

The Effect of Voluntary Disclosure of Information on the Quality of Information, Decision-Making and Shareholder Behavior

Javad Rezazadeh ^a, Mohammad Javad Tasaddi Kari ^{b,*}, Rouhollah Kheiri ^c

^a Faculty of Management and Economics, Tarbiat Modares University, Tehran, Iran

^b Faculty of Management and Accounting, Rasht Branch, Islamic Azad University, Rasht, Iran

^c Faculty of Accounting, Tonekabon Branch, Islamic Azad University, Tonekabon, Iran

Received: 9 September 2023 /Accepted: 20 December 2023

Abstract

According to the information content of financial reports, this research aims to investigate the effect of Voluntary Disclosure (VD) on the quality of information, the quality of decision and the behavior of shareholders. The population of the research is the firms listed in Tehran Stock Exchange. Based on the screening, 138 firms were selected between 2013 and 2021. The required data was extracted through the website of the stock exchange organization. The collected data were analyzed through econometric models and EViews software. According to the results, there is a significant relationship between VD, disclosure quality, decision quality and shareholders' behavior. Therefore, the amount of stock transactions can be a function of the amount of disclosure characteristics and the quality of the decision. By focusing on the shareholders, the results can provide a basis for making managers' decisions to meet their information needs and improve the transparency of the financial market.

Keywords: Voluntary disclosure, disclosure quality, decision quality, shareholders' behavior, characteristics of the reporting entity.

Introduction

Considering the role and importance of information in the Decision-Making (DM) process, the disclosure of important and quality information is considered a competitive advantage; Because accounting information affects the behavior of shareholders (Rezazadeh et al., 2022), which indicates the existence of information content of accounting reports (Azadi et al., 2021). Therefore, providing as much important and quality information as possible can improve the quality of decision making. Disclosures in financial reports are divided into two categories: mandatory and optional or Voluntary Disclosure (VD). Considering that mandatory disclosure includes information that must be provided in a mandatory manner, optional disclosure through more supply and more uniform distribution of information can create value and improve the DM process (Hamidian et al., 2018); In other words, the amount of discretionary disclosure in financial reports can affect the quality of information and increase its value (Vali Pur et al., 2014) and affect the intensity of market influence; because VD can compensate for the weak points of the market; This is despite the fact that mainly reporting units have limited their scope of disclosure to providing information within the framework of legal requirements. Because the reporting units believe that VD facilitate the access of competing reporting units to needed

* Corresponding author E-Mail: j.rezazadeh@modares.ac.ir

information and this can have negative consequences in competitive markets. In other words, reporting units do not want to disclose information outside the scope of legal requirements due to competitors spying on their surplus information (Moradi, 2019). However, it is expected that the release of excess information can improve users DM and if the results of decisions are aligned with user's utility function and increase the interests and wealth of shareholders, it can affect their behavior. Therefore, it is necessary to analyze the effect of VD of information on the capital market so that rational decisions can be made in this regard by considering its positive and negative consequences. In order to achieve the goals of this research, the behavior of the shareholders and the quality of their decisions are investigated. It is expected that their effects will be reflected in the trading volume of the reporting units' shares (Kheradyar et al., 2022).

The purpose of the research is to investigate the effect of voluntary disclosure on the quality of financial reporting, users' decisions, and shareholders' behavior. It is expected that this relationship will be affected by the characteristics of reporting units. This research has investigated the different dimensions of disclosure on the behavior of shareholders. The importance of this is that shareholders are in the center of attention as the most key audience of financial reports. Paying attention to this can help improve the capital market situation. The results of the present study show that voluntary and quality disclosure affects the quality of decision and shareholders' behavior. Clarifying the mentioned relationship can bring transparency and improve the quality of reporting in the capital market by focusing attention on the shareholders. In addition, VD and voluntary provision of information can also set the stage for increasing disclosure in other reporting units; Because the influence of information disclosure is considered as a positive phenomenon.

