THE INFLUENCE OF FEMALE CEOS ON CAPITAL STRUCTURE AND FIRM PERFORMANCE OF LISTED FIRMS IN VIETNAM

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Abstract

This study investigates the impact of female chief executive officers (CEOs) on capital structure and firm performance within the unique context of Vietnam's rapidly evolving economy. Drawing upon Upper Echelons Theory, which posits that executive characteristics influence organizational outcomes, this research examines how female leadership shapes corporate decision-making in a traditionally patriarchal business environment. While prior global studies suggest that female-led firms exhibit lower risk- taking, stronger governance compliance, and potentially enhanced performance, a significant gap exists in understanding these dynamics within Vietnam's specific cultural, economic, and regulatory landscape. Utilizing panel data from 86 of Vietnam's top-listed enterprises (Vietstock dataset, 2020-2024), this study analyzes the relationship between female CEO presence and key indicators of firm performance (Return on Asset, liquidity), liquidity and capital structure (debt-to-equity ratio). The findings reveal that female CEOs in Vietnam exert a positive influence on firm performance, specifically enhancing Return on Asset and improving liquidity, while adopting more conservative capital structures. This research contributes novel empirical evidence on female leadership in an underexplored emerging market, highlighting its potential to drive both profitability and financial stability. The implications of these findings are significant for policymakers seeking to promote gender diversity and for businesses aiming to leverage female leadership as a strategic asset in Vietnam's competitive market.

Research purpose:
The aim of the research is to explore female chief executive officers' (CEOs) effects on capital structure and firm performance in Vietnam, which is a unique context shaped by gender roles and economic transition.

Research motivation:
While overseas scholarship suggests that female-led firms exhibit lower risk- taking, stronger governance compliance, and potentially enhanced performance, little is known about how these dynamics are enacted in Vietnam, a transitioning, export-led economy with deeply embedded cultural tradition. This paper fills this gap by sharing empirical evidence of Vietnam's listed firms.

Research design, approach, and method:
The research utilises panel data from eighty-six of the firms that have been listed in Vietnam through Vietstock in the period 2020 to 2024. We used regression modelling to evaluate potential relationships between firm level female leadership and the outcomes of Return on Assets (ROA), capital structure and liquidity. Our selected control variables were firm size, firm age, industry, board size, board independence, profitability, and ownership structure.

Main findings:
Empirical evidence demonstrates that female CEOs influences financial performance positively, namely increasing ROA and liquidity, and using more conservative capital structures with lower leverage usage. The findings highlight the critical role of gender diversity in executive leadership, positioning female CEOs as key catalysts for sustainable growth and resilience in Vietnam's corporate landscape, setting a foundation for further exploration and policy development.

Practical/managerial implications:
These findings suggest that gender diversity among senior executives enhances profitability and financial performance, underlining women as a strategic leader asset. To policymakers, the findings reinforce policies favoring women in leadership positions; to corporations, it focuses attention on the capacity of women CEOs to drive growth through savvy financial stewardship.

Keywords: Female CEO, Firm performance, Capital structure, Vietnam, Gender diversity

1. INTRODUCTION

Among Vietnam's most powerful corporations, women are taking on leadership positions, encouraging the conventional leadership paradigms in the traditionally patriarchal business community. This phenomenon raises an intriguing question: How are female leaders reshaping the business environment in Vietnam's rapidly growing economy?

Executive quality studies have also focused more on gender as a determinant of leadership style and decision-making. Faccio et al. (2016) demonstrated that female-managed firms are less risk-taking than their male-managed counterparts, which they conveyed in more conservative investment strategies. Echoing this finding, Zalata et al. (2019) indicated that companies with female CEOs have significantly lower debt ratios and less volatile earnings, which suggests differing styles in capital structure decisions.

The influence of CEO gender also extends beyond performance metrics. Post and Byron's (2015) meta-analysis of 140 studies established that female board representation is positively associated with accounting returns, particularly in countries with stronger shareholder protections—a finding relevant to Vietnam's ongoing efforts to prop up investor protections. Moreover, Glass and Cook (2018) found that female-led companies outperform their peers during periods of economic uncertainty, suggesting higher resilience that could prove useful in Vietnam's sometimes turbulent market context.

Despite these findings, there is an urgent research need for understanding the combined impact of female CEOs on capital structure and firm performance in Vietnam's specific case as a transitional economy. Although cross-country studies identify the general impacts of gender diversity, few have analyzed how Vietnam's cultural, economic, and regulatory contexts shape these impacts. Further, how women's leadership is mixed with Vietnam's unique market conditions—e.g., export-driven industries and evolving governance norms—is not known. This study aims to bridge this gap by providing a detailed analysis of the effects of female leadership in Vietnam, contributing both academically and practically to policymakers and businesses.

This study investigates female leadership impacts on the most essential aspects of corporate decision-making and results on the basis of evidence from 86 companies ranked in the Vietstock dataset for the period 2020-2024. The scope comprises peer-reviewed scholarly journals, reports, and articles examining female leadership, financial policy and organizational performance, particularly focusing on Vietnamese listed companies of the Vietstock rankings. This approach guarantees complete understanding of the influence of gender dynamics on corporate outcomes in a transforming economy.

Capital structure decisions made under female management are biased towards conservative financial policies. Pham and Hoang (2020) observe this bias in Vietnam and attribute it to reduced risk-taking behavior in accordance with the conservative financial culture characteristic of transitioning economies.

The Vietstock data provide a solid and comprehensive foundation for this study, covering the entire sample of Vietnam’s largest and most dynamic listed companies. This study uses this data to synthesize prior evidence, identify key gaps in the literature, and provide a solid foundation for the empirical testing in the following sections. The key findings highlight that female CEOs contribute positively to firm performance, specifically through improved Return on Asset (ROA), and by adopting conservative capital structures with lower debt-to-equity ratios and financial leverage. These findings form the basis for the contributions of this research, extending beyond superficial statistical results to have important implications for both theory and practice in Vietnam's evolving economic environment.

This paper makes several significant contributions to the academic literature and applied discourse on gender diversity in corporate leadership. Most notably, it provides fresh empirical evidence of the impact of female CEOs in Vietnam, a context that is understudied in global firm performance research. Unlike much of the existing literature, which focuses on Western economies or more established markets with more established gender equality frameworks, this study illuminates the role of female leadership within Vietnam's unique socio-economic environment—marked by high economic growth, a market economy in transition, and deeply rooted cultural perceptions of gender roles. By capturing how female CEOs contribute to financial performance and capital structure, this research contributes to the richness of the global dialogue about gender diversity, offering a baseline comparative analysis that underscores the strength and adaptability of women leaders in emerging economies.

Second, the study contributes to the literature by examining the interaction among female leadership and capital structure choices in an integrated framework. Although earlier studies have tried examining each one of these variables in isolation, the study integrates them to ascertain how the Vietnamese female CEOs impact profitability, and also offer liquidity and conservative funding habits. This finding contradