



Effectiveness of Financial and Environmental Performance and Accepted Values on the Tehran Stock Exchange

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ABSTRACT

At present, the idea of corporate social responsibility responds to the widespread challenge of engaging not only in economic and financial discourse but also in social, human, and environmental interactions. Any company that wants to ensure sustainable development of performance should not inevitably overlook the benefits of interacting in a social approach. The purpose of this study is to investigate the relationship between environmental performance disclosure, financial performance, and company value. The research approach is descriptive-correlational in terms of purpose and with regard to the analysis of the relationships between variables. Through a careful study of the literature, five design hypotheses and statistical samples including 130 companies were selected from among the listed companies on Tehran Stock Exchange for a period of 4 years 2016-to 2020. Multiple regression equations based on pooled data were tested. The findings of the study indicate that according to the first and second hypotheses, financial performance is not related to environmental disclosure but prior financial performance is related to environmental disclosure, in relation to the third hypothesis environmental disclosure is not related to firm value, and results in The fourth and fifth hypotheses of the study reject the effect of environmental disclosure on the relationship between firm's financial performance and firm's environmental performance.

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1. Introduction

The responsibility and social reporting of companies, especially in the environmental dimension, in recent years, when human activities have led to the warming and destruction of the environment day by day, as one of the most important and common topics in scientific circles and the business world, has attracted a lot of attention. Nowadays, due to the complicated relationship between the companies in the society with each other as well as with the government and people in the society, a situation has arisen where the companies should be accountable not only to the beneficiaries, but also to the people (Sojobi and Zayed, 2022: 188). Considering that the environment is the basis of human existence and green productivity is the main key to sustainable growth and development for the realization of industrial, economic and social ideals in human societies, the need to strengthen environmental thinking and create an environmental culture in each and every institution of the society is felt. Sustainable development requires proper exploitation and use of basic resources, including natural, financial and human resources, to reach the optimal consumption pattern in order to provide for current and future generations (Durmaz and Fidanaglu, 2022: 416). Obviously, no organization can pave the way for sustainable development without paying attention to environmental issues. In developing countries, usually the first part that is damaged in the development process is the natural environment, which quickly undergoes irreparable damage; But the development that is based on the destruction of resources will not last long and soon its unfortunate consequences will appear; It means the loss of valuable natural resources. Since the 60s, companies have realized the importance of social resources, including the environment; in such a way that this importance was revealed in social reporting a decade later. Also, sudden fluctuations in stock prices in recent years, especially after the 2008 financial crisis, have attracted a lot of attention (MacDonald and Xu, 2022: 162). These fluctuations generally occur in two ways, falling and growing stock prices; but due to the fact that investors attach special importance to

their stock returns, researchers have paid more attention to the event of stock price falls, which causes a sharp decrease in returns, compared to growth. The risk of the stock price falling is an adverse event in which the stock price undergoes a sudden and severe negative adjustment; If the return of the company's stock is lower than the return of the entire market index in a certain period of time, the probability of the fall of the stock price in that period increases (Na, 2021: 908). Previous research proves that the quality of financial statements and the items included in them alone is not guaranteed by following and applying accounting standards; because other factors also affect the quality of financial statements and financial reporting; For example, the political influence of managers and owners of economic units in political circles and their relations with political power centers is one of those important factors that affect the amount and quality of disclosed information. Political relations and influence, in addition to affecting the financial status of economic units, also affect managers' motivation in relation to financial reporting and preparation of financial statements, which is expected to affect the quality of financial statements of companies with political relations compared to companies without political relations (Goel et al., 2022).

In fact, by publishing information about their environmental performance, environmentally friendly companies disclose more non-financial information to promote information transparency, and by disclosing such information, information asymmetry between investors and managers is voluntarily reduced; Therefore, such companies have a higher level of quality in financial reporting. Also, investors and financial market analysts can use the non-financial information provided by environmentally friendly companies to evaluate the ethical integrity of managers. These companies are likely to avoid hoarding bad news; As a result, the risk of falling stock prices is less. Also, considering that the costs of protecting the environment are large and impressive, but the rewards from the environment are small and effective in the long term; therefore, companies want to avoid this responsibility in any way (Afulabi, 2022). Here, the presence of political

connection as a supporting umbrella leads to companies escaping from environmental activities. These companies can adjust the strict environmental regulations to their advantage; therefore, political communication mode is expected to weaken the effect of environmental performance on stock price crash risk (Ziolo, 2020). The importance of this issue can be seen in the fact that the publication of these reports in recent years and the position of Iran in these rankings have been controversial in our country. For this reason, in recent years, there has always been this question among experts, theorists and accounting researchers and economic and commercial communities, whether there is a meaningful relationship between financial performance and environmental performance of companies or not? Environmentally friendly services can be used as a distinguishing factor between companies with good performance and companies with poor performance, and in other words, can the production and provision of environmentally friendly goods and services be a way to earn more profit and improve asset returns? Considered the question of whether environmental performance and financial performance have a significant relationship or not has always been the subject of long scientific debates among researchers.

