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ENTERPRISE SCALE AND THE LEVEL OF ACCOUNTING INFORMATION DISCLOSURE

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Abstract
Vietnam's stock market in 2024 will have more bright spots coming from the support of the macro-economy, business performance, and internal factors of the market. Vietnam's economic growth still maintains the highest growth rate in the world. The information technology system that manages and operates transactions on the Vietnamese stock market can deploy more appropriate financial products on the market. The purpose of this study is to determine the effect of enterprise scale on the level of accounting information disclosure of securities firms listed on the Vietnam stock market. The authors will use the OLS, FEM, REM, and GLS methods combined with statistic analysis with Stata software and the synthesis method. The article analyzed the level of accounting information disclosure by securities firms based on secondary data provided by Global Data Services Company and compiled by the authors. Our findings show enterprise scale has an impact on the level of accounting information disclosure by securities firms. This research uses the data of securities firms listed on the Vietnam stock market based on previous studies. Within the context of the stock market's opportunities in 2024, they will be clearer and brighter than in 2023. According to forecasts, business growth will return to positive numbers compared to 2023. These variables are useful solutions for the economy.

Keywords: accounting information, accounting information disclosure (I), enterprise scale, accounting, finance, securities firms
JEL Codes: M40, M41, E44, F65

1. INTRODUCTION

Along with the formation and development of the stock market, securities firms are also established, operated, and developed to meet the needs of the securities products and services of participating entities. Securities firms are one of the specific types of enterprises that act as intermediaries in the securities market, performing activities that provide securities services such as securities brokerage activities, securities self-trading, securities underwriting, securities investment consulting, and other services according to the provisions of the law.

A company's financial reports, which comprise financial statements as well as reports on managers' analysis and appraisal, audits, and other reports, are the means by which accounting information is disclosed (Healy & Palepu, 2001).

The level of accounting information disclosure in a firm is affected by different factors. In particular, the factor of enterprise scale is one of the important factors being studied by domestic and international researchers.

Determining the influence of the enterprise scale factor is important in improving the level of accounting information disclosure, thereby contributing to affirming the reputation of the firm to external audiences such as investors, joint venture partners, credit institutions, suppliers, and customers.

There have been many studies on the topics of accounting, auditing, and finance in Vietnam, notably: Nguyen et al. (2023) determine the corporate culture factors and their influence on internal control in commercial firms in Hanoi. Hoi et al. (2023) research the status quo of provisions of PIT levied on real estate to come up with some recommendations to perfect the law. Dung et al. (2023) present banking management and control for sustainability in the Vietnam situation. However, there are not many studies on the influence of enterprise scale on the level of accounting information disclosure.

So, the objective of this paper is to present the influence of enterprise scale on the level of accounting information disclosure by securities firms. And we formulated the research question as follows:

RQ: How does the influence of enterprises scale on the level of accounting information disclosure in securities firms in Vietnam?

2. THEORETICAL AND BASIS LITERATURE REVIEW

Accounting information disclosure

Accounting information disclosure has been categorized by researchers both domestically and internationally into two categories: required information disclosure and optional information disclosure. Specifically, required information disclosure refers to the need for businesses to disclose information in accordance with existing regulations, including the Securities Law, Ministry of Finance Circulars, and regulatory bodies. Information that listed companies voluntarily release that is not the fundamental financial data that must be published in accordance with generally accepted accounting principles is referred to as voluntary information disclosure. extensively acknowledged and mandated by securities authorities (FASB, 2001).

Ta (2012) used the following procedures to create an index of voluntary information disclosure: The initial step is to compile a list of voluntary information releases based on related prior research. The information disclosure index from step 1 will be compared against Vietnam's mandatory information disclosure requirements at the time of the research in the second stage. If the two are identical, the mandated publishing will be disregarded. After then, the information disclosure index's indexes are divided into six categories: general company information, auditing-related information, financial information, information for the future, employee information, social

responsibility, environmental policy, and board structure announcement. Lastly, the constructed index is provided to specialists for feedback and editing of the information disclosure.

