





Some Factors that Influence the Quality of Voluntary Disclosure

Khadijeh Rabiee

Kaveh Mehrani

Associate Professor of Accounting, Faculty of Management, University of Tehran, Tehran, Iran. kmehrani@ut.ac.ir

Arash Tahriri

Assistant Professor of Accounting, Faculty of Management, University of Tehran, Tehran, Iran.

ABSTRACT

The purpose of this study is to investigate the factors affecting the evaluation of the quality of voluntary disclosure, given that the factors used in internal research due to having an external source and focusing on the number of disclosures may not be an appropriate criterion for measuring the quality of information disclosure, so, it is necessary to provide new influencing factors on the evaluation of voluntary disclosure quality. In this study, first nine factors influencing the evaluation of voluntary disclosure quality were obtained through semi-structured interviews with 17 accounting and auditing elites. Then the effect of the nine factors on the quality of voluntary disclosure was statistically analyzed. The required information was collected from 384 questionnaires electronically through distribution in social networking groups between professors and accounting experts. Data analysis was performed by SPSS24 and AMOS24 software using structural equation modeling. Among the factors determined by the elite, factors such as access to voluntary information, form of voluntary disclosure, voluntary disclosure, attention to the type of industry and information users, having qualitative information characteristics, analytical disclosure and future disclosure had a significant and positive impact on the evaluation of voluntary disclosure. In addition, providing comparative information and non-financial statistics did not have a significant effect on the evaluation of the quality of voluntary disclosure.

Keywords:

Disclosure, Voluntary disclosure, Voluntary disclosure quality

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1. Introduction

One of the basics of evaluating a firm's performance and performance and making investment decisions is having clear and reliable information as the product of a comprehensive reporting system. In any economic event, investors need credible information to make a decision. Timely disclosure of financial reports is considered to be a key element in reducing information asymmetry and improving capital market performance (Hoseini 2016). It is, moreover, a very important element of financial information markets. One of the factors affecting the functioning of the information capital market is transparent information and information deficits increase transaction costs and market inability to appropriately allocate resources. The more transparent and accessible the information can be, the better decisions can be made about the optimal allocation of resources, and ultimately the more efficient the allocation efficiency that is the ultimate goal of the capital market. Therefore, disclosure of information by companies plays an important role in the efficiency of the capital market. The disclosure of company information is carried out by the publication of financial statements, explanatory notes, board reports and the like. Some companies voluntarily disclose additional information in addition to disclosing minimum information in accordance with relevant standards and other laws and regulations. Hence, the disclosure of information by companies can be divided into two categories: forced and voluntary disclosure, (Hamidian, Hajiha and Taghizade .2018).

Exposure research is done in three main dimensions, the first and perhaps the most important being measuring and measuring the level and quality of disclosure. For this purpose, several researchers have provided checklists to measure the level of voluntary disclosure by various researchers, (Binh 2012 , Varghese ,2011). Various researches have been conducted in Iran in this regard, and mainly by basing the checklists prepared in foreign research to measure the level of voluntary disclosure and, of course, some adjustments have also been made, the most important of which is the checklist set up by Botosan (1997) that Kashani Pour et al. 2009 have been modified and used, and subsequently various studies have based this checklist on their reviews.

According to theories related to disclosure, such as agency theory, marking theory, capital need theory, and legitimacy theory, firms with high-quality disclosures are expected to have higher returns than other companies with information asymmetry, capital cost and profit management and cash flow, access to funds, trading volume and stock returns, but a review of related and different studies reveals very contradictory results and largely contradicts theories about disclosure and the causes of disclosure. In Iran, voluntary disclosure fails to realize the benefits it expects, calling into question the necessity of disclosing the information and benefits expected of it, the existence of such inconsistent results, therefore, reinforces the possibility of incomplete, ineffective, and invalidated voluntary disclosure quality assurance tools, as Beretta and Bozzolan (2004) represent in their research, managers are symbolic of information disclosure and checklist-based tools cannot detect whether or not the reports are symbolic, because despite the disclosure of information in a particular area, the quality of the information disclosed cannot help investors facilitate the decision-making process. In a critical approach, they developed a text-based data mining tool for measuring the quality of disclosed information, which examines and scores the qualitative depth of the disclosed information.

Beretta and Bozzolan (2004) believe that information disclosure by managers in some reports is symbolic and that investors cannot make good use of disclosed information. The results in Iran and the findings of Beretta and Bozzolan (2004) support the hypothesis that checklists used in internal research to measure the quality level of information disclosure may not perform well for two reasons, first, most of the checklists used in internal research are external based and do not comply with internal laws, guidelines, requirements and guidelines, and second, checklists designed solely on the basis of disclosure and non-disclosure of the information in question and only measure the number of disclosures but the extent to which the information is disclosed in a transparent, overall quality manner is not investigated, therefore, the purpose of this study is to evaluate the quality of voluntary disclosure of information and to examine the expectations of theories.

Numerous studies indicate that greater disclosure and transparency will have many benefits for companies. The most important of these are lower capital costs and reduced information asymmetry. Forced and voluntary disclosure is one of the tools of financial transparency that increases the liquidity power of a company's stock and thus creates value for shareholders and for the community (Rahmani and Bashirimanesh ,2015). Accurately measuring the level of information disclosure by companies is one of the key aspects of voluntary disclosure research, which uses a checklist tool to measure it accurately in related literature in which first, a proper checklist should be prepared and its information determined, and then the disclosure index calculated by scoring each item. Forced disclosure of information in a checklist is determined by the accounting standards and the voluntary disclosure of this self-made tool comes from a review of the guidelines of the professional accounting and literature communities in the field, the disclosure index is obtained by dividing the company's voluntary disclosure score by maximum voluntary disclosure score, and ultimately the highest rated companies are identified and classified as companies with better disclosure quality (Copeland and Fredricks 1968), Cooke (1989).

