefore results can be generalized to the whole study community which represents financial managers in industrial companies and investors.

The researcher depends on the analysis of the mean data as a measure of the responses of the sample members as well as the standard deviation to measure and indicate the dispersion of the responses of the sample's members for the arithmetic mean.

#### 3.7. The First Hypothesis: There is a Relationship of Statistical Significance between the Level of the Company Management's Awareness of Environmental Issues and the Disclosure of Environmental Accounting Information

Table 2 shows that except paragraph 13, all the paragraphs obtain an arithmetic mean >3.00 and the significance levels of observation are <0.05, ie, they are statistically significant. Paragraph 5, which relates to "the management of the company examines the means

#### Table 1: The value of the cronbach factor (alpha) for the responses of the sample to the questionnaire's data analysis

Iteams	No. items	Value of alpha (%)
Level of the company management's awareness	17	81.1
Legal legislation related to environmental accounting	8	82.8
The financial performance of the companies	7	81.5
The pricing of the services provided by the company	6	84.6
Total	38	82.5

of disposal of solid and hazardous waste and the performance of pollution control devices, has been ranked first and in the middle of the mean as 4.585. Paragraph 10, relates to the application of environmental accounting disclosure procedures in the company in making good decisions in production" has been ranked second, with an arithmetic mean of 4.567. Then paragraphs 9, 6, 1, 11, 8, 12, 17, 4, 2, 14, 16, and 3 at the following ranks. Paragraph 15 relates to supporting the company's accounting disclosure of the environmental impact in its last activities in the statistically accepted paragraphs.

Paragraph 13 receives a mean with <3.00 i.e., the role of the accountant should be limited to the preparation of the conventional financial statements and should not exceed the preparation of environmental financial statements.

The researcher in Table 2 considers that there is a great conviction of the management of companies of the importance of applying the system of environmental accounting and disclosure of environmental accounting data. Besides the application of environmental accounting disclosure procedures improves the fairness of the financial statements, but at the same time the researcher believes that the management of companies have a great fear of The application of environmental accounting disclosure procedures, where they believe that environmental accounting disclosure may harm the reputation of the company, and also because of lack of sufficient experience and affordability of the company. The management of companies considers that it is difficult to apply environmental accounting disclosure to those companies.

The researcher also believes that when it comes to disclosing data with environmental impact information, the management of companies becomes very concerned about the disclosure of such data. It may be due to the researcher's view that these companies have negative environmental effects that do not want to be disclosed. This disclosure of such environmental information doess not cause any damages to the companies.

In order to test the first hypothesis, Table 3 shows that the mean is 4.353 and the mean of the significance of the observation is 0.00, i.e., it is a statistical function, where the first hypothesis is accepted. There is a statistically significant relationship between the level of the company's awareness of environmental matters and the disclosure of environmental accounting information.

#### **3.8.** The Second Hypothesis: There is a Statistically Significant Relationship between the Existence of Legal Legislation Related to Environmental Accounting Disclosure and the Disclosure of Environmental Accounting Information

Table 4 shows that all the paragraphs obtain the means >3.00 and the significance levels of observation <0.05 i.e., they are statistically significant. Paragraph 21 relates to "obliging Jordanian legislations to apply accounting standards related to the application of environmental accounting disclosure" in the first rank and with an arithmetic mean of 4.369. Paragraph 18 relates to "compelling Jordanian legislation to industrial companies to implement