The necessity of examining this issue can be seen from the fact that the results of previous studies and researches related to the relationship between these two concepts have been different. Some of these researches have shown a significant positive relationship between financial and environmental performance, while others have not found this significant relationship. On the other hand, no study was found that shows a significant negative relationship between financial performance and environmental performance. Most of these researches have been conducted in developed economies such as the United States of America and Europe, where the level of environmental awareness is actually high, but few studies have been conducted in developing countries. One of the reasons for this issue can be the lack of appropriate and specific indicators and criteria for evaluating environmental performance in developing

countries. Of course, in some of these countries there are indicators for evaluating environmental performance, but their reliability and accuracy are low. Considering the importance of the above-mentioned cases, the present article will examine the relationship between environmental performance disclosure and financial performance and the value of companies admitted to the Tehran Stock Exchange.

Research Hypotheses

Hypothesis 1: The financial performance of the company has a positive and significant effect on environmental disclosure.

Hypothesis 2: The financial performance of the previous period of the company has a positive and significant effect on environmental disclosure.

Hypothesis 3: Environmental disclosure has a positive and significant effect on the value of the company.

Hypothesis 4: Environmental disclosure has a significant effect on the relationship between financial performance and firm value.

Hypothesis 5: Environmental disclosure has a significant effect on the relationship between environmental performance and firm value.

2. Theoretical foundations

Disclosure of social responsibility

Social responsibility in the business world is not a new issue or an emerging phenomenon. In the 19th century, a large number of factory owners in Europe and America realized their responsibility towards the society and invested in housing, welfare and grants to workers, attention and in home construction, health and education for workers and their families. Currently, the new way of social responsibility of companies to achieve the social and environmental impact of institutions and its management with a strategic method, in a systematic way and with a plan and purpose (Vinh et al.,

2022). The meaning of social responsibility is that because organizations are social institutions and interact with society and have a great impact on society, their activities should not have a negative impact on society, and in case of harming society, they should try to compensate (Nugraheni et al., 2021). Social responsibility is the alignment between the goals, policies and activities of the organization with the interests of shareholders, customers, employees, investors and the general society (Dias et al., 2017). In fact, social responsibility is a set of duties and obligations that the organization must perform towards the society around it (Kargarpour et al., 2021). Social responsibility has 4 dimensions. Its first dimension, the economic dimension, shows the primary and final goal of every organization, i.e. earning profit. The second dimension of social responsibility is the legal dimension, which is also referred to as social obligation. Based on social commitment and social responsibility, organizations must behave within the framework of public laws and regulations. The third dimension of social responsibility is the moral dimension, which is also referred to as social accountability. Based on this, organizations should perform their activities within the framework of values, beliefs and convictions of the people of the society. The fourth dimension of social responsibility is the public and national dimension, which is also referred to as social accountability. Based on this, organizations should carry out their activities in compliance with national and public interests (Cheng et al., 2022). In general, there are 3 approaches regarding corporate social responsibility, based on the first approach or the classical theory, the goal of organizations is to maximize profits in a completely ethical and legal framework. Based on the second theory or the responsibility perspective, the goal of organization managers is to maximize profits; with the difference that balance and coordination should be established between the rights of the beneficiaries of the organization and the general public. According to the third theory or the general view, profit is not the ultimate goal of the organization. According to this point of view, the

organization should both seek to obtain an appropriate level of profit and perform an appropriate level of social actions (Ghodsai Khamiri, 2020).

