

Factors Affecting Information Disclosure: Evidence from Vietnamese Listed Companies

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<https://doi.org/10.18280/ijstdp.170531>

ABSTRACT

Received: 15 June 2022

Accepted: 16 August 2022

Keywords:

disclosure, financial statements, disclosure of segment financial statements, level of information disclosure, GMM, Vietnam

The stock exchanges increasingly have strict regulations on information disclosure of listed companies. Disclosure of information helps meet the necessary conditions prescribed by the floor, but information disclosure also brings higher value to companies. Therefore, this study analyzes the factors affecting the disclosure of enterprise segment reporting information in Vietnam. Data was collected with 48 companies listed on HOSE and HNX (two stock exchanges in Vietnam) from 2015 to 2019. Through the Generalized Method of Moments (GMM) model, it has been shown that the factors of audit units, business lines, and exchanges positively impact the level of disclosure of segment financial statements. The factor of profit ROA has a negative impact on the level of information disclosure of enterprises. From the results of this study, the authors also offer some research implications to help investors and companies make their decisions positively.

1. INTRODUCTION

In order to develop the stock market, relevant organizations require mandatory conditions in the disclosure of information of companies listed on the stock exchange and the financial market [1]. The information that must be disclosed is almost mandatory for companies entering the market [2]. Currently, the disclosure of information of listed companies on the Vietnamese stock market is carried out by the Law on Securities and Circular No. 96/2020/TT-BTC, guiding the disclosure of information on the stock market, replacing Circular No. 155/2015/TT-BTC, of the Ministry of Finance guiding information disclosure on the stock market. In the world, several laws regulate information disclosure: the Securities Act of 1933 and 1934 in the United States stipulates the mandatory disclosure of financial information; The Sarbanes-Oxley Act of 2002 and the Dodd-Frank Act of 2010 different highlight aspects of improving disclosure. Therefore, it can be seen that the laws on information disclosure have been around for a long time in the world.

Countries have different securities systems, and securities laws are applied differently at exchanges [1]. However, the regulations on information disclosure are becoming more and more stringent, and companies will have to provide more information about their financial activities. In particular, after the 2008 financial crisis, governments increased the level of disclosure about banks by conducting annual corporate audits and making their results publicly available. This has led to considerable public debate [1]. According to experts and investors, the requirement to improve information disclosure is suitable for the market [3, 4]. In addition to the positive effect on the market, the disclosure also brings higher value to companies [5, 6]. Furthermore, disclosure of more information will help reduce the impact of information asymmetry in the market between investors and inside the company.

The Vietnamese Accounting Standards System (VAS)

promulgated up to 2006 has mentioned the requirement to Segment Information Disclosure (SID). (specified in VAS 28). However, the research and survey of state-owned enterprises have complied with these requirements. Whether the principles of 's information disclosure can meet the requirements of investors and many other users who need to use information has not been interested in researchers. SID is essential in assessing the risks and economic benefits of businesses with many different industries, businesses with bases abroad, or businesses operating in many different geographical areas. SID supports users of financial statements to understand the business's performance over the years and adequately assess the risks and economic benefits of the business, thereby making an accurate assessment of the capacity. of the enterprise.

There is much debate surrounding the benefits and costs of making SID disclosures. In fact, with the administrative approach, information from SID is necessary for investors and many other information users. Based on this, information users, in general, can see the operation situation of a multi-faceted enterprise as closely as the administrator of that enterprise. This helps the users of the information to make sound economic decisions. However, in terms of regulations and practice, the disclosure of information on state-owned enterprises still has some shortcomings, which greatly affect the transparency, publicity, and sustainable development of Vietnam's stock market. One of the shortcomings is that the information disclosure of the Divisional Report in Vietnam has not been paid enough attention.

From the increasing mandatory requirements for information disclosure and the benefits from the disclosure of departmental reporting information. The author researches the factors affecting the level of disclosure of divisional reporting information. The study analyzed enterprises listed on the stock exchange from 2015 to 2019.

