

Examining the moderating effect of ownership concentration on the association between social responsibility performance and information asymmetry (case study: companies admitted to the Tehran Stock Exchange)

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Abstract

The primary objective of this study is to examine the impact of corporate social responsibility performance on information asymmetry, taking into account the moderating influence of ownership concentration in Tehran Stock Exchange-listed firms. In this study, information regarding 84 companies admitted to the Tehran Stock Exchange in 2019-2020 was analyzed. In the Eviews10 software environment, Pearson's correlation test and F-Limer test were used to assess hypotheses. Using Hadri's test, the significance of the variables was evaluated, and it was determined that all variables have sufficient significance. The data normality test demonstrated that the distribution of the data is normal. All of the research's hypotheses were confirmed, as indicated by the findings. Using Hadri's test, the significance of the variables was evaluated, and it was determined that all variables have sufficient significance. The data normality test demonstrated that the distribution of the data is normal. All of the research's hypotheses were confirmed, as indicated by the findings. The effective variables of this study (independent and moderator) are suitable for information asymmetry with 99% assurance. The coefficient of determination for the general regression model of this study is 0.205, indicating that the estimated regression model can predict 20.5% of the changes in the dependent variable. Lastly, based on the research findings, practical recommendations are presented.

Keywords: corporate social responsibility performance, information asymmetry, ownership concentration.

Introduction

Disclosure of social responsibility facilitates communication between the business and its stakeholders and attracts institutional investors. Due to their ownership of a substantial portion of the company's shares, institutional investors have a great deal of sway over investing businesses and can alter the practices of managers. Influence and comply with professional ethics by supplying firms with correct information. In this approach, the internal function of disclosing social responsibility and institutional ownership can result in a strengthening of the company's position,

an increase in efficiency and profitability, and the eventual survival of businesses over the long term. By reporting social responsibility in the annual report or sustainability report, corporations can gain the support of shareholders, particularly institutional investors, in terms of material and non-material (social) issues (Abolhosni Ranjber et al., 2013).

Theoretically, corporate social responsibility is regarded sensitive to the requirements of society and its stakeholders, which can be helpful in attracting institutional investors. The purpose of the present study is to give evidence about the role of social responsibility in terms of whether the disclosure of information regarding social responsibility and its dimensions is related to institutional ownership. This research is significant because it demonstrates to managers, investors, shareholders, and financial analysts that the disclosure of social responsibility, due to the role it can play in sustaining the business unit's relationship with its stakeholders, raises the stakeholders' awareness. Regarding the moral responsibilities and obligations of the company towards society, it is considered in investment and financial decisions, thereby encouraging investors to support the right to legislate social responsibility of companies and the obligation to be accountable and A company's dedication to its performance towards society (Najafabadi et al., 2018).

Companies will see that corporate social responsibility is more than a cost, constraint, or grant if they assess the hidden potential in their societal duties in the same manner that they do in their primary business sectors. It is charitable and will provide the organization with a source of innovation or competitive advantage (Ghekrit et al., 2018). Several investing decisions are influenced by the likelihood of information asymmetry. Information asymmetry is a situation in which one party of an interaction has more information than the other. One of the most significant repercussions of asymmetric information is the disruption of the financial markets' normal operation. The manner in which information enters the market's price creation and information asymmetry may diminish the market's efficiency or even prohibit its development, depriving the parties of the benefits of trade (Meshkin et al., 2015: 41).

The importance and necessity of paying attention to the social responsibility of businesses in today's global conditions and new business spaces necessitates that the leaders and managers of large organizations and businesses that are active and effective in global markets with globalizing markets create a balance between social, economic, and environmental sectors. Corporate social responsibility transcends the basic legal criteria within which it is situated. It has become a suitable and dominant model in the field of commercial and industrial businesses as a result of the growth of non-governmental organizations, protest movements against the power of economic enterprises, increasing social awareness, development of capital markets and public companies, and financial and ethical scandals involving large organizations in recent years. Thus, the increasing expectations of stakeholders for the accountability of businesses has made responsible business practices and a focus on social responsibility strategy in firms essential.

The debate of market efficiency, according to which all accessible information reflects its effect on the stock price, is an important aspect of stock exchanges. Information asymmetry, in which one participant to an exchange has more information than the other, can explain the existence of accounting from the perspective of the efficient market theory. This is due to transactions and information within the organization. Many investors in the capital markets are average citizens, and the only method for them to receive vital information is through company announcements. An example of this form of release is the announcement of the estimated profit of each share, in which the corporation predicts and announces the proposed profit of each share. Now, if there are active investors in the capital markets who are in a better position than others in terms of information, such as those who are aware of upcoming profit announcements, these investors can alter the market's supply and demand and, so to say, cause a price gap. The primary cause is the existence of information asymmetry on the capital market, according to which those who are aware of the profit announcement (or other significant news) are in a better position to make decisions than others who are unaware (Ahmadpour and Ajam, 2019: 109).