The environment in which commercial companies operate today is a growing and highly competitive environment, and in order to survive, companies have to face many factors at the national and international level and expand their activities through new investments (Rahayu et al., 2021). The meaning of competition in the product market is that different companies have close competition in the production and sale of goods, and their goods are not superior to each other; because if it is otherwise, the market tends towards monopoly or multilateral monopoly. In competitive literature, it is stated that intense product market competition motivates managers to perform efficiently. In the same context, Trpeska states that competition drives managers to communicate more with stakeholders and increase efficiency (Trpeska et al., 2021). In fact, the existence of competition in the market increases transparency and reduces information asymmetry, capital cost and bankruptcy risk; Because similar and comparable information can be obtained from other competitors active in the market and used to check the correctness of the claims and information provided by the company's management (Zhang and Yang, 2021). The economic consequence of the asymmetric information environment, in addition to shrinking the financial markets, entails risks such as increasing their capital costs. Perhaps it is because of these possible negative consequences that most countries in the world have taken steps to eliminate information asymmetry and improve the transparency of financial information of companies and have taken measures such as presenting reports related to compliance with social responsibility requirements (Jeroh, 2020). Corporate social responsibility plays an important role in economic development and shows the company's continuous commitment to ethical behavior (Tarighi et al., 2021). Corporate social responsibility means the connection and unity between the organization's activities and values in such a way that the interests of all stakeholders, including shareholders,

customers, employees, investors and the general public, are reflected in the organization's policies and performance. In other words, the organization should always consider itself a part of the community and feel responsible towards the community and strive to improve public welfare independently of the direct interests of the company (Loew et al., 2021). Wood (1991) examined the classification of social responsibility based on the relationship between the company and the society, at three levels, and presented principles based on his own interpretations to each one. In his opinion, from an institutional point of view, the legitimacy of organizations is debatable, and from an organizational point of view, the principle of public accountability is considered important, and from an individual point of view, fulfilling ethical duties is very important (Albawwat, 2022). Corporate social responsibility increases the number of stakeholders in front of responsible managers, and as a result, the number of supervisors of management behaviors increases and leads to the conclusion of implicit contracts with a wide range of stakeholders (Zraqat et al., 2021). Also, managers who consider themselves committed to the organization are more willing to disclose their social activities; Therefore, it is expected that increasing monitoring and expanding a set of implicit contracts will reduce agency conflicts between managers and shareholders (Firmansyah et al., 2020); As a result, by balancing the interests and needs of different stakeholders, making management decisions can be improved.

3. Literature Review

Vafaeipoor et al. (2022) in an article argued that the results of the structural equation modeling technique (Smart PLS software) showed that social responsibility and professional ethics had a positive and significant effect and tone management had an inverse and significant effect on the readability of financial reporting. Providing a comprehensive model for measuring the readability of financial reporting can increase the understanding and knowledge of investors and researchers in the field of capital market.

Sahmaniasl et al. (2022) in an article showed that there is a negative and significant relationship between social responsibility and financial leverage of companies. Also, high competition in the product market reinforces the negative relationship between the social responsibility and financial leverage. Nguyen et al. (2022) in their research concluded that a positive effect of both corporate social responsibility expenditure (CSRE) and corporate social responsibility disclosure (CSR D) on the financial performance of the bank. The results also show the impact of the component CSRs on the bank's financial performance, particularly finding a positive effect of Environmental responsibility and Employee responsibility. In contrast, the influence of Community responsibility is not evident. Mohammadi and Saeidi (2022) in an article indicated that CSR has a significant effect on stock return; however, it does not have a significant effect on real earnings management. CSR has a significant effect on information asymmetry and financial performance. Originality/value the present study is the first research conducted on CSR and financial concepts in Iran. The results of this study contribute to the literature by introducing social responsibility to financial accounting variables and provide suggestions for capital market participants. Social responsibility has received growing attention from many companies and managers, as it influences the interests of indirect stakeholders in addition to direct ones. CSR reporting can enhance the development of scientific and cultural skills by promoting a culture of knowledge acquisition and knowledge creation, leading to a reduced gap between the expectations of economic enterprises and the community.

Yahaya (2022) in an article argued that the design is correlational with a population and sample of 156 and 112, respectively. Four filters were applied: corporations listed with the Nigerian Exchange Group as at the end of 2021 were considered; companies without complete 10 years annual reports were excluded, corporations that were quoted after 2021 were excluded and firms with technical difficulties with the Exchange as indicated on its website were excluded. The total quoted corporations that were used

was 112 for a period of 10 years which produces 1,120 observations. The dependent variable which proxy financial performance was an index derived from return on assets, earnings per share and return on equity. The independent variable: corporate social responsibility is treated as an index derived from human resource, environmental activities, community donations, gifts and new product research and development. In the case of control variables, we employ firm size and leverage. Following the results of the model, p-values, t-values, R², Prob > F value, we report that corporate social responsibility is positively and significantly related to corporate financial performance. We drop leverage in favour of firm size because of the model specification error test results, though it is negatively insignificant. Sawhney et al. (2022) argued that Scopus database is used in order extract articles published over past 30 years (1991-2021). The analysis is conducted over 3076 peer-reviewed articles identified with proper selection procedure. Bibliometric analysis is conducted through Bibexcel software and VOSviewer software. Citation analysis as well as visualization of results was performed through VOSviewer software. The findings of the study suggests that CSR and financial performance has gained more attention over the past decade (2009 onwards). Moreover, the USA and United Kingdom are leading countries contributing to research on this topic. Adamkaite et al. (2022) concluded that the relevant financial performance indicators were selected to measure the impact of CSR on financial performance of energy companies. The results of the study, which examined nine Lithuanian energy companies, showed the dominating neutral relationship between CSR and financial performance during 2017–2020 period.