2. LITERATURE REVIEW

2.1 Introduction about vietnam stock exchange

Vietnam has three stock exchanges, which is the one listed on the Ho Chi Minh City Stock Exchange (also known as “HOSE”), which officially opened in 2000; The stock exchange listed on Hanoi Stock Exchange (also known as “HNX”) officially opened in 2005 and UPCoM - the unlisted public company market started trading in 2009. In that case, the two exchanges, HOSE and HNX are considered the largest and most interested. Therefore, in this study, we only focus on companies listed on HOSE and HNX.

2.2 Disclosure of financial statements

Disclosure of financial statements is understood as accounting information provided mainly through the financial reporting system of an enterprise. This information is usually presented following financial reporting standards, accounting standards, and regulations of competent state agencies such as the Securities Commission and the Ministry of Finance. Disclosure of financial statements is all information provided through the financial reporting system of a company in a certain period. Disclosure of financial statements is a mandatory accounting activity. To become helpful information users, businesses should disclose more information to support the decision-making of information users, including investors, which are voluntary accounting disclosures.

Disclosure of financial statements acts as a bridge between enterprises and information users outside the enterprise. Enterprise information published in the report is an official information supply channel and has high legal value compared to many other sources of information such as newspapers, rumors, etc. Therefore, financial statement information published by enterprises is very important to the users of information, especially those outside the enterprise. According to Cooke [7, 8] disclosure of item-by-item information in corporate reports is appropriate. It plays an important role in the decision-making process of information users - who do not have access to information. Information sources are on demand, and if relevant and important information is not disclosed, the users' decision of the information is suboptimal. Therefore, disclosure of enterprises' information is necessary for an efficient capital market, minimizing information disturbance, and ensuring transparent and legal information.

The basic purpose of financial statements is to provide helpful information for decision-making by information users such as institutional investors, individual investors, stockbrokers, and credit officers—banks, auditors, financial analysts, governments, tax authorities, researchers, and many more. The information considered helpful to the information users is the information that supports these objects in predicting the future operations of the enterprise.

2.3 The disclosure of enterprise segment reporting information

Segment reporting information is a component of an enterprise's financial statement information. Financial statements reflect in a strict structure the financial position, business results, and changes in the enterprise's financial position. The purpose of financial statements is to provide

information about the financial position, business situation, and cash flows of an enterprise, meeting the needs of the majority of users in making economic decisions. To achieve this purpose, the financial statements normally must provide information about the enterprise on Assets, liabilities, equity, revenue/other income, other expenses/expenses, profit/loss, and cash flows. Besides financial statements, users of the information for investment activities realize the need for another type of report, which provides information classified by each management department in the enterprise (maybe by geography and business sector), especially when they want to invest in a company that is multi-industry, offers product and service groups, or operates in different geographies have different rates of return, growth opportunities, prospects, and risks. That is the reason for the introduction of the segment report and the requirement to disclose the segment reporting information as contained in the enterprise's financial statements. Therefore, it can be understood that segment information is all information related to the results, costs, assets and liabilities, and cash flows of each segment in the enterprise, depending based on the division in each enterprise for reporting.

2.4 Factors affecting the disclosure of segment reporting

2.4.1 Trading floor and disclosure of segment reporting

Many studies are looking at which factors listed on the exchange or stock market affect the level of SID. Research by Herrman and Thomas [9] has proven that SMEs in large and international exchanges are motivated to disclose more complete and detailed information than those in small markets. The reason is that the company listed in the large exchanges have many shareholders and are subject to greater monitoring and control; Furthermore, the financial disclosure regulations of large markets are often more extensive and detailed. In Vietnam, there are two major exchanges, HOSE and HNX. Which HOSE has a more extended history and has a larger trading volume. Therefore, the research hypothesis is stated as follows:

H1: Enterprises listed on HOSE have a higher level of Segment information disclosure than enterprises on HNX.

