






## The Impact of Social Responsibility on Environmental Accounting (Companies Listed on the Tehran Stock Exchange)

Mona. Hashempour Abandansari<sup>1</sup>, Mohammad Mehdi. Abbasian<sup>2\*</sup>, Abbas Ali. PourAghajan<sup>2</sup>, Aliakbar. Ramezani<sup>2</sup>,  
Alireza. Modanlo Joibary<sup>3</sup>

<sup>1</sup> PhD Student, Department of Accounting, Qaemshahr Branch, Islamic Azad University, Qaemshahr, Iran

<sup>2</sup> Department of Accounting, Qaemshahr Branch, Islamic Azad University, Qaemshahr, Iran

<sup>3</sup> Department of Management and Accounting, Behshahr Branch, Islamic Azad University, Behshahr, Iran

\* Corresponding author email address: mm.abbasian2@gmail.com

### Article Info

#### Article type:

Original Research

#### How to cite this article:

Hashempour Abandansari, M., Abbasian, M. H., PourAghajan, A. A., Ramezani, A., & Modanlo Joibary, A. (IN PRESS). The Impact of Social Responsibility on Environmental Accounting (Companies Listed on the Tehran Stock Exchange). *International Journal of Innovation Management and Organizational Behavior*.  
<https://doi.org/10.61838/kman.ijimob.5.x.x>



© 2025 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

### ABSTRACT

**Objective:** This study aims to investigate the impact of social responsibility on environmental accounting practices among companies listed on the Tehran Stock Exchange.

**Methodology:** The research employed a descriptive-correlational design, focusing on a sample of 198 financial managers selected from a population of 589 through simple random sampling and Cochran's formula. Data were collected using a questionnaire and analyzed using SPSS version 25 and PLS version 3 for structural equation modeling. Both library and field methods were used for data collection.

**Findings:** The results indicated that social responsibility significantly impacts environmental accounting, with a path coefficient of 0.401. The determination coefficient ( $R^2$ ) was 0.219, and the adjusted determination coefficient ( $R^2$  Adjusted) was 0.213, indicating a moderate fit. The normality test showed that social responsibility data were normal, while environmental accounting data were not. Convergent and discriminant validity tests confirmed the reliability and validity of the measurement model.

**Conclusion:** The study found a significant relationship between social responsibility and environmental accounting. Despite the importance of environmental costs, traditional accounting systems often neglect these costs. The adoption of environmental accounting practices can bridge the gap between environmental managers and accountants, enhancing both financial and environmental performance. Policymakers, managers, and regulators should consider integrating social responsibility into strategic planning and regulatory frameworks to promote sustainable business practices.

**Keywords:** *Social Responsibility, Environmental Accounting, Stock Exchange.*

## 1 Introduction

Human encroachment on nature has become so extensive that it even endangers human life on Earth (Braam & Peeters, 2018; Dilla et al., 2019). The depletion of natural resources, the extinction of plant and animal species, and ultimately, numerous environmental pollutants have prompted international communities and environmental NGOs to react (Aerts et al., 2008). With the increasing growth of factories and their pollutants, accounting must also play its role in preventing or at least reducing the damage to nature. This has led to the emergence of a new branch in accounting known as environmental accounting. Additionally, given the growing population and the limited natural resources available, the issue of environmental protection has become one of the most important issues facing human society today (Al-Ajmi, 2008). It is crucial to note that preserving the environment is not limited to political and geographical boundaries and requires the collective effort of all Earth's inhabitants. Thus, with the discussion of environmental protection and sustainable exploitation of nature, various encouraging tools, laws, and treaties have been established worldwide to support these issues. Human activities affect nature and the environment, altering the quality and quantity of natural resources. Societies react to these impacts through macroeconomic and environmental policies, environmental organizations, and sometimes by raising public awareness. However, sometimes governments are either unaware of the extent of the environmental damage or do not pay attention to it (Almahrog et al., 2018).