The innovation of this article can be examined in several ways: First; investigating the relationship between disclosure of environmental performance and financial performance and the value of companies admitted to the Tehran Stock Exchange; Second; investigating the relationship between production and provision of environmentally friendly goods and

services and earning more profit and improving asset returns; Third; investigating the presence or absence of a significant relationship between environmental performance and financial performance

4. Methodology

The present study is applied in terms of purpose and is descriptive-correlational according to the analysis of relationships between variables. The statistical population in this study is all companies listed on the Tehran Stock Exchange. The time domain of the research is from the year to 2016-2020. In this research, for sample selection, the systematic removal method is used and the sample conditions are:

1. All companies that have been listed on the stock exchange after 2016.
2. Companies that went off the stock exchange after 2016 and before 2020 and entered the OTC market.
3. Companies whose information is not available during the research period.
4. Companies that have the nature of investment and financial intermediation (holding, leasing and banks).
5. Companies that have changed their financial period during the research period and their financial year does not end on March 20th. Based on the mentioned criteria, a total of 130 companies have been selected as the statistical sample of the research from among the companies admitted to the Tehran Stock Exchange. According to the 5-year time period, the data of 650 companies have been extracted through the above sampling. Also, in order to collect the required data, the audited financial statements of the companies and the reports of the board of directors have been used. The desired data has been collected through a computerized database (Rehavard Novin software) and the Comprehensive Bank of the Stock Exchange. Finally, the collected data is done using Excel software and with the help of Eviews software.

4.1. Research model and how to measure variables

In this study, using the research of Kyosta et al. (2018), the multivariate and multiple regression model is used as follows:

The first and second hypothesis models of the research:

$$\begin{aligned} TEND_{i,t} = & \alpha_0 + \beta_1(ROS)_{i,t} + \beta_2(ROS)_{i,t-1} \\ & + \beta_3(SIZE)_{i,t} + \beta_4(LEV)_{i,t} + \beta_5(FnActs) \\ & + \beta_6(MB)_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (1)$$

The third research hypothesis model:

$$\begin{aligned} PRICE_{i,t} = & \alpha_0 + \beta_1(TEND)_{i,t} + \beta_2(SIZE)_{i,t} \\ & + \beta_3(LEV)_{i,t} + \beta_4(ROA) + \beta_5(EPS)_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (2)$$

The fourth research hypothesis model:

$$\begin{aligned} PRICE_{i,t} = & \alpha_0 + \beta_1(ROS)_{i,t} + \beta_2(ROS)_{i,t-1} + \beta_3(TEND)_{i,t} (ROS)_{i,t} \\ & + \beta_4(TEND)_{i,t} (ROS)_{i,t} + \beta_5(SIZE)_{i,t} + \beta_6(LEV)_{i,t} + \beta_7(FnActs) \\ & + \beta_8(BVPS)_{i,t} + \beta_9(ROA) + \beta_{10}(EPS)_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (3)$$

Model of the fifth research hypothesis:

$$\begin{aligned} PRICE_{i,t} = & \alpha_0 + \beta_1(ENP)_{i,t} + \beta_2(ENP)_{i,t-1} + \beta_3(TEND)_{i,t} (ENP)_{i,t} \\ & + \beta_4(TEND)_{i,t} (ENP)_{i,t} + \beta_5(SIZE)_{i,t} + \beta_6(LEV)_{i,t} + \beta_7(FnActs) \\ & + \beta_8(BVPS)_{i,t} + \beta_9(ROA) + \beta_{10}(EPS)_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (4)$$

4.2. The dependent variable

Company value: In this research, using Desvanti and Sirugar (2018) research, company value is calculated as follows:

Company value = (Company stock price * Number of shares issued by the company)

$$PRICE = P_{i,t} * N_{i,t}$$

$P_{i,t}$ = stock price of company i in year t

$N_{i,t}$ = number of shares issued by company i in year t

4.3. Independent variables

1. *Financial performance:*

In this study, using Desvanti and Sirugar (2018) research, financial performance is calculated as follows: Financial Performance (ROS): Measured by the ratio of profit before interest and tax to the company's net sales.