2.4.2 Audit and disclosure of segment reporting

Many studies show that audit influences the content of information disclosure of customers. For example, scholars Wallace, Naser, and Mora [10] argue that large auditing firms make higher audit requirements because they want to preserve their reputation and develop principles and strict requirements with customers. In addition, large auditing firms and international enterprises have an advantage in controlling the application of the international accounting standard system and the national standard system. The reason is that these businesses have more highly trained staff. By the experimental method, the study of ref. [11] confirmed that auditing firms belonging to the Big 4 that conduct audits at listed companies on the stock market have higher compliance with SID standards than other firms. Therefore, the research hypothesis is stated as follows:

H2: Big4 audits have a higher level of information disclosure than companies using outside of Big4

2.4.3 Industry and disclosure of segment reporting

The industry of different businesses will influence the levels of information disclosure in the annual report because

businesses in different industries will face a high level of competition, risk, and growth opportunities [12, 13]. In this study, the authors use two main occupations: financial and non-financial businesses. In which financial enterprises are heavily involved in activities related to mobilizing investors (banks or securities companies). Therefore, they will tend to provide more departmental reporting information to bring confidence to customers. Therefore, the research hypothesis is presented as follows:

H3: Financial firms tend to disclose more information than non-financial firms

2.4.4 The profitability and disclosure of segment reporting

According to agency theory, managers in highly profitable businesses disclose information to the outside to accomplish their goals. They will provide detailed information to make their plans public. Many studies have concluded a close relationship between corporate profitability and SID [10, 14, 15]. The hypothesis is presented:

H4: The profitability has a positive influence on the level of segment disclosure

2.4.5 Firm Size and disclosure of segment reporting

Agency theory refers to the effect of firm size on information disclosure. Inchausti [16] has stated that business managers need to build an effective internal information system, help them make strategic business decisions, and ensure all departments operate as planned. From the perspective of firm size, many studies have shown that the opportunity cost of disclosing financial information is higher in large enterprises, which is one reason small businesses will receive limited information disclosure than large-scale enterprises. Inchausti [16] stated in his study for large-scale enterprises, the largest source of capital mobilization is the capital market and the stock market, so it is essential to disclose information to comply with market regulations. Moreover, disclosing the information is not a wrong solution to resolve conflicts in the relationship between enterprises, creditors, and managers. Based on the results of the authors' empirical studies [14, 15, 17], it can be seen that there is a close relationship between firm size and the level of segment reporting in different countries, and this relationship is positive.

H4: The SIZE has a positive influence on the level of segment disclosure

3. METHOD

3.1 Research model

From theory as well as research, the authors come up with the following research model:

$$SDI_{it} = \beta_0 + \beta_1 MAR_{it} + \beta_2 AUDIT_{it} + \beta_3 IND_{it} + \beta_4 ROA_{it} + \beta_5 ROE_{it} + \beta_6 SIZE_{it} + \varepsilon_{it}$$

In which:

SDI_{it} : Disclosure level of segment reporting

MAR_{it} , $AUDIT_{it}$, IND_{it} , $SIZE_{it}$, ROA_{it} , ROE_{it} : the independent variables.

The variables are described in Table 1.

Dependent variable: SDI-Segment Disclosure Index. The formula for measuring the level of SID provided to an

enterprise is as follows:

$$I_j = \frac{\sum_{i=1}^{n_j} d_{ij}}{n_j}$$

I_j : Information disclosure index of enterprises, $0 \leq I_j \leq 1$.

d_{ij} : Take the value of 1 if information i is published, get the value of 0 if information i is not published.

n_j : Number of items of information that enterprise j can disclose, $n \leq 6$.

The number of departmental reporting metrics to be read in detail in each SID report. The author reads and scans to get the number of disclosure indicators on each report in each year for each company.

