

The Application of Green Accounting and its Reflection on Increasing Sales

Murtadha Mohammed Shan ^a, Layth Ali Hammadi Al-Tameemi ^b

^a *Department of Accounting, Babylon Technical Institute, Al-Furat Al-Awsat Technical University, Iraq.
E-mail: murtadha.shani@atu.edu.iq*

^b *Department of Accounting, Babylon Technical Institute, Al-Furat Al-Awsat Technical University, Iraq.
E-mail: Layth.hammadi@atu.edu.iq*

Abstract

This research aims to find solutions to the problems that most economic units suffer from, represented by changing customer tastes and consequently declining sales through the application of green accounting and an attempt to show the effect of this on increasing sales, and get acquainted with the concept of green accounting and what are the modern methods and tools in this field and the most important findings of the research Green accounting contributes to reducing environmental influences at the same time by rationalizing the use of energy, water, and materials in internal processes and final products.

Keywords: Green Accounting, Increase Sales, Green Accounting Methods.

Introduction

Technological progress and a pause in several changes, changes in consumer tastes, intensification of competition between companies, increased customer awareness, and pressure from environmental organizations prompted companies to adopt green accounting to maintain their reputation and market share, as there are studies conducted in the United States that companies that did not apply Environmental Accounting Sales are down 18% compared to companies with an environmental commitment.

Research Methodology

- A. The Research Problem:** In light of the intense competition faced by companies and the development of production methods and methods, companies are facing other problems represented in changing the tastes of customers and facing most customers to acquire environmentally friendly products, and this was reflected in the decline in sales of some companies as a result of the presence of a competitor that produces environmentally friendly products at a competitive price, and this is reflected in the impact of the application of green accounting on corporate sales, so it is a problem to research through the following questions:
1. Does the application of green accounting reflect positively on increasing sales?
 2. The application of green accounting improves the reputation of the economic unit in a way that enhances its competitive position.
 3. Do the desires and tastes of customers affect the company's sales?
- B. Research Objectives:** The objectives of the research are to find solutions to the problems that most economic units suffer from, represented by changing customer tastes and consequently declining sales through the application of green accounting and an attempt to show the effect of this on increasing sales and identifying the concept of green accounting and what are the modern methods and tools in this field.
- C. Research Importance**
1. Helping companies to demonstrate the importance of applying green accounting and its reflection on increasing their sales.
 2. Clarify and clarify the importance of applying green accounting and its reflection on improving the content of companies' financial statements.
 3. Demonstrating the role of green accounting in increasing companies' ability to compete in line with users' expectations.
- D. Research Hypotheses**
1. The application of green accounting affects increasing companies' sales in light of the tendency of most customers to purchase environmentally friendly products.
 2. The adoption of green accounting contributes in one way and another to strengthen the competitive position of companies in a way that enhances their financial position.

The Theoretical Aspect of the Research

A. Green Accounting Concept

Green accounting is defined as the systematic description within an accounting framework of the interrelationships between the environment and the economy. (Badran, 2014).

It is the identification, compilation, analysis, and disclosure of environmental cost information and relying on it in economic decisions. (Tunis and Ranan, 2017).

It is a branch of accounting that includes measurement methods and disclosure of information related to the activities and procedures of the economic unit that have an environmental impact in financial reports or independent reports. That measurement and disclosure in its framework include ecological costs as well as other elements related to environmental activities aimed at providing internal and external parties with the information necessary to take Decisions, monitor, and evaluation of environmental performance. (Abdul-Samad and Makri, 2016).

It is a tool that provides beneficiaries with accounting information and decision-makers with cost information related to environmental aspects. Any inclusion and integration between the methods of measurement and disclosure of activities and programs that affect the environment, and its task is to measure the cost of the various activities of the economic unit and their impact on natural resources and to use the results of these measurements to help the competent authorities to realize and correct the negative effects of the activity of the economic unit on the environment. (Yored, 2019).

B. Motives for Green Accounting

The most important reasons that led to the interest in accounting in the environment can be summarized in the following points: (Abdul-Majid and Amin, 2017).

1. **The Emergence of Environmental Protection Laws:** As a result of the negative effects of economic units, which forced many countries to issue laws aimed at protecting and preserving the environment to ensure the continuation of economic progress without harming the human environment.
2. **Lenders:** Lenders are concerned with the financial effects resulting from many environmental factors and the inability of traditional accounting to provide such information, which led to the emergence of the need for green accounting to deal with environmental issues.
3. **Consumers:** They are those who wish to obtain information on the performance of the product and to obtain environmentally friendly products.
4. **Investors:** Investors take into account the extent to which economic units comply with environmental requirements to ensure the continuity of the flow of profits, as bad environmental practices lead to an increase in obligations and thus increase risks and reduce profits.
5. **The Emergence of Tax Pressure Associations:** Environmental associations in many countries are exerting increasing pressure on institutions and governments to preserve the environment and protect it from various damages that may be exposed it.
6. **Improving the Quality and Price of Products:** The increasing role of green accounting and the associated costs in pricing products by considering all elements of environmental costs when calculating the revenues and costs of environmental institutions.