Material and Method

The 20th century is known as the century of financial regulation and the century of certified accountants in America and Britain. The goal of regulation in America was to create uniformity and the goal of Britain was to emphasize disclosure of information (Rezazadeh et al., 2022). Among the factors that led to the attention of regulations with the purpose of disclosure in the United Kingdom was the alignment of factors such as the establishment of legal reporting units and the separation of ownership from management, which necessitated the disclosure of information to capital owners. Also, the limited liability of capital owners was not unaffected in this matter (Rezazadeh et al., 2022). Therefore, the history of disclosure of financial information can be referred to the 20th century (Rezazadeh et al., 2022), which aims to reduce information asymmetry and distribute information evenly among a wide range of financial reporting audiences. Therefore, it can be claimed that disclosure of information is optional. Disclosure in the word means revealing or revealing. Disclosure of financial information is one of the basic elements in the field of accounting duties, so that the audience can make the right decision based on it to allocate resources with the aim of gaining profit and wealth. In the terminology of accounting, disclosure is a comprehensive term that is also referred to as one of the four principles of accounting and includes all information of financial importance (Hassani & Bashir Hosseini, 2010). There are several definitions of disclosure in the accounting literature. From the point of view of Hendriksen & Van Breda (1991), disclosure means the reflection of information. Riahi-Belkaoui (2004) also in line with statement number one of the Financial Accounting Standards Board, which explained the purpose of financial reporting to provide useful information for decision making, disclosure is a useful range of information for users that leads to the optimal allocation of resources, defines. In another definition, Maheshwari (2000) explains disclosure as one of the principles of accounting, based on which financial reports must be presented in a complete and fair manner.

The nature of disclosure is based on the theories of representation, public interest (Haghighat et al., 2016), legitimacy and signaling (Moradi, 2019; Rouf & Siddique, 2023). Agency theory is rooted in agency relationship, which due to its nature, creates information asymmetry between managers and owners. Therefore, the owners will not have a correct understanding of the abilities, preferences and level of effort of the managers (Rezazadeh, 2018), and this makes the role of information disclosure colorful. On the other hand, considering the importance, role and status of the public; and emphasizing the protection of society's interests, the legislative and governing bodies enact laws and regulations. Because information gaps can lead to the failure of the market.

The origin of information disclosure requirements in the 20th century is also due to the nature of public interest theory. Based on the theory of legitimacy, reporting units affected by the environment in which they operate, disclose information that legitimizes their activities (Moradi, 2019). Also, based on the signaling theory, profitable reporting units disclose more information by disclosing good news and obtaining its positive consequences (Moradi, 2019). Because the disclosure of good news has a positive effect on the behavior of shareholders (Kheradyar et al., 2022).

For the first time, Botosan (1997) proposed disclosure indicators including background information, a summary of historical results, key non-financial information, budget information, and management discussions and analyzes. Then, Jensen (2004) introduced unweighted measures of disclosure, which include the level of strategic disclosure, competitive landscape, details of production, marketing and sales, human capital, and the amount of information disclosure.

Voluntary Disclosure

Considering that disclosure of information can be classified into two categories: mandatory disclosure and VD; Therefore, when disclosure of financial information is done based on legal requirements, it is called mandatory disclosure, and when disclosure of important information is done in excess and outside of legal requirements, it is called optional or VD (Owusu-Ansah, 1998). What should be disclosed in VD is determined by the manager (Dye & Finn, 2007). Healy & Palepu (1993) believe that although accounting standards are a mechanism to reduce the information gap between the parties of conflict of interest, this information gap does not disappear completely; Therefore, VD can help reduce this gap and improve financial reporting. In this regard, the research results of Putra & Hatta (2023) show that profit quality, optional disclosure and information asymmetry are important for investors' DM. In another research, Tahir et al. (2023) also found that the role of corporate governance system and VD reduces information asymmetry and helps to improve shareholders' DM. Payandehdost Masooleh et al. (2023) also found in another study that VD (including social sustainability information) increases the quality of disclosure by better showing the functional nature of the reporting unit.