Table 1. The variables

Code	Content	Measured
SDI	Disclosure level of segment reporting	$I_j = \frac{\sum_{i=1}^{n_j} d_{ij}}{n_j}$
MAR	Trading floor - HOSE	If the company is listed on HOSE, the value is 1; =0 if HNX
AUDIT	Audited company	Is a dummy variable. Get value 1 if the business is audited by BIG 4, otherwise get value 0
ROA	Profitability	= return on total assets
ROE	Profitability	= return on equity
IND	The field of activity is finance	= 1 if the enterprise operates in the banking and finance sector; = 0 if other industry
SIZE	Firm size	Loga nepe of total assets

3.2 Sample and data collection

The sample with 48 enterprises based on the voting results for award-winning enterprises Annual report 2016, data collected for five years from 2015 to 2019. Regarding voting criteria, maintain standards-essential evaluation criteria (standard, transparent, professional, creative), based on the way enterprises disclose information, not based on the results of production and business activities of enterprises, highlighting the enterprises do good corporate governance, especially corporate governance towards the goal of sustainable development for the community and society. Enterprises are classified according to Ho Chi Minh and Hanoi exchanges (HOSE and HNX) and the charter capital level of the main industry.

3.3 Data analysis

Collected data will be processed by STATA software. The author chooses a linear regression model and estimates regression parameters with the support of STATA software to study the correlation between variables and analyze the factors affecting the level of information disclosure report of enterprises listed on the Vietnam stock market. Specifically, the author conducts a linear regression analysis to evaluate the factors affecting the level of partial disclosure in the period from 2015 to 2019.

The Fixed effect model (FEM) and the Random effect model (REM) are two popular models used in panel data analysis. If the FEM or REM model has problems, the author will proceed to overcome them by the different GMM estimation methods (Difference Generalized method of

moments - GMM) of Arellano - Bond (1991). GMM allows overcoming violations that lead to autocorrelation, heteroskedasticity, and endogenous, so the estimation results will not be wrong, stable, and most efficient. The Arellano - Bond method can also overcome the fixed effect of the model's error (due to the characteristics, the selected company variables for the study do not change over time, and geographical location can correlate with the explanatory variables in the model) [18].

The Hansen test determines the appropriateness of the instrumental variables after the GMM estimate, which is a test of over-identifying restrictions. Hansen's test with the hypothesis H0 is an exogenous instrumental variable. That is, it is not correlated with the variance of the model's error, so the larger the P-value of the Hansen statistic, the better. The Arellano - Bond test proposed by Arellano - Bond [19] is used to test the error autocorrelation property of the GMM model, the first difference form. Therefore, the investigation difference series implicitly has first-order correlation, AR(1), and test results are ignored. The second-order correlation, AR(2), is tested on the difference series of the error to detect the autocorrelation of the first-order error, AR(1). The hypothesis H0 of the Arellano-Bond test is uncorrelated and applies to differential residuals.

4. RESULTS

4.1 Descriptive statistic

First, the bar chart will provide information about the business analysis. The results show that the number of companies listed on HOSE is more than three times higher than the number of enterprises collected on HNX (36 companies listed on HOSE and 12 listed on HNX). The detail in Figure 1.

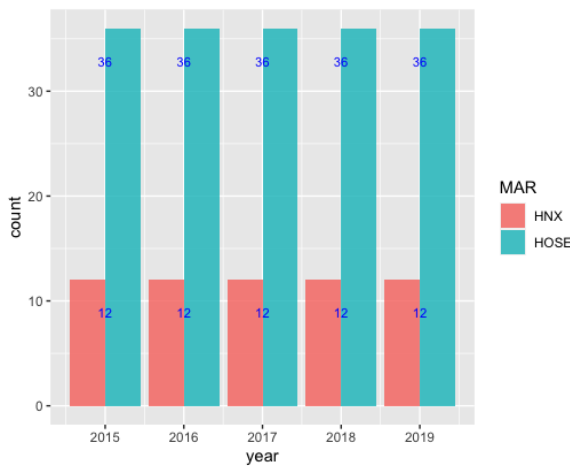


Figure 1. The information about stock exchange

For the industry of enterprises. The results show that the collected enterprises are mainly non-financial (43 enterprises). The rest only the five enterprises operate in the financial sector (Figure 2).

Regarding audited companies, the number of Big4 audited enterprises was 17 in 2015 and 2016 and decreased to 11 in 2017, 2018, and 2019 (Figure 3).

For the quantitative variables in the model, Table 2 shows that the mean level of internal disclosure is 0.32, of which the

largest is 0.875, and the smallest is 0. As a result, the mean ROA return is achieved. 4.69%, of which the largest is 27.07%, and the smallest is -0.04%. The mean ROE of the whole period reached 5.14%, of which the largest was 28,975, and the smallest was -0.09%.