Table 2: Mean, standard deviation, t-value and level of significance regard the level of the company management's
awareness

aware	:ness			
No.	Items	Mean	Standard deviation	Level
1	The company has a specialized team of technicians to study public policies in the field of the environment	4.441	0.56576	5
2	The company has a specialized team of technicians to assess public policies in the field of the environment	4.049	0.83600	12
3	The company's management examines the environmental status of the environmental receptors (surface, groundwater, sea, air and ocean, living organisms)	3.927	1.09057	15
4	The company's management examines operational practices and procedures, monitors and analyzes emissions and inspect storage facilities	4.198	0.72224	11
5	The company's management examines the disposal of solid and hazardous waste and the performance of pollution control devices	4.585	0.59361	1
6	Environmental accounting procedures and environmental accounting disclosure cannot be applied by industrial companies	4.495	0.68433	4
7	The concept of environmental accounting disclosure is unclear to the management of the company	4.387	0.70127	8
8	There is a need to apply environmental accounting disclosure in the industrial company listed on the Amman stock exchange	4.391	0.58991	7
9	The application of environmental accounting disclosure procedures contributes to the emergence of so-called environmental revenue resulting from the sale of industrial waste which is involved in the production of other industries	4.531	0.56792	3
10	The application of environmental accounting disclosure procedures in the company helps in making rational decisions in production	4.567	0.56475	2
11	The disclosure of amounts allocated and disbursed to address the environmental impact caused by the company to increase the volume of sales	4.423	0.70614	6
12	The application of environmental accounting disclosure and disclosure of environmental impacts is detrimental to the Company's reputation	4.351	0.66793	9
13	The role of the accountant should not be limited to the preparation of traditional financial statements, but also to the preparation of environmental financial statements	2.864	1.18426	17
14	Application of environmental accounting disclosure leads to unnecessary spending by companies applying environmental accounting procedures.	4.013	1.01339	13
15	I support the company's disclosure of the environmental impact related to its industrial activities	3.522	0.99634	16
16	The application of the company's environmental accounting disclosures improves the quality of the financial statements	3.95	0.83600	14
17 Total	Environmental accounting information contributes to investment decision making	4.265 4.353	0.74700 0.54229	10

#### Table 3: t-test results for the company's management of environmental matters

Items	Mean	Standard deviation	t-calculated	t-tabulated	DF	Sig.*
Level of the company's awareness of environmental matters	4.353	0.54229	119.61	3.291	221	0.000

#### Table 4: Mean, standard deviation, t-value and level of significance regard the legal legislation

No.	Items	Mean	Standard deviation	Level
18	Jordanian legislation requires companies to implement environmental accounting disclosure	4.121	82855	2
19	The development of environmental legislation contributes to the application of environmental accounting disclosure	3.941	1.08097	4
20	The non-application of environmental accounting disclosure will result in legal violations against the company	4.067	96544	3
21	Jordanian legislation requires the application of accounting standards relating to the application of environmental accounting disclosure	4.369	67170	1
22	The absence of a regulatory body requesting the disclosure of environmental accounting information contributes to the non-application of environmental accounting disclosure	3.846	87394	5
23	Legislation prohibits the acceptance and approval by government agencies of lists of companies that do not apply environmental accounting disclosure procedures	3.175	1.10970	8
24	Companies comply with article (4) of the securities and exchange commission's disclosure instructions, which provides for disclosure of the company's contribution to the protection of the environment and the local community	3.783	92629	7
25	Legal action is taken against companies in case they fail to comply with the provisions of article (4) of the disclosure instructions concerning the company's contribution to the protection of the environment	3.815	82776	6
Total	•	3.968	65315	

environmental accounting disclosure" in the second rank with a mean 4.121. Paragraphs 20, 19, 22, 25 and 24, are followed respectively. Paragraph 23 relates to the prohibition of legislation to be accepted and approved by government agencies for lists of companies that do not apply environmental accounting disclosure procedures in the final rank with a mean 3.175.

The researcher believes that in Table 4, Jordanian legislation obligates Jordanian tourism and hotel companies to apply environmental accounting disclosure. There is also a development in the Jordanian environmental legislation, but in fact and looking at some reports of companies, there is a lack of real and serious commitment to this. The applied penalties by the securities commission are not considered a deterrent to companies that do not disclose environmental data and information. The penalty may in some cases lead to the declaration of names of companies that do not disclose. The researcher believes that such penalties are not enough and does not urge companies to adhere to disclose data relating to the environment.