Disclosure Quality

The term quality of disclosure is used as the same meaning as transparency (Hemmati & Amiri 2018). Singhavi & Desai (1971) define quality disclosure at a broad level, providing financial information, and quality disclosure at a detailed level, providing information outside the context of financial statements. They believe that quality disclosure is disclosure that is complete, correct and reliable. Banimahd et al. (2016) believe that disclosing more information in the text of financial statements and explanatory notes is considered an example of quality disclosure and the more a unit discloses more financial and non-financial information. it has a higher level of disclosure quality. The way information is distributed can affect the capital market. In such a

way that the lack of uniform distribution of information or the existence of information asymmetry can lead to the failure to make effective decisions and optimal allocation of resources (Hemmati & Amiri, 2018). Therefore, it is expected that uniform distribution of information and VD of additional information, in addition to legitimizing the right of the audience implicitly, will increase the scope for making informed decisions. Therefore, there is a two-way relationship between VD and the quality of disclosure. So that the research of Suharsono et al. (2020) shows that VD has increased the quality of financial statements due to information asymmetry and due to the uniform distribution of information. In another study, Marshall et al. (2009) showed that voluntary environmental disclosures affect the value of the reporting unit, which is a function of the quality of information disclosure and the future expectations of users of that information.

Decision Quality

Decision quality was introduced for the first time by Howard (1988) emphasizing the evolution of statistical decision theory and game theory and developed by Ronald (Naderi Roushanvand et al., 2020). So far, researchers have tried to help make effective and efficient decisions by introducing decision components or requirements (Naderi Roushanvand et al., 2020). But so far, there is no comprehensive definition regarding decision quality. Based on the study of the available sources, it can be seen that the quality of the decision is a function of the closeness of the decision results to the predetermined criteria.

Since human behavior is a function of his decisions, it is expected that providing quality information will improve individual performance. The research results of Jayalath & Priyadarshanie (2022) show that the voluntary and VD of information helps to improve the DM of investors.

The Behavior of Investors

Behavior is an institutional phenomenon that is caused by the environment and adaptation to it. Behavior is a function of the goal, and without a goal, the behavior of living beings cannot be understood and analyzed (Sohrabi & Alavi, 2010). Shareholders make their decisions based on financial reports, which indicates the existence of informational content of financial reports (Azadi et al., 2021). Therefore, it is expected that the behavior of the shareholders as a result of their decisions will affect the volume of stock exchanges (Rezazadeh et al., 2022). In other words, the amount of buying and selling shares of the reporting units can be a function of this. Therefore, it is thought that the optional disclosure and the quality of the disclosure will attract the attention of investors and overshadow their decisions due to the existence of the mentioned information content. In this regard, the research of Rezazadeh et al. (2022) also showed that the behavior of investors is influenced by the quality of disclosure and the life cycle of the reporting entity (Rezazadeh et al., 2022). Khordiar et al. (2022) also found in another study that good and bad accounting news affects the behavior of investors; In other words, the behavior of investors is a function of good and bad accounting news published. In another study, Azadi et al. (2021) found that the readability of financial statements has an effect on the risk of falling stock prices, and this can overshadow the decisions of shareholders.

According to the issues raised, the hypotheses of the current research are explained as follows:

H₁: VD affects the behavior of shareholders.

H₂: VD has an effect on the relationship between decision quality and shareholders' behavior.

H₃: VD affects the behavior of shareholders by influencing the quality of disclosure and the quality of decision.