$$\text{ROS} = \text{EBIT}_{i,t} / \text{NET SALE}_{i,t}$$

EBIT_{i, t} = Profit before interest and company tax i in year t

NET SALE_{i, t} = Net sales of company i in year t

4.4. Environmental performance

Is a virtual variable. If the green management company discloses (green supply and procurement, green design, green production, green transportation and green packaging) it is assigned the number one, otherwise it is assigned the number zero. Environmental performance: The independent variable of this research is the environmental performance index. The environmental performance of companies is measured by the Environmental Protection Agency (ISO14000 certified) and is measured by content analysis and a checklist containing self-made questions. It is necessary to explain that since there is no specific index in Iran to rank the environmental performance of companies, so in this study, according to the study of companies listed on the Tehran Stock Exchange of having ISO14000 certification as an indicator Environmental function is used. To this end, five environmental reporting issues, including two related to disclosures in the notes to the financial statements and three related to disclosures in the report of the Board of Directors to the General Meeting of Shareholders, to determine the extent of disclosure of the company's environmental performance. Are considered. By observing the audited financial statements and the reports of the board of directors to the general meeting of shareholders, disclosure or non-disclosure of any of the five issues for the years 1395 to 1400 is observed and then reflected in the observation

registration card. These five issues represent those financial and non-financial events that have been emphasized in accordance with binding environmental laws and regulations and accounting standards. The issue of pollution is one of the operational characteristics of polluting companies, and considering the implicit reference to accounting standards, polluting companies are required to disclose environmental performance in the financial statements based on environmental protection laws and regulations. And are explanatory notes. Existence of various laws and regulations in the field of environment (as described in Table 1), necessitates the disclosure of environmental financial performance of polluting companies in the financial statements, and disclosure of environmental financial performance merely requires a specific accounting standard in the field of environmental accounting. It is not biological. However, Accounting Standard No. 1 implicitly emphasizes the need to disclose additional information in order to present the business unit's financial performance in a favorable manner.

4.5. Control variables

In this study and in accordance with the research literature of Kiusta et al. (2018), control variables include company size (SIZE), the total assets of the company are measured through the natural logarithm. Leverage (LEV), measured by the ratio of total debt to total assets of the company. Company activities (FnActs) is measured through the ratio of income from investing in shares to assets. Net proceeds from the issuance of common equal net income from investing in shares. Market value to book value ratio (MB) is measured through the ratio of market value of equity to book value of equity. Earnings per share (EPS) measured by the ratio of net income to the number of shares of the company. $ROE = \text{Earning} / \text{stocks outstanding}$. Stocks outstanding equal number of shares of the company. Return on Assets (ROA) is measured through the ratio of net profit to assets.

5. Research Findings

Descriptive Statistics

Descriptive statistics related to the variables used in this research during the period 2016-2020 are given in Table 1. The reported statistics include central indicators and criteria including mean, mean, maximum, minimum and dispersion indices including standard deviation and skewness coefficient of variables used in this research.

Table 1. Descriptive statistics related to the variables used

Variable	Average	Med	Max	Min	Standard deviation	Skewness coefficient	Slenderness ratio
Environmental disclosure	13.96885	14.00000	19.00000	6.000000	2.214450	-0.506357	3.199075
environmental function	2.173770	2.000000	11.00000	0.000000	2.304982	0.925148	3.107242
company value	25.53797	25.29021	33.06033	20.63033	2.058611	0.522447	3.151906
Financial performance	0.272817	0.147411	44.08623	-2.523147	1.802826	23.58358	573.7479
Company size	14.09475	13.82301	19.30306	9.410502	1.678530	0.666833	3.618525
Assets return	0.133178	0.111235	0.664091	-0.855135	0.158168	0.013367	7.670802
The ratio of market value to book value	1.074075	1.027298	3.142857	0.714286	0.170911	6.904303	65.51564
Lever	0.547437	0.567750	0.885610	0.100058	0.198179	-0.414499	2.367283
Earnings per share	1381.208	541.1150	129055.7	-2855.612	6122.299	16.76790	326.4539

Source: Research findings

Table 2. shows the Pearson correlation for all variables. Our measurement of the variables shows that there is a positive but not significant correlation between environmental disclosure and company value, but there is a positive and significant correlation between environmental performance and company value and a negative correlation between environmental disclosure and environmental performance with financial performance. It does not make sense.