The existence of numerous studies that have failed to find a meaningful link with what theories and theories expect from high-quality companies increases the importance of changing the quality of disclosure measurement tools. This importance in Iran is increasing due to the inefficiency of the market, the existence of severe information rents, high information asymmetry. A model and benchmark that can assist investors in classifying and separating companies with high-quality voluntary disclosure reduces error in investment decisions and capital flows in growing companies and financial health, this result encourages other companies to appropriately disclose information to increase investor awareness and improve capital market efficiency. Therefore, the purpose of this study is to present a new tool and index to assess the quality of voluntary disclosure by experts, so as to provide a tool that is appropriate to the country's native conditions. Considering the aims of the research and the assumptions made to attain the intended goals, it is expected that the criterion presented is based on a structural analysis that assesses the quality of voluntary disclosure using the views of internal experts and taking into account internal circumstances, and be more in line with other theories and theories related to disclosure than other methods used in internal research. Because it is based on criteria used in internal research to measure the quality of voluntary disclosure, it is rooted in external research and is more likely to count the number of disclosed items than to evaluate and evaluate the quality of disclosed items. The same characteristics of the criteria used can lead to the disapproval of disclosure theories and theories. Hence, this study investigated the factors affecting the evaluation of optional disclosure quality.

2. Literature Review

The term disclosure, in its broadest sense, means providing information. Accountants use this term more restrictively and they mean publishing financial information about a company in the financial statements (usually in the form of annual reports). In some cases, this concept is still more limited and means providing information not included in the financial statements. Full disclosure implies providing all the information needed to make a decision, and thus ensuring that investors are not misled. Experimental research does not distinguish between the quantity and quality of disclosure. It is generally assumed that the quantity of information disclosed is an indicator of its quality. As a result, disclosure quantity metrics are used to measure disclosure quality. Despite this assumption, however, there is still controversy about achieving a more effective measure of disclosure quality (Beretta and Bozzolan .2004).

Corporate disclosure is one of the areas of interest for academic researchers in many developing and developing countries. Investigating research in the field of disclosure shows that research is conducted in three main dimensions, namely:

Accurate measurement of information disclosure by companies has been measured and quantified in various aspects of compulsory disclosure and voluntary disclosure in terms of financial and nonfinancial information.

Identify the drivers and factors that affect information disclosure procedures and procedures. In the context of legitimacy theory and stakeholder theory, variables such as corporate governance, ownership structure, company characteristics, and stakeholder power influence information disclosure practices.

Various studies have shown that higher disclosure and transparency have different benefits for companies. The most important of these are lower

capital costs and reduced information asymmetry. Forced and voluntary disclosure is one of the tools of financial transparency that increases the liquidity of stocks and thus creates value for company and shareholders community (Rahmani and Bashirimanesh ,2015).

Considering the separation of ownership from management and the inconsistent goals between the agent and the broker, as well as ensuring the proper disclosure and transparency of business information to the general public and stakeholders, it is necessary to have appropriate corporate governance mechanisms. In other words, the disclosure policies of corporate executives are influenced by the corporate ownership structure and its governance systems (Baek Johnson, and Kim ,2011).

It can be stated that due to the information disclosure process, investors face the problem of information asymmetry. This problem arises when one party to the transaction has more information than the other party. The information asymmetry between investors may lead to wrong valuation of the company and may provide incentives to correct the wrong valuation by disclosing more information. Voluntary disclosure of information also reduces information uncertainty and asymmetry and increases investor confidence in corporate management (Parsian Kazemiand Reza Zadeh ,2019).

Voluntary disclosure is the disclosure of information beyond legal obligations, as explained by the legislature, and has an important role in reducing information asymmetry between managers and outside investors. Voluntary disclosure, in the sense of disclosure, goes beyond the rules and standards. Although accounting standards set the minimum disclosure level, they do not restrict disclosure of information beyond the legal requirements. When management is able to disclose additional and voluntary disclosure provide better guidance on the future goals and prospects of the company and the optimal use of its resources and provide a clearer picture of the status quo. In this case, investors and other users of financial statement information will be able to become aware of management measures and address their criticism of the firm's performance and hope for the firm's future Gholami Jamakrani and Bakhtiari (2018). Optional disclosure models can be examined from the following three aspects:

Investors' Analysis and Interpretation of Disclosure or Non-Disclosure Information has a fundamental and key role in making management decisions to disclose information voluntarily. When investors reasonably anticipate that information managers will only disclose information if it is in their interest, such investors will interpret the disclosure specifically depending on the level of knowledge and motivation of the company executives.

It is the management that makes the disclosure decisions, not the company. The cost and benefit of disclosure that describes disclosure decisions reflect the effectiveness of management and the disadvantage of disclosure. Factors that affect management productivity and the unfavorability of disclosure include managers' remuneration packages or corporate governance structure to maximize investment value. Most models assume that managers strive to maximize stock prices. However, most managers are motivated to lower stock prices.

Motivational systems are designed not only to influence managers' disclosure decisions but also to influence investor decisions, competitive behaviour, and capital structure choices.