Material and Methods

Methodology

The current research can be classified from different dimensions; So that the current research can be categorized as applied research from the perspective of the objective, from the perspective of the method of data collection as semi-experimental research, from the perspective of reasoning as comparative research, and in terms of nature, He put it in the category of proof studies. The data required for the research was extracted from the website of the Tehran Stock Exchange Organization. The statistical population of the present study consists of reporting units active in the Tehran Stock Exchange, which have been operating continuously during the years 2013 to 2021 and with the following conditions:

- Do not change the financial year;
- Their fiscal year should be on end of year;
- Be of production type and;
- Do not have a trading break of more than one month.

Based on systematic elimination sampling, 138 reporting units were selected in the mentioned period. The collected data have been analyzed using multivariate regression method and econometric models.

Research Model

In order to test research hypotheses, multivariate regression model number one has been used.

$$SB_{it} = \beta_0 + \beta_1 VD_{it} + \beta_2 DMQ_{it} + \beta_3 DQ_{it} + \beta_4 VD_{it} \times DMQ_{it} + \beta_5 VD_{it} \times DMQ_{it} \times DQ_{it} + \beta_6 SIZE_{it} + \beta_7 AQ_{it} + \beta_8 ROA_{it} + \beta_9 MB_{it} + \epsilon_{it} \quad (1)$$

The elements of the model include SB as a symbol of shareholder behavior, VD optional disclosure, DMQ decision quality, DQ disclosure quality, SIZE size, AQ audit quality, ROA return on assets, MB growth opportunity, i reporting unit, t year symbol, β Regression coefficients and ϵ are symbols of error sentences. The way to measure the variables is as follows:

The behavior of shareholders is calculated from the natural logarithm of the volume of annual stock transactions, which is based on the volume of stock transactions according to (Vatanparast et al., 2019).

Therefore, in order to study the behavior of shareholders, the natural logarithm of the average annual volume of the stock exchanges has been used. In other words, the annual sales volume of the audited reporter's shares belonging to period t can be measured for one year ($t+2$) from August 1 of the following year ($t+1$) (Vatanparast et al., 2019). Due to the impossibility of implementing the Butosan index to evaluate VD in Iran, in the present study, according to Rabiei et al. (2019), the checklist in Table 1 indicators have been used to measure the variable of VD.

After collecting the data from the checklist in Table 1, the total points obtained are divided by the number of main themes (nine themes) to obtain the optional disclosure disclosure points of each reporting unit for each year. Also, to measure the quality of decision-making, the index of reaction coefficient of normal return to profit has been used. This index directly shows the quality of investors' decision-making, which is measured by model number two:

$$R_{it} = \beta_0 + \beta_1 EPS_{it} + \epsilon_{it} \quad (2)$$

The components of model number two are the symbol R, which indicates the normal return (simply to calculate the normal return, the value of the share at the beginning of the period is

deducted from its value at the end of the period and the number obtained is divided by the value of the share at the beginning of the period) and EPS, which indicates profit per share.

Table 1. VD Checklist

Row	Object	Yes	No
1	Access to information (official and unofficial sources)		
2	The preferred form of information presentation		
3	The optimal amount of information		
4	Attention to the type of industry and information users		
5	Having the qualitative characteristic of information		
6	Providing comparative information		
7	Providing non-financial statistics		
8	Providing analytical information		
9	Provision of future information		

To measure the quality of disclosure, the ranking of Iran Stock Exchange has been used. So that the quality score of the disclosure of the accepted units, which indicates the awareness level of the disclosure of the reporting units, is calculated and presented during the periods of three, six, nine and 12 months. These scores are calculated based on the weighted average of the timeliness and reliability criteria of the disclosed information. The ranking of the stock exchange organization is done based on the information disclosure regulations in the stock exchange organization (Noravesh & Hosseini, 2009). In this research, the size is obtained from the natural logarithm of the total assets of the reporting units. In the calculation of audit quality based on the previous principles, if the auditors of the reporting units are audit organizations, the number will be one and otherwise it will be equal to zero. Also, to calculate the return on assets, the result of dividing the net profit by the total assets of the reporting units is used, and finally, the growth opportunity is also calculated from the ratio of the stock market value to its book value.