In order to test the second hypothesis, Table 5 shows that the arithmetic mean is 3968 and the mean of the significance of the observation of 0.00. This is a statistical function. The second hypothesis is accepted. There is a statistically significant relationship between the existence of legal legislation related to environmental accounting disclosure and the disclosure of environmental accounting information.

# **3.9. The Third Hypothesis: There is a Statistically Significant Relationship between the Disclosure of Environmental Accounting Information and the Financial Performance of Companies**

In paragraph 6, it is clear that all the paragraphs obtain means are >3.00 and the significance levels are <0.05 i.e., they are statistically significant. Paragraph 32 relates to "the contribution of environmental accounting disclosure, has led to the company charging the employees with health expenses and compensation." In the first rank and with a mean 4.400. Paragraph 30 relates to "the industrial company being charged fines for failing to comply with environmental standards and laws." in second rank with a mean 4.220. Then paragraphs 27, 29, 31, are equal and with an arithmetic mean 4.211. Paragraph 28 with a mean 4.180. Paragraph 26 relates to "the company bears expenses to prevent the occurrence of environmental damage that may be caused by the industrial company" in the last rank with a mean 3.918.

The researcher believes that Table 6 shows that industrial companies may incur expenses to prevent environmental damage. Environmental accounting contributes to increase profitability in the long term. Companies bear fines due to non-compliance with environmental standards. In fact, to protect the environment, penalties and fines are imposed on companies that cause environmental pollution, which is easy to detect, and which may cause such fines and violations to occur. The researcher also believes that disposal of waste in an environmentally sound manner leads to environmental revenue.

As for the third hypothesis, Table 7 shows that the arithmetic mean is 4.159 and the significance level is 0.00. This is a statistical function. The third hypothesis is accepted. There is a statistically significant relationship between the disclosure of the environmental accounting information and the financial performance of the companies.

#### **3.10.** The Fourth Hypothesis: There is a Statistically Significant Relationship between the Disclosure of Environmental Accounting Information and the Pricing of Services Provided by the Company

Table 8 shows that paragraphs 33 and 34 obtain means >3.00 and the mean of significance of observation is <0.05 i.e., they are statistically significant. Paragraph 34 relates to "the pricing of services by taking all elements of environmental and non-environmental costs into consideration," is ranked first with a mean 3.585. Paragraphs 37 and 38 have a mean of <3.00, which is not a statistical function.

The application of environmental accounting disclosure will lead to long-term profits for a company through optimal utilization of

Table 5: t-test re	esults for the compa	nv's management (	of legal legislation
14010 01 0 0000 10	is and for the compa	ing of managementer	or regar registation

<b>I</b> V 8		0 0				
Items	Mean	Standard deviation	t-calculated	t-tabulated	DF	Sig.*
Legal legislation related to environmental accounting	3.968	0.65315	90.52	3.291	221	0.000

# Table 6: Mean, standard deviation, t-value and level of significance regard the disclosure of environmental accounting information and the financial performance of companies

No.	Items	Mean	Standard deviation	Level
26	The company shall bear expenses to prevent the occurrence of environmental damage that may be caused by it	3.918	0.82534	5
27	Environmental accounting disclosures increase the profitability of the company over the long term	4.211	0.70886	3
28	Environmental accounting disclosures improve the company's reputation for customers	4.180	0.68200	4
29	The optimal use of energy reduces the cost of the product and thus increases the profits of the company	4.211	0.70886	3
30	The company is liable for fines for not complying with environmental standards and laws	4.220	0.62448	2
31	Disposal of waste in an environmentally sound manner results in environmental revenue	4.211	0.70886	3
32	Environmental accounting disclosure contributes to the company's payment of health expenses and compensation to its employees	4.400	0.75902	1
Total		4.159	0.60381	

Table 7: t-test results for the disclosure of environmental accounting information and the financial performance of
companies

Items	Mean	Standard deviation	t-calculated	t-tabulated	DF	Sig.*
the financial performance of the companies	4.159	0.0381	102.65	3.291	221	0.000

