CHAPTER 2
DEVELOPMENT OF FINANCE, ACCOUNTING AND AUDITING

IMPACT OF THE QUALITY OF FINANCIAL REPORTING INFORMATION ON THE SECURITIES LIQUIDITY OF LISTED COMPANIES ON THE STOCK MARKET IN VIETNAM

Duong Thi Nhan[1]

[1]*Ho Chi Minh City College of Industry and Trade, Ho Chi Minh City, Vietnam, e-mail: nhandt@hitu.edu.vn*

Abstract. *Research on the relationship between financial statement information quality and securities liquidity, making recommendations to improve the liquidity of listed companies. The purpose of this paper is to assess the impact of quality of financial reporting on the liquidity of securities of companies on the stock market in Vietnam. Using a mixed method to measure Financial statement information quality, securities liquidity. Using a regression model to evaluate the influence of financial statement information quality on securities liquidity of 149 companies listed on HOSE and HNS in 2022. The information quality characteristics of the financial statements are: Appropriate, Honest, Understandable, Comparative, Timely, Verifiable. To measure the liquidity of securities, the author uses the price and trading volume of securities of listed companies at the beginning of the year, the end of the first quarter, the second quarter, the third quarter, and the fourth quarter of 2022. The analysis results show that six characteristics Financial reporting information quality has a positive impact on the liquidity of securities in companies listed on the Vietnamese stock market. Among them, the most influential characteristic is honesty. The study offers suggestions based on the aforementioned findings to improve the quality of financial report information in order to promote liquidity. At the same time, to make the recommendations feasible in practice, the study also proposes recommendations to create a legal corridor and practical support for relevant factors. The author recommends that businesses need to have independent auditing companies audit annually, and those companies need to be reputable in the professional world.*

Keywords: *information quality; financial statements; securities liquidity.*

JEL Classification: G 15, G 24
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Introduction. Financial statements are one of the information channels that listed companies are required to provide on the stock market. The quality of the information presented on it is crucial for efficient financial markets. One question is whether the information on those financial statements provided by listed companies has any influence on investors' decisions?

When applying Adam Smith's invisible hand theory to the stock market, people see it as a combination of many factors. The first factor is the business and the information it provides. The information provided by the enterprise is shown in the financial statements.

Securities liquidity is affected by many factors, in which the information in the financial statements has received much attention in recent years. Many studies around the world show that with high quality information on financial statements can help increase securities liquidity for companies. So what about this problem in a country where the stock market is still quite young like Vietnam today? Does the quality of the information published in the financial statements of listed companies really affect or help investors in making decisions? That is the reason why the author chose the topic related to the scientific article: *"Impact of information quality in financial statements on the liquidity of companies listed on Vietnam's stock market"*.

After conducting an overview of domestic and foreign scientific studies that are relatively related to the problem of the research topic, the author considers and adds new points in the research such as: information quality comprehensive financial statements in the direction of usefulness of information to help users of financial statements information make decisions; Building a scale of securities liquidity for companies listed on Vietnam's stock market more clearly. Not only stopping at financial information, the study also delves into the relationship between accounting information reflected on financial statements and securities liquidity.

Literature review. Some of the company theories are applied to explain the characteristics of financial statement information quality that affect the liquidity of securities as follows:

One of the first studies on agency theory came from Jensen and Meckling in 1976. Agent theory describes the relationship between managers and shareholders. Through agency theory, a problem is raised as to how the financial statement information should be presented to shareholders in order to minimize the conflict of interests between the parties. Therefore, the scope of the thesis is to study whether the information in the financial statements is presented honestly, reliably and in a timely manner.

G.A. Akerlof was the first to introduce the theory of asymmetric information in the 1970s. Through the theory of asymmetric information, it was shown that asymmetry is a consequence of informed stock market participants. information to varying degrees between an information provider and a receiver. In the stock market, joint-stock companies and joint-stock companies have the executive board as the information providers, and investors and stakeholders as the recipients of information. The adverse selection part belongs to investors when receiving less information than the information provider is the Management Board. To reduce

asymmetric information, the information in the Financial Statements needs to be verifiable and comparable so that investors can have more confidence in the Financial Statements.

