The Effect of Corporate Governance Factors on the Corporate Capital Structure of Vietnamese Listed Companies

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Abstract

Capital structure, leverage ratio or bala znce between debt and ownership are always the important task of any company. It impacts to all business function and causality impact on managerial financial decision. In Vietnam, 97% of Vietnamese businesses are small and medium-sized enterprises, with limited capital capacity and difficulty in securing assets. They have to carry on and pressure on the double burden of cash flow and the risk of jumping into debt. This research explores the relationship between corporate governance factors, including Board duality, board gender, board size, board independence, and the capital structure of Vietnam listed companies. The research collects data of 199 listed companies in Vietnam from 2016 to 2021 from fiscal year financial statement from HNX and HOSE index and use 1188 observations in total. The results show that independent, size's board of directors have significant relation with capital structure - leverage ratio. While company has dual director - Chief of Executive concurrently is the Chairman of the Board of Directors, and gender are negative effect to leverage, but only gender is provided significant result. It is consistent with the previous studies that the good board committee structure and quality tend to have lower debt ratio and increasing firm performance.

Keywords: *Capital structure, Leverage, Corporate governance, Listed companies, Vietnam.*

1. Introduction

Capital structure is one of the most controversial topics in corporate finance. The capital structure of a business reflects how well it uses debt and equity to finance its assets. The use of more or less debt will affect the behavior of managers as well as their financial decisions. It is therefore important to examine the relationship between corporate governance, board of directors and capital structure by establishing and maintaining an appropriate capital structure.

Many empirical studies analyzing the influence of corporate governance on capital structure have been carried out in developed countries (Anderson, 2004; Berger et al., 1997). Some similar studies have been conducted in developing countries, such as: the study of Nadeem Ahmed Sheikh and Zongjun Wang (2012) using multiple regression analysis to estimate the relationship between corporate governance and corporate governance. Capital structure of non-financial companies listed on the stock exchange of Karachi, Pakistan between 2004 and 2008. It shows that board size, independent directors and degree of ownership concentration proportional to total debt and long-term debt ratio. Manager's ownership is negatively related to long-term debt ratio. Another study by Amarjit Gill et al (2012) also examines the relationship between corporate governance and capital structure of small businesses in India, indicating board size, director duality, positive impact on capital structure.

In Vietnam, there are also a few studies on the impact of corporate governance and capital structure. The author Nguyen (2016) conducted a study on corporate governance and the process of dynamically adjusting capital structure of companies listed on the Vietnamese stock market, showing that capital structure is not only depends on the characteristics of the enterprise but also influenced by the characteristics of business ownership. Another study on the influence of CEO characteristics on corporate performance by Phanet al (2017) based on a data sample of 120 listed companies in the period 2009 - 2015. The results show that the impact of CEO's age and capital ownership ratio on firm performance is nonlinear. In addition, companies with a CEO who serves as the chairman of the board of directors perform better than companies that do not maintain this structure.

2. Objectives

This study aims to help businesses realize the limitations and negative aspects of corporate governance that are often encountered in making capital structure decisions. The research will suggest a number of solutions and policies to help businesses use capital appropriately to help businesses operate effectively and sustainably. To address this research purpose, the remainder of the paper is organized as follows. Section 2 reviews the existing literature on capital structure and firm performance then hypothesis developing. Section 3 illustrates the research

methodology and data applied. Section 4 display the empirical results and discussion. Based on research findings, Section 5 conclude on the relationship between corporate governance characteristics and financial leverage as well as capital structure.

3. Materials and Methods

3.1. Literature Reviews and Hypothesis development

The capital structure of a business reflects how well it uses debt and equity to finance its assets. The use of more or less debt will affect the behavior of managers as well as their financial decisions, and therefore, the performance of the business (Harris & Raviv, 1991; Graham & Harvey, 2001).