The dispersion of analysts' profit projections is another metric of information asymmetry. Brown and Han (1992) explain that eliminating information asymmetry promotes financial analysts' agreement and consensus regarding the company's future performance (Richardson, 2000: 84). In organizations with a concentrated ownership structure, organizational issues may rise as their number declines. On the one hand, the effective and efficient control of affairs by the dominant shareholders can cause the majority of shareholders to usurp the company's resources, such as by taking unfavorable risk exposures and providing unreasonable compensation packages, which is detrimental to the minority shareholders. These activities appear to have an unfavorable association with financial reporting quality (Cohen et al., 2002). According to Chow and Leung (2006), ownership concentration has a negative correlation with collective governance measures within a company. Lack of transparency in the financial reporting process may persist, causing controlling shareholders to pursue their own personal interests (Garcia-Mecca and Sanchez- Ballesta, 2010).

The significance of the existence of big shareholders in a company's ownership structure stems from the fact that they can play a crucial role in reducing agency costs in comparison to organizations with dispersed ownership. When corporate governance procedures are inadequate, the presence of big shareholders is an effective way to mitigate the

danger of management straying from ethical standards. On the other side, ownership Concentration produces information asymmetry and conflict between major and minority shareholders. Because it is likely that the main shareholders, in accordance with their power, will attempt to maximize their interests and usefulness, so appropriating the interests of other shareholders for their own gain. Consequently, in the present study, ownership Concentration refers to the company's key shareholders (Navissi et al., 2006).

In contrast, ownership concentration is evaluated by the proportion of important company shares held by the five largest investors. Since institutional investors seek to diversify their holdings in order to obtain exposure to more companies, ownership concentration in the United States has not expanded as rapidly as institutional ownership. Institutional investors have a significant impact on financial markets in the United States (Cornett et al., 2007).

According to the explanations provided, the purpose of this study is to address existing research gaps and to answer the primary question of this study, which is whether the performance of corporate social responsibility has an effect on information asymmetry in companies admitted to the Tehran Stock Exchange. And what is the moderating effect of ownership Concentration in this regard?

Method

In terms of classifying the research according to the data collection method, the current study is causal and post-event. Moreover, according to the classification of research by objective, the current study is of an applied nature. The research methodology is post-event type correlation, which involves investigating the existence of a relationship and correlation between variables by regression (using past information). In this study, linear regression on time series is used to analyze and test hypotheses. The Hausman test will be used to evaluate whether the estimation of the model will be based on fixed or random effects. Eviews software will be utilized in this investigation.

The companies admitted to the Tehran Stock Exchange were used to select the statistical population because, firstly: the information of the companies admitted to the Tehran Stock Exchange is audited by the authorized official auditors of the Securities and Exchange Organization, making it more trustworthy than the information of other companies. has a greater The information of these companies is also more readily available than that of other companies. The statistical population of the study consists of all businesses admitted to the Tehran Stock Exchange between 2012 and 2019 for which the necessary financial data, including financial statements, independent auditors' reports, and notes supporting financial statements, are accessible. to be Due to the vastness of the statistical volume of the society and the presence of some discrepancies among its members, the following criteria have been established for the selection of the statistical sample:

- 1- These firms must be listed on the stock exchange prior to 2012, and their shares must be traded on the exchange beginning in 2019.
- 2- The company's fiscal year concludes on March 29.
- 3- The companies' fiscal year has not altered during these years (the period under review).
- 4- During the research phase, the company's trading symbol is active and does not cease trading for more than six months per year.
- 5- Throughout the specified fiscal years, they have not been withdrawn from the stock market.
- 6- The company's type of business is production, and it does not belong to banks and other financial institutions, investment and mediation firms, holding and leasing, because their methods of financial reporting and the nature of their revenues and expenses are different.
- 7- During the research time, each of the examined companies' complete information is accessible.

Consequently, by applying the aforementioned restrictions, the companies in the statistical sample of the research will have the same characteristics, which will be selected from the statistical population; the statistical sample of the current study will be chosen on purpose and through a systematic elimination procedure. The statistical sample for this study consists of information regarding 84 firms admitted to the Tehran Stock Exchange between the years of (2012-2019). A method of systematic screening will be utilized to establish the sample size.

In this study, information will be gathered using library approaches. For the collection of information in the fields of theoretical foundations and research literature, library resources, journals, and essential books were utilized, and statistical data will be gathered via the Tehran Stock Exchange website and Rahavard Novin software.

The regression and correlation test and Eviews software will be used for data analysis, and the data will be studied in two sections: descriptive statistics and inferential statistics, with dispersion indices, mean, median, mode, and graphs comprising the descriptive statistics component. In the descriptive statistics section, variance, standard deviation, etc., will be employed. In the inferential statistics section, Kolmogorov Smirnov tests will be used to verify the normality of variables, and correlation and regression tests will be used to determine the relationship between variables.

Findings

Statistical descriptions of study variables

In the descriptive statistics phase, data analysis was performed using central indices such as the mean and median and dispersion indices such as standard deviation, skewness, and skewness. In this connection, the mean is the primary central index and represents the average of the data; if the data are aligned on an axis, the mean value corresponds to the equilibrium point or center of gravity of the distribution. The standard deviation is a dispersion parameter that indicates the extent of data dispersion. Skewness is an indicator of data symmetry and one of the metrics for determining the divergence from normality. If the distribution of the society is symmetrical, the skewness coefficient will equal zero; if it is skewed to the left, it will be negative; and if it is skewed to the right, it will be positive. Elongation is also a sign of community dispersion relative to the typical distribution (Momini and Ghayoumi, 2019). Table 1 provides a summary of descriptive statistics pertaining to model variables after screening and removing outliers using Eviews10 software.

Table 1: Data descriptive statistics indicators

Variables	N	Mean	Std.	Skewness	Kurtosis	Min	max
information asymmetry	84	21.55	1.29	1.14	2.08	13.32	52.17

According to the descriptive statistics supplied in the preceding table:

The information asymmetry variable data pertains to 84 companies listed on the Tehran Stock Exchange, with a mean of 21.55, a minimum of 13.32, a maximum of 52.17, a standard deviation of 1.29, a skewness of 1.14, and a skewness of 2.08. The purpose of this study is to explore the hypothesis that ownership concentration moderates the association between social responsibility performance and information asymmetry. The objective of the third hypothesis test is to examine the moderating role of ownership concentration in the relationship between social responsibility performance and information asymmetry. The statistical hypothesis is as follows:

H_0 :Ownership concentration does not play a moderating role in the relationship between social responsibility performance and information asymmetry.

H_1 :Ownership Concentration moderates the association between social responsibility performance and information asymmetry.

$$\begin{cases} H_0 : \beta_1 = 0 \\ H_1 : \beta_1 \neq 0 \end{cases}$$

Table 2: Test of the relationship between ownership concentration and social responsibility performance and information asymmetry.

	The moderating effect of ownership concentration and social responsibility performance	Information asymmetry
The moderating effect of ownership concentration and social responsibility performance	1	0.173
Information asymmetry	0.173	1
The significance level	0.00	

Observing that the correlation coefficient between these two variables, i.e. the moderating effect of ownership concentration and social responsibility performance and information asymmetry, is 0.173 and the significance index is 0.000, the positive value of these values indicates a direct relationship between the variables, consistent with the level value. With an error level of less than 1%, hypothesis H1 is confirmed and the existence of a direct and

statistically significant association is confirmed. Hence, the third hypothesis is supported, as there is a positive and statistically significant association between the moderating effect of ownership concentration and social responsibility performance and information asymmetry at the 99% confidence level.

As demonstrated, the moderating effect of ownership concentration and social responsibility performance have a direct linear correlation with the dependent variable of information asymmetry (that is, with the increase of the independent variable, the value of the dependent variable also increases). Furthermore, these associations are significant at the 1% error level.

Table 3: Summary of regression test results (Limmer's F)

Cross-section fixed effects test equation:				
Dependent Variable: IT				
Method: Panel Least Squares				
Date: 08/21/22 Time: 16:49				
Sample: 1392 1399				
Periods included: 8				
Cross-sections included: 84				
Total panel (balanced) observations: 672				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.075604	0.006506	11.62032	0.0000
CSR*OWNERSHIP	0.088682	0.014485	6.122426	0.0000
Effects Specification				
Period fixed (dummy variables)				
R-squared	0.080776	Mean dependent var	0.098876	
Adjusted R-squared	0.069684	S.D. dependent var	0.141918	
S.E. of regression	0.136884	Akaike info criterion	-1.126063	
Sum squared resid	12.42279	Schwarz criterion	-1.065658	
Log likelihood	387.3572	Hannan-Quinn criter.	-1.102669	
F-statistic	7.282584	Durbin-Watson stat	1.717304	
Prob(F-statistic)	0.000000			

The results of the regression test indicate a significant positive or direct relationship between the moderating effect of ownership concentration and the performance of social responsibility and information asymmetry at the 99% confidence level. In other words, information asymmetry will increase according to the moderating influence of ownership concentration and social responsibility performance. As shown in the preceding table, the Durbin-Watson value is 1.71. Hence, the assumption of error independence for the regression test is validated, and the findings of this regression are valid and acceptable. The coefficient of explanation for this hypothesis' regression model is 0.080, indicating that the estimated regression model can predict 8% of changes in the dependent variable.