C. Green Accounting Objectives

The application of green accounting is a means to achieve a set of goals, which are: (Asmaa, 2015) and (Al-Jawzi, 2012).

1. Contribute to sustainable economic development to improve knowledge and understanding of the increasing interactions in the environment and the economy.
2. Designing new forms of accounting systems, information systems, and financial and non-financial control systems to encourage the work of environmental management.
3. Developing new methods and methods of performance evaluation and environmental communications internally and externally.
4. Preparing data and providing information on sales and total costs that aim to preserve the environment.
5. Preparing reports on environmental expenditures to clarify the extent to which economic units are committed to implementing laws and legislation related to environmental protection.

D. Components and Obstacles of Green Accounting

The elements of green accounting can be summarized as follows: (Nasour and Yassin, 2016).

1. **Compliance:** Green accounting supports the protection of the environment and a commitment to the efficiency of compliance with environmental laws through the planning and implementation of pollution control investments and the control of environmental waste and emissions.
2. **Economic Efficiency:** Green accounting contributes to reducing costs and environmental impacts at the same time by rationalizing the use of energy, water, and materials in internal processes and final products.
3. **Strategic Location:** Green accounting contributes to the evaluation and implementation of environmentally sensitive and cost-sufficiency programs to ensure the unit's strategic location in the long term by working with suppliers to design products that cover the green market.

The obstacles to green accounting can be summarized as follows: (Tijani and Abdel Halim, 2008).

1. Difficulty determining the size of losses or estimating compensation and their effects.
2. The difficulty of determining the types of pollution, their causes.
3. The difficulty of enumerating the types of damage caused to the environment.
4. Different cultures and their impact on the development between accounting and other professions.

E. The Sales

Definition of sales: They are products provided by the economic unit and the financing agencies and other products or services that the sales department sells to the beneficiaries. It is also known as the good or service that is exchanged in exchange for providing money immediately, or through a financial bond. This bond is an invoice, contract, or anything else. (Othman, 2017).

And that sales forecasting is one of the main functions of the administration, as it sets goals, policies, programs, and procedures, and takes decisions that affect one way or another the future of the project. To participate in the planning process, each according to his position, even if it is within narrow areas or limits, and we must not forget that the costs spent on planning operations are less than the expected revenues as a result of that, and this is what is called planning sufficiency, And adherence to the drawn plans and their application in the correct manner to know or measure the deviations resulting from the application process when comparing the port with what is planned, within the permissible flexibility and studying these deviations to avert them in the future. daily, such as the continuous rise in the cost of production about the element of labor and services, the increase in the strength of competition, and the continuous change in the characteristics of the market. (Obaidat, 2012).

F. Factors that Affect Sales Volume

Many factors affect the volume of sales, these factors may be internal or external, which in turn are divided into different factors as follows: (Kafi, 2012).

External Factors

1. **Political Factors:** Wars, countries' disputes, and fluctuations in the political situation resulting from the differences of political blocs are considered to have a significant and direct impact on the process of planning and forecasting sales.
2. **Economic Factors:** Projects are affected by the general economic aspects of the country in terms of their passing in periods of boom or economic depression, which lead to a positive and negative impact on the sales forecasting process.
3. **Government Control Over Sales Activity:** The government sometimes imposes procedures and regulations on the quality, specifications, and prices of the produced goods, which affects the sales forecasting process.
4. **Population:** The sales forecasting process is affected by the number of people and their geographical distribution according to age groups, gender, population growth rate, consumption habits, and culture.
5. **Technical Factors:** Technical factors also affect sales forecasting as a result of continuous technological development, which leads to lower prices as a result of lower costs, despite the complications associated with technical development.
6. **Social Factors:** They include the prevailing social values and customs, purchasing power, national income, the volume of investments and their distribution to economic sectors, the level of competition in the market, the import and export plan in the project country, taxes and price fluctuations, all of which affect the sales forecasting process.

Internal Factors

They are the factors that can be controlled and controlled by the project management, namely:

1. Introducing new goods and developing old ones.
2. Use of new distribution methods.
3. Developing the efficiency of sales parties.
4. Pricing.
5. Advertising.
6. Marketing activity costs.
7. The efficiency of the administrative body.
8. Financial Resources.