Research on the impact of capital structure on firm performance is derived from the use of developed country data. Roden & Lewellen (1995) showed a positive relationship between capital structure and firm performance. Hadlock & James (2002) suggest that firms with high profitability will use more debt. Berger and Bonaccorsi di Patti (2006) show that a higher debt ratio is associated with increasing firm performance. Majumdar & Chhibber (1999) showed a negative relationship between the level of debt use and the profitability of the firm. Salim (2012) also found a negative relationship between the level of debt use and the performance of firms. However, some studies, especially those conducted in emerging or transitioning economies, have shown a negative association between capital structure and firm performance. Zeitun and Tian (2007) show that debt has a negative effect on firm performance, both in terms of accounting and market performance. Majumdar and Chhibber (1999) also found that there is a negative relationship between capital structure (measured by debt to equity) and firm profitability (measured as a ratio of profit to sales). However, their interpretation is based on the conditions of the Indian market, where the role of debt as a monitoring channel to improve firm performance is insignificant.

According to Modigliani and Miller (1958), capital structure has no impact on firm value and performance. However, Agrawal and Knoeber (1996) argue that the use of debt financing can improve efficiency because creditors will have good supervision. That is, the impact of financial leverage on firm performance. Many previous studies have suggested that debt can improve firm value by forcing managers to make decisions to maximize value. Wruck (1990) found debt as a valuable motivator for organizational change. Therefore, financial difficulties require changes in management, corporate governance and organizational structure. Executives can face the possibility of losing their jobs if the business is in financial trouble (Gilson, 1989). Research by Opler and Titman (1994) for US firms shows that high leverage tends to lose market share and lower operating profit compared to competitors. That means the cost of financial hardship is more than there is to the benefit of businesses in the US. Antoniou et al (2008) also suggested that the relationship between financial leverage and firm performance is negative. With the research sample in Thailand, it also shows that financial leverage has a negative impact on firm performance (Vithessonthi and Tonggurai, 2015). In addition, Berger and Bonaccorsi di Patti (2006) show that higher financial leverage or lower equity ratio is more effective. Margaritis and Psillaki (2010) also suggest that financial leverage has a positive impact on performance. Research results in Thailand by Detthamrong et al. (2017) found that financial leverage is a mediating factor for the impact of supervisory board size on firm performance for large-scale enterprises. Another study by Okiro and Omoro (2015) studying the impact of corporate governance and capital structure on the performance of listed firms in East Africa found a positive relationship between corporate governance and performance, and at the same time found a significant positive influence of financial leverage on this relationship. From the above arguments, corporate governance does not directly affect the performance but through the impact of financial leverage. Therefore, in the hypothesis building section, I propose the capital structure hypothesis, which is also measured by financial leverage, which mediates through performance. Samuel (2013) examines the effect of capital structure on company performance and investigate the extent to which the relationship depends product market competition. Research shows that financial leverage has a positive and significant effect on the company's operations. It has also been found that competition in the product market increases the efficiency of leverage. The result is strongly against alternative leverage and competition measures .

In Vietnam, the relationship between capital structure and performance has also been investigated by some researchers. Nguyen (2011) studied this relationship of companies listed on the Hanoi Stock Exchange and found a positive relationship. Le & Phung (2013) indicates that debt use has a positive relationship with firm performance. Phan (2016) shows that: (1) The larger the enterprise, the more it tends to use borrowed capital in total assets. (2) The factor of profitability has a negative effect on the company's employees. (3) Tangible properties of assets have a negative impact on corporate shareholders. Regarding the liquidity of assets, the empirical results show that this factor has a negative impact on the company's employees. Ngo et al (2019) show a negative

relationship of corporate performance when measured by ROA, ROE and EVA with corporate capital structure decision. In addition, the authors found a negative relationship between LEV, SLEV and ROA and EVA and a positive relationship between LEV, SLEV and ROE. Nguyen Thanh Hieu and Nguyen Huu Anh (2020) show that capital structure has a statistically significant negative effect on company performance. The results also show that this effect is stronger in state-owned enterprises than in non-state enterprises in Vietnam.