Results

In this section, the collected data were analyzed by Eviews10 software. Table 2 shows the descriptive statistics of the research variables, which includes 1242 company-years.

Table 2. Descriptive statistics of variables

Symbol	Average	Middle	Max	Min	Standard Deviation
SB	18.848	19.001	25.839	8.747	2.022
VD	0.420	0.444	0.888	0.111	0.144
DMQ	0.226	0.384	1.000	-1.000	0.697
DQ	0.478	0.480	1.000	0.000	0.241
SIZE	14.729	14.520	21.327	11.035	1.613
AQ	0.175	0.000	1.000	0.000	0.380
ROA	0.148	0.124	0.673	-0.581	0.155
MB	5.476	3.147	153.516	-49.703	9.610
Observations	1242	1242	1242	1242	1242

Table 2 contains the descriptive statistics of the variables. The highest average is related to the variable of shareholders' behavior and the lowest is related to the variable of return on assets of the reporting units. In order to ensure the results of the research, Manai's test was performed. Because the use of invalid data in the model leads to the occurrence of false regression (Kheradyar et al., 2022). This test was performed using EViews software and methods of Levin, Lin and Chou test, Im–Pesaran–Shin (IPS) test, generalized Dickey-Fuller Fisher unit root test

and Fisher-Phillips unit root test. The results of the unit root test for the variables of the models are as described in Table 3.

Table 3. Results of stationarity test of variables

Variables	Levin, Lin and Chou Test		IPS		Dickey-Fuller Fisher		Fisher-Phillips	
	Statistics	Meaningful	Statistics	Meaningful	Statistics	Meaningful	Statistics	Meaningful
SB	-8.430	0.000	-4.790	0.000	425.29	0.000	411.85	0.000
VD	-15.80	0.000	-5.514	0.000	417.601	0.000	420.75	0.000
DMQ	-19.89	0.000	-7.723	0.000	533.87	0.000	505.42	0.000
DQ	-21.41	0.000	-10.25	0.000	598.11	0.000	684.76	0.000
SIZE	-23.16	0.000	-14.67	0.000	444.56	0.000	482.32	0.000
ROA	-12.30	0.000	3.490	0.000	405.10	0.000	414.28	0.000
MB	-18.72	0.000	-8.768	0.000	567.40	0.000	411.55	0.000

The results of Table 3 indicate that the significance (Prob) obtained for all significance tests of the variables is less than 0.05; Therefore, all research variables are significant. Before estimating the regression model of the research to test the hypotheses, the collinearity of the variables in the model should be examined. Table 4 shows the Pearson correlation coefficients of the variables.

Table 4. Non-collinearity test results

Correlation	SB	VD	DMQ	DQ	SIZE	AQ	ROA	MB
SB	1.000							
VD	0.205	1.000						
DMQ	-0.056	0.010	1.000					
DQ	-0.036	0.303	0.006	1.000				
SIZE	0.546	0.416	0.008	-0.019	1.000			
AQ	0.061	0.405	0.092	0.039	0.240	1.000		
ROA	0.019	0.258	0.122	0.041	0.267	-0.0008	1.000	
MB	0.102	0.049	-0.047	0.015	-0.038	-0.068	0.075	1.000

According to the results of the Table 4 and the collinearity test of the variables, it is clear that there are no very high or very low values of the correlation coefficient (i.e. close to +1 and -1) that affect the results of the regression analysis; As a result, there is no linearity between research variables. The results of the estimation of the test model of hypotheses one to three, using the EGLS method, are shown in Table 5.

The results expressed in Table 5 indicate that the significance of the F test is equal to 0.000, which is smaller than 0.05. Therefore, the hypothesis test model is significant with a probability of 95% and has high reliability. The adjusted coefficient of determination of the model is equal to 0.854. This number indicates that about 85% of the changes in the dependent variable can be explained by the explanatory variables of the model, and since the Durbin-Watson statistic of the model is equal to 1.712 and this value is between 1.5 and 2.5. It can be said that there is no autocorrelation in the model.