Since the mid-1970s, companies have been confronted with the concept of environmental liability reporting. Initially, these companies were reluctant to disclose environmental damages in their financial statements. However, over time and with the increasing damage, companies were compelled to address these issues (Ballou et al., 2018). In the current era, given some environmental restrictions, especially in global trade and the narrowing competitive field, there is a consensus that managers of business units are under increasing pressure to not only reduce operational costs but also minimize the environmental impacts of their operational activities (Braam & Peeters, 2018). This pressure is exerted by shareholders, the government, the media, consumers, and others

(Chepurko et al., 2018). Companies have no choice but to incorporate environmental costs into their accounts and decisions to reduce the environmental impacts of their operational activities (Chih et al., 2008). However, despite the significant size and importance of environmental costs, these expenses have been ignored by managers because the information provided by traditional accounting systems in this area is generally incomplete, incomprehensible, and irrelevant. The use of environmental accounting equips the organization with tools to revise the traditional accounting system and modify it to create a link between environmental managers and accountants. By bringing these two groups together, it is possible to move towards better financial and environmental performance in the future (Daoud et al., 2014). Therefore, in this context, the present study aims to present an environmental accounting model in the organization, emphasizing social responsibility indicators.

## 2 Methods and Materials

The present study is applied in terms of its objective and descriptive-correlational in terms of its nature and method. The statistical population includes all financial managers of companies listed on the Tehran Stock Exchange, totaling 589 individuals. Using simple random sampling and Cochran's formula, a sample size of 198 was determined. These managers have more than 15 years of experience in financial management and accounting and are sufficiently familiar with environmental accounting. The study used both library and field methods for data collection. The research instrument was a questionnaire. To develop comprehensive dimensions and components, semi-structured interviews with experts were used to determine the relative importance of the elements and sub-elements of environmental accounting, emphasizing social responsibility indicators. Data were analyzed using qualitative content analysis. For data analysis, SPSS software version 25 and PLS software version 3 were used for structural equation modeling.

## 3 Findings and Results

In this section, the descriptive statistics of the research variables, including their means and standard deviations, are presented to understand the respondents' responses to the questionnaire items related to each research variable.

**Table 1**

*Descriptive Statistics of Independent and Mediating Variables*

Research Variables	N	Mean	Median	Mode	Standard Deviation	Minimum	Maximum
Social Responsibility	196	3.32	3.33	3.83	0.76	1.00	5.00
Environmental Accounting	196	3.14	3.03	2.98	0.55	1.00	5.00

Table 2 shows the results of the normality test for the distribution of the variables. The decision rule for this test is that if the significance level (Sig) is less than 0.05, the data

are normal; if it is greater than 0.05, the data are not normal. As observed in Table 2, all research variables are normal. Therefore, we use parametric tests for these variables.

**Table 2**

*Normality Test for the Distribution of Research Variables*

Research Variables	Kolmogorov-Smirnov Statistic	Significance Level (Sig)	Test Result
Social Responsibility	0.08	0.007	Normal
Environmental Accounting	0.22	0.0004	Not Normal

As shown in Table 3, the model is at a very good level based on all three mentioned criteria, as the average variance extracted is greater than 0.4, the composite reliability

coefficient is greater than 0.7, and Cronbach's alpha coefficient is greater than 0.6.

**Table 3**

*Convergent Validity and Composite Reliability in Model Fit*

Research Variables	Average Variance Extracted	Composite Reliability Coefficient	Cronbach's Alpha Coefficient
Social Responsibility	0.46	0.81	0.71
Environmental Accounting	0.56	0.79	0.63

According to Table 4, the numbers on the main diagonal are greater than their underlying values, which holds true for

all research constructs, indicating the confirmation of discriminant validity.

**Table 4**

*Correlation Matrix and Discriminant Validity Analysis Using Fornell and Larcker (1981)*

Variables	Environmental Accounting	Social Responsibility
Social Responsibility	-	0.676
Environmental Accounting	0.681	0.329

In the structural model, unlike the measurement model, only the latent variables and the relationships between them are examined. The arrows indicate the path coefficients, which represent the magnitude of the relationship between a

latent variable and its corresponding observed variable during path analysis. According to Table 5, the impact of social responsibility on environmental accounting is 0.401.