The director concurrently holding the position of chairman of the board of directors is always a matter of concern in corporate governance and operational efficiency. Companies with part-time directors have high bankruptcy rates (Daily and Dalton, 1994; Finegold et al., 2007) and reduce firm performance (Coles et al., 2001). However, according to Le Quang Canh (2014), the duality of the CEO creates good corporate performance because unified leadership will help quick feedback from the board of directors, management to the board of directors. and vice versa, minimizing information asymmetry in the business environment. The CEO has the function of operating and handling the company's activities; while the Chairman of the Board of Directors is responsible for running the company and setting strategic goals. Therefore, once the Director is concurrent, it will affect the capital structure of the company (Zaid et al., 2019). Obviously, this duality will increase the risk of abuse of power, and management decisions will be distorted. Therefore, having one person take on two tasks can damage the image control process and negatively affect business performance (Duru et al., 2016). Because of this, the experientiality affects the reputation of the company's ability to repay in the eyes of the lender.

Hypothesis H1: Part-time directors have a negative relationship with financial leverage

The independence of the board of directors is reflected in the percentage of independent members on the board of directors or the independence between the chairman of the board of directors and the general director. Nowak and McCabe (2008) argue that the majority of independent directors will provide safeguards for the balance of power and relationship with the board. Kakabadse, Yang and Sanders (2010) point out that the system of non-executive directors in China is weak because there is too much interference from the government. controlling shareholders and lack of understanding of the functions of non-executive directors. Garg (2007) argues that having board independence does not guarantee improved corporate performance. due to the poor supervisory role of the independent directors. However, Abdullah (2004) argues that the independence of the board of directors can contribute to the performance of a company. Evidence that the high number of independent directors has influenced financial performance of the company. Ameer, Ramli and Zakaria (2009) found that during the period 2002 to 2007 in Malaysia, firms have The representation of external and foreign directors is significantly correlated with firm performance. As a result, the board of directors independently influences the operations of the business, leading to decisions about capital structure.

Hypothesis H2: The number of independent directors on the board has a positive relationship with financial leverage

The size of the Board of Directors is also one of the factors to evaluate the effectiveness of corporate governance. Lipton and Lorsch (1992) suggest that the number of members of the BOARD has an ambiguous effect on ROA. But Coles, Daniel and Naveen (2008) asserted that firms with few members of the board of directors are associated with firm success, while many other studies show the opposite (Klein, 1998; Dalton et al., 1999). In some businesses, the large number of board members can slow down the final decision-making process because consensus is required among board members and the homogenization process is complex. This will slow down the work progress and sometimes will lose business opportunities. Poor decision-making and control processes can lead to poor business performance. In other words, enterprises with a small number of members on the board of directors will have better corporate governance. But in some businesses, the corporation requires a large number of members on the board of directors due to the high workload, many departments need to be supervised. Large board of directors will easily control and operate the business well because decentralization and authorization from CEO to other directors will have to be done regularly. This usefulness helps the CEO to make decisions on business operations and capital use in an increasingly diverse and complex business environment and organizational culture.

Hypothesis H3: *The Board size has a negative relationship with financial leverage*

Currently, the presence of female managers in enterprises in the world and in Vietnam is still low, but there is a tendency to change. Several empirical studies have found outcomes to be positively related (Liu et al., 2014). Certain female gender characteristics such as experience, skills, and demographics can contribute to improved effectiveness in decision-making and monitoring. According to Smith et al. (2006), female executives have different experiences from work life and outside work. Regarding the relationship between manager gender and firm performance, Nishii and Özbilgin (2007) show that gender diversity has a positive effect on firm

performance. However, there are also studies showing the view that companies run by women have poor performance (Inmyxai and Takahashi, 2010; Amran, 2011_. Research by Robb and Farilie (2009) suggests that businesses are Women-run businesses are less financially successful than men-run businesses. Biological and social differences can affect risk tolerance and the degree of risk. trust between men and women (Sapienza et al, 2009) Graham et al. (2013) reported that female directors used less debt than male directors, similar findings were reported. presented by Graham and Leary (2011). In gender diversity theory, Schubert (2006) and Maxfield et al. (2010) argue that women are more risk averse than men, which means that women make low-risk decisions, while men make high-risk decisions. Schicks (2014) reported that male borrowers have a higher risk of debt than women. The reason for this is the risk aversion theory. can help women avoid major risk by using less debt.

Hypothesis H4: The proportion of female in the Board has a negative relationship with financial leverage.

3.2. Research Methods

This study focuses on the characteristics of corporate governance and the relationship with capital structure. The study was conducted on more than 1188 observations of 199 enterprises listed on HNX and HOSE in the period 2016 - 2021 to study the relationship between board of director characteristics and capital structure. In this study, the data collected and used has been audited and publicly disclosed on Public Information Disclosure System – SSC, Hanoi Stock Exchange Portal – HNX, and Ho Chi Minh stock Exchange Market - HOSE. The study used data of 77 enterprises listed on the Hanoi Stock Exchange (HNX) and 122 enterprises on the Ho Chi Minh Stock Exchange. Ho Chi Minh City Stock Exchange (HOSE) in the period 2016 to 2021. The research collects financial and non-financial information from financial statements of listed companies.

Nadeem and Zongjun (2012) show that the relationship between corporate governance and corporate governance. Modigliani and Miller (1958) evidence that capital structure has no impact on firm value and performance. However, Agrawal and Knoeber (1996) argue that the use of debt financing can improve efficiency because creditors will have good supervision. That is, the impact of financial leverage on firm performance. Therefore, to measure for company capital structure, we use leverage (LEV) ratio between total assets over total liabilities (Nadeem and Zongjun (2012); Buvanendra et al (2017); Robert and Rabih (2018); Nguyen et al (2023)). LEV is used as the dependent variable to test capital structure with corporate governance relationship.

Based on Sun et al (2010), they confirm Research by Sun et al (2010) confirms that to evaluate an impact factor with many characteristics, the method can fully reflect the common, integrated impact when those characteristics are synthesized and expressed. Therefore, this study test four hypotheses about how corporate governance affects financial leverage. The research used four proxies as board of director characteristics, firm size (SIZE), Dual position of Chairman and CEO (DUAL), proportion of female director in the board (GENDER) and proportion of independent members in the board (INDEPENDENT) for independent variable – corporate governance. Two control variables were profitability and firm age. Finally, we also control firm characteristics with firm performance ratio (ROA) and firm age with measure as firm establishment year (Detthamrong et al, 2017). The description of variables measurement was in Table 1.

Table 1 Summary of variable names and methods of measurement

Variable name	Measure
Dependent variable	***Following Nadeem and Zongjun (2012), Buvanendra et al (2017), Robert and Rabih (2018), Nguyen et al (2023)***
LEV	It is the ratio between total debt and total assets
Independent variables	***Following Sun et al (2010)***
DUAL	Is a binary variable measured by if in the board of directors there is a Director concurrently the Chairman of the Board of Directors, the value is 1 and vice versa, the value is 0
GENDER	Ratio of female members to total members in the board of directors
SIZE	Number of members on the board of directors
INDEPENDENT	Ratio of independent members to total number of members on the board of directors
Control variable	***Following Klein (1998), Dalton et al (1999), Nguyen Thanh Hieu and Nguyen Huu Anh (2020)***
ROA	Profit after tax divided by Total assets
FIRM_AGE	Natural logarithm of years of establishment at the time of data collection.

In this study to evaluate the impact of corporate governance on debt use and explain the relationship between business performance, corporate governance and capital structure, we used the test. Each variable (Univariate test) includes T-test and non-parametric test (Nonpametric test) and builds a regression model, a binary variable model so that we can estimate the real effect of the independent variable on the dependent variable. The research equation is built and apply OLS model follows:

$$LEV = \beta_0 + \beta_1 * DUAL_{i,t} + \beta_2 * INDEPENDENT_{i,t} + \beta_3 * SIZE_{i,t} + \beta_4 * GENDER_{i,t} + \beta_5 * ROA_{i,t} + \beta_6 * FIRM\_AGE_{i,t}$$

4. Results and Discussions

The descriptive statistics on financial leverage, operating efficiency and corporate governance include: mean, median, maximum, and minimum observations. maximum and standard deviation.

Table 2 Descriptive Statistics Table

Variable	Obs	Mean	Median	Min	Max	St
LEV	1188	0.47608	0.47942	0.00808	6.32005	0.3062
SIZE	1188	3.58081	3	1	14	1,772
DUAL	1188	0.16667	0	0	1	0.3728
GENDER	1188	0.14156	0	0	1	0.2196
INDEPENDENT	1188	0.43461	0.5	0	1.2	0.3151
ROA	1188	0.05891	0.00808	-0.35364	0.39411	0.0689
FIRM_AGE	1188	1.19965	1.17609	0.69897	1.67210	0.1472

Table 2 shows sample statistics on the number of observations, mean, median, maximum value, minimum value, standard deviation of all variables used in this study. The variables have been defined in detail in Table 1. From the data table, it can be seen that financial leverage LEV has an average value of 0.476 times corresponding to 47.6%, the largest value is 6.32 times corresponding to 632% and the smallest value is 0.008 times corresponding to 0.8 times. %. Looking at the above figures shows that the difference in debt use of enterprises is quite large. With the corporate governance variables including DUAL, SIZE, GENDER, INDEPENDENT having the mean value of 0.1666, 3.580, 0.1415, 0.4346 respectively, indicating that the relatively little duality of the CEO may be caused by they are not confident enough to take on the two functions. Besides, some enterprises do not have many female members on the board of directors, even none with the maximum value of 1 and the minimum value of 0. In addition, the number of members on the board of directors is with a maximum value of 14 people and a minimum value of 1 person. Thus, large-scale board of directors appears in corporations because it requires management of subsidiaries and other divisions. Small and medium enterprises often have a small number of board members or even 1 CEO because of the small workload. In the observed sample, the average ROA of the enterprise is 5.89%, this figure shows that the company's profit from assets is not high. The maximum number of years of establishment is 1.67 equivalent to 47 years at the time of study and the minimum is 0.698 equivalent to 5 years. In general, the companies in the observed sample have been established for a long time.

Table 3 results of the correlation relationship between variables in the research model are described in detail in Table 1.

Table 3 Autocorrelation Matrix

	LEV	SIZE	DUAL	GENDER	INDEPENDENT	ROA	FIRM_AGE
LEV	1						
SIZE	0.1543***	1					
DUAL	-0.02	-0.03	1				
GENDER	-0.0737*	0.012	0.1215***	1			
INDEPENDENT	0.076***	0.366***	-0.141***	-0.031	1		
ROA	-0.31***	-0.01	-0.06**	0.0058	0.014	1	
FIRM_AGE	-0.08	-0.08	-0.025	0.018	0.0507*	0.081	1

From the results of the autocorrelation matrix shows the relationship between the variables. First, the variable LEV has a negative relationship with DUAL, which is explained that the higher the concentration of power in one member determines the low level of financial leverage. Besides, the proportion of female members in the directory (GENDER) also has a negative relationship with the variable LEV, which means that when the directory has many female members, the level of financial leverage is low. The LEV variable and the CGQ variable have the same direction, indicating that corporate governance has a positive relationship with financial leverage with significance in the range from 5% to 10%. The positive relationship with LEV, SIZE and INDEPENDENT indicates that the higher the number of members on the board of directors and the proportion of independent members, the more likely it is to have good operating performance and high financial leverage. relative level at the 1% significance level. The variable DUAL has a negative relationship with the variables INDEPENDENT, ROA, FIRM_AGE, showing that companies with a low percentage of independent board members, small ROA, and relatively old establishment will have a concentration of power. force on the CEO. However, the variable SIZE and DUAL have a negative relationship confirming that the number of members in the directory board is high, so there will not necessarily be a concurrent CEO. The negative relationship of the variable SIZE and ROA shows that if the board of directors is large, the return on assets of the enterprise is low and the use of assets of the enterprise is inefficient, in the sample. In this study with a correlation coefficient of 0.0106 and a significance level of 10%, the relationship between these two variables has relatively little impact.

Table 4 presents the results of T-test and Nonpametric test on each variable point. The variable points are constructed according to the LEV. All variable points are defined in detail in the research model. Corresponding to that are the LEV values. The numbers in the table are the coefficients and standard errors. The significance levels of 1%, 5%, and 10% are expressed as ***, ** and * respectively.