The voluntary disclosure of information in the annual reports of Jordanian businesses listed on the Amman Stock Exchange (ASE) is examined by Albitar (2015). The findings indicated that while there has been a notable improvement over the years, the amount of voluntary information disclosure by businesses in Jordan is low (an average of 35.7% over three years).

According to Dang (2016), information disclosure is viewed as a means of putting in place a transparent corporate procedure to guarantee that information is fairly accessible to investors and shareholders.

Enterprise scale

Research by Ahmed & Nicholls (1994) suggests that large-scale enterprises have the necessary resources and expertise to prepare better-quality financial reports and therefore disclose more information.

Soliman (2013) affirms that enterprise scale has an impact on the level of accounting information disclosure.

The theory of economies of scale suggests that firms can save more costs with an increase in enterprise scale (Moore, 1959), thereby ensuring the effectiveness of financial leverage and influencing increased financial performance. However, the theory of economies of scale suggests the opposite relationship (Canback et al., 2006). According to agency theory, the larger the enterprise, the more likely it is to minimize the problem of information asymmetry. The effectiveness of managers' decisions on using financial leverage will be more reliable, thereby increasing corporate financial performance (Dawar, 2014).

Compared to small enterprises, large firms are often easier to accept risks; accordingly, enterprise scale can become an incentive to borrow more debt, and the impact of financial leverage on financial performance will become even greater when regulated by enterprise scale. This regulatory relationship is also confirmed by empirical research by Meshack et al. (2020) and Santosa (2020).

The enterprise scale factor includes the average number of employees, average revenue, and average total assets of the enterprise (Zahirul & Wendy, 2000), or enterprise scale is determined as the logarithm of total revenue or logarithm of total assets. Expanded enterprise scale can help firms take advantage of economies of scale and increase profits and enterprise scale.

From there, we build hypothesis H1 as follows: Enterprise scale positively affects the level of accounting information disclosure by listed securities firms.

3. RESEARCH METHODS

Research data and estimation methods

The article uses secondary data, collected from the secondary data set obtained from the data platform of Global Data Services Company. The study collected 358 observations of 36 securities firms listed on the Vietnam stock market in the period from 2018 to 2022 (2 indicators in 5 years; 1 firm does not have data in 2022), ensuring that most of these firms have quite enough numbers data during the 5-year study period. The paper combines the use of qualitative and quantitative

research methods, in which the research results are determined by quantitative methods, specifically using OLS, FEM, REM, and GLS estimation methods. All data processing is based on the support of Microsoft Excel software and Stata 13 software.

Research models

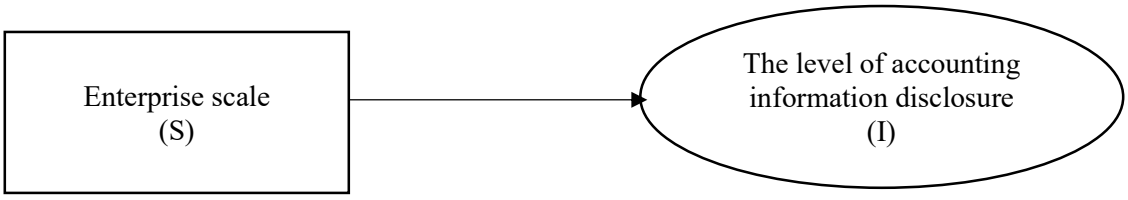

Figure 1: Research model

Measure variables

Inheriting the results of the above studies, based on the results of expert interviews and relevant legal provisions such as Circular No. 155/2015/TT-BTC dated October 6, 2015, and Circular No. 96/2020/TT-BTC, we determine the level of accounting information disclosure (I) at listed securities firms as follows:

$$Ij = \sum_{i=1}^{nj} \text{dij/n}j$$

In which: Ij: accounting information disclosure index of firm j; dij = 1 if information item i is published, = 0 if not published; n: number of items of information the firm can publish; and 0 < Ij < 1; mandatory information disclosure includes 25 indexes; voluntary information disclosure includes 72 indexes.

Previous authors often used total assets, market capitalization, or net revenue (Nandi & Ghosh, 2012; Soliman, 2013) to measure enterprise scale. Firm size is measured by the logarithm of total assets (Bolek & Wiliński, 2012; Yazdanfar, 2013; Chu et al., 2015). Securities firms have quite large and stable total assets because of the characteristics of these enterprises' business lines. Therefore, in this article, enterprise scale is represented by the scale of assets, measured by the Logarithm of Assets (LnTS) denoted S.

4. RESEARCH RESULTS

Descriptive statistics

Table 1 shows: Enterprise scale and level of accounting information disclosure are described by 179 observations (obs); basic indicators such as the average value (mean), maximum value (max), minimum value (min), and standard deviation (sd) of each index have been determined, and the basic indicators reflect the scale and level of accounting information disclosure of securities firms listed on the Vietnamese stock market.

Table 1: General descriptive statistics and detailed descriptive statistics

General descriptive statistics					
Variable	**Obs**	**Mean**	**Std. Dev.**	**Min**	**Max**
I	179	.5456698	.0792135	.4329897	.7604167
S	179	11.08899	1.372903	8.058644	15.72201

Detailed descriptive statistics		
Stats	**I**	**S**
N	179	179
Sum	97.6749	1984.929
Variance	.0062748	1.884861
Range	.327427	7.663367
Cv	.1451675	.1238077
Skewness	.8591756	.5121673
Kurtosis	2.963559	3.717821
p50	.5319149	11.13519

Source: Compiled by authors and Stata 13 software

Correlation matrix

Table 2 describes the correlation relationship with the variables in the research model, including dependent variable I and independent variable S. According to the results of Table 2, the correlation coefficient between the pair of independent variables and dependent variables in the model The figure is smaller than 0.8, so it is less likely that multicollinearity occurs between the independent variable and the dependent variable when included in the model. To check for multicollinearity, the study uses the variance inflation factor (VIF) in the regression model. The results show that the VIF value is 0.3781 (table 3), so it can be concluded that the model does not have a multicollinearity phenomenon.

Table 2: Correlation matrix results

Correlate S I
(obs=179)

	S	**I**
S	1.0000	
I	0.3781	1.0000

Source: Compiled by authors and Stata 13 software

Table 3: Results of variance magnification factor VIF

Variable	**VIF**	**1/VIF**
S	1.00	1.0000
Mean VIF	1.00	

Source: Compiled by authors and Stata 13 software

Regression results

OLS regression

Table 4 shows that F = 29.52 > 1.96 and Prob. > F = 0.0000 < 0.05. The result of this model with R-squared is 0.1429, meaning that the independent variables in the research model explain 14.29%

of the influence of the independent variable on the dependent variable. According to Kohler and Kreuter (2005), the findings are accepted temporarily but need to test the suitability of the model.

Table 4: OLS regression results

Regression of **I S**

Source	SS	Df	MS	Number of obs = 179
				F(10, 141) = 29.52
Model	.159647274	1	.159647274	Prob > F = .0000
Residual	.957264592	177	.005408275	R-squared = 0.1429
Total	1.11691187	178	.006274786	Adj R-squared = 0.1381
				Root MSE = .07354

I	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
S	.0218138	.0040149	5.43	0.000	.0138905	.0297371
_cons	.303777	.0448597	6.77	0.000	.2152483	.3923057

Additionally, Table 3 also demonstrates the correlation among independent variables. The outcome shows that VIF coefficients < 2 (table 3); an attribute of independent variables has VIF coefficients smaller than 2, so it can be confirmed that 100% of all independent variables do not have autocorrelation (Ditzen, 2018).

Table 5: Results of heteroskedascity (estat hottest)

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of I
chi2(1) = 13.27
Prob > chi2 = 0.0003

The result of Table 5 with Prob. > Chi2 = 0.0003 < 0.05 is relevant to a phenomenon of variable variance. That means the research model is not consistent with the input data. Therefore, there is a need to use the model at a higher level (Bryman & Cramer, 2001). The higher-level models are the fixed-effects regression model (FEM) and the random-effects model (REM) (Kohler & Kreuter, 2005).

FEM and REM

Table 6: FEM model with attributes

xtreg I S, fe

Fixed-effects (within) regression	Number of obs = 179
Group variable: ID	Number of groups = 36
R-sq: within = 0.0036	Obs per group: min = 4

between = 0.2212	avg = 5.0
overall = 0.1429	max = 5
	F(10,104) = 0.52
corr(u_i, Xb) = -0.4333	Prob > F = 0. 4725

I	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
S	-.0022757	.0031591	-0.72	0.472	-.0085207	.0039693
_cons	.5709051	.0350959	16.27	0.000	.5015271	.6402831
sigma_u	.07731786					
sigma_e	.02845262					
rho	.88073086	(fraction of variance due to u_i)				

F test that all u_i=0: F(35, 142) = 29.73 Prob > F = 0.0000

Table 6: REM model with attributes

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xtreg I S, re
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Random-effects GLS regression	Number of obs = 179
Group variable: ID	Number of groups = 36
R-sq: within = 0.0036	Obs per group: min = 4
between = 0.2212	avg = 5.0
overall = 0.1429	max = 5
	Wald chi2(1) = 0.08
corr(u_i, X) = 0 (assumed)	Prob > chi2 = 0.7747

I	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
S	.0008803	.0030748	0.29	0.775	-.0051462	.0069068
_cons	.5354053	.0360176	14.87	0.000	.4648121	.6059984
sigma_u	.06682959					
sigma_e	.02845262					
rho	.8465522	(fraction of variance due to u_i)				

Comparing FEM and REM by Hausman test to choose the optimal model.

Table 7: Results comparing FEM and REM models

---- Coefficients ----

I

	(b) FEM	***(B) REM***	***(b-B) Difference***	***sqrt(diag(V_b-V_B)) S.E.***
S	*-.0022757*	*.0008803*	*-.003156*	*.0007251*

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(9) = (b-B)'[(V_b-V_B)^(-1)](b-B)

= 18.95

Prob>chi2 = 0.0000

(V_b-V_B is not positive definite)

Table 7 shows that H0: difference in coefficients is not systematic, meaning that there is no difference between the FEM and REM models; therefore, the REM model is selected (Kohler & Kreuter, 2005). However, it is necessary to retest heteroscedasticity with estat hottest.

Table 8: Results of the estat hottest test of the observed variable

Breusch and Pagan Lagrangian multiplier test for random effects

I[ID,t] = Xb + u[ID] + e[ID,t]

Estimated results:

	Var	sd = sqrt(Var)
I	.0062748	.0792135
e	.0008096	.0284526
u	.0044662	.0668296

Test: Var(u) = 0

chibar2(01) = 219.46

Prob > chibar2 = 0.0000

Table 8 shows that Prob > Chibar2 = 0.0000 < 0.05: This means there is a phenomenon of variable variance, i.e., the research model is inconsistent with the input data. Thus, for the observed variable, I need to use the final regression, which is GLS regression (Torres-Reyna, 2007).

GLS regression

Table 9: xtgls I S, panels(iid) corr(independent)

Cross-sectional time-series FGLS regression

Coefficients: generalized least squares

Panels: homoskedastic

Correlation: no autocorrelation

Estimated covariances = 1 Number of obs = 179

Estimated autocorrelations = 0 Number of groups = 36

Estimated coefficients = 2 Time periods = 4
Wald chi2(10) = 29.85
Log likelihood = 214.19 Prob > chi2 = 0.0000

I	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
S	.0218138	.0039925	5.46	0.000	.0139887	.0296388
_cons	.303777	.0446084	6.81	0.000	.2163461	.3912079

In Table 9, we see that the regression equation of enterprise scale affecting the level of accounting information disclosure I is I =.0039925 S.

