THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND PERFORMANCE OF SECURITIES BROKERAGE FIRMS – A CASE STUDY IN VIETNAM

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ABSTRACT

Purpose: The aim of this study is to examine the relationship between capital structure and performance of securities brokerage firms.

Theoretical framework: The study inherits previous studies on the relationship between capital structure and performance to reason, test and determine the optimal capital structure.

Design/methodology/approach: Using Qualitative Research (Synthetic Methods; Statistical methods, description; Inductive and interpretive methods) and quantitative research methods (linear regression methods).

Findings: The results identified an inherent structure that significantly affects performance through the variables: (1) Financial leverage of a stockbroker (FL) and (2) Brokerage company size (Siz).

Research, Practical & Social implications: The study provides a number of discussions and evaluations on the important role of decision making on optimal capital structure for securities brokerage service companies, in addition to recommendations on financial solutions to improve operational efficiency for companies.

Originality/value: Through the study of 105 securities brokerage companies, corresponding to 1,314 observations in the period 2003 - 2021.

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A RELAÇÃO ENTRE A ESTRUTURA DE CAPITAL E O DESEMPENHO DAS CORRETORAS DE VALORES - UM ESTUDO DE CASO NO VIETNAME

RESUMO

Objetivo: O objetivo deste estudo é examinar a relação entre a estrutura de capital e o desempenho das empresas de corretagem de títulos.

Estrutura teórica: O estudo herda estudos anteriores sobre a relação entre a estrutura de capital e o desempenho para raciocinar, testar e determinar a estrutura de capital ótima.

Concepção/metodologia/abordagem: Utilização de pesquisa qualitativa (métodos sintéticos; métodos estatísticos, descrição; métodos indutivos e interpretativos) e métodos de pesquisa quantitativa (métodos de regressão linear).

Descobertas: Os resultados identificaram uma estrutura inerente que afeta significativamente o desempenho através das variáveis: (1) alavancagem financeira de uma corretora (FL) e (2) tamanho da corretora (Siz).

Pesquisa, implicações práticas e sociais: O estudo fornece uma série de discussões e avaliações sobre o importante papel da tomada de decisões sobre a estrutura ideal de capital para empresas de serviços de corretagem de títulos, além de recomendações sobre soluções financeiras para melhorar a eficiência operacional das empresas.


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RELACIÓN ENTRE LA ESTRUCTURA DEL CAPITAL Y LOS RESULTADOS DE LAS SOCIEDADES DE CORRETAJE DE VALORES - ESTUDIO DE UN CASO EN VIETNAM

RESUMEN
Objetivo: El objetivo de este estudio es examinar la relación entre la estructura de capital y el rendimiento de las empresas de corretaje de valores.
Marco teórico: El estudio hereda estudios anteriores sobre la relación entre la estructura de capital y el rendimiento para razonar, probar y determinar la estructura de capital óptima.
Diseño/metodología/enfoque: Utilización de métodos de investigación cualitativos (métodos sintéticos; métodos estadísticos, descripción; métodos inductivos e interpretativos) y cuantitativos (métodos de regresión lineal).
Conclusiones: Los resultados identificaron una estructura inherente que afecta significativamente al rendimiento a través de las variables: (1) Apalancamiento financiero de una sociedad de valores (FL) y (2) Tamaño de la sociedad de valores (Siz).
Investigación, implicaciones prácticas y sociales: El estudio proporciona una serie de discusiones y evaluaciones sobre el importante papel de la toma de decisiones sobre la estructura óptima de capital para las empresas de servicios de corretaje de valores, además de recomendaciones sobre soluciones financieras para mejorar la eficiencia operativa de las empresas.
Originalidad/valor: Mediante el estudio de 105 empresas de servicios de intermediación de valores, correspondientes a 1.314 observaciones en el periodo 2003 - 2021.

Palabras clave: Estructura de Capital, Rendimiento, Sociedades de Valores, Vietnam.