Table 4 T-test and Nonpametric test

	Obs	Mean Dummy	Mean	$P > \|t\|$		$P > \|z\|$	
DUAL	594	0	0.1632997	0.6221		0.0000	***
	594	1	0.1700337				
SIZE	594	0	3.796296	0.0000	***	0.0000	***
	594	1	3.36532				
GENDER	594	0	0.1293978	0.9719		0.0000	***
	594	1	0.1537266				
INDEPENDENT	594	0	0.4582371	0.0048	***	0.0000	***
	594	1	0.4109792				

The results of testing for each variable (Univariate test) including T-test and non-parametric test (Nonpametric test) in Table 4 show that the DUAL variable has a value of 1 when there is a member holding two positions. capacity with a financial leverage value of 0.17, whereas for businesses receiving DUAL of 0, the average value is 0.16. This result shows that for firms with concentration of power in the director, better use of financial leverage, but this is not significant. The ratio of female members to the number of members of the board of directors, when greater than 0, then GENDER_CGQ receives the value 1 and vice versa receives the value 0. At this time with an average value of 0.15 the high percentage of female members will good financial leverage, but this effect is not significant. In addition, with the number of members on the board of directors greater than 3, now SIZE_CGQ has a score of 1 with an average value of 3.36 while a score of 0 has an average value of 3.79. It means that the company with a small number of directors will have better financial leverage, this result has a significance level of 1%. The proportion of independent members greater than 0 will receive the value 1 with an average value of 0.41 and otherwise receive an average value of 0.45. Board of directors with a small percentage of independent members will have better financial leverage than independent board of directors, at 1% significance level. The above analyzes are only preliminary results that show the relationship between the variables. However, for accurate results, we run a regression model.

Table 5 Summary of results of linear regression model of hypothesis H2

	(1)	(2)	(3)
Constant	0.7217***	0.5641***	0.7002***
	(10.39)	(47.44)	(9.60)
DUAL	-0.0369	-0.0359	-0.0212
	(-1.63)	(-1.58)	(-0.89)
ROA	-1.3690***	-1.3917***	
	(-11.14)	(-11.34)	
FIRM_AGE	-0.1324**		-0.1839***
	(-2.30)		(-3.06)
Prob > F	0.0000	0.0000	0.0069
Obs	1188	1188	1188

Table 5 shows the regression results of 199 enterprises on HNX and HOSE in the period from 2016 to 2021. In which, the dependent variable is financial leverage (LEV); independent variable DUAL, variable the proportion of independent members in the board of directors; The control variables are ROA and number of years of establishment, respectively. Statistical significance levels of 1%, 5%, and 10% are denoted by ***, ** and *, respectively.

Table 5 shows the regression results when considering the impact of CEO duality on financial leverage. The results show that duality has a negative relationship with financial leverage but is not significant, the statistical significance of DUAL with models (1), (2), (3) are all high, respectively P – value = -1.63, P-value = - 1.58, P-value = - 0.89. The variables fit the hypothesis and have very high significance. This result is equivalent to the hypothesis H1 but the significance level is not significant, so if the company has an experienced CEO, the company uses low financial leverage. In other words, a business with a part-time director will negatively affect the use of debt of the business. The CEO carries two functions that can increase agency costs because supervisory and executive functions perform at the same time. Ahmed Sheikh and Wang (2012) argue that conflicts between management and shareholders can be resolved by separating the roles of the Director's management and the Chairman's control. This combination results in increased personal oversight, and increased capital structure problems (Fama and Jense, 1983). So. Lenders would not invest in such an organized business because they are highly aware of the risks associated with dual CEOs. Usman (2019) also provides evidence that part-time directors prefer to use low debt. Kyereboah – Coleman and Biekpe (2006) also suggest that when the director is acting as chairman, less debt will be used. Furthermore, Chen (2003) reports that duality gives a lot of power to the director, making it difficult for the board to make decisions. As a result, it will be financially difficult for the company.

Table 6 Summary table of results of linear regression model of hypothesis H2

	(1)	(2)	(3)
Constant	0.6878***	0.5237***	0.6712***
	(9.90)	(32.77)	(9.19)
INDEPENDENT	0.0813***	0.0781***	0.0783***
	(3.04)	(2.92)	(2.79)
ROA	-1.3601***	-1.3842***	
	(-11.12)	(-11.33)	
FIRM_AGE	-0.1392**		-0.1910***
	(-2.43)		(-3.18)
Prob > F	0.0000	0.0000	0.0002
Obs	1188	1188	1188

Table 6 shows the regression results of 199 enterprises on HNX and HOSE in the period from 2016 to 2021. In which, the dependent variable is financial leverage (LEV), independent variable INDEPENDENT, variable the proportion of independent members in the board of directors, the control variables are ROA and number of years of establishment, respectively. Statistical significance levels of 1%, 5%, and 10% are denoted by ***, ** and *, respectively.

Table 6 presents the regression results when considering the effect of the proportion of independent members on the board of directors and financial leverage. The results show that the independent variable INDEPENDENT has a significant effect on LEV when the ROA variable, FIRM_AGE is involved in the model (2), (3) respectively with, P-value = 2.92, P -value = 2.79 at 5% significance level. The influence is positive in model (1) with P - value = 3.04 at 1% significance level and is consistent with the hypothesis. This result shows that the positive relationship with financial leverage coincides with the hypothesis H2. That is, the higher the proportion of independent members on the board of directors, the more leveraged the company tends to be, or in other words, high debt. Inherently independent members will not be affected by the benefits from the Board of Directors, so they tend to take risks and use high debt to invest and develop and operate the business. Independent directors tend to have more external resources, so they tend to prefer debt in deciding to use financial leverage. In Japan, Endo (2020) and Miwa (2005) also claim that external directors contribute to the company through their competence and external resources related to them. Their activities are seen as those that expand the boundaries and provide important business links for the company. The independent director has the ability to collaborate with external resources to increase the company's ability to raise capital or raise the profile and attention of the company. The proportion of independent directors is associated with high leverage (Pfeffer and Salancick, 1978). Jensen (1986) also suggested that independent board of management uses more debt to reduce the amount of cash flow generated available to managers for discretionary spending purposes. Abor's (2007) study of listed companies in Ghana also found a significant positive relationship between independent membership and capital structure. Abdulkarim and Bahamman (2021) argues that independent directors play an important role as they strengthen the relationship between capital structure and profitability.

Table 7 Summary table of linear regression model results of hypothesis H3

	(1)	**(2)**	**(3)**
Constant	0.5907***	0.4635***	0.5723***
	(8.19)	(22.96)	(7.55)
SIZE	0.0254***	0.0261***	0.0256***
	(5.37)	(5.54)	(5.15)
ROA	-1.3541***	-1.3722***	
	(-11.16)	(-11.34)	
FIRM_AGE	-0.1047*		-0.1565***
	(-1.84)		(-2.62)
Prob > F	0.0000	0.0000	0.0000
Obs	1188	1188	1188

Table 7 shows the regression results of 199 enterprises on HNX and HOSE in the period from 2016 to 2021. In which, the dependent variable is financial leverage (LEV); independent variable SIZE, variable number of members on the board of directors; The control variables are ROA and number of years of establishment, respectively. Statistical significance level 1%, 5%, 10% are denoted by ***, ** and * respectively.

Table 7 is the result of a regression of the relationship between the number of members of the board of directors and financial leverage. The results show that the number of board members has a positive relationship with financial leverage with the significance level of 1%, other variables also have a high level of significance, the degree of concordance with the hypothesis is high. This result indicates that the more members of the board of directors, the more leveraged the company has, which coincides with the H3 hypothesis. In other words, large BOARDS prefer to use high debt. Coles et al (2008) also found a positive relationship between board size and debt ratio in the US context. Wen et al (2002) and Abor (2007) also point out this positive relationship, explaining that it is difficult for large boards to reach consensus on decision-making. Large board of directors have the ability to find and access external finance, so they tend to use a lot of debt for company operations. On the other hand, the large board of directors is mainly located in large enterprises, so these companies inherently have high capital structure, leading to greater debt capacity. Moreover, the board of directors has many members, the division of supervisory duties will be more effective, the implementation of responsibilities is also more effective, and the leadership experience is diverse. Therefore, the quality of the company's internal control will tend to be good, fraud will be reduced, and audit quality will also tend to be positive. Large enterprises tend to require good audit

quality to signal to investors that the business is controlled by competent and reputable directors. It is that reputation that creates an advantage for businesses to easily find external financial sources.