In the above mentioned models, managers have information advantages over the value of the company and the profitability of the foreign investors and have incentives to maximize the value of the company. Managers have incentives to strategically and selectively disclose information. In contrast, investors reasonably expect such disclosure strategies, and managers have incentives to disclose information that reduces information asymmetry (Gholami Jamakrani and Bakhtiari ,2018).

Liu et al. (2019) stated that an in-company and an out-of-company informant share heterogeneous beliefs about their shared information about risky assets and analyse their motivation to voluntarily disclose information to the public. Heterogeneous beliefs may also reinforce voluntary disclosure for additional profits. The findings show why some people within the company prefer to deal with unauthorized persons, while others prefer to voluntarily disclose outside companies, (Liu et al, (• ۲ •)

Sihombing and Pangaribuan (2017) stated that corporate employing appropriate governance mechanisms leads to increased information disclosure and further to this information disclosure leads to reduced information asymmetry (Sihombing and Pangaribuan, 2017).

Chen et al. (2015) showed that this criterion had a negative relationship with analysts' forecasting dispersion as well as a negative relationship with the bid and ask range (Chen, Miao and Shevlin ,2015).

Satta et al. (2015) stated that there is a significant positive relationship between minority ownership and the audit committee with increasing the quality of voluntary disclosure; there is a significant negative relationship between managerial ownership and board size with increasing quality of voluntary disclosure; Institutional and non-executive directors are not associated with increased levels of voluntary disclosure (Satta et al 2015).

(2012) demonstrated that dimensions and future prospects were the most important in terms of financial analysts and managers, respectively. Evidence shows that with actual review of corporate voluntary disclosure, public information and future prospects have the highest level of disclosure, which is consistent with actual results with analysts and financial manager (Binh 2012).

Sukthomya (2011) examined the level of voluntary disclosure in Thailand. The findings of the study showed a growing trend of voluntary disclosure over the time period of the study and the level of disclosure in the strategic information dimension was higher than the other two dimensions. Also in nonfinancial information, employee information received the lowest level of disclosure (Sukthomya, 2011).

Parsian et al. (1977) showed that corporate governance mechanisms have a positive and significant effect on voluntary disclosure, financial performance and information asymmetry companies. Voluntary disclosure of companies has a significant and positive effect on information symmetry in the capital market. Also, the financial performance of the companies did not have a significant effect on the information symmetry of the companies in the sample. Finally, it can be argued that with the establishment of appropriate corporate governance mechanisms, voluntary disclosure of corporate information, information transparency, and information symmetry in the capital market can be achieved and this can be effective in improving the financial market to improve corporate performance, (Parsian Kazemi and Reza Zadeh ,2019).

Rahmani and Bashiri Manesh (2017) showed that the structural characteristics of the firm had a positive and significant effect and the functional characteristics of the firm had a significant negative impact on the level of voluntary disclosure. Board characteristics, ownership structure, and auditing have a significant positive effect on the level of voluntary disclosure. Also, internal stakeholders have a significant negative impact and external stakeholders have a significant positive impact on the level of voluntary disclosure (Rahmani and Bashirimanesh ,2015).

Gholami Jamakrani and Bakhtiari (2017) stated that financial reporting and disclosure are important issues in capital markets that directly affect market performance and performance on the one hand and on the performance of any company on the other hand. Notice. They also found that information disclosure plays a key role in making informed and informed decisions by various groups, especially investors. According to the economic theory of asymmetry, information disclosure reduces asymmetry and reduces the cost of capital. Because disclosing more information leads to more liquidity, less transaction costs and ultimately more stock demand. In the case of voluntary disclosures, managers make such disclosures when the benefits are greater than their costs, and as laws and regulations address investor information needs through mandatory disclosure and provide the least amount of information to assist investors, the need for voluntary disclosure and filling the gap created by mandatory disclosure is felt, Gholami Jamakrani and Bakhtiari (2018).

Kashani Pour et al. (2014) showed that there is a significant and positive relationship between "nonmembers" and "corporate ownership" with voluntary disclosure. No significant relationship was found between "board size", "managerial ownership" and "institutional ownership" with voluntary disclosure (Gholami Jamakrani and Bakhtiari ,2018).

2.1. Research Hypotheses

The purpose of this study was to determine the factors affecting the evaluation of the quality of voluntary disclosure. These factors affecting the evaluation of the quality of voluntary disclosure in the present study were collected by interview method. Interview questions were designed based on factors affecting the evaluation of voluntary disclosure quality, based on external research, and all interviewees (n = 17) from the accounting and auditing elite were asked similar questions. The interviews were semi-structured and in-person. Then the factors determined by the elites were tested as follows.

Hypothesis 1: How access to voluntary information has a significant impact on evaluating the quality of voluntary disclosure.

Hypothesis 2: The form of voluntary disclosure has a significant impact on the evaluation of the quality of voluntary disclosure.

Hypothesis 3: The volume of voluntary disclosure has a significant impact on the quality of voluntary disclosure.

Hypothesis 4: Paying attention to the type of industry and information users has a significant impact on evaluating the quality of voluntary disclosure.

Hypothesis 5: Having a qualitative characteristic of information has a significant impact on evaluating the quality of voluntary disclosure.

Hypothesis 6: Providing comparative information has a significant impact on evaluating the quality of voluntary disclosure.

Hypothesis 7: The presentation of non-financial statistics has a significant impact on the evaluation of the quality of voluntary disclosure.

Hypothesis 8: Providing analytical information has a significant impact on the evaluation of the quality of voluntary disclosure.

Hypothesis 9: The presentation of future information has a significant impact on the evaluation of the quality of voluntary disclosure.

2.2. Conceptual Model of Research

Based on the theoretical foundations of the research as well as the opinions of some of the accounting and auditing elites, the conceptual model of research was designed according to Figure (1).

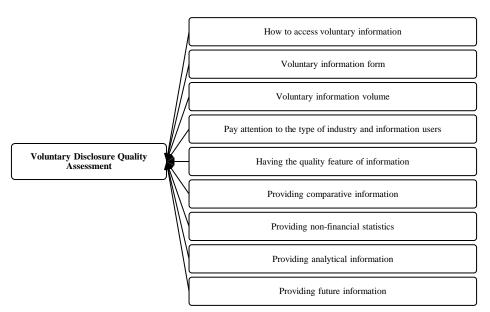


Figure (1): Conceptual model of research

3. Methodology

The purpose of this study is a kind of applied research and its results can be used to determine the factors affecting the evaluation of companies' voluntary disclosure quality. In the present study, a

mixed method (qualitative and quantitative) was used. Mixed methodology or mixed methods research is a study that combines quantitative and qualitative outputs in a single or multi-stage study methodology. The fundamental principle of mixed methods research is the use of quantitative and qualitative methods in

stages of research that can be done simultaneously or sequentially, with complementary strengths and nonoverlapping weaknesses. According methodology, it is an ontological and epistemological necessity to explain and understand simultaneously the complexities, structures, dimensions and forms of social realities and phenomena, the use of different theories, designs, methods and data sources, because, as Brewer and Hunter (2007) have put it, "no single method is perfect". The reason for using this research method in the present study is that for gathering data and key information about the provision of optional disclosure quality assessment index from the viewpoint of professors and considering the variety of research variables as well as regarding the questions raised in the research, It can only gather the necessary and useful data by using qualitative tools such as interviews in order to arrive at research results. Therefore, to obtain a tool that has an optional disclosure quality assessment index in this study. Consequently, interviews were conducted as a qualitative research tool.

Also, in terms of research time sequence, qualitative data first and then quantitative data were collected. Secondary interviews were then conducted to confirm the findings. In this study, the priority and importance are collected by qualitative data and quantitative data are followed up for deeper understanding and reinforcement of the problem. In other words, the primary purpose of the study was to

provide an optional disclosure quality assessment index. One of the reasons for using this sequence in this study is that qualitative research addresses the problem appropriately and can first identify the best structures, variables, and classifications for the test, it will also help in identifying and determining factors and scales to develop quantitative tools, but the problem is that exploration alone is not enough and a little component research is needed to better understand the problem. Therefore, in this study, the research method is specifically exploratory hybrid method. In these projects, the main goal is to start the research with a qualitative phase and then continue with a quantitative phase. Initially, qualitative data were collected through interviews with experts and then quantitative data were collected through questionnaires to track and complete the problem.

The research questionnaire was distributed in two phases. In the first phase, an open questionnaire was identified by interviewing 17 accounting and auditing experts influencing the factors affecting the evaluation of voluntary disclosure. In the second step, for the identified factors and evaluation of voluntary disclosure quality, a closed questionnaire based on Likert spectrum was designed and the sample was provided for accountability. The validity of the questionnaire was confirmed by professors' opinion and Cronbach's alpha coefficient was used to assess its reliability. Table 1 indicates the questionnaire items for measuring variables.

Table 1: Ouestionnaire reliability for measuring variables

NO.	Question variable	Amount of questions in the questionnaire	Number of questions in the questionnaire	Cronbach's alpha coefficient value
1	How to access voluntary information	3	1-3	0.782
2	Voluntary information form	3	4-6	0.714
3	Voluntary information volume	2	7-8	0.753
4	Pay attention to the type of industry and information users	2	9-10	0.726
5	Having the quality feature of information	2	11-12	0.715
6	Providing comparative information	2	13-14	0.780
7	Providing non-financial statistics	2	15-16	0.730
8	Providing analytical information	2	17-18	0.787
9	Providing future information	2	19-20	0.816
10	Voluntary Disclosure Quality Assessment	20	21-40	0.876
11	Total of Questionnaire	40	1-40	0.835

Statistical population and sample

Two groups of experts were used in this study. The first group of experts was determined according to disclosure-related characteristics such as academic level, background in disclosure, related research activities. The sample size of the present study is determined by reaching the data saturation limit. Therefore, in this semi-structured interview, 17 people were selected by qualitative sampling method. Interviewees were selected from people with at least one of the following characteristics:

- 1) Having a background in accounting education and research
- 2) Having financial management experience
- 3) Board membership experience
- 4) Having an audit record

After collecting the factors affecting the evaluation of voluntary disclosure quality, in the second stage, a questionnaire of the determinants of voluntary disclosure was prepared and distributed electronically to those familiar with accounting and disclosure issues. Due to the uncertainty of the statistical population according to Morgan table, 384 individuals were selected and distributed and

collected as electronic links. The questionnaire indicated that respondents would have sufficient information about the subject of the questionnaire.

4. Results

The related features of the disclosure domain in this study were obtained by using thematic analysis method. Theme analysis was completed after the interviews. Theme analysis is a convenient and flexible way to analyse qualitative data. Theme analysis is a recursive process in which there is a movement back and forth between the steps mentioned. In this way, patterns within data (themes) are identified, analysed and reported. Each theme highlights an important aspect of data and research. Determining what constitutes a theme requires the judgment of the researcher. To this end, Table 2 provides two examples of interviews with coding and

The table of identified themes, including the main and sub-codes and themes identified as a result of data content analysis by the theme analysis method, is presented below (Table 3).

Table 2: Sample interview text with coding and sub themes

	Table 2. Sample meet view text with couning and sub-titemes				
	Sample Interview 1:				
\mathcal{U} 1	Providing comparative information about the subject of disclosure to similar and active companies in the industry, provided that you are a senior, increases the quality of the disclosure because the information is not self-explanatory but makes sense when we				
compare it.					
Code:I1306	Theme: Providing comparative information with similar companies active in the industry				
	Sample Interview 2:				
To increase the understanding of information for users, it is simply not enough to use numbers or explanations, and it is advisal to use a combination of both types of disclosure.					
Code:I0602	Themes: Information presentation form (quantitative and qualitative)				

Table 3: Themes identified

The main theme	Side Themes	Codes
How to access information	Corporate Board Transparent Information Report (Board Activity Report, Detailed Management Report, etc.)	I0201-I0401-I0413-I0701-I1201- I1401-I1701
	Press interviews articles and analytical reports on	I0109-I0308-I0402-I0414-I0702- I0708-I0807-I0904-I0909-I1108- I1209-I1305-I1506
	Instant disclosures on the Kodal site	I0307-I0414-I0702-I0807-I1209- I1305
Form of information presentation		I0104-I0204-I0302-I0411-I0505- I0602-I0706-I0802-I1204-I1303- I1404-I1502
	Quantitative and quantitative information	I1006-I1103-I1602
	Use table, chart, figure, headings, font type, etc.	I0309-I0709-I0803-I0906-I1006-

The main theme	Side Themes	Codes
		I1109-I1210
The volume of information provided	More sentences	I0101-I0410-I0601-I0707-I0804- I1005-I1402-I1601
	More information content	I0203-I0301-I0707-I0804-I1004- I1102-I1302-I1501-I1702
Pay attention to the type of industry and information users	Pay attention to the information users need	I0102-I0202-I0310-I0801-I0810- I0902
information users	Pay attention to the type of industry	I0103-I0209-I0310-I0407-I0503- I0902-I1202
Having the quality of information	the quality of information Relevance and Reliability	
	Validation and Prediction of Information	I0207-I0306-I0502-I1301
Providing comparative information	Provide comparative information with similar and active companies in the industry	I0106-I0206-I0304-I0413-I0506- I0603-I0705-I0907-I1106-I1206- I1306-I1406-I1503-I1604-I1607
	Provide performance in line with past projected goals	I0107-I0208-I0305-I0413-I0508- I0604-I0704-I1105-I1207-I1307- I1407-I1505-I1605
Providing non-financial statistics	Human Resources Information and Customer Description	I0406-I0501-I1001-I1606-I1703
<u> </u>	Sustainable Reporting Information	I0406-I0901-I1001-I1606
Providing analytical information	Risk analysis and market situation	I0404-I0606-I1003
	Analysis of weaknesses and strengths	I0405-I1008
Providing future information	Expressing goals, vision and strategy	I0105-I0205-I0303-I0412-I0507- I0703-I0908-I1002-I1104-I1202- I1304-I1405-I1504-I1603
-	Mission Statement	I0205-I0507-I0908-I1002-I1104- I1205-I1304-I1405-I1504-I1603

In this research, descriptive statistics and inferential statistics were used to analyze the data obtained from the sample. In fact, using SPSS24 software, each variable is described in the form of tables and statistical indices, and then to analyze the data, test the hypotheses and to generalize the results of the sample to the statistical population, the structural equation modeling method was used by Amos24 software. Table 4 shows the results of the descriptive statistics of the research variables.

Prior to testing the hypotheses, the reliability and accuracy of the research variables' measurement models must be assured before the structural relationships can be examined. Fit indices are used for this purpose as shown in Table 5.

As you can see from the table above, all the properties are in the desired range. Therefore, the relevance of the confirmatory factor analysis model in fitting to the collected data is confirmed. Before fitting the structural model, it is necessary to check whether the 40 items observed (including questionnaire questions) reflect 10 dimensions or concepts of how to access voluntary information, form of voluntary information, volume of voluntary information,

attention to industry type and information users, qualitative information, comparative information, nonfinancial statistics, analytical information, future information and evaluation voluntary disclosure quality, correctly. The overall fit of the measurement model is determined by Confirmative Factor Analysis (CFA). Obtaining poor fit at this stage indicates that it is necessary to refine the measurement model and to prevent the study of the structural model with the hidden variable. At this stage of the analysis, CFA is performed to determine the degree of fit of the model, adequacy of factor loadings, standardized residuals, and explained variances for the observed variables. Some software-related modifications were suggested that improved the model implementation; the software modifications proposed were to release covariance among a number of error terms. Some software-related modifications were suggested that improved the model implementation; the software modifications proposed were to release covariance among a number of error terms. The measurement model, along with its corrections, can be seen in the following figure. The measurement model with its corrections can be seen in Figure (2).

Table 4: Descriptive statistics of research variables

Table it 2 continues of resources (altable)						
Variable	Average	Standard deviation	Minimum value	Maximum value	Number	
How to access voluntary information	4.282	0.614	1.67	5.00	384	
Voluntary information form	4.457	0.436	3.33	5.00	384	
Voluntary information volume	3.691	0.684	2.00	5.00	384	
Pay attention to the type of industry and information users	4.213	0.573	2.50	5.00	384	
Having the quality feature of information	4.602	0.448	3.00	5.00	384	
Providing comparative information	4.511	0.600	2.00	5.00	384	
Providing non-financial statistics	4.442	0.514	2.50	5.00	384	
Providing analytical information	4.569	0.476	3.00	5.00	384	
Providing future information	4.425	0.629	2.00	5.00	384	
Voluntary Disclosure Quality Assessment	4.337	0.401	3.10	5.00	384	

Table (5): Fit indices for the research measurement model

Fit Indicators/ Pattern	CIMIN/df	GFI	IFI	TLI	CFI	NFI	RMSEA
Main pattern	2.237	0.960	0.973	0.934	0.970	0.933	0.002
Acceptable level	1-3	>0.9	>0.9	>0.9	>0.9	>0.9	< 0.08

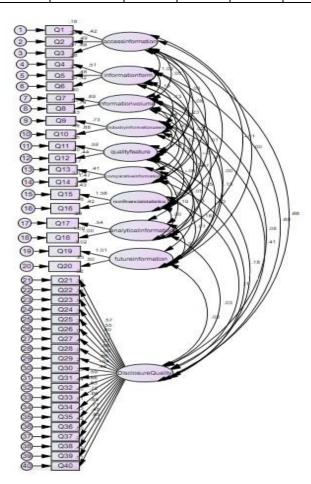


Figure (2): Measurement model after correction

In this section, the structural model of the research is fitted to test the underlying assumptions. This model is shown in Figure (3).

Based on the results of the structural model of the research, we will present the results of the path analysis of the research hypotheses. To test the research hypotheses, it is necessary to examine the significance of the simultaneous relationships between the variables.

Hypothesis 1: Results of Structural Path Analysis (including the relationship of hidden variables to each other) of the first hypothesis is presented in Table (6).

The first hypothesis states that access to voluntary information has a significant impact on the evaluation of the quality of voluntary disclosure. According to the results of Table (6), the effect of access to voluntary information on the quality of voluntary disclosure was equal to 0.497 is positive and the mean level (0.000) is less than 0.05. Accordingly, access to voluntary information has a significant positive effect on the evaluation of voluntary disclosure quality, and the first hypothesis is confirmed at 95% confidence level.

Table 6: Results of the first hypothesis

Route	Standardized coefficient	Standard deviation	t statistics	p-value
How to access voluntary information ⇒ Evaluation of the quality of voluntary disclosure	0.497	0.117	3.759	0.000

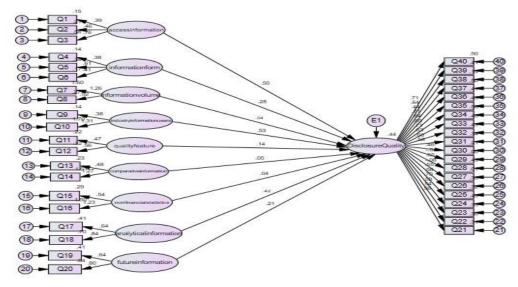


Figure (3): Structural model of research in standard mode

Hypothesis 2: Results of Structural Path Analysis (including Relationships of Variables Hidden Available) of the second hypothesis is presented in Table 7.

The second hypothesis states that the form of voluntary disclosure has a significant impact on the evaluation of the quality of voluntary disclosure. Based on the results of Table (7), the effect of the form of voluntary disclosure on the evaluation of the quality of voluntary disclosure was positive at 0.281

and the mean level obtained (0.000) is less than 0.05. Accordingly, the form of voluntary disclosure has a significant and positive impact on the evaluation of voluntary disclosure quality, and the second hypothesis is confirmed at 95% confidence level.

Hypothesis 3: The results of structural path analysis (including the relationships of hidden variables together) of the third hypothesis is presented in Table 8.

Table 7: Results of the second hypothesis

Route	Standardized coefficient	Standard deviation	t statistics	p-value
Voluntary information form ⇒ Evaluation of the quality of voluntary disclosure	0.281	0.247	2.113	0.035

Table 8: Results of the third hypothesis

Route	Standardized coefficient	Standard deviation	t statistics	p-value
Voluntary information volume ⇒ Evaluation of the quality of voluntary disclosure	0.343	0.076	3.710	0.000

The third hypothesis states that the volume of voluntary disclosure has a significant impact on the evaluation of voluntary disclosure quality. According to the results of Table (8), the effect of voluntary disclosure volume on evaluation of voluntary disclosure quality is positive at 0.343 and the mean level (0.000) was less than 0.05. Accordingly, the volume of voluntary disclosure has a significant positive impact on the evaluation of voluntary disclosure quality, and the third hypothesis is confirmed at 95% confidence level.

Hypothesis 4: The results of structural path analysis (including the relationships of hidden variables together) of the fourth hypothesis is presented in Table

The fourth hypothesis states that attention to the type of industry and information users has a significant impact on the evaluation of the quality of voluntary disclosure. According to the results of Table (9), the effect of attention to industry type and information users on evaluation of voluntary disclosure quality is positive 0.532 and the mean level (0.000) was less than 0.05. Accordingly, attention to

the type of industry and information users has a significant and positive impact on the evaluation of voluntary disclosure quality, and the fourth research hypothesis is confirmed at 95% confidence level.

Hypothesis 5: The results of structural path analysis (including the relationships of hidden variables together) of the fifth hypothesis is presented in Table 10.