INTRODUCTION
In the market economy, most companies see improving operational efficiency as a goal to maximize profitability, even though many businesses consider operational efficiency a vital factor of the business. Because when operational efficiency increases, cash flow increases, profits increase, revenue increases, capital increases, costs decrease, funding increases, and the company's reputation increases rapidly. For stockbrokers, it is no exception that every company always has to set a goal to improve operational efficiency through increasing revenues and reducing expenses, in which the cost of capital of funding sources is a matter that needs to be considered. In other words, the cost of capital is the minimum rate of return that brokerage firms must achieve when using loans to finance their business, ensuring that the rate of return on equity does not decline.

The stock market is an important capital channel of the economy. The stock market can only operate effectively when the participants in the market have all the conditions to ensure effective business operations, in which securities companies is one of the key actors. The activities of securities companies have a great influence on the stable and sustainable development of the stock market. To be able to operate effectively, securities companies need to ensure certain capabilities, especially financial capacity. Therefore, improving the financial capacity of securities companies is a fundamental condition and a requirement for the development of securities companies in particular and the stock market in general.
In Vietnam, the process of formation and development of securities companies is associated with the formation and development of the securities market. In the early stage of the new stock market coming into operation, the number of securities companies was still small, but in the following years, securities companies increased rapidly in both quantity and quality. From the place where there were only 5 securities companies initially with the highest company's equity in 2004 at 107.61 billion dong, to date, there are nearly 80 active and reputable securities companies. The owner securities company increased to VND 9,873 billion, nearly 92 times higher than the securities company with the highest level of owner's shares at the time of 2004. Many securities companies have become major financial institutions in the market, providing high quality services, being quick in innovating core technologies to adapt to the fierce competitive environment, demonstrating operational efficiency, significantly enhanced. However, in the recent period, the number of Vietnamese securities companies that are dissolved, ceased to operate, merged, etc. tended to increase (from December 31, 2009 to December 31, 2021 the number number of securities companies decreased from 105 companies to about 80 companies). One of the reasons leading to the above situation is that Vietnamese securities companies have low business performance and limited ability to use capital. Low operational efficiency has hindered securities companies from improving service quality, launching new products, opening more branches, transaction offices, investing in technology or expanding market share. unsafe for the existing system, affecting the interests of investors and partners.

LITERATURE REVIEW

The term capital structure is used quite commonly in economics and finance, according to the Vietnamese dictionary book by the author. Nguyen Nhu Y (1998) defines "Structure as the sum of the internal relationships of a whole, a system" (Nguyễn Như Ý, 1998) Besides, in the dictionary of economics and finance and banking, associate professor Dr Le VanQi (1996 ) defines "Capital as the contribution to business activities by actual capital investment" (Lê Văn Tề, 1996) Thus, according to the article's author, it can be understood that "capital structure is a relation to the proportion of each type of capital contributing to business activities".