The errors have a normal distribution with a mean of zero, confirming the normality assumption; hence, this regression test is legitimate and its results are acceptable. On the basis of the preceding tables, it can be inferred with

99.9% assurance that the moderating effect of ownership concentration and social responsibility performance are appropriate variables for information asymmetry. Thus, the following is the selected regression model:

$$Y = 0.075604 + 0.88682X1$$

In this model, Y represents information asymmetries, X1 represents the moderating influence of ownership concentration and social responsibility performance, and 0.075604 is the constant number.

Multivariate research regression model

The final research model is approximated using F-Limer test. Indicators of the regression model are summarized in the table below.

Table 4: Summary of regression tests (Limmer's F).

Cross-section fixed effects test equation:				
Dependent Variable: IT				
Method: Panel Least Squares				
Date: 08/21/22 Time: 16:47				
Sample: 1392 1399				
Periods included: 8				
Cross-sections included: 84				
Total panel (balanced) observations: 672				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.019994	0.008909	2.244218	0.0251
CSR	0.422466	0.042001	10.05847	0.0000
OWNERSHIP	0.003734	0.012788	0.292038	0.0303
CSR*OWNERSHIP	0.004965	0.035763	0.138820	0.0496
Effects Specification				
Period fixed (dummy variables)				
R-squared	0.205276	Mean dependent var	0.098876	
Adjusted R-squared	0.193253	S.D. dependent var	0.141918	
S.E. of regression	0.127469	Akaike info criterion	-1.265646	
Sum squared resid	10.74024	Schwarz criterion	-1.191817	
Log likelihood	436.2570	Hannan-Quinn criter.	-1.237053	
F-statistic	17.07357	Durbin-Watson stat	1.003914	
Prob(F-statistic)	0.000000			

As shown in the preceding table, the Durbin-Watson value is 1.58. Hence, the assumption of error independence for the regression test is validated, and the findings of this regression are valid and acceptable. On the basis of the preceding table, it can be inferred with 99% assurance that the effective factors of this study (independent and moderator) are appropriate variables for information asymmetry. The coefficient of explanation for the general regression model of this study is 0.205, indicating that the estimated regression model can predict 20.5% of the changes in the dependent variable. Thus, the following is the selected regression model:

$$Y = 0.019994 + 0.422466 X1 + 0.003734 X2 + 0.004956 X3$$

Y = information asymmetry X1 = corporate social responsibility performance in this model.

X2 equals ownership Concentration

X3 = the moderating effect of ownership concentration on social responsibility performance, and 0.019994 is the equation's constant.

Conclusion

The correlation coefficient between these two variables, namely the moderating effect of ownership concentration and social responsibility performance and information asymmetry, is 0.172, and the significance index is 0.00. Taking into account the significance level value, which is less than 1%, the positivity of these values implies a direct association between the variables. At the 1% significance level, the assumption of H1 is validated, as is the existence of a direct and meaningful link. Hence, the third hypothesis is supported, as there is a positive and statistically significant association between the moderating effect of ownership concentration and social responsibility performance and information asymmetry at the 99% confidence level. The findings of this study correspond with those of Rahimi (2014), Abdol Rahimian et al. (2014), Golchin et al. (2014), Shahrabi Farahani et al. (2014), Kazempour et al., Ijaz Rahman et al. (2020), Phiri et al. (2019), Khalil et al. (2019), Ninimaki (2018), and Choi et al. (2013).

Suggestions

1. It encourages investors to pay greater attention to the extremely significant category of corporate social responsibility and its role in eliminating information inequality on the capital market.
2. It aids auditors in comprehending the significance of social responsibility accounting information, which is mostly non-financial in nature and not reported in basic financial statements.

research limitations

This study, like other studies, has limitations that make it impossible to generalize its findings.

- 1- Data's validity for the duration of data collection.
- 2- Restriction of corporations' financial information
- 3- The results might be more generalizable if the time domain of the investigation was evaluated for a longer length of time. However, if further years were considered for sample selection, the number of member companies and the statistical sample would drop, hence reducing the research's validity and the ability to examine the specified link.
- 4- The political and economic situations of the country, as well as the psychological climate controlling the Tehran Stock Exchange market, are among the elements that may influence the variables of this study, although they were not controlled for in this study.

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