**Table 5**

*t-Test Results and Path Coefficient*

Relationship	Standard Deviation	t-Statistic	Path Coefficient	Significance Level (p)
Social Responsibility -> Environmental Accounting	0.059	5.381	0.401	0.000

Continuing with the model fit, the relationships between the independent and dependent variables are examined. At this level, the researcher assesses whether the model variables are well correlated. For this purpose, the

coefficients of determination ( $R^2$ ) and adjusted determination coefficient ( $R^2$  Adjusted) are used. These coefficients measure the relationship between the explained variance of a target (dependent) variable and its total

variance. These coefficients range from 0 to 1, with higher values being more desirable. Values close to 1 are highly desirable, close to 0.67 are desirable, close to 0.33 are moderate, and close to 0.19 are weak. According to the results obtained ( $R^2 = 0.219$  and  $R^2$  Adjusted = 0.213), it is observed that the determination coefficient and adjusted determination coefficient for all variables are below 0.33, indicating that these indices are in the "moderate" range. Therefore, based on the results, it can be stated that the model has an acceptable overall fit in terms of  $R^2$  and  $R^2$  Adjusted coefficients.

#### 4 Discussion and Conclusion

The results of this study showed that there is a relationship between social responsibility and environmental accounting. In Iran, as a developing country, the issue of environmental accounting management is still not recognized as an organizational duty. Companies often attempt to present an environmentally friendly image solely for product advertising and profitability, even though industrial production is a major source of environmental pollution in the country. This negligence in organizations indicates a focus on profitability rather than environmental issues, which are not institutionalized as a work duty for companies. This ongoing trend will result in unresolved environmental issues and increased environmental degradation by organizations, leading to direct and indirect costs for society and the government. The growing human impact on the environment necessitates fundamental changes in traditional economics, ethics, and accounting assumptions (Hooks & van Staden, 2011). Recently, efforts have been made to operationalize environmental issues. It is clear that environmental concerns have been at the forefront over the past two decades since the Kyoto Protocol (Iatridis, 2013). Environmental accounting provides information that helps managers in performance evaluation, control, decision-making, and reporting. It is built on economic and environmental concepts and uses non-market-derived values, necessitating cultural change for its application. Environmental accounting presents part of these changes within organizations and society, offering greater fundamental understanding and participation in daily activities, aiding in the continuous development goal as a specific approach (Gillet-Monjarret & Martinez, 2012). Given the intensification of global environmental issues, manufacturing companies must assume the responsibility of compensating for environmental costs and appropriately

report them in their financial statements. The social legitimacy of organizations is only established by adopting the ethical standards prevailing in society (Chepurko et al., 2018). In other words, companies operate in accordance with societal interests and desires, and in return, individuals support these companies by purchasing their products. Therefore, manufacturing companies should strive to enhance their social position in addition to their primary goal of profitability and value maximization. Disclosure of environmental cost-related information can increase the credibility and social status of companies and serve as an effective tool in achieving competitive advantage (Faisal et al., 2018).

This study has several limitations. First, the sample size was limited to financial managers of companies listed on the Tehran Stock Exchange, which may not represent all industries or geographical areas. Second, the cross-sectional design of the study restricts the ability to establish causality between social responsibility and environmental accounting. Third, the reliance on self-reported data through questionnaires may introduce response biases. Lastly, the study focused on a developing country, and the findings may not be directly applicable to developed economies with different regulatory and cultural contexts.

Future research could address these limitations by expanding the sample size to include a broader range of industries and geographical locations, both within and outside of Iran. Longitudinal studies could be conducted to better understand the causal relationships between social responsibility and environmental accounting. Additionally, future research could incorporate more objective measures of environmental accounting practices, such as actual environmental performance data, to complement self-reported information. Comparative studies between developing and developed countries could provide insights into how different regulatory and cultural environments impact the relationship between social responsibility and environmental accounting.

The findings of this study have several practical implications for policymakers, managers, and regulators. Policymakers should consider developing and enforcing stricter environmental regulations to ensure that companies incorporate environmental costs into their accounting practices. Managers should recognize the importance of social responsibility in enhancing both financial and environmental performance and integrate these considerations into their strategic planning and decision-making processes. Regulators could promote transparency

and accountability by requiring companies to disclose detailed environmental accounting information in their financial reports, thereby encouraging more sustainable business practices and fostering public trust.