Signaling theory was conceived in the early 1970s and is based on Spence's 1973 work to clarify information asymmetry in the labor market. Theory suggests that asymmetric information problems can be mitigated if parties signal each other. It has also been used to explain disclosure on corporate reporting. According to signal theory, managers who expect a high growth signal in the future will have an incentive to send this signal to investors. Information on Financial Statements is one of the signaling vehicles where companies will publish more information to signal to investors, to show that they are better than other companies. in the market for the purpose of attracting investment and enhancing its reputation. Therefore, when investors receive information on the Financial Statements, it is necessary to ensure that such information is appropriate and understandable to ensure that the Financial Statements are really reliable and of high quality.

Based on the theoretical basis and empirical research results on the information quality characteristics of financial statements affecting the liquidity of securities of companies, the research hypotheses are built as follows:

1) Basic quality characteristics:
− *Relevant:*

According to Ferdy van Beest (2009): Information is considered relevant if it makes a difference in the decision-making of users within their capacity as capital providers.

Hypothesis H1: The more relevant the quality of information provided in the financial statements, the higher the liquidity of the company's securities.
− *Truthful presentation:*

In order for Financial Statements to be useful, they must be presented fairly, reflecting economic phenomena for what they mean. A truthful presentation is only achieved when the interpretation of an economic event is complete, neutral and free from material misstatement.

Hypothesis H2: The quality of information provided on the financial statements presented honestly will increase the liquidity of the company's securities.

2) Additional quality characteristics:
− *Comparable:*

According to signal theory, comparability is expressed in information that allows its users to identify similarities and differences between two economic objects. Consistency means the use of accounting policies and procedures that are the same between accounting periods or within an accounting period between businesses. If comparability is the goal, consistency is a condition for achieving it.

Hypothesis H3: The easier the information presented in the financial statements is to compare, the higher the liquidity of securities.
− *Verifiable:*

An element of information that can ensure that the information users are presented truthfully according to the nature of the economic phenomenon. Verifiable

information also means that independent users with different knowledge can come to a common, however, not necessarily identical conclusion. For information to be verifiable, it must have one of the following two elements:

+ Information is presented faithfully about economic events without material misstatement

+ Apply a method of recognition or measurement that is reasonable, free of material misstatement or bias.

Hypothesis H4: The more verifiable the information presented in the financial statements, the higher the liquidity of securities.

− *Timeliness*

Timeliness means having information available to decision makers before it loses its value and ability to influence those decisions. Having relevant information sooner can increase its influence on decisions, and delays will deprive them of their core, potential value.

Hypothesis H5: The more timely the information presented in the financial statements, the higher the liquidity of securities.

− *Understandable*

An element of information that can help users understand the meaning of the information. Comprehensibility increases when information is categorized, clarified, and presented in a clear, concise manner.

Hypothesis H6: The more information presented in the financial statements, the easier it is to understand, the higher the liquidity of securities.

Aims. The purpose of this paper is to assess the impact of quality of financial reporting on the liquidity of securities of companies on the stock market in Vietnam.

Methodology.

1) Measure dependent and independent variables in the model:

− *Measure the dependent variable:*

After reviewing domestic and foreign studies, as well as using expert methods, the author uses a yardstick to measure the liquidity of securities for listed companies in Vietnam according to the research of Mr. Bogdan, Siniša, Suzana Bareša, and Saša Ivanović. (2012) is the total return of trading volumes over time.

Total volume earnings are calculated for each time t for each stock during the year according to the equation:

$$VK= \sum_{n=1}^{Nt} Pn . Vn$$

− VK is the total income.
− Pn: is the price at time t.
− Vn: is the trading volume at time t.

VK is determined by the sum of the product price Pn multiplied by the trading volume Vn at 5 times: the beginning of the year, the end of the first quarter, the end of the second quarter, the end of the third quarter, the end of the fourth quarter.

− *Measure the independent variable:*

Variable name	Variable Type	Describe	Measure	Dimension of influence
R	Quantitative	Relevant	Total score for each company.	+
T	Quantitative	Truthful presentation	Total score for each company.	+
C	Quantitative	Comparable	Total score for each company.	+
V	Quantitative	Verifiable	Total score for each company.	+
L	Quantitative	Timeliness	Number of days from the end of the financial year to the date of publication of the annual financial statements	+
U	Quantitative	Understandable	Total score for each company.	+

Determining the total score for each company, the author based on domestic and foreign research documents to build questions and measures, and explain the scoring method. After conducting the measurement method, the author used a qualitative method to survey including experts with experience in the fields of accounting, auditing, finance, securities analysis, investment. ...., thereby confirming the appropriateness of the factors that make up the quality of financial reporting information in the Vietnamese environment. The author uses observational documents that are annual reports of listed companies that have been selected for the research sample.