Table 5. Model estimation results for hypothesis testing
$$SB_{it} = \beta_0 + \beta_1 VD_{it} + \beta_2 DMQ_{it} + \beta_3 DQ_{it} + \beta_4 VD_{it} \times DMQ_{it} + \beta_5 VD_{it} \times DMQ_{it} \times DQ_{it} + \beta_6 SIZE_{it} + \beta_7 AQ_{it} + \beta_8 ROA_{it} + \beta_9 MB_{it} + \epsilon_{it}$$

Variable	Coefficient	Std. Error	t-Statistic	Prob
VD	0.591	0.258	2.290	0.022
DMQ	-0.029	0.096	-0.309	0.757
DQ	-0.116	0.117	-0.991	0.321
VD×DMQ	0.845	0.305	2.772	0.005
VD×MQ×DQ	-0.846	0.306	-2.759	0.005
SIZE	1.149	0.030	37.397	0.000
AQ	-0.479	0.132	-3.610	0.000
ROA	0.551	0.217	2.540	0.011
MB	0.015	0.002	6.294	0.0000
y-intercept	1.605	0.439	3.655	0.0000
The coefficient of determination = 0.871		Adjusted coefficient of determination = 0.854		
DW Statistics = 1.712	Statistic Test F = 50.833		Test Probability F = 0.000	

Regarding the first hypothesis, the results of Table 5 show that the significance (Prob) calculated for the independent variable of VD is equal to 0.022, smaller than 0.05, and the estimated coefficient of that variable is equal to 0.591 positive. As a result, it can be stated that VD has a positive and significant effect on the behavior of shareholders. Therefore, the first research hypothesis regarding the effect of VD on shareholders' behavior is accepted at the 95% confidence level. Also, regarding the second hypothesis, the results indicate that the significance (Prob) calculated for the VD×DMQ variable is equal to 0.005, smaller than 0.05, and the estimated coefficient of that variable is positive 0.845. Therefore, it can be stated that VD has a positive and significant effect on the relationship between decision quality and shareholders' behavior. Based on this, the second research hypothesis that VD has an effect on the relationship between decision quality and shareholders' behavior is also confirmed at the 95% confidence level. On the other hand, the results listed in Table 5 show that the significance (Prob) calculated for the VD×DMQ variable is equal to 0.005, smaller than 0.05, and the estimated coefficient of that variable is negative 0.846. As a result, it can be stated that VD has a negative and significant effect on the behavior of shareholders by influencing the quality of disclosure and the quality of decision. Based on this, the third hypothesis of the research that VD has an effect on the behavior of shareholders by influencing the quality of disclosure and the quality of decision is also accepted.

Discussion and Conclusion

The current research aims to investigate the impact of disclosure characteristics with emphasis on voluntary characteristics and its quality on the quality of decisions and behavior of shareholders. For this purpose, the information of 138 reporting units (1242 years - companies) has been used and analyzed through statistical methods and multivariate regression. The results of the research show that VD has an effect on the quality of disclosure and the quality of decision and can influence the behavior of shareholders. In other words, it is expected that the release of additional information by the reporting units will lead to the reduction of information asymmetry and more uniform distribution of information, and due to the increase of information, it will affect the quality of the decision. The results of the present research are in line with the results of Healy & Palepu (1993), Putra & Hatta (2023), DM by shareholders;

Suharsono et al. (2020), Marshall et al. (2009) and Jayalath & Priyadarshanie (2022) based on the quality of information and shareholder decisions; Rezazadeh et al. (2022) is based on the role of disclosure quality on shareholders' behavior. The consequence of the quality of decisions can be crystallized in the volume of stock exchanges of the reporting units. Also, in line with the results of Rezazadeh et al. (2022), the quality of information disclosure as good news and in line with the research results of Kheradyar et al. (2022) follows. Therefore, the quality of shareholders' decisions can be affected by the characteristics of information disclosure, including VD and the release of quality information, and the results of this can be crystallized in the decisions of shareholders.