Table 8 Summary table of results of linear regression model of hypothesis H4

	(1)	(2)	(3)
Constant	0.7233***	0.5714***	0.7060***
	(10.45)	(46.36)	(9.71)
GENDER	-0.0988**	-0.1003***	-0.1006**
	(-2.58)	(-2.61)	(-2.50)
ROA	-1.3551***	-1.3774***	
	(-11.07)	(-11.27)	
FIRM_AGE	-0.1279**		-0.1798***
	(-2.23)		(-2.99)
Prob > F	0.0000	0.0000	0.0005
Obs	1188	1188	1188

Table 8 shows the regression results of 199 enterprises on HNX and HOSE in the period from 2016 to 2021. In which, the dependent variable is financial leverage (LEV); independent variable GENDER, variable number of members on the board of directors; The control variables are ROA and number of years of establishment, respectively. Statistical significance level 1%, 5%, 10% are denoted by ***, ** and *, respectively.

Table 8 shows the results of the relationship between the proportion of female members in the board of directors and financial leverage is inversely significant at the 10% level, the variables have a high degree of concordance with the hypothesis. The results show that the proportion of female members in the board of director is high, the company tends to use low financial leverage, which coincides with the hypothesis H4. Female gender characteristics such as experience, skills, and demographics can contribute to improved effectiveness in decision-making and monitoring. Therefore, they are risk averse, more careful in investment decisions and capital mobilization of enterprises. According to this view, attitudes, perceptions, and beliefs are systematically correlated with demographic factors such as age, gender, and race (Robinson and Dechant, 1997). Robb and Fairlie (2009) also found that firms run by women are less successful in financial performance than firms run by men. Because they often have little human capital, women's financial and experience are limited from household businesses, especially in growth. Women-owned family businesses are particularly interested in the prospect of low-risk returns. They also behave ethically, are not overconfident and are more prudent in financial reporting than male directors (Ho et al., 2015). Risk aversion differs between male and female CEOs, along with other demographic groups (Bertrand and Schoar, 2003). Many opinions say that female CEOs receive more favor than many male colleagues. In fact, female CEOs face many challenges and threats from active investors (Gupta et al., 2018). Female CEOs are generally more risk averse than male CEOs, which is why gender has a problem to reduce risk-taking behavior (Palvia et al., 2015). The different financial decision making between men and women can be attributed to the difference in overconfidence levels between them. Barber and Odean (2001) found that women are less confident than men when they have to make financial decisions.

The results show a positive relationship between the number of board members and financial leverage as measured by total debt divided by total assets. This conclusion is also consistent with the studies of Wen (2002), Abor (2007) and Coles (2008). The degree to which the percentage variable can represent high hypothesis concordance. Besides, the results also conclude that the higher the proportion of independent members, the higher the financial leverage tends to use debt. Because independent directors have the ability to cooperate with external resources to increase the ability to raise capital or enhance the position and attention of the company. In addition, the proportion of female in the board of directors has a negative relationship with financial leverage with high significance. The gender difference will make female directors less risk-averse or risk-averse than male directors. In addition, the relationship between part-time directors and financial leverage also shows negative results, although not at a significant level. It may be because the research is limited due to the relatively small sample size.

5. Conclusion

The study examined the relationship between corporate governance characteristics and financial leverage, through the influence of board of director structure, CEO duality, female gender ratio in board of directors, board

of director size, ratio of independent members and performance measured by financial leverage of 199 listed companies in particular: 77 companies on HNX and 122 companies on HOSE in the period 2016 – 2021. The research has pointed out the aspects related to corporate governance to create the best performance, which lies in ensuring the quality of the business's operations through financial leverage. Although the research results on duality are not significant, in order to ensure transparency, ensure benefits and operational efficiency, enterprises should separate the roles of each position of Director and Chairman of the board of directors. to make appropriate adjustments, make the right decisions during the operation and dare to follow the business. In addition, managers should harmonize the gender ratio in the board of directors and independent members to diversify the structure of the board of directors to create operational efficiency and improve decision making in the use of in debt. The study is expected to help stakeholders see clearly the influence of corporate governance on capital structure. In addition, the study also has limitations in data collection such as the lack of diversity in variables, limited research time, and not considering some characteristics of governance that can affect the structure capital such as industry, experience, age.

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