Indeed, there are many different views on the relationship between capital structure and business performance, most of which have proven the relationship to be favourable, and some studies have shown the opposite result, namely According to Bevan et al. (2002), based on an analysis of the capital structures of 822 companies in the UK, the results show that the form of
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debt, including long-term and short-term debt, differs significantly from companies. They are borrowing through commercial credit accounts for over 62% of companies' total liabilities, which are relatively sensitive to financial leverage (Bevan & Danbolt, 2002). This means that the level of leverage in UK companies has a one-sided relationship with size and tangibles and is negatively correlated with a company's profitability and growth rate. Therefore, when considering leverage, managers only consider long-term debt; it is not complete about the company's capital structure. According to Eriotis et al. (2007), there is evidence that capital structure differences between companies with debt ratios higher than 50% and companies with ratios less than 50%, that company size has a favourable relationship with capital structure through debt ratios, in particular, there is a negative relationship between the debt ratio of companies and growth, the ability of companies to pay interest and the ability to pay quickly. The data used by the team is relatively reliable, including a sample of 129 companies listed on the Athens Stock Exchange observed between 1997 and 2001 (Eriotis, Vasiliou, & Ventoura-Neokosmid, 2007). The study results show that financial theories help select the optimal capital structure to increase company value. The drawback of the study is that there is no classification of companies in different areas of activity; companies' capital structure is likely to be different, especially in the financial sector. According to Asarkaya et al. (2007), intending to study the determinants of capital structure in the commercial banking sector in Turkey, the sample was a secondary data file of 20 commercial banks with reliable financial statements and independently audited, cross-data tables observed from December 2002 to April 2006 (the author excludes banks with excessively high capital adequacy ratios), through the generalized moment quantitative research (GMM) methodology. The results of the authors' research show that capital, the average capital level of the industry, return on equity, portfolio risk, and economic growth rate are correlated in the same direction to the capital adequacy ratio. In contrast, the deposit ratio is negatively correlated with the capital adequacy ratio (Asarkaya & Özcan, 2007). Banks with higher portfolios have lower capital adequacy ratios, and capital adequacy ratios have a negative algebraic correlation with assets; these banks need to have higher capital to provide a large enough buffer to limit accidental losses, especially in periods of economic exhaustion, the ability to replenish capital from profits is limited. The study focus on commercial banks in maintaining capital structures through internal capital adequacy ratios, whereas for stockbrokers, capital structures have their own merits due to their inability to raise debt capital as widely as banks. According to Pratheepkanth (2011), companies' capital structure and performance are negative, causing companies to be largely dependent on debt and high-interest expense pressures. The author used a sample of companies doing business in Sri
Lanka, observing for five years from 2005 to 2009. Capital structure independent variables are used debt-to-equity, and debt-to-total assets, whereas dependent variables are gross profit, net profit, return on equity, return on assets, and net return on total investment costs (Pratheepkanth, 2011). The author recommends that the capital structure strongly influences companies’ performance, so adjusting the optimal capital structure helps them make the right decisions in investment activities. According to Mwangi et al. (2014), intending to find an optimal capital structure through the analysis of the relationship between business performance and capital structure, the authors used a sample of 42 companies listed on the Nairobi Stock Exchange, Kenya from 2006 to 2012. Variables that depend on the profitability on equity and profitability on assets represent performance, whereas variables such as Company size; Financial leverage; Short-term liabilities on total assets; Total liquid assets to total assets; Gross domestic product growth rate, a measure of the capital structure of companies (Mwangi, Makau, & Kosimbei, 2014) The results show that financial leverage has a negative relationship with the performance of companies, and company managers should reduce their reliance on long-term loans as a primary source of capital. However, the team's sample focused mainly on non-financial companies. According to Alipour et al. (2015), theories of capital structure are relatively relevant to emerge markets such as companies in Iran, factors affecting a company's capital structure such as company size, asset structure, profitability, etc. liquidity, growth rate, type of ownership or risk that affects the capital structure. Besides, the capital structure of companies has an inverse relationship to profitability of companies. In particular, companies always prefer short-term loans, which are the primary source of financing, so investors should consider the capital structure before investing. The authors are said to have used reliable, cross-source data from companies collected on the Tehran Stock Exchange between 2003 and 2007 (Alipour, Mohammadi, & Derakhshan, 2015) The study's results explored the determinants of the capital structure of companies, helping companies make optimal capital structure decisions. The study's drawback is that most of the sample is companies in the non-financial sector. According to Vătavu (2015), companies' financial efficiency will increase when the company does not use debt capital but mainly use equity capital. However, companies do not have endogenous capital to implement investment projects, nor are they effective in using existing assets. This shows that companies are more at risk when the mentality of borrowing rather than improving operational efficiency increases the risk of interest costs due to not having enough cash. The author conducted the study's results on a sample of 196 companies listed on the Romanian Bucharest Stock Exchange, covering eight years from 2003 to 2010 (Vătavu, 2015) The author uses the dependent variable, the return on assets and the profitability on
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equity, and the independent variables are short-term debt, long-term debt, total debt and total equity. However, the study's limited focus on the sample was mainly manufacturing companies and the lack of long-term debt data. According to Adesina et al. (2015), intending to examine how the capital structure of post-merger commercial banks affects operational efficiency, the team used a sample of 10 merged commercial banks on the Nigerian Stock Exchange, an observation period for eight years from 2005-2012. The researchers used profit before tax as a dependent variable and equity and debt as independent variables. The results show that the capital structure of post-merger banks has a positive impact on the performance of banks; bank managers should use debt and equity to finance business activities to improve profitability (Adesina, Nwidobie, & Adesina, 2015). The drawback of the study is that the sample is not significant in scale. Besides, securities brokerage companies have a commercial bank-like nature when providing capital to investors through activities such as securities credit... but stockbrokers in Vietnam have distinct points to consider. According to Chavali et al. (2018), with data from 23 non-bank financial companies listed on the Indian Stock Exchange, observations between 2006 and 2016 were included in the study. Variables are used, such as return on equity, return on assets, and interest insurance rates. The results show that the capital structure of non-bank companies strongly affects the profitability of companies (Chavali & Rosario, 2018) However, with the amount of observational data not large, the research results are more or less affected.

Transaction cost economics or theory the concept of transaction costs was first introduced by Ronald Cose in 1937, published in The study titled "The Nature of the Firm" laid the foundation for the theory of transaction costs, which was later perfected and developed by Williamson (1987), while also clarifying the forms of transaction management. Transactions and different forms of transaction organization affect firm size (Coase, 1995). According to Cose (1937), firm size is limited by the number of transactions that can be efficiently executed. “the company getting bigger means that additional transactions are done by the owner of the company and becoming smaller means that some transactions will be abandoned”, and the transactions are executed optimally. by the market mechanism. Cose (1937) provides an explanation: (1) As the firm size gets larger, the profits of the firm owner may decrease and the additional transaction costs within the firm may increase. And of course up to a point the additional transaction costs within the company will equal the cost of making this transaction in the market or organized by another company owner. (2) It is possible that when the transactions increase, the owners of the companies do not know how to use their operations
effectively. (3) The price of the supply of one or more inputs may increase for the benefit of a smaller firm than that of a large firm.

Cose (1937) concluded that, all things being equal, a firm will tend to increase in size when: (1) Organizational costs tend to decrease, and these costs increase more slowly with increasing costs. transactions are organized; (2) The fewer mistakes the company manager makes, and the smaller the increase in mistakes with the increase in organized transactions; (3) The greater the supply price of inputs, the greater the supply price of factors for larger firms. The size limit of an enterprise is determined when the scope of its transactions expands to a threshold where the cost of organizing additional transactions into the company exceeds the cost of executing these same transactions through market or at another company. If the firm's size reaches the maximum, if the size continues to increase, the transaction costs continue to increase and are higher than the costs of exchanging or buying from the market to perform additional transactions, then the company will be inefficient or at a loss. Implications from the theory of non-economies of scale, financial efficiency of securities companies depends on the size of the company, the capacity of the managers and executives of the securities companies and the operational efficiency.

Pecking Order Theory: Also known as the pecking order theory, the theory was initially studied by Myers and Majluf (1984). The theory that begins with asymmetric information indicates that corporate directors know more about their company's potential and risks than outside investors (Myers & Majluf, 1984). Asymmetric information affects the choice between internal and external financing, and between new issuance of debt and equity securities. This leads to a pecking order whereby the company's investments are first financed with internal capital, mainly retained earnings for reinvestment, and then new debt is issued. and finally by issuing new equity. Issuing new shares is often the last resort when the company has used up its debt capacity, that is, there is a threat to the company's performance that makes existing creditors as well as the CFO. company to worry about.

The pecking order theory explains why firms with low profitability tend to take on more debt. Not because they have higher target debt ratios but because they need more outside funding. Firms, which are less profitable, issue debt and because they do not have internal sources for capital investment and because debt financing ranks first in a pecking order of external financing. Highly profitable companies with limited investment opportunities will strive for low debt ratios.

Thus, it can be seen that there are quite a few studies on the capital structure of enterprises, but still only focus on companies in the field of production and trade, studies on
companies providing services. The role of capital structure in securities has not been clarified, while financial decisions affect the survival and development of enterprises (Al-Refay, Abdulhussein, & Al-Shaikh, 2022), whether the business uses modern or traditional accounting (Hameedi, Union, Talab, & Almagtome, 2022).

**MATERIAL AND METHODOLOGY**

(1) *Quantitative research objectives.* The paper examines the model of the relationship between capital structure and the performance of Vietnamese securities brokerage companies, resulting in proposed solutions to help securities brokerage company managers make decisions on optimal capital structure.

(2) *Research data.* The article uses data from a Vietnamese securities brokerage company that has been independently audited. According to the quantitative study of the multiple linear regression model, the sample size and size are performed according to the formula \( n=50+8q \), where \( q \) is the number of independent variables of the model. The model has five independent variables, and the minimum number of observations required is 90. To increase the model's accuracy, the author uses 1,314 observations from 2003 to 2021.

Data cleaning: Before conducting data analysis, the author additionally performs and calibrates the parameters of the variables to ensure that the data processing results honestly reflect the research object. Specifically:

Step 1: After entering the data into the excel, the author checks the abnormality of the data. Then calculate the values of the study variables.

Step 2: Add and adjust the missing value by the following ways: (1) leave it as is, when analyzing the software automatically assigns the default missing value; (2) assign the missing value to mean or median; (3) assign the missing value to 0.

Step 3: Analyze the correlation of each pair of variables separately to detect data errors in case the analysis results cannot be explained. Removing data distorts the relationship of variables in the case of data outliers.

(3) *Regression method.* The paper uses STATA 14 software to test and estimate regression models, models using OLS, FEM, REM, and GLS. Steps to assess defects and carry out remediation according to quantitative research methods.

The research model takes the form of:

\[ Y_{it} = \beta_1 X_{it1} + \beta_2 X_{i2} + \ldots + \mu_i \]
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Constants in the model:

β1, β2...is the regression coefficient, β1 is the root, μi is the residual.

Table 1: Summary of variables included in the regression model

<table>
<thead>
<tr>
<th>No.</th>
<th>Names of independent variables</th>
<th>Calculation formula</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Dependent variable: ROA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Financial leverage of a stockbroker (FL)</td>
<td>Liabilities/Total Capital</td>
<td>Bevan et al. (2002), Eliotis et al. (2007), Asarkaya et al. (2007),</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pratheepkanth (2011), Mwangi et al. (2014), Alipour et al. (2015),</td>
</tr>
<tr>
<td>2</td>
<td>Debt-to-equity ratio (DE)</td>
<td>Liabilities/Equity</td>
<td>Pratheepkanth (2011), Mwangi et al. (2014), Alipour et al. (2015),</td>
</tr>
<tr>
<td>4</td>
<td>Long-term debt ratio (LTD)</td>
<td>Long-term debt/Total capital</td>
<td>Bevan et al. (2002), Eliotis et al. (2007), Asarkaya et al. (2007),</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pratheepkanth (2011), Mwangi et al. (2014), Alipour et al. (2015),</td>
</tr>
<tr>
<td>5</td>
<td>Brokerage Company Size (Siz)</td>
<td>Total property logarithm</td>
<td>Bevan et al. (2002), Eliotis et al. (2007), Asarkaya et al. (2007)</td>
</tr>
</tbody>
</table>

(Source: Author synthesized from theoretical basis)

* The paper considers two regression models:

\[
\text{ROA} = \beta_1 \times \text{FL} + \beta_{02} \times \text{DE} + \beta_{03} \times \text{CL} + \beta_{04} \times \text{Siz} \quad (*)
\]

\[
\text{ROA} = \beta_{01} \times \text{FL} + \beta_{01} \times \text{DE} + \beta_{01} \times \text{LTD} + \beta_{01} \times \text{Siz} \quad (**)
\]

* Hypotheses:

H1: The financial leverage of a stockbroking company (FL) is similar to the performance of securities brokerage companies in 2003 -2021.

H2: The debt-to-equity ratio (DE) has an inverse relationship with the performance of securities brokerage firms in 2003 – 2021.

H3: The proportion of Current Liabilities (CL) is opposite to the performance of securities brokerage companies in 2003 – 2021.
H4: The proportion of long-term debt (LTD) is opposite to the performance of securities brokerage companies in 2003 – 2021.

RESULTS AND DISCUSSION

The whole period 2003 - 2021 is considered a relatively favorable period for improving the performance of securities brokerage companies. Proprietary trading and brokerage activities are considered the main sources of income of securities companies, with favorable conditions from stable macroeconomic factors that have promoted the profitability of Vietnamese securities companies, especially group of securities companies with large capital scale with capital advantages, so these securities companies have high and stable profitability. However, there are still a large number of securities companies with low profitability, which are a group of small-capital securities companies and medium-sized securities companies.

Statistics of variables in the research model of the relationship between capital structure and the performance of securities brokerage firms are as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1,314</td>
<td>.0749696</td>
<td>1.228.713</td>
<td>-9.913.092</td>
<td>5.560.888</td>
</tr>
<tr>
<td>FL</td>
<td>1,314</td>
<td>.311048</td>
<td>.2717683</td>
<td>-.0013335</td>
<td>1.096.536</td>
</tr>
<tr>
<td>DE</td>
<td>1,313</td>
<td>1.088.097</td>
<td>4.608.532</td>
<td>-2.338.425</td>
<td>1.337.492</td>
</tr>
<tr>
<td>CL</td>
<td>1,314</td>
<td>.2827982</td>
<td>.2536679</td>
<td>-.0013335</td>
<td>1.088.273</td>
</tr>
<tr>
<td>LTD</td>
<td>1,314</td>
<td>.0282499</td>
<td>.1001604</td>
<td>0</td>
<td>.9809205</td>
</tr>
<tr>
<td>Siz</td>
<td>1,314</td>
<td>2.661.626</td>
<td>1.604.613</td>
<td>2.232.113</td>
<td>3.155.878</td>
</tr>
</tbody>
</table>

(Source: Data compiled on Stata 14 software)

Table 2 shows that the Std. Dev data is largely higher than 1, the standard deviation is higher than average, the data is scattered, and the fluctuations are strong. The study sample had 1,314 observations; the average values of ROA, FL, DE, CL, LTD, and Siz variables were 0.0749696, 0.311048, 1.088.097, 0.2827982, 0.0282499, 2.661.626. The ROA variable has a value ranging from -9,913,092 to 5,560,888, which shows that the profitability of Vietnamese securities brokerage companies is relatively low compared to equivalent sectors such as banking and insurance.
The regression results of the models (*) give us the following statistical results of the variables and model coefficients (Table 3a). Besides, for the research results to be valid, the author compares the statistics and significance levels of the studies with each other:

Table 3a. Model recapitalization results (*) relationship between capital structure and performance of Vietnamese securities brokerage companies

<table>
<thead>
<tr>
<th>Var</th>
<th>FEM</th>
<th>REM</th>
<th>OLS</th>
<th>GLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FL</td>
<td>-6.735**</td>
<td>-6.919*</td>
<td>-6.804*</td>
<td>-5.598***</td>
</tr>
<tr>
<td></td>
<td>[-1.99]</td>
<td>[-1.88]</td>
<td>[-1.95]</td>
<td>[-5.02]</td>
</tr>
<tr>
<td>DE</td>
<td>0.0650</td>
<td>0.0824</td>
<td>0.0760</td>
<td>-0.0519</td>
</tr>
<tr>
<td></td>
<td>[0.88]</td>
<td>[1.13]</td>
<td>[1.07]</td>
<td>[-1.09]</td>
</tr>
<tr>
<td>CL</td>
<td>-1.268</td>
<td>-0.910</td>
<td>-1.164</td>
<td>0.429</td>
</tr>
<tr>
<td></td>
<td>[-0.37]</td>
<td>[-0.25]</td>
<td>[-0.34]</td>
<td>[0.42]</td>
</tr>
<tr>
<td>Siz</td>
<td>3.646***</td>
<td>3.936***</td>
<td>3.856***</td>
<td>2.921***</td>
</tr>
<tr>
<td></td>
<td>[16.71]</td>
<td>[10.49]</td>
<td>[13.44]</td>
<td>[19.54]</td>
</tr>
<tr>
<td>_cons</td>
<td>-94.57***</td>
<td>-102.4***</td>
<td>-100.3***</td>
<td>-75.67***</td>
</tr>
<tr>
<td>N</td>
<td>1313</td>
<td>1313</td>
<td>1313</td>
<td>1313</td>
</tr>
<tr>
<td>R-sq</td>
<td>0.55</td>
<td>0.55</td>
<td>0.55</td>
<td>0.55</td>
</tr>
</tbody>
</table>

(Source: Data compiled on Stata 14 software)

Meanwhile, the results of model regression (**) performed on OLS, FEM, REM, GLS models, we get (Table 3b):

Figure 1. The degree of data dispersion of the study sample

(Source: Data compiled on Stata 14 software)
Table 3b. Model recapitalization results (**) relationship between capital structure and performance of Vietnamese securities brokerage firms

<table>
<thead>
<tr>
<th>Var</th>
<th>FEM</th>
<th>REM</th>
<th>OLS</th>
<th>GLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FL</td>
<td>-8.003***</td>
<td>-7.829***</td>
<td>-7.968***</td>
<td>-5.169***</td>
</tr>
<tr>
<td></td>
<td>[-5.74]</td>
<td>[-4.80]</td>
<td>[-5.31]</td>
<td>[-7.80]</td>
</tr>
<tr>
<td>DE</td>
<td>0.0650</td>
<td>0.0824</td>
<td>0.0760</td>
<td>-0.0519</td>
</tr>
<tr>
<td></td>
<td>[0.88]</td>
<td>[1.13]</td>
<td>[1.07]</td>
<td>[-1.09]</td>
</tr>
<tr>
<td>LTD</td>
<td>1.268</td>
<td>0.910</td>
<td>1.164</td>
<td>-0.429</td>
</tr>
<tr>
<td></td>
<td>[0.37]</td>
<td>[0.25]</td>
<td>[0.34]</td>
<td>[-0.42]</td>
</tr>
<tr>
<td>Siz</td>
<td>3.646***</td>
<td>3.936***</td>
<td>3.856***</td>
<td>2.921***</td>
</tr>
<tr>
<td></td>
<td>[16.71]</td>
<td>[10.49]</td>
<td>[13.44]</td>
<td>[19.54]</td>
</tr>
<tr>
<td>_cons</td>
<td>-94.57***</td>
<td>-102.4***</td>
<td>-100.3***</td>
<td>-75.67***</td>
</tr>
<tr>
<td>N</td>
<td>1313</td>
<td>1313</td>
<td>1313</td>
<td>1313</td>
</tr>
<tr>
<td>R-sq</td>
<td>0.56</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In general, the resulting statistics show no significant difference between the models.