#### Table 8: Mean, standard deviation, t-value and level of significance regard the pricing of services provided by the company

No.	Items	Mean	Standard deviation	Level
33	Disclosure of environmental performance leads to improved product quality and rationalization of consumers' tendency to use environmentally friendly products	3.396	1.08281	2
34	Products are priced by taking all elements of environmental and non-environmental costs into consideration	3.585	1.16486	1
35	Environmental accounting discloses the correct cost of products	2.851	1.32175	4
36	Disclosure of environmental costs leads to increased quality of the cost accounting system in the facility.	2.941	1.22241	3
37	Disclosure of environmental costs reduces current operating costs and rationalizes the use of resources	2.792	1.25930	6
38	Disclosure of environmental costs leads to sound environmental decisions that contribute to cleaner production	2.828	1.06252	5
Total	-	3.112	86061	

Table 9: t-test results for the pricing of services provided by the company

Items	Mean	Standard deviation	t-calculated	t-tabulated	DF	Sig.*
The pricing of the services provided by the company	3.112	0.86061	53.88	3.291	221	0.000

energy and inputs. The researcher finds that there is insufficient interest by the banks in the level of environmental disclosure in the tourism and hotel companies. The granting of credit is not related to the environmental condition of the company. Besides the companies that disclose their environmental data may enjoy a competitive advantage distinguish them from the rest of the companies. Environmental disclosure of tourism and hotel companies contributes to improve the pricing of services and raise the efficiency of the cost system in these companies.

The researcher considers that Table 8 shows environmental accounting disclosure leads to improve service quality and increase consumer demand for environmentally friendly services.

The researcher also finds that the environmental accounting disclosure neither help to determine the cost of services properly, nor it leads to raise the quality of the company's cost accounting system. This fact contradicts the results of some studies which conclude that the environmental accounting system and environmental accounting disclosure leads to determine the cost of service correctly and also improve the cost accounting system used by companies.

In order to test the hypothesis, Table 9 shows that the mean is 3.16 and the significance level is 0.00. This is a statistical function. The seventh hypothesis is accepted. There is a statistically significant relationship between the disclosure of the environmental accounting information and the pricing of the services provided by the company.

### **4. CONCLUSIONS**

The study aims to identify the role of environmental awareness in the application of environmental accounting disclosure and its importance to investors in industrial public shareholding companies. Referring to the analysis of the data and testing hypotheses, the researcher can conclude the most important conclusions:

The management of companies has sufficient awareness of the importance of environmental accounting and the application of environmental accounting, but at the same time, this awareness may be accompanied by the lack of appropriate experience and qualification for the application of accounting environment and environmental accounting disclosure. The researcher finds also that companies has a sense of fear and reluctance to apply disclosure environmental accounting because of the uncertainty of the benefits of this application and fear that it would be an additional burden on the company. Comparing the present study with the study of Donna et al., 2018; Enas et al., 2011; Lu'ay et al., 2011 it is found that there is a consensus that there is a difficulty for industrial companies to comply with environmental legislation and standards and the importance of following them. The researcher also believes that the need to work to increase awareness of the environment, in response to organizations and entities that demand companies responsibility for the environment, and this is consistent with Taher (2010).

The Jordanian legislations contribute to the application of environmental accounting disclosure and there is a remarkable development in this legislation which covers many environmental aspects. However, the fact that these legislations deal with the management of companies is very shameful. The researcher finds that there is some kind of (courtesy) with the management of industrial companies, since the legislation exists but is not effective, and if so it does not deal with the required rigor to force industrial companies to take effective steps in the preservation of the environment and move forward towards the application of environmental accounting and disclosure of environmental Saleh and Jawabreh: Role of Environmental Awareness in the Application of Environmental Accounting Disclosure in Tourism and Hotel Companies and its Impact on Investor's Decisions in Amman Stock Exchange

accounting information adequately. This is consistent with the study of Elena et al., 2011 and Eljayash, 2015), when comparing the current study with Al-Hussein et al., 2015; Bazazo et al., 2017; Bank and Bank, 2018; Francisco et al., 2014; Saleh et al., 2012). The researcher believes that there is consensus in terms of the impact of environmental accounting disclosure on investor decisions and that environmental accounting disclosure may lead to correction of these decisions.