Hypothesis 5 states that having information quality has a significant effect on the quality of voluntary disclosure based on the results of Table (10). According to the results of Table (10), the effect of having information quality attribute on evaluation of voluntary disclosure quality is positive 0.144 and the mean level (0.000) was less than 0.05. Accordingly, having a qualitative characteristic of information has a significant positive effect on the evaluation of voluntary disclosure quality, and the fifth research hypothesis is confirmed at 95% confidence level.

Hypothesis 6: The result of structural path analysis (including the relationships of hidden variables together) of the sixth hypothesis is presented in Table

Table 9: Results of the forth hypothesis

Route	Standardized coefficient	Standard deviation	t statistics	p-value
Pay attention to the type of industry and information users ⇒ Evaluation of the quality of voluntary disclosure	0.532	0.099	4.868	0.000

Table 10: Results of the fifth hypothesis

Route	Standardized coefficient	Standard deviation	t statistics	p-value
Having the quality feature of information ⇒ Evaluation of the quality of voluntary disclosure	0.144	0.068	2.794	0.018

Table 11: Results of the sixth hypothesis

	J 1			
Route	Standardized coefficient	Standard deviation	t statistics	p-value
Providing comparative information ⇒ Evaluation of the	0.045	0.058	0.427	0.669

Hypothesis 6 states that the provision of comparative information has a significant impact on the evaluation of the quality of voluntary disclosure. Based on the results of Table (11), the effect of comparative information provision on the quality of voluntary disclosure is positive at 0.045 and the mean level (0.669) was greater than 0.05. Accordingly, providing comparative information has no significant effect on the evaluation of voluntary disclosure quality, and the sixth hypothesis of the study is not confirmed at 95% confidence level.

Hypothesis 7: The results of structural path analysis (including the relationships of hidden variables together) of the seventh hypothesis is presented in Table 12.

Hypothesis 7 states that the presentation of nonfinancial statistics has a significant impact on the evaluation of the quality of voluntary disclosure. According to the results of Table (12), the effect of non-financial statistics provision on the quality of voluntary disclosure is positive at 0.037 and the mean level (0.681) was greater than 0.05. Accordingly, the presentation of non-financial statistics has no significant effect on the evaluation of voluntary disclosure quality, and the seventh research hypothesis is not confirmed at 95% confidence level.

Hypothesis 8: The results of the structural path analysis (including the relationships of hidden

variables together) of eighth hypothesis is presented in Table 13.

Hypothesis 8 states that providing analytical information has a significant impact on evaluating the quality of voluntary disclosure. Based on the results of Table 13, the amount of analytical information provided on the evaluation of voluntary disclosure quality is positive at 0.422 and the mean level (0.000) was less than 0.05. Accordingly, providing analytical information has a significant positive impact on the evaluation of voluntary disclosure quality, and the eighth hypothesis is confirmed at 95% confidence level.

Hypothesis 9: The result of structural path analysis (including relationships of hidden variables together) Hypothesis 9 is presented in Table 14.

Hypothesis 9 states that presenting future information has a significant impact on the evaluation of voluntary disclosure quality Based on the results of Table (14), the rate of forward disclosure on a voluntary disclosure quality assessment is positive at 0.214 and the mean level (0.000) was less than 0.05. Accordingly, the presentation of future information has a significant positive impact on the evaluation of the quality of voluntary disclosure, and the ninth research hypothesis is confirmed at 95% confidence level.

Table 12: Results of the seventh hypothesis

Route	Standardized coefficient	Standard deviation	t statistics	p-value
Providing non-financial statistics ⇒ Evaluation of the quality of voluntary disclosure	0.037	0.055	0.411	0.681

Table 13: Results of the eighth hypothesis

	0 11			
Route	Standardized coefficient	Standard deviation	t statistics	p-value
Providing analytical information ⇒ Evaluation of the quality of voluntary disclosure	0.422	0.073	4.698	0.000

Table 14: Results of the ninth hypothesis

Route	Standardized coefficient	Standard deviation	t statistics	p-value
Providing analytical information ⇒ Evaluation of the quality of voluntary disclosure	0.214	0.052	3.442	0.000

Table 15: Summary of Hypothesis Results

NO.	Hypothesis description	Type of effect	Result
1	How access to voluntary information has a significant impact on the evaluation of the quality of voluntary disclosure.	Positive and meaningful	Accepted
2	The form of voluntary disclosure has a significant impact on the quality of voluntary disclosure.	Positive and meaningful	Accepted
3	The volume of voluntary disclosure has a significant impact on the quality of voluntary disclosure.	Positive and meaningful	Accepted
4	Paying attention to the type of industry and information users has a significant impact on the evaluation of the quality of voluntary disclosure.	Positive and meaningful	Accepted
5	Having a qualitative characteristic of information has a significant impact on the evaluation of the quality of voluntary disclosure.	Positive and meaningful	Accepted
6	Providing comparative information has a significant impact on the evaluation of the quality of voluntary disclosure.	Nonsense	Rejected
7	The presentation of non-financial statistics has a significant impact on the evaluation of the quality of voluntary disclosure.	Nonsense	Rejected
8	Providing analytical information has a significant impact on the evaluation of the quality of voluntary disclosure.	Positive and meaningful	Accepted
9	Providing future information has a significant impact on the evaluation of the quality of voluntary disclosure.	Positive and meaningful	Accepted