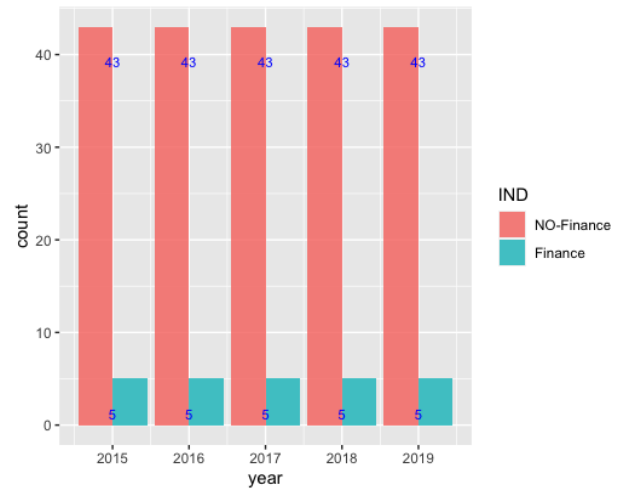


Figure 2. The information about industry

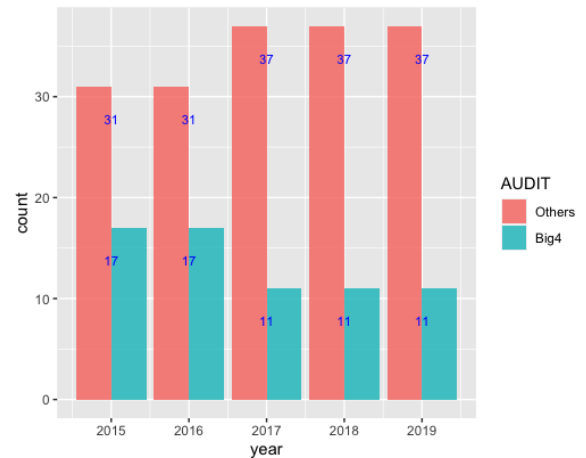


Figure 3. The information about audited companies

Table 2. The descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
CCTT	240	0.3255	0.303	0	0.875
SIZE	240	7.084	2.976	0.970	12.042
ROE	239	5.145	8.644	-0.09	28.97
ROA	239	4.695	8.313	-0.04	27.07

4.2 Regression

The variables will be included in the regression analysis with two original FEM and REM models. The Hausman test has shown that the FEM model is suitable for the research data (p-value = 0.000). However, the model is endogenous, so that it will be corrected through the GMM model. The final GMM model is used when AR (2) has p-value = 0.063 and Hansen test has p-value = 0.841. The results of GMM analysis show that Big4 audited enterprises tend to have a higher level of disclosure than non-Big4 audited enterprises. Companies listed on hose exchange tend to have a higher degree of departmental disclosure than companies listed on HNX. Firms

operating in the financial sector tend to disclose more segment information than non-financial ones. ROA has a negative effect on disclosure (Table 3).

The audited companies play an important role in the level of information disclosure of enterprises. Large auditing units will have strict international standards to affirm their reputation. As a result, these entities often have more disclosures to provide a clearer picture of the segment's financial statements [10]. Companies using Big4 also want to show professionalism, transparency, and quality of their financial statements. Therefore, the enterprise also wanted to include much information in the financial statements.

The factor of the listing floor also has a difference in the level of disclosure of divisional reporting. Specifically, companies listed on HOSE exchange tend to have a higher level of information disclosure than companies listed on HNX. The HOSE is a bigger exchange than HNX. According to regulations, a joint-stock organization listing securities on HOSE must have a charter capital of 120 billion VND or more. In comparison, this capital level on HNX is only 30 billion VND. In particular, HOSE requires listed companies to disclose debts to members of the board of directors, supervisory board, board of directors, major shareholders, and related people. At the same time, HNX does not publicly regulate this requirement. HOSE also requires the number of 300 shareholders (excluding major shareholders) to hold at least 20% of the voting shares; HNX only requires 100 shareholders to hold 15% of the voting shares of the listed company. Due to stricter regulations on hose floors, the level of disclosure of listed companies has since been greater [9].