Scale back results (Table 3A and Table 3B):

\[
\text{ROA} = -5.598*FL + 2.921*Siz + \mu \quad (***)
\]
\[
\text{ROA} = -5.169*FL + 2.921*Siz + e \quad (****)
\]

The regression results examine the relationship between the capital structure and the performance of securities brokerage firms for the results, including two independent variables that explain over 55.0% of the variation of ROA dependent variables, including the Financial leverage of the securities brokerage company (FL) and size of the brokerage company (Siz). Specifically, the trend of influence is as follows:

Financial leverage of securities brokerage companies (FL): Has a negative impact on the performance of Vietnamese securities brokerage companies, with a very high significance of 1%. In the period from 2003 to 2021, brokerage companies tend to increase the proportion of debt to finance business activities, mainly short-term debts; this activity is subject to high-interest rate risks. Besides, macroeconomic environmental factors are unstable, leading to adverse effects on the performance of the companies. Vietnam securities brokerage company. The results are consistent with the study of

Size of a securities brokerage company (Siz). Has the same impact on the performance of Vietnamese securities brokerage companies, with a very high significance of 1%. In the past, brokerage companies with significant capital would help the company be financially self-reliant, create a brand, reputation and position, efficiently manage risks and invest heavily in
core technology, reducing costs and improving operational efficiency. The results are consistent with the study of

In addition, the models showed a less meaningful or non-meaningful relationship between the amount of debt to equity (DE), the ratio of Current Liabilities Ratio (CL) and the ratio of long-term debt (LTD) to performance.

Based on research, the article makes some recommendations that are considered feasible to improve the operational efficiency of Vietnamese securities brokerage companies in the coming time. Recommendations include:

First, increase equity through retained profits. For securities brokerage companies with large capital scale, operating solid efficiency and cash flow, there is currently a great need for capital to implement projects, investment opportunities or at least plans to increase charter capital. The shareholders of these companies are not worried about the fluctuation of dividends. These companies may consider the option of a dividend surplus policy. Companies with significant remaining capital, operating efficiently, having a surplus of funds, but planning to withdraw investment projects now as well as in the future to focus on ongoing business activities or have a strategy to list securities on the Exchange, may consider using a dividend stabilization policy. For companies with small and medium-sized capital, which are profitable at a certain level but not stable, in the current period, it is recommended to temporarily retain 100% of after-tax profit to improve financial capacity and ensure sustainable growth in the long term.

Second, increase equity through the issuance of new shares. Individual share offering plan. This option can be mainly applied to small capital companies and medium-sized enterprises. The private placement of shares of the enterprise must meet only two conditions: (i) not offering through mass media; (ii) offers to less than 100 investors, excluding professional securities investors or offers only to professional securities investors. Businesses with significant capital sizes can use the option of offering more shares to the public. Conditions that the enterprise must satisfy the conditions, (i) The charter capital of VND 30 billion or more; the General Meeting of Shareholders approves (ii) The plan to increase equity. And at the same time, in the last 02 years, there must be financial statements and reports on the contributed capital of the approved owner of the auditing organization.

Third, with debt capital that can be used as bond issuance, convertible bonds for a period of about 2-3 years are reasonable to increase the size of the company and equity in the long term.
Fourth, transform the type of business that operates enterprises are organized under limited liability companies to convert into joint-stock companies, and non-public enterprises converted into public companies through IPO activities to increase capital and the company's financial capacity.

CONCLUSION

On the basis of the research results, the author makes some recommendations on financial solutions to adjust the optimal capital structure and improve the profitability of securities brokerage companies in Vietnam. These proposals include increasing owner's equity through retained earnings; increase equity through issuing new shares; with debt capital that can be used as bond issuance; change the type of business operation. However, the limitation of the study is that it only focuses on analyzing the capital structure of securities service companies, brokerage firms, these companies account for a small proportion in the economy. Meanwhile, the remaining enterprises account for a relatively large proportion that has not been included in the study.

REFERENCES