5. Discussion and Conclusion

The purpose of this study was to provide a model for evaluating the quality of voluntary disclosure of companies according to environmental characteristics and country conditions. The analysis of the results showed that to increase the perception of information for users, the use of numbers or explanations is not sufficient and it is better to use a combination of both quantitative and qualitative information. The type of board report writing and other voluntary disclosures such as the use of paintings, tables or descriptions of texts or captions, or commas, all have informational content and can attract user attention and influence the measurement of voluntary disclosure quality. Paying attention to the information user needs and the information the user has are effective in disclosing quality, which is true for a user who uses information as an analyst. The type of industry can be considered as an indicator of the quality of disclosure because, depending on the type of industry, the disclosure literature will vary in the amount of disclosure. The qualitative characteristics of information do not depend on mandatory information but relate to voluntary information. The discussion of forecasts and timeliness, which are indicators of relevance, are important in voluntary disclosures. Providing comparative information can affect the quality of disclosure if the country's economic conditions are stable and equal, but this cannot be done in inflationary and critical conditions. Non-financial statistics make up the bulk of reporting. Theoretically, financial disclosure alone is not sufficient, and most of the discussion of voluntary disclosure relates to nonfinancial disclosure. Because the capital market is a futuristic market, the capital market wants to know more about the future and this pressure is there, so it's definitely one of the most important indicators of information disclosure because of the need for future disclosure information. Companies that have strategic management determine their organizational mission, define their horizons and outlook, and set their goals and plans, and thus have a better quality disclosure. More disclosure volume does not necessarily mean disclosure quality. The information content along with the volume of information can be considered as an indicator of the quality assessment of disclosure. The results of this study were not available in terms of precise comparison of factors due to the new sample, but in some ways it is similar to Rahmani and Bashiri Manesh's (2017) research. Corporate characteristics, corporate leadership and stakeholder power as voluntary disclosure incentives were addressed through structural equation modelling. Kashani Pour et al. (2009) also used Botosan checklist to investigate voluntary disclosure quality factors. Researchers are suggested in future research to use neural network

modeling by artificial intelligence to provide effective factors in evaluating the quality of voluntary disclosure.

References

- 1) Baek, H.Y., Johnson, D.R. and Kim, J.W. (2011). Managerial ownership, corporate governance, and voluntary disclosure, The Journal of Business and Economic Studies, 15(2), 44-94.
- 2) Beretta, S. and Bozzolan, S. (2004). Quality versus Quantity: The Case of Forward-Looking Lisclosure. Journal of Accounting, Auditing & Finance, 23(3), 333-375.
- 3) Binh, T.Q. (2012). Voluntary Disclosure Information in the Annual Reports of Non-Financial Listed Companies: The Case of Vietnam, Journal of Applied Economics and Business Research JAEBR, 2(2), 69-90.
- 4) Botosan, C.A. (1997). Disclosure Level and the Cost of Equity Capital. The Accounting Review, 72, 323-349.
- 5) Chen, S., Miao, B. and Shevlin, T.J. (2015). A New Measure of Disclosure Quality: The Level of Disaggregation of Accounting Data in Annual Reports, Journal of Accounting Research, 53(5),
- 6) Copeland, R.M. and Fredricks, W. (1968). Extent of Disclosure. Journal of Accounting Research , 6, 106-113.
- 7) Cooke, T.E. (1989). Voluntary corporate disclosure by Swedish companies, Journal of International Financial Management Accounting , 1, 171-195.
- 8) Gholami Jamakrani, R. and Bakhtiari, M. (2018). Disclosure and its models. Management and Accounting Studies, 3 (3), 67-76.
- 9) Hamidian, M., Hajiha, Z. and Taghizade, N. (2018). The Usefulness of Voluntary Disclosure to Investors' Judgment, Economical Modeling, 11(4), 137-155.
- 10) Hoseini, A. (2016). Investigation of Effects of Corporate Reporting Quality, Timeliness and Quantity for Disclosure and Reliability of Financial Reports on Stock Price Delay, Advances in Mathematical Finance and Applications , 1(1),
- 11) Kashani Pour, M., Rahmani, A. and Parchini Parchin, S.M. (2009). Relationship between Disclosure of Optional Information and Non-Duty

- Board Members, Accounting and Auditing Reviews, 16 (57), 85-100.
- 12) Liu, X., Liu, S., Lu, L., Shi, Y. and Xiong, X. (2020). Voluntary Information Disclosure with Heterogeneous Beliefs, Available at SSRN: https://ssrn.com/abstract=3379412.
- 13) Parsian, H., Kazemi, H. and Reza Zadeh, J. (2019). Identification of Voluntary Disclosure Components between Corporate Governance and Information Asymmetry in Companies Active in Tehran Stock Exchange, Financial Economics, 12 (43), 107-132.
- 14) Rahmani, A. and Bashirimanesh, N. (2015). A Review of the Literature on Disclosure in IRAN, Journal of Accounting Research , 4(4), 35-68.
- 15) Satta, G., Parola, F., Profumo, G. and Penco, L. (2015). Corporate governance and the quality of voluntary disclosure: Evidence from mediumsized listed firms, International Journal of Disclosure and Governance, 12(1), 144-166.
- 16) Sihombing, J. and Pangaribuan, H. (2017). A Study of Corporate Governance Structure, Disclosure and Information Asymmetry in Indonesia Banking Industry, Jurnal Akuntansi, 21(2), 156-169.
- 17) Sukthomya, D. (2011). The empirical evidence of voluntary disclosure in the annual reports of listed companies: the case of Thailand. Thesis of Doctor of Philosophy, the University of Nottingham.
- 18) Varghese, R. (2011). Voluntary annual reportdisclosures of manaufacturing companies in India and their linkages with organisational demographics. South Asian journal management: SAJM. Hyderabad: AMDISA, 18(4), 23-43