Considering that the focus of the current research is the shareholders and emphasizing the results of the research that the publication of additional information voluntarily and the publication of quality information can influence the decisions of the shareholders, it is suggested to the reporting units as a way to create a competitive advantage. It is possible to provide more voluntary information while maintaining the quality of information. In addition to increasing the value of the shares of the reporting units due to the increase in demand, this also provides the basis for improving the transparency of financial reporting. This can be aggravated under the influence of the auditors' report.

According to the results of the present research, it is suggested for future researches to investigate the effect of disclosure of positive and negative information of the reporting unit on the behavior of shareholders. Also, in another research, the role of the influence of the non-commissioned members of the board of directors on the voluntary release of information and its effect on the capital market can be analyzed.

In expressing the limitations of the present research, we can mention the behavioral patterns of the shareholders. In other words, it is possible that in some cases, some of the transactions took place due to the following of common people from knowledgeable people. Although this cannot overshadow the completeness of the results of the current research, it can influence the intensity of the results. It is also suggested to the managers to take measures to voluntarily disclose information and to increase the quality of information and provide the basis for improving the quality of decision-making.

References

- Azadi, K., Azizmohammadlo, H., Tasaddi Kari, M. J., & Khedmatgozar, H. (2021). The readability effect of financial statements on stock price risk and shareholder behavior. *Financial Accounting Knowledge*, 8(28), 121-144
- Banimahd, B., Arabi, M., & Hassanpour, S. (2017). *Empirical Researches and Methodology in Accounting*. Termeh, Tehran.
- Botosan, C. A. (1997). Disclosure level and the cost of equity capital. *Accounting Review*, 323-349.
- Dye, R. A., & Finn, M. (2007). Equilibrium voluntary disclosures when firms possess random multi-dimensional private information. In *Essays in Accounting Theory in Honour of Joel S. Demski*, (pp. 53-72). Springer, New York, NY.
- Haghighat, H., Safarzadeh, M. H., & Rafiee, A. (2016). *Accounting Theory*, Ramzineh- Tehran.
- Hamidian, M., Hajiha, Z., & Taghizade, N. (2018). The Usefulness of Voluntary Disclosure to Investors' Judgment. *Economical Modeling*, 11(40), 137-155.
- Hassani, M., & Bashir Hosseini, S. (2010). Examining the Relationship between the Level of Disclosure of Accounting Information and the Fluctuation of the Price of Stock, in the Companies Accepted in Tehran's Stock Market. *Journal of Economic Business Research*, 1(2), 75-84.
- Healy, P. M., & Palepu, K. G. (1993). The effect of firms' financial disclosure strategies on stock prices. *Accounting Horizons*, 7, 1-11.
- Hemmati, H., Amiri, E. (2018). The Effect of Disclosure Quality in Terms of Reliability and Timeliness on the Stock Trading Cost. *Journal of Financial Accounting Research*, 10(2), 107-134.
- Hendriksen, E. S., & Van Breda, M. F. (1991). *Accounting theory*. Irwin, McGraw.