Table 2. Pearson correlation of variables

Variable	Environmental disclosure	environmental function	company value	Financial performance	Company size	Assets return	The ratio of market value to book value	Lever	Earnings per share
Environmental disclosure	1.000								

environmental function	0.034	1.000							
	0.399	-----							
company value	0.011	0.197	1.000						
	0.776	0.000	-----						
Financial performance	-0.030	-0.016	0.029	1.000					
	0.453	0.690	0.470	-----					
Company size	-0.022	0.241	0.719	0.036	1.000				
	0.571	0.000	0.000	0.366	-----				
Assets return	0.071	0.144	0.1252	0.155	0.064	1.000			
	0.079	0.0004	0.0019	0.0001	0.1117	-----			
The ratio of market value to book value	-0.063	0.032	-0.397	-0.013	-0.094	-0.039	1.000		
	0.116	0.421	0.000	0.738	0.019	0.332	-----		
Lever	-0.017	-0.121	-0.096	-0.005	-0.035	-0.331	-0.037	1.000	
	0.662	0.0027	0.017	0.9004	0.376	0.000	0.351	-----	
Earnings per share	-0.067	0.036	-0.011	0.029	0.199	0.156	-0.032	-0.065	1.000
	0.097	0.374	0.780	0.465	0.000	0.0001	0.427	0.107	-----

Source: Research findings

5.1. Determining the appropriate model for testing hypotheses

Before estimating the model using composite data, it is necessary to decide on the appropriate method of using such data in estimation. F-Leamer test statistic is used to make the final decision. Based on the results of this test, the panel data method should be used. As a result, the discussion of choosing between fixed and random effects models occurs, for which the Hausman test is used. The test results indicate that the random effects method should be used in the research model. Finally, the Pagan-Cook and Weisberg test was used to investigate the problem of variance heterogeneity. In the first and second models of the research, but in the third, fourth and fifth models, there is a problem of variance heterogeneity, so the final estimation of the model is done using GLS test.

5.2. The result of testing hypotheses

Hypothesis 1: The financial performance of the company has a positive and significant effect on environmental disclosure.

The estimated coefficient of the independent variable of financial performance in Table 3 indicates that there is no significant relationship between financial performance and environmental disclosure at the error level of 0.05. Because the p-value calculated for the coefficient of this variable is more than 0.05. Therefore, it can be said that there is no significant relationship between financial performance and environmental disclosure at the 95% confidence level. On the other hand, according to the level of significance obtained for the model, 81% of the changes in the dependent variable are related to the variables included in the regression model. Is a regression model. The result of this hypothesis is in line with the results of the research of Wu et al. (2019), in line with and contrary to the results of the research of Gatimbu and Mukaria (2016).

Table 3. Lack of significant relationship between financial performance and environmental disclosure

Variable	Environmental disclosure					
	Coefficients	Standard deviation	T statistics	P-Value	VIF Test	Result
Width of origin	14.864	0.601	24.699	0.000	-----	Significant positive correlation
Financial performance	-0.007	0.006	-1.178	0.239	1.028	Significant Negative Relationship
Assets return	0.268	0.313	0.858	0.391	1.199	Significant positive correlation
Company size	0.016	0.040	0.394	0.6936	1.044	Significant positive correlation
The ratio of market value to book value	-0.775	0.253	-3.066	0.0023	1.0123	Significant Negative Relationship
Lever	-0.463	0.254	-1.823	0.068	1.144	Significant Negative Relationship
Earnings per share	-1.80E-05	7.87E-06	-2.288	0.0225	1.064	Significant Negative Relationship
The coefficient of determination	0.817		Fisher statistics	17.084		
Watson Camera	1.548		Significance level	0.000		

Source: Research findings

Hypothesis 2: The financial performance of the previous period of the company has a positive and significant effect on environmental disclosure.

The estimated coefficient of the independent variable of financial performance of the previous period in Table 4 shows a significant

relationship between financial performance of the previous period and environmental disclosure at an error level of 0.05. Therefore, it can be said that there is a significant relationship between the financial performance of the previous period and environmental disclosure at the 95% confidence level. A significant number of studies have examined how diversity and differences in terms of emissions (pollution) affect the financial performance of companies. Two different sets of arguments have been put forward: win-win argument and win-lose argument. In the win-win approach, it is suggested that any effort to reduce emissions will lead to improved corporate competitiveness. While the win-lose approach indicates that companies' tireless efforts to reduce their emissions will be costly and can also reduce their competitiveness. The test results of this hypothesis are in contradiction with the results of Deswanto and Siregar (2018) research.