Research Methodology

A. The Research Problem

In light of the intense competition faced by companies and the development of production methods and methods, companies are facing other problems represented in changing the tastes of customers and facing most customers to acquire environmentally friendly products, and this was reflected in the decline in sales of some companies as a result of the presence of a competitor that produces environmentally friendly products at a competitive price, and this is reflected in the impact of the application of green accounting on corporate sales, so it is a problem to research through the following questions:

1. Does the application of green accounting reflect positively on increasing sales?.

2. The application of green accounting improves the reputation of the economic unit in a way that enhances its competitive position.
3. Do the desires and tastes of customers affect the company's sales.

B. Research Objectives

The objectives of the research are to find solutions to the problems that most economic units suffer from, represented by changing customer tastes and consequently declining sales through the application of green accounting and an attempt to show the effect of this on increasing sales and identifying the concept of green accounting and what are the modern methods and tools in this field.

C. Research Importance

1. Helping companies to demonstrate the importance of applying green accounting and its reflection on increasing their sales.
2. Clarify and clarify the importance of applying green accounting and its reflection on improving the content of companies' financial statements.
3. Demonstrating the role of green accounting in increasing companies' ability to compete in line with users' expectations.

D. Research Hypotheses

1. The application of green accounting affects increasing companies' sales in light of the tendency of most customers to purchase environmentally friendly products.
2. The adoption of green accounting contributes in one way and another to strengthen the competitive position of companies in a way that enhances their financial position.

The Practical Aspect of the Research

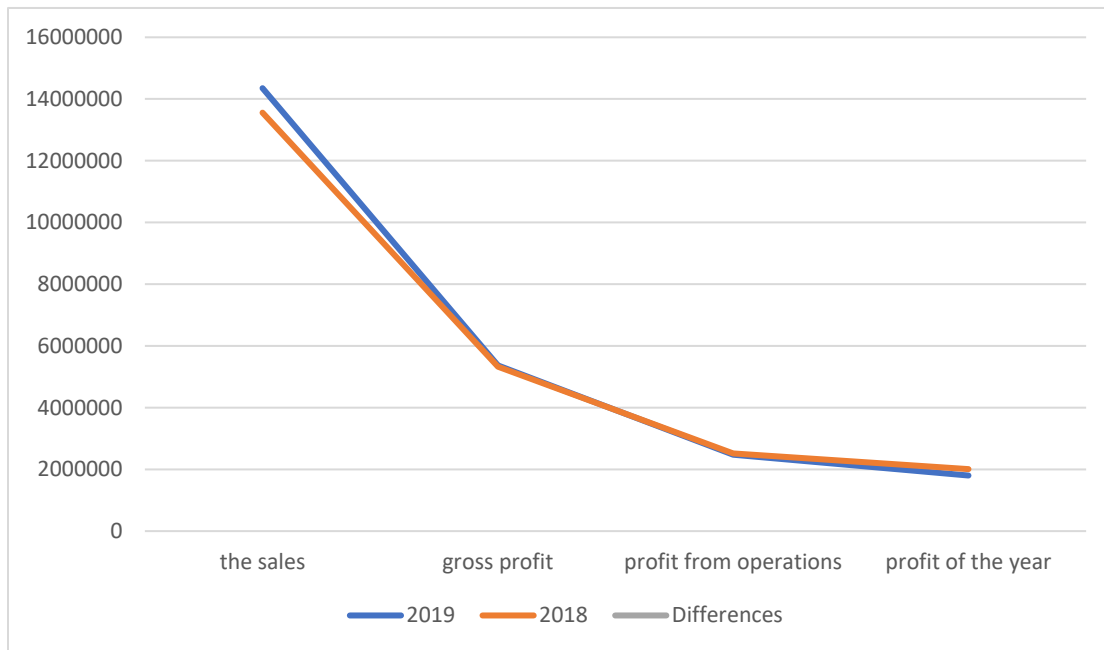
The practical side was conducted to search the financial statements of the Saudi Almarai Company, which are published on the company's website and approved by the auditor. The data for the years 2017 and 2018 were taken, considering the beginning of the application of green accounting, to show the increase in sales, as it seemed that the application of the smart farm system and environmentally friendly fodder is part of the project of the Kingdom of Saudi Arabia about sustainable development or Saudi 2035 in terms of adopting a strategy and establishing fully environmentally friendly tourist cities. The company has 42 subsidiaries spread in several countries around the world, and the data of the Almarai company that is committed to environmental or green accounting was compared with an Iraqi company that does not.