Table 3. The result of regression

VARIABLES	(1) FEM	(2) REM	(3) GMM
LV _{t-1}			-0.119*** (0.0354)
BIG4	-0.00383 (0.0500)	0.00392 (0.0448)	0.432* (0.247)
MAR		0.0745 (0.0861)	1.274** (0.566)
IND		0.0852 (0.124)	1.612* (0.976)
ROA	0.00425* (0.00217)	0.00391* (0.00218)	-0.00585* (0.00317)
ROE	-0.00571*** (0.00207)	-0.00580*** (0.00208)	0.00470 (0.00434)
SIZE	-0.00346 (0.00443)	-0.00247 (0.00443)	-0.000927 (0.000586)
Constant	0.360*** (0.0339)	0.289*** (0.0812)	-0.848* (0.501)
Observations	239	239	191
Number of i	48	48	48
Hausman test		0.000	
AR(2)			0.63
Hansen test			0.841

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The industry of different enterprises will influence the levels of disclosure in the financial statements. Disclosure does not only bring risks to the enterprise but can also bring different opportunities [12, 13]. For companies operating in the financial sector, the company has much to do with activities aimed at mobilizing investors (banks or securities

companies). Therefore, they will tend to provide more departmental reporting information to bring confidence to customers.

5. CONCLUSION

The research has achieved the research objectives set out. First, the authors have systematized the theoretical basis of financial statement disclosure in general and segmental financial statements in particular. In which segment information is all information related to results, costs, assets and liabilities, and cash flow of each segment in the enterprise, depending on the division basis in each enterprise to report. Second, the study has collected theories and previous studies to show the relationship between factors and information disclosure levels. Since then, the study has come up with a research model. Third, the study has shown positive influencing factors with data collected from listed companies through the GMM regression model. Besides, the ROA factor has a negative impact on the level of information disclosure. Finally, from the results of this study, the author gives some research implications.

6. IMPLICATIONS

6.1 Theoretical implication

The study has a significant theoretical contribution when it finds a few factors that affect the level of disclosure of segment reporting. The factors found will help reduce the information asymmetry of information on the enterprise's segment reports. In addition, the factors that affect the disclosure of segment reports will be a sign to help the parties have more information when making decisions.

6.2 Practical implication

For investors, in case they want to comprehend companies with a high level of information disclosure. First, investors can focus on companies listed on the HOSE exchange; In addition, the information of enterprises whose audit unit is Big4 also has a higher level of information disclosure. Next, companies operating in the financial sector also have a higher information disclosure level, so investors can easily access information. Finally, the ROA factor is not necessarily a good indicator of disclosure. Therefore, investors interested in businesses with high information disclosure will focus on companies with low ROA. And vice versa, investors who want to learn about companies with a low level of information disclosure will find this information in companies.

7. LIMITATIONS AND FUTURE RESEARCH

Although the study has shown the factors affecting the level of information disclosure of listed companies, the study still has some limitations. First, the study was conducted with one type of segment report, so other types of reports may have disclosure characteristics that have not yet been discovered. Secondly, with a limited sample size (48 enterprises), it is not easy to conduct a more detailed classification and comparisons such by region and many different types of industries (in this

study, only two are given). The main occupations are Finance and non-financial. Thirdly, this study only focuses on internal factors of enterprises without considering external factors that can affect the level of information disclosure of enterprises.

From the above limitations, the study also makes some recommendations for further studies on the level of disclosure. First, subsequent studies could expand on a broader range of report types to uncover more disclosure-related results. This will enable interested investors and shareholders to learn through different types of reports. This will help them better consult before making investment decisions. Second, future research may collect more companies. The diversity of industries will make making more detailed comparisons by industry easier. Finally, external factors will help measure the factors affecting the level of disclosure in more depth. Many external factors can be meaningful to help stakeholders have many reference bases to make their decisions.

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