Table 4. Estimation coefficient of independent variable of financial performance

Variable	Environmental disclosure					
	Coefficients	Standard deviation	T statistics	P-Value	VIF Test	Result
Width of origin	14.390	0.550	26.118	0.000	-----	Positive and significant
Previous period financial performance	-0.002	0.0003	-7.733	0.000	1.003	Significant Negative Relationship
Assets return	0.1401	0.338	0.413	0.679	1.171	Positive and significant
Company size	0.024	0.019	1.259	0.208	1.044	Positive and significant
The ratio of market value to book value	-0.776	0.283	-3.076	0.004	1.012	Significant Negative Relationship
Lever	-0.508	0.423	-1.201	0.230	1.141	Significant Negative Relationship

Variable	Environmental disclosure					
	Coefficients	Standard deviation	T statistics	P-Value	VIF Test	Result
Earnings per share	-1.70E-04	7.86E-05	-2.387	0.0325	1.064	Significant Negative Relationship
The coefficient of determination	0.848		Fisher statistics	15.89		
Watson Camera	2.169		Significance level	0.000		

Source: Research findings

Hypothesis 3: Environmental disclosure has a positive and significant effect on the value of the company.

According to the results of Table 5. the relationship between environmental disclosure and company value is positive and meaningless, so it can be said that there is no significant relationship between environmental disclosure and company value at the 95% confidence level. Kell et al. (2010) examined the market response to adverse environmental events of 11 S and P500 oil and gas companies. They considered 5 high-level companies and 5 low-level companies ranked based on market capitalization. Of the 11 companies they surveyed, only 6 experienced non-substantial negative returns. The researchers argued that the market does not penalize and punish all companies that have negative environmental behavior. The results of this hypothesis do not agree with the results of Zandi and Faghani (2018), Mara et. al, (2017).

Table 5. Relationship between environmental disclosure and company value

Variable	Environmental disclosure					
	Coefficients	Standard deviation	T statistics	P-Value	VIF Test	Result
Width of origin	26.751	0.834	32.06	0.000	-----	Positive and significant
Previous period financial performance	0.0054	0.022	0.246	0.805	1.014	Positive and significant
Assets return	0.405	0.2343	1.724	0.085	1.173	Positive and significant
Company size	0.392	0.044	8.808	0.000	1.045	Positive and significant
The ratio of market value to book value	-6.116	0.309	-19.74	0.000	1.0165	Significant Negative Relationship
Lever	-0.445	0.191	-2.326	0.020	1.141	Significant Negative Relationship
Earnings per share	-4.98E-05	9.64E-06	-5.167	0.000	1.069	Significant Negative Relationship
The coefficient of determination	0.965		Fisher statistics	106.247		
Watson Camera	2.197		Significance level	0.000		

Source: Research findings

Hypothesis 4: Environmental disclosure has a significant effect on the relationship between financial performance and firm value.

The estimated coefficient of the interaction effect of financial performance with environmental disclosure in Table 6 indicates the lack of significant effect of environmental disclosure on the relationship between

financial performance and company value. Therefore, it can be said that environmental disclosure does not have a significant effect on the relationship between financial performance and company value at the 95% confidence level. Perhaps according to research (Li, 2018) the impact of corporate social responsibility on firm performance is conditional on the characteristics of the industry, which is often defined as an acceptable level of character, ethics and importance of responsible or irresponsible social activities. The hypothesis contradicts the results of Diantimala (2018)

Table 6. Estimation coefficient of the interactive effect of financial performance with environmental disclosure

Variable	Environmental disclosure					
	Coefficients	Standard deviation	T statistics	P-Value	VIF Test	Result
Width of origin	26.471	0.850	31.138	0.000	-----	Significant positive correlation
Financial performance	0.740	0.607	1.2190	0.223	1.028	Significant positive correlation
Environmental disclosure	0.0151	0.0233	0.649	0.5164	1.0142	Significant positive correlation
Financial performance * Environmental disclosure	-0.062	0.0504	-1.236	0.216	-----	Significant Negative Relationship
Assets return	0.535	0.247	2.166	0.0307	1.173	Significant positive correlation
Company size	0.403	0.044	8.983	0.000	1.045	Significant positive correlation
The ratio of market value to book value	-6.111	0.309	-19.768	0.000	1.0165	Negative and significant

Variable	Environmental disclosure					
	Coefficients	Standard deviation	T statistics	P-Value	VIF Test	Result
Lever	-0.456	0.194	-2.354	0.0189	1.141	Negative and significant
Earnings per share	-4.96E-05	9.64E-06	-5.148	0.000	1.069	Negative and significant
The coefficient of determination	0.965		Fisher statistics	105.586		
Watson Camera	2.202		Significance level	0.000		

Source: Research findings

Hypothesis 5: Environmental disclosure has a significant effect on the relationship between environmental performance and firm value.