Almarai Company
 Private Joint-stock Company

The Details	Financial statements as of 31/12/2018 (Thousands of Saudi riyals)	Financial statements as of 31/12/2019 (Thousands of Saudi riyals)
Revenues	13557827	14351277
revenue cost	(8230763)	(8984603)
gross profit	5327074	5366674
Selling and distribution expenses	(2180244)	(2376328)
General and administrative expenses	(375204)	(400273)
Other expenses net	(275075)	(88672)
Impairment losses on financial assets	24684	(28192)
profit from operations	2521235	2473208
net financing cost	(426716)	(550739)
Share in the results of an associate company	(5413)	-
Profit before zakat and income tax	2079056	1922469
Zakat	(49352)	(71426)
Income tax	(21146)	(49471)
profit of the year	2008558	1801572

We note that Almarai Company's sales increased during 2019 to 14,351,277 compared to 2018, which is the beginning of the application of environmental accounting, which was also reflected in the increase in gross profit because the profit for the year decreased during 2019 as it became 1801,572 compared to 2018, which was 2008,558 riyals.

Despite the increase in the company's sales during the year 2019, the profits decreased from 2018, and this is a result of the increase in other expenses, zakat, and the cost of capital financing as a result of the expansion of investment and the use of environmentally friendly machines and tools, which are only during the first year. Also, the company was suffering during 2019 from a situation Corona and the global closure now, the expected sales were more than the achieved, and this is also what was reflected in the increase in sales in the years following the year 2019.



As the above chart shows the amount of difference and variance between sales and profits in the years 2018 and 2019 if the deviation is relatively simple, which does not exceed 6% for sales and 4% for profit.

Conclusions and Recommendations

Conclusions

1. Many countries have passed laws to protect and preserve the environment to ensure the continuation of economic progress without harming the human environment.
2. Consumers desire to obtain information on product performance and to obtain environmentally friendly products.
3. Environmental associations in many countries put pressure on institutions and governments in order to preserve the environment and protect it from the various damages it may be exposed.
4. Green accounting contributes to reducing environmental impacts at the same time by rationalizing the use of energy, water and materials in internal processes and final products.
5. The total profit of Almarai Company for the year 2019 became 1801, 572 riyals, compared to 2018, which is 2008, 558 riyals, which is the beginning of the application of green accounting.

Recommendations

1. The necessity of obligating companies to implement and preserve environmental protection laws without harming the human environment.
2. Encouraging companies to produce environmentally friendly products and urging consumers to purchase them.
3. Activating the role of environmental associations to preserve the environment and protect it from the various damages it may be exposed.

4. Applying green accounting methods to reduce costs through rationalizing the use of energy, water, and materials in internal processes and final products.
5. Apply green accounting in the public and private sectors to increase sales of companies and profit-oriented departments.

References

- Badran, A.J. (2014). *Economic and Sustainable Development*. First Edition, Cairo.
- Tounsi, A., & Bou, R.I. (2017). The role of environmental culture in strengthening the application of environmental accounting in light of the requirements of sustainable development. *Journal of Studies and Research*, (27).
- Abdel-Samad, N., & Makri, Z. (2016). The reality of environmental accounting measurement in public cement institutions. *Algerian Journal of Economic Development*, (4).
- Yorid, F. (2019). *The Role of Green Accounting in Achieving Sustainable Development*. Master's Thesis, Larbi Ben M'hidi University, Algeria.
- Abdul-Majid, M., & Amin, B.M. (2017). Measuring and disclosing environmental costs in the financial statements in light of the trend towards achieving sustainable development. *Journal of Administrative and Financial Sciences*, 1(1).
- Asmaa, J. (2015). *The Role of Environmental Cost Accounting in Achieving Competitive Advantages for the Industrial Enterprise*. Ph.D. Thesis, Mohamed Khider University, Biskra.
- Al-Jawzi, J. (2012). *The Importance of Environmental Accounting in Sustaining Development*. Intervention in an International Forum, Kasdi Merbah University of Ouargla.
- Nassour, R., & Yassin, A. (2016). *The Impact of Environmental Knowledge in the Concept of Green Accounting on Marketing Performance*. Faculty of Administration and Economics, Tishreen University.
- Tijani, B., & Gharbi, A.H. (2008). *Green Accounting System in the Framework of Sustainable Development*. An intervention in the International Scientific Conference entitled Sustainable Development and the Efficiency of Using Available Resources, Farhat Abbas University, Algeria.
- Othman, M.F.H. (2017). *The Role of Marketing Research in Increasing Sales*. Master's Thesis, Shendi University, Sudan.
- Obeidat, M.A. (2012). *Sales Department*. Cairo: The Arab Marketing Company in cooperation with the Open Teaching University.
- Kafe, M. (2012). *Marketing Communications between Sales and Negotiation Skills*. Osama Publishing, Jordan, First Edition.