5. DISCUSSION AND IMPLICATIONS

Table 1 results show that the average level of accounting information disclosure of securities enterprises listed on the Vietnamese stock market in the period 2018–2022 is 0.5456698 compared to full disclosure of 1. That is, in Vietnam in the period 2018–2022, the average level of accounting information disclosure of securities industry enterprises only reached 54.567%, while about 45.433% of the necessary information has not been published. Table 1 also shows that the variance of variable "I" is 0.0062748 and the standard deviation (Standard. Dev) is 0.0792135. The asymmetry coefficient, also known as skewness, is equal to.8591756, which is greater than zero (0), so the distribution is skewed to the right. The value of kurtosis equal to 2.963559 is less than 3, indicating that the distribution is concentrated at a normal level.

The maximum disclosure has reached 76.04167% and the minimum is 43.29897%. There is a gap between these two values, which shows that accounting information disclosure among businesses in the securities industry is uneven and still Many businesses still disclose incomplete information. This easily confuses information users who are able to identify and analyze data.

The larger the scale of an enterprise, the higher the level of accounting information disclosure.

Enterprise scale is measured by the logarithm of the enterprise's total assets, so the larger the enterprise's scale, the higher the enterprise's total assets, demonstrating the stronger financial potential of the enterprise and helping the enterprise Industry promotes product consumption and service provision to consumers, thereby improving the level of accounting information. This result is consistent with the initial hypothesis.

The results of estimating the scale variable (S) have a regression coefficient of.0039925, confirming that the enterprise scale factor is meaningful and positively affects the information disclosure of listed securities firms in Vietnam, consistent with expectations according to the research hypothesis.

Using the GLS estimation method, the article has determined that enterprise scale positively affects the level of accounting information disclosure. Accordingly, the article recommends that securities firms should coordinate closely and appropriately between enterprise scale and the level of accounting information disclosure to improve the level of accounting information disclosure.

Research results suggest that firms not only care about size but also consider the level of accounting information disclosure. If the business's performance is reduced, managers can make

adjustments to reduce the size of the firm. In addition, securities firms should strengthen risk management measures in accordance with the trend of changing enterprise scale.

Listed securities firms should improve the level of information disclosure in the direction of increasingly expanding their enterprise scale. Because, when expanding scale, firms have more conditions to carry out activities to improve the quality of accounting information and increase the level of voluntary and mandatory information disclosure.

Securities firms should promote service provision, expand markets, and diversify services to achieve sustainable revenue growth. In addition, firms should take advantage of economies of scale to increase business performance, thereby improving the level of accounting information disclosure.

6. CONCLUSIONS

According to signaling theory and previous studies, the business scope of large enterprises is often more diverse in terms of products and geographical scope than that of small enterprises. Therefore, management at the central unit of the enterprise needs a lot of detailed information to make effective management and business decisions. Therefore, large enterprises often have the necessary conditions to meet the task of transmitting accounting information. Therefore, enterprise size is a factor that affects how much information a company discloses.

Agency theory suggests that due to the clear separation between ownership and control of enterprises, along with asymmetric information between executives and investors, agency costs arise. For large enterprises with many shareholders, this cost will often be very high because enterprises always tend to monitor executives. To limit agency costs, these enterprises will increase information disclosure.

The research contributes to the improvement of the theoretical framework of accounting and the stock market in general, as well as the impact of enterprise size on the level of accounting information disclosure in particular.

This study analyzed, evaluated, and measured the impact of enterprise size on the level of accounting information disclosure at securities firms listed on the Vietnamese stock market, but in reality, there are many contents about accounting, finance, other economic information, and other factors affecting the level of accounting information disclosure at securities firms that also need to be clearly measured and analyzed. In addition, this topic in firms in other industries also needs to be researched. Therefore, future research can expand and add content and firms from other industries to the research and select a larger, more diverse research sample.

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