### Authors' Contributions

All authors have contributed significantly to the research process and the development of the manuscript.

### Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

### Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

### References

- Aerts, W., Cormier, D., & Magnan, M. (2008). Corporate environmental disclosure, financial markets and the media: An international perspective. *Ecological Economics*, 64(3), 643-659. <https://doi.org/10.1016/j.ecolecon.2007.04.012>
- Al-Ajmi, J. (2008). Audit and reporting delays: Evidence from an emerging market. *Advances in Accounting*, 24(2), 217-226. <https://doi.org/10.1016/j.adiac.2008.08.002>
- Almahrog, Y., Ali Aribi, Z., & Arun, T. (2018). Earnings management and corporate social responsibility: UK evidence. *Journal of Financial Reporting and Accounting*, 16(2), 311-332. <https://doi.org/10.1108/JFRA-11-2016-0092>
- Ballou, B., Chen, P.-C., Grenier, J. H., & Heitger, D. L. (2018). Corporate social responsibility assurance and reporting quality: Evidence from restatements. *Journal of Accounting and Public Policy*, 37(2), 167-188. <https://doi.org/10.1016/j.jaccpubpol.2018.02.001>
- Braam, G., & Peeters, R. (2018). Corporate Sustainability Performance and Assurance on Sustainability Reports: Diffusion of Accounting Practices in the Realm of Sustainable Development. *Corporate Social Responsibility and Environmental Management*, 25(2), 164-181. <https://doi.org/10.1002/csr.1447>
- Chepurko, I., Dayanandan, A., Donker, H., & Nofsinger, J. (2018). Are socially responsible firms less likely to restate earnings? *Global Finance Journal*, 38, 97-109. <https://doi.org/10.1016/j.gfj.2018.02.002>
- Chih, H.-L., Shen, C.-H., & Kang, F.-C. (2008). Corporate Social Responsibility, Investor Protection, and Earnings Management: Some International Evidence. *Journal of Business Ethics*, 79(1), 179-198. <https://doi.org/10.1007/s10551-007-9383-7>
- Daoud, K. A. A., Ku Ismail, K. N. I., & Lode, N. A. (2014). The timeliness of financial reporting among Jordanian companies: do company and board characteristics, and audit opinion matter? *Asian Social Science*, 10(13), 191-201. <https://repo.uum.edu.my/id/eprint/12570/>
- Dilla, W., Janvrin, D., Perkins, J., & Raschke, R. (2019). Do environmental responsibility views influence investors' use of environmental performance and assurance information? *Sustainability Accounting, Management and Policy Journal*, 10(3), 476-497. <https://doi.org/10.1108/SAMPJ-12-2018-0357>
- Faisal, F., Prasetya, A. R., Chariri, A., & Haryanto, H. (2018). The relationship between corporate social responsibility disclosure and earnings management: is it a complement mechanism or a substitute mechanism? *International Journal of Business Governance and Ethics*, 13(1), 1-14. <https://doi.org/10.1504/IJBGE.2018.095411>
- Gillet-Monjarret, C., & Martinez, I. (2012). La vérification sociétale des entreprises du SBF 120: l'impact de la structure de propriété et du conseil d'administration. *Comptabilité-Contrôle-Audit*, 18(3), 43-66. <https://www.cairn.info/revue-comptabilite-contrrole-audit-2012-3-page-43.htm>
- Hooks, J., & van Staden, C. J. (2011). Evaluating environmental disclosures: The relationship between quality and extent measures. *The British Accounting Review*, 43(3), 200-213. <https://doi.org/10.1016/j.bar.2011.06.005>
- Iatridis, G. E. (2013). Environmental disclosure quality: Evidence on environmental performance, corporate governance and value relevance. *Emerging Markets Review*, 14, 55-75. <https://doi.org/10.1016/j.ememar.2012.11.003>

### Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.

### Declaration of Interest

The authors report no conflict of interest.

### Funding

According to the authors, this article has no financial support.

### Ethical Considerations

In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were observed.