2) Regression model:

The study measures the impact of financial reporting information quality characteristics on securities liquidity. Based on the proposed hypotheses, the overall regression model proposed in this study to test the above hypotheses has the following form:

$$VK = \beta_0 + \beta_1 R + \beta_2 T + \beta_3 C + \beta_4 V + \beta_5 L + \beta_6 U + \varepsilon \qquad (1)$$

3) Research sample and data collection method:

Research sample. The object of the study focuses on sampling companies listed on HOSE and HNS with large capitalization and complete and complete accounting process. With the minimum sample requirement: $n \geq 50 + 8p$, n is the minimum sample size, p is the number of independent variables (Nguyen Dinh Tho, 2011, p. 499). So the minimum number of samples required is 98 companies, accounting for 11.2% of the total number of companies listed on HOSE and HNS. The research will select a sample of 20% of the total listed companies in 2022 as the 175 companies with the highest capitalization in each Stock Exchange, specifically described as follows:

Table 1. Description of sample selection

	HOSE	HNS
Total number of listed companies in 2022	**515**	**359**
Rate of 20% of total listed companies in 2022	103	72
Total number of companies to be investigated	**175**	
Minimum sample requirements: $n \geq 50 + 8p$	**98**	

Data collection methods. The data in the study are taken from the annual reports for the financial year ended December 31, 2022 of companies listed on the website:

cafef.vn. The researcher downloads 175 annual reports with attached appendices from 175 companies in the selected sample. Then, based on that, the author gives the financial report quality score of the independent variables from 175 annual reports according to the following characteristics: Relevant; Truthful presentation; Comparable; Verifiable; Timeliness; Understandable.

Results.

− *Survey results on information quality factors of financial statements*

120 questionnaires were sent to the subjects, and 118 valid questionnaires were obtained. Overall, 24 questions including 2 questions about dependent variable and 22 independent variables all had a score of 3.5 or higher. Therefore, the set of criteria used to assess the quality of information in the financial statements of enterprises consists of 22 scales.

− *Research results*

Table 2 provides a statistical description of the variables used in the model. In general, the quality of information on financial statements and securities liquidity of listed companies on Vietnam's stock market is still low (average 2.5-3.0).

Table 2. Descriptive statistics of quantitative variables

Chara-cteristic	N	Minimum value	The greatest value	Medium	Chara-cteristic	N	Minimum value	The greatest value	Medium
VK (ĐV: 1.000.000 Đ)	175	0	151.747	**7.552**	C1	175	1	5	**12,14** 2,75
R1	175	1	4	2,49	C2	175	1	5	2,83
R2	175	1	4	2,62	C3	175	1	5	2,81
R3	175	1	4	2,52	C4	175	1	4	<u>2,83</u>
R4	175	1	5	2,63	L	175	0	98	**11,22 48,91**
R5	175	1	4	<u>2,52</u>	V1	175	1	5	2,41
T1	175	1	5	**12,78** 2,96	V2	175	1	5	2,34
T2	175	1	5	3,07	V3	175	1	5	2,32
T3	175	1	5	3,12	V4	175	1	5	<u>2,84</u>
T4	175	1	5	<u>3,07</u>					**9,91**
U1	175	1	5	**12,22** 3,02					
U2	175	1	5	3,07					
U3	175	1	5	3,06					
U4	175	1	5	<u>2,99</u>					

The author uses SPSS software to evaluate the reliability and value of the financial statement information quality scale and the stock liquidity scale. The results of the reliability analysis of the scale showed that the correlation of all the observed variables was greater than 0.3 and the Cronbach alpha coefficient > 0.6. So the scale has the necessary reliability.

The results of testing the performance conditions of EFA on information quality factors for financial statements are presented in Table 3. Table 3 shows that KMO results = 0.948 > 0.5, which should be consistent with the requirements for analysis.

factor. In addition, the Bartlett Test has a Sig value. = 0.000 < 0.5. Therefore, the above results show that factor analysis is appropriate.

Table 3. Testing of EFA's performance conditions on financial reporting information quality factors KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,948
Bartlett's Test of Sphericity	Approx. Chi-Square	4865,561
	Df	231
	Sig.	.000

The results of factor rotation presented in Table 4 show that there are 2 factors formed as follows:

- *The first factor includes the variables:* R1, R2, R3, R4, R5, T1, T2, T3, T4, U1, U2, U3, U4, C1, C2, C3, C4, V1, V2, V3, V4. These variables relate to the preparation, presentation and disclosure of information.