The application of the company to disclose the environmental accounting information will improve the financial performance of the company. The optimal utilization of energy leads to a reduction in the cost of production and thus increasing profits. it can also be mentioned here the experiences of some industrial companies in the field of environmental revenue, the waste of industrial companies, and the accounting disclosure of environmental accounting information may improve the reputation of the company to its customers. By comparing this study with Al-Thaher and Al-Bahlul, 2011 the researcher finds that there are points of convergence between the two studies, as there is no actual application of environmental accounting or measurement of environmental costs, and both studies find that most companies have a strong conviction of the need to develop the system to include data and information on environmental activities. There is increasing awareness and growing awareness by corporate management of the importance of environmental accounting.

The disclosure of environmental accounting information in companies leads to a competitive advantage that improves performance, especially in the long term, by increasing their ability to market their products and reduce the marketing costs of their products. The disclosure of environmental accounting information in companies may also result in a competitive advantage that facilitates to obtain various bids and tenders, as many companies and concerned parties prefer to deal with companies that enjoy a good environmental reputation.

The researcher believes that the disclosure of environmental accounting information in companies leads to the ability to obtain governmental and international support through government agencies and international organizations, and helps these companies to obtain consumer satisfaction through the production of environmentally friendly products that enhance the role and presence of these companies. It leads to the possibility of increasing term profitability.

The researcher believes that the disclosure of environmental accounting information in companies contributes to raise the efficiency of the cost system in these companies by determining the cost of products in a correct manner, reducing the current costs and rationalizing the use of resources.

The researcher recommends to do studies aim at conducting environmentally adjusted financial statements. They aim at clarifying the importance of taking environmental accounts into consideration in the financial statements and the effect of these statements on improving the quality of these environmentally sound financial statements.

#### REFERENCES

- Abdul, A., Al-Sharif, J.O. (2016), The obligation of industrial companies to disclose the costs of social responsibility. Journal of Economic Sciences, 17(1), 106-121.
- Abdullah, A.B., Rickards, T. (2006), Rethinking creativity in the accounting profession: to be professional and creative. Journal of Accounting and Organizational Change, 2(1), 25-41.
- Ahmed, R.B, Ronald, D.P. (2001), The impact of multinationality on the informativeness of earnings and accounting choices. Managerial Finance, 27(12), 82-94.
- Alan, K.S., Tennyson, M. (2007), The accessibility of financial reporting of u.s. municipalities on the internet. Journal of Public Budgeting, Accounting and Financial Management, 19(1), 56-92.
- Al-Beraidi, A., Rickards, T. (2003), Creative team climate in an international accounting office: an exploratory study in Saudi Arabia. Managerial Auditing Journal, 18, 7-18.
- Al-Dosar, A. (2011), The Importance of Accounting for Environmental Costs in Improving the Quality of Accounting Information (A Field Study on Companies Listed on the Kuwait Stock Exchange), Unpublished Master Thesis. Jordan: Middle East University.
- Al-Hussein, M., Jawabreh, O., Alananzeh, O., Ali, M. (2015), The impact of understanding the behavior of workers on the success of management, (a case study of five star hotels in Aqaba). Journal of Management Research, 7(3), 51-70.
- Al-Taher, A. (2010), The Impact of Environmental Costs on Evaluating the Performance of Sudanese Industrial Establishments. An Analytical Applied Study on the Oil Sector, Department of Accounting, Faculty of Economics and Administrative Sciences, Red Sea University, Unpublished Master Study, 1-495
- Al-Thaher, A., Al-Bahlul, H. (2011), Accounting disclosure of environmental performance at the cement national company of Libya. (Expedition study). Damascus University Journal of Economical Science and Law, 27(1), 30-41.
- Ashkar, A., Refaat, A. (2011), The Role of Administrative Accounting in Improving the Environmental Performance of Egyptian Business Organizations (Applied Study), Unpublished Master Thesis. Egypt: Suez Canal University.
- Azhar, S., Meiryani, M. (2019), The impact of environmental accounting information system alignment on firm performance and environmental performance: A case of small and medium enterprises s of Indonesia. International Journal of Energy Economics and Policy, 9(2), 229-236.
- Bank, M., Bank, C. (2018), The business of climate change: A perspective of environmental performance on the tourism industry. African Journal of Hospitality, Tourism and Leisure, 7(2), 1-14.
- Bazazo, I., Alshatnawi, E.A.R., Jawabreh, O., Alshawagfih, K.F.A. (2017), The effect of adopting the international standard (ISO 10015) in training programs on the performance quality of the workers at the Jordanian ministry of tourism and antiquities. Journal of Social Sciences, 6(3), 694-708.
- David, S., Kerry, J. (2011), Breaking up the sky: The characterisation of accounting and accountants in popular music. Accounting, Auditing and Accountability Journal, 24(7), 904-931.
- Dian, A., Tjiptohadi, S., Wiwiek, D. (2019), The mediating effect of environmental management accounting on green innovation firm value relationship. International Journal of Energy Economics and Policy, 9(2), 299-306.
- Divesh, S.S. (2001), The role of cash flow information in predicting corporate failure: The state of the literature. Managerial Finance, 27(4), 3-28.
- Donna, W., Subhadeep, B., Isaac, R. (2018), Evaluating the quality of environmental impact reporting for proposed tourism-related