- Howard, R. A. (1988). Decision Analysis: Practice and Promise. *Management Science*, 34(6), 679-695.
- Jayalath, J. A. T. S., & Priyadarshanie, W. A. N. (2022). Impact of voluntary disclosure level on the value relevance of accounting information; evidence from colombo stock exchange, Sri Lanka. In CMA National Management Accounting Conference.
- Jensen, M. A. (2004). Disclosure Level and cost of capital: Evidences from Danish financial market.
- Kheradyar, S., Kazemi, H., Tasaddi Kari, M. J., & Yar Ahmadi, J. (2022). The Effect of Good and Bad Accounting News on Shareholder Behavior. *Accounting and Auditing Research*, 14(53), 67-80.
- Maheshwari, S. (2000). *Fundamentals of Accounting For CA Foundation Course*.
- Marshall, S., Brown, D., & Plumlee, M. (2009). The impact of voluntary environmental disclosure quality on firm value. In *Academy of Management Proceedings*. Briarcliff Manor, NY, Academy of Management.
- Moradi, M. (2019). The Role of Optional Disclosure of Financial Information in the Industrial Espionage of Companies. *Accounting and Auditing Studies*, 8(32), 89-104.
- Naderi Roushanavand, A., karami, M., Ezati, M., & Souri, A. (2020). A model for evaluating the quality of university resource allocation: Meta-Synthesis approach. *Journal of Educational Planning Studies*, 9(17), 252-293.
- Noravesh, I., & Hosseini, S. (2009). Corporate Disclosure Quality (consist of timeliness and reliability) and Earnings Management. *Accounting and Auditing Review*, 16(2), 117-134.
- Owusu-Ansah, S. (1998). The impact of corporate attribites on the extent of mandatory disclosure and reporting by listed companies in Zimbabwe. *The International Journal of Accounting*, 33(5), 605-631.
- Payandehdost Masooleh, H., Kheradyar, S., Vatanparast, M.. (2024). The relationship between companies' social sustainability performance and the quality of voluntary disclosure. *Journal of Management Accounting and Auditing Knowledge*, 13(49), 1-16.
- Putra, D. A., & Hatta, M. (2023). Corporate Governance, Voluntary Disclosure, Earning Quality, Information Asymmetric: A Conceptual Framework. *Open Access Indonesia Journal of Social Sciences*, 6(3), 989-997.
- Rabiee, K., Mehrani, K., & Tahriri, A. (2020). Formulation of optional disclosure quality assessment model, 9(35), 187-206.
- Rezazadeh, J., Vatan Parast, M., Tasaddi Kari, M. J., & Yar Ahmadi, J. (2022). The Effect of Disclosure Quality on Shareholder Behavior with Emphasis on the Biological Characteristics of the Reporting Unit. *Environmental Energy and Economic Research*, 6(4), 1-14.
- Rezazadeh, J. (2018). *Auditing Theory*. Termeh, Tehran.
- Riahi-Belkaoui, A. (2004). *Accounting Theory*. Thomson.
- Rouf, M. A., & Siddique, M. N. E. A. (2023). Theories applied in corporate voluntary disclosure: a literature review. *Journal of Entrepreneurship and Public Policy*, 12(1), 49-68.
- Singhavi, S. S., & Desai, H. B. (1971). An empirical analysis of the quality of corporate financial disclosure. *The Accounting Review*, 46(1), 129-138.
- Sohrabi, S., & Alavi, S. M. (2010). The attractiveness of e-commerce websites. *Journal of Business Management*, 2(8), 24-37.
- Suharsono, R. S., Nirwanto, N., & Zuhroh, D. (2020). Voluntary disclosure, financial reporting quality and asymmetry information. *The Journal of Asian Finance, Economics and Business*, 7(12), 1185-1194.
- Tahir, S., Ehsan, S., Hassan, M. K., & Zaman, Q. U. (2023). Does corporate governance compliance condition information asymmetries? Moderating role of voluntary disclosures. *Journal of Asian Business and Economic Studies*, 30(1), 2-25.
- Vali Pur, H., Taleb Nia, G., & Ahmadi, R. (2014). Examining the Impact of Voluntary Disclosure Level on Value Relevance of Accounting Information of Firms Listed in Tehran Stock Exchange (TSE). *Management Accounting*, 7(2), 71-81.
- Vatanparast, M. R., Tasaddi Kari, M. J., & Yarahmadi, J. (2019). Corporate social responsibility and shareholder trust. 4th National Conference on Management, Accounting and Economics with an emphasis on regional and global marketing, Iran.