Table 4. Table of Rotation Matrix of factors Rotated Component Matrix

	Component			Component	
	1	2		1	
R1	0,888		U3	0,913	
R2	0,881		U4	0,946	
R3	0,852		C1	0,900	
R4	0,838		C2	0,894	
R5	0,902		C3	0,920	
T1	0,929		C4	0,896	
T2	0,938		L		0,975
T3	0,894		V1	0,814	
T4	0,947		V2	0,773	
U1	0,936		V3	0,928	
U2	0,932		V4	0,864	

To check the fit of the model, the study analyzed the Sig significance level. of the F value, the model achieves a good fit when Sig. <0.05

The results of the regression run according to Table 5, we see that the adjusted coefficient R2 = 0.761< R2 = 0.771. With R2 = 0.771, it means that the dependent variable factor 1 is explained by 77.1% by the above independent variables.

Table 5. Summary of the model with the dependent variable being stock liquidity Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,878	0,771	0,761	153,835	1

a. Predictors: (Constant), R,T,C,V,L,U
b. Dependent Variable: VK

Table 6, ANOVA analysis shows that parameter F has Sig. = 0.00, showing that the regression model is suitable for the collected data set, and the included variables are statistically significant at the 5% level of significance.

Table 6. ANOVA analysis – Reliability of research model

	Model	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	351.475.796,569	6	58.579.299,595	24,759	,000[b]
1	Residual	335.973.194,012	142	2.366.008,465		
	Total	687.448.990,581	148			

a. Dependent Variable: VK
b. Predictors: (Constant), R,T,C,V,L,U

Thus, the regression model with the dependent variable is Securities liquidity and the independent variable is the quality of information Financial statements include 22 factors related to relevancy, truthfulness, understandable presentation. achievable, comparable, timely and verifiable presentation.

Table 7 presents the regression results with the dependent variable being Securities liquidity; The independent variables are relevance, fair presentation, understandable, comparable, timely, verifiable characteristics. Results when considering reliability, the independent variables, Sig values. All < 0.05, showing high reliability. At the same time, the above table shows that the largest VIF coefficient is 3,885 <10, so it can be concluded that there is no multicollinearity phenomenon.

Table 7. Results table of regression weights

Model	Unstandardized Coefficients		Standardized Coefficients	Tstat	Sig.	Statistical Multicollinearity	
	Beta	Std. Error	Beta			Tolerance coefficient	Coefficient VIF
Constant	-5.299,096	646,350		-8,198	0,000		
R	91,633	873,494	0,233	0,110	0,000	0,039	3,885
T	115,513	916,744	0,464	1,210	0,000	0,023	2,626
U	427,882	899,064	0,283	2,146	0,000	0,023	3,156
C	345,334	927,726	0,307	1,723	0,000	0,028	2,822
L	11,076	4,455	0,112	0,203	0,000	0,088	1,012
V	222,436	432,199	0,207	1,194	0,000	0,143	2,011

Dependent Variable: VK

Based on Table 7, from the statistical parameters in the regression model, the multiple linear regression equation evaluates the quality of financial statements information on the liquidity of securities at listed companies on the stock market. Vietnam stock market with standardized coefficients as follows:

$$VK = 0,233*R + 0,464*T + 0,283*U + 0,307*C + 0,112*L + 0,207*V \quad (2)$$

Thus, all six factors: Relevant, Truthful presentation, Understandable, Comparable, Timeliness, and Verifiable all have a proportional influence on stock liquidity at listed companies listed on the Vietnamese stock market. That is, the higher R, T, U, C, L, V, the higher the liquidity of companies listed on the Vietnamese stock market. Among these 6 factors, the factor that has the strongest

influence on stock liquidity in companies listed on the Vietnamese stock market is the Truthful presentation characteristic (= 0.464), Comparable characteristic. (= 0.307), understandable characteristics (= 0.283), Relevant characteristics (= 0.233), verifiable characteristics (= 0.207), and finally timely characteristics (= 0.112). Thus, hypotheses H1, H2, H3, H4, H5, H6 for the official theoretical research model are accepted.

Discussion. The quality of financial report information and stock liquidity of businesses listed on the Vietnamese stock market is still poor (on average, 2.5–3.0), according to the descriptive statistics results of the model's variables. This suggests that in order to increase their stock liquidity, corporations must strengthen the variables that influence the caliber of their financial reporting information.