The estimated coefficient of the interactive effect of environmental disclosure with environmental performance in Table 7 indicates the lack of significant effect of environmental disclosure on the relationship between environmental performance and firm value. Therefore, it can be said that environmental disclosure has no significant effect on the relationship between environmental performance and company value at the 95% confidence level. However, due to the significant level of environmental performance with company value, there is a positive and significant relationship between environmental performance and company value, but there is no significant relationship between environmental disclosure and company value. Studies show that although environmental issues Tends to affect stock market performance; there is also asymmetry in the sensitivity of stock returns to environmental news; For example, Clarkson (1995) concluded that the reaction of stock price changes to negative news about a firm's environmental performance is greater than positive news. In times of financial crisis, companies struggle to reduce costs by restructuring and reducing staff and austerity practices. These results are consistent with the results of Akbari and Pourzamani (2018).

Table 7. Estimation coefficient of the interactive effect of environmental disclosure with environmental performance

Variable	Environmental disclosure					
	Coefficients	Standard deviation	T statistics	P-Value	VIF Test	Result
Width of origin	26.915	0.762	35.300	0.000	-----	Positive and significant
Financial performance	0.1740	0.087	1.991	0.047	1.093	Positive and significant
Environmental disclosure	0.018	0.022	0.812	0.416	1.017	Positive and significant
Financial performance * Environmental disclosure	-0.009	0.005	-1.685	0.092	-----	Positive and meaningless
Assets return	0.357	0.248	1.437	0.151	1.169	Positive and meaningless
Company size	0.387	0.056	6.892	0.000	1.116	Positive and significant
The ratio of market value to book value	-6.438	0.341	-18.85	0.000	1.021	Negative and significant
Lever	-0.434	0.131	-3.297	0.001	1.133	Negative and significant
Earnings per share	-4.97E-05	1.30E-05	-3.827	0.0001	1.071	Negative and significant
The coefficient of determination	0.945		Fisher statistics	64.271		
Watson Camera	2.234		Significance level	0.000		

Source: Research findings

6. Conclusion

In the recent decades, Corporate Social Responsibility has become the main attention of many firms and managers, because, in addition to direct

stakeholders, it considers the indirect stakeholders, too. The main purpose of a firm is to improve their financial performance and creating market value, so that, today it's become the main priority for investors and shareholders. So it is expected that the implementation of Corporate Social Responsibility, affects financial performance and CSR affects Market value-added through financial performance. Today accounting information quality by presenting transparent and related information to users can cause the management to choose some methods to lower the cost of financial supply and pave the way for optimal utilization of resources by the managers. In this regard, transparency and reflection of the performed measures by the management via accounting information can enhance the ability of beneficiaries to analyze and supervise the management performance in the firm. In general, these features can remarkably level up investment efficiency. Financial reporting quality can play a major role in firms' investment efficiency. Higher quality and information transparency are opportunities for reflecting the stock price. This, in turn, can absorb some new investors. High-quality financial information can be improved by lowering information inconsistencies. Financial information utilizes by the shareholders to supervise the managers and is a significant source for investors to monitor the firm's financial performance. The purpose of this article was to investigate the relationship between environmental performance disclosure, financial performance and value of companies listed on the Tehran Stock Exchange. Many companies today face environmental issues and are looking for a way to re-report and disclose information to the general public. The issue of environmental pollution is one of the most important problems of human society today and in Iran has become so intense that its capital is known as one of the most polluted cities in the world. This suggests the need to use environmental accounting as an effort to protect the environment.

Given the rejection of the first, third, fourth and fifth hypotheses and the confirmation of the second hypothesis of the research, it is suggested that companies to tie their marketing system based on environmental

performance disclosure to increase their sales. Disclosure of this performance increases the sales force in the company and reduces the company's financial debt and increases financial performance. There is no doubt that accountants can be a powerful arm for the government in terms of economic and financial controls if a favorable environmental accounting system is established in the country. To achieve this goal, the goals and tasks of environmental accounting must be clearly defined and standards and criteria and criteria must be established and developed based on logical and practical principles. Environmental green accounting is one of the emerging aspects of accounting science. That will affect companies in the near future.

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All authors had contribution in preparing this paper.

Conflicts of interest

The authors declare no conflict of interest

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