Saleh and Jawabreh: Role of Environmental Awareness in the Application of Environmental Accounting Disclosure in Tourism and Hotel Companies and its Impact on Investor's Decisions in Amman Stock Exchange

infrastructure in the protected areas of South Africa: A case study on selected EIA reports. African Journal of Hospitality, Tourism and Leisure, 7(3), 1-5.

- Elena, B., Pascal, D., Niculae, F., Liliana, F.(2011), Mandatory Environmental Disclosures by Companies Complying with IAS/ IFRS: The Case of France. Germany and the UK: Cahier de Recherche.
- Eljayash, K.M.(2015), Documentation of environmental disclosure practices in the oil companies in the countries of the Arab spring some evidences from Egypt, Libya and Tunisia. Journal of Economics, Business and Management, 3(10), 954-960.
- Enas, F.M., Abu-Eker, Muneer, M.F.J., Omar, A.A.J., Mousa, M.A.S. (2011), The extent of applying the methods of management accounting in planning, controlling and pricing in Aqaba hotels. European Journal of Economics, Finance and Administrative Sciences, 36, 123-132.
- Farah, A.R., Riyad, H. (2011), The disclosure of the elements of corporate social responsibility (CSR), a case study of industrial companies listed on the amman stock exchange for 2007-2008. Jordan Journal of Business Administration, 7, 273-294.
- Francisco, C., Ana, D., Rute, A., Fátima, D.(2014), Environmental Disclosure From the Accounting to the Report Perspective, ICEIS 2014 16<sup>th</sup> International Conference on Enterprise Information Systems.
- Hassan, M. (2014), The Importance of Disclosing Environmental and Social Responsibility in Financial Reports Published in the Kingdom of Saudi Arabia, Creative Journal, Al-Mahasbi, Cairo, Ain Shams University, Faculty of Commerce, 2, 25-41
- Hussainey, K., Salama, A. (2010), The importance of corporate environmental repulation to investors. Journal of Applied Accounting Research, 11(3), 229-241.
- Imaduddin, M., Muhammad, F., Aditya, P., Muara, A., Aulia, R. (2019), Environmental disclosure as corporate social responsibility: evidence from the biggest nickel mining in Indonesia. International Journal of Energy Economics and Policy, 9(1), 115-122.
- Kamal, M.E. (2015), Documentation of environmental disclosure practices in the oil companies in the countries of the Arab spring some evidences from Egypt, Libya and Tunisia. Journal of Economics, Business and Management, 3(10), 954-960.
- Lu'ay, W., Issa, O.J., Muneer, J. (2011), The extent of applying the accounting responsibility in Aqaba hotels. International Research Journal of Finance and Economics, 69, 35-44.
- Lucky, N., Wiwik, U., Taufik, A., Willy, A. (2017), The challenges of microfinance institutions in empowering micro and small entrepreneur to implementating green activity. International Journal of Energy Economics and Policy, 7(3), 66-73.
- Lulu, Y.J. (2016), The Availability of the Components of Environmental Cost Accounting in Industrial Companies in the Gaza Strip (Analytical Field Study), Unpublished Master Thesis. Gaza: Islamic University.
- Meiryani, A.S., Dezie, L.W. (2019), The issues influencing of