The regression results in Table 7 examine the impact of financial report information quality on the liquidity of businesses listed on the Ho Chi Minh City stock market. The main conclusion drawn from the regression analysis is that all six factors: appropriate, honest, understandable, comparable, timely and verifiable all have a proportional influence on the quality of the product. Stock liquidity at companies listed on the Vietnamese stock market. Thus, the higher the quality of financial reporting information a company has, the higher its liquidity level. Investors will put more trust in companies that provide good quality financial reports.

Conclusions. The goal of this study is to investigate and quantify the aspects of accounting information quality that have an impact on the liquidity of companies listed on the Vietnamese stock market. At the same time, consider the difference in assessing the impact of accounting information quality factors affecting the liquidity of companies listed on the Vietnamese stock market.

According to the delegation hypothesis, owners of a joint stock firm have the authority to appoint managers. This authorization leads to conflicts of interest. From conflicts of interest, business managers tend to act in their own interests rather than in the interests of the owners. Meanwhile, according to asymmetric information theory, Managers are information providers, so they tend to hide information, thereby leading to asymmetric information. In order to minimize this situation, the issue of improving the quality of financial reporting information is to increase liquidity for listed companies.

Cronbach's alpha reliability coefficient tool and EFA analysis were used to test the scale in official quantitative research with a sample size of n= 175. The author has built 22 observed variables for 22 scales. These scales are included in surveys in official quantitative research. As a result, a total of 22 observed variables were grouped into 6 accounting information quality factors that affect the liquidity of companies listed on the Vietnamese stock market: (1) Relevant, (2) Truthful presentation, (3) Understandable, (4) Comparable, (5) Timeliness, (6) Verifiable.

The study offers suggestions based on the aforementioned findings to improve the quality of financial report information in order to promote liquidity. At the same time, to make the recommendations feasible in practice, the study also proposes recommendations to create a legal corridor and practical support for relevant factors.

Suggestions and Policy recommendations. Based on the research results of the topic, the author offers some suggestions for managers of companies listed on the Vietnamese stock market in improving liquidity appropriately and effectively. These suggestions are made with the goal of raising the standard of financial reporting data, influencing investors' investment choices and thereby increasing liquidity, benefiting companies listed on the Vietnamese stock market greatly, and creating chances for the Vietnamese stock market to grow and develop.

As a result, the author offers the suggestions below to raise the caliber of financial report data.

Listed companies in Vietnam are currently required to disclose information according to Circular 52. Information quality of Financial statements in a broad sense are evaluated on the basis of the information presented according to this regulation. Although the information required by listed enterprises to disclose according to Circular 52, includes characteristics of financial information as well as non-financial information in accordance with international practices, it is only of a nature suggest. Because each business has a different scale, level of complexity and industry, the quality of financial statement information published by listed businesses is different. This depends a lot on the explanatory part of each enterprise regarding the contents specified in this Circular. In order to improve the quality of Financial Report information, the recommendations will be related to each quality characteristic of Financial Report information:

− *Relevant information characteristics:* Financial statement information can help users have good forecasting ability, when it must be able to predict the activities of the business, make short-term and long term decisions.

− *Characteristics of truthfully presented information:* According to IASB (2010), for information to be truthful, it must satisfy the following requirements: neutral, complete, free from material errors and verifiable. The characteristic of faithful presentation covers both financial and non-financial information.

− *Characteristics of information presented in an easily understandable way*: In addition to presenting a good layout, there should be illustrative charts and specialized phrases presented that explain clearly so that readers can readily understand the information and content presented.

− *The characteristics of information presented are comparable:* When comparing figures within the same business, accounting principles and policies should be implemented consistently. In case there is a change in accounting principles and policies, businesses need to have a clear explanation and explanation of the data when adjusting.

− *Characteristics of timely released information:* Decision makers will no longer find information timely if it is not published quickly enough to boost its utility. As a result, organizations must enhance their information preparation and publication processes.

− *Characteristics of verifiable information:* Verifiable information also indicates that independent users with various levels of understanding can reach a similar conclusion, though not always exactly the same one. Independent auditing

firms serve as the independent verifiable users, and the skill and experience of the auditor and the auditing firm are crucial in helping to reach a reasonable conclusion.

The author recommends that businesses need to have independent auditing companies audit annually, and those companies need to be reputable in the professional world.

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