environmental accounting information systems: An empirical investigation of SMEs in Indonesia. International Journal of Energy Economics and Policy, 9(1), 282-290.

- Mousa, M.A.S., Omar, A.A.J., Mohammad, N.A., Eman, M. (2018), Environmental accounting as perspective for hotels of Aqaba special economic zone authority (ASEZA). Problems and Perspectives in Management, 16(4), 169-185.
- Mujahid, A.H.B. (2014), The Effect of Accounting Measurement and Disclosure on Environmental Costs in the Quality of Financial Reports (A Field Study at Petrodar Petroleum Operations) A Supplementary Study for a Master's Degree in Accounting and Finance, Al-Zaeem Al-Azhari University.
- Muna, A.H. (2014), The Effect of Measuring and Disclosing Environmental Costs in Improving the Efficiency of Environmental Performance (Applied Study), Unpublished Master Thesis, Damascus University.
- Musora, O., Joseph, M., Mike, M. (2017), Tourists' perceptions of environmental impacts of tourism development on water resources in the Okavango Delta, Botswana. African Journal of Hospitality, Tourism and Leisure, 6(3), 1-10.
- Noemi, R., Raffaele, T. (2010), Environmental reporting and accountability in the Lazio region between national guidelines and pilot experiences of local governments in Italy. Economia Aziendale Online, 1(3), 323-334.
- Saidi, S.H. (2014), Accounting Standard for Environmental Impact and Disclosure in Industrial Institutions (Case Study of Hama Bouziane-Constantine), Unpublished Master Thesis. Algeria: University of Constantine.
- Saleh, M., Muneer, M., Jaradat, M., Jebreel, F. (2012), Environmental disclosure in industrial companies in Aqaba. Journal of Management Research, 4(3), 278-292.
- Shale, L., Rantšo, T. (2019), A community based model of environmental resource conservation and livelihoods: Non-governmental organisation supported tšenekeng botanical garden in semonkong, Lesotho. African Journal of Hospitality, Tourism and Leisure, 8(1), 1-18.
- Taher, A. (2010), Accounting disclosure about environmental performance in Al-Ahlia Cement Company, Libya, "an exploratory study." Damascus University Journal for Economic and Legal Sciences, 27(1), 33-48.
- Thomas, P.L., John, W.M. (2011), Greenwash: Corporate environmental disclosure under threat of audit. Journal of Economics AND Management Strategy, 20(1), 3-41.
- van de Dion, B., Vieira, R.J.O.(2014), Environmental Disclosure Determinants in Dutch Listed Companies. Vol. 25. Sao Paulo: R. Cont. Fin. USP. p60-78.
- Yahya, A.L. (2015), The Effect of Disclosure of Social Responsibility on Improving Financial Performance of the Economic Corporation (Case Study of Plasti-Anubi-Valley Foundation) Thesis submitted for Master Degree. Lakhdar: University Al-Shaheed Hama.
- Yingjun, L., Indra, A. (2014), Stakeholders' power, corporate characteristics, and social and environmental disclosure: Evidence from China. Journal of Cleaner Production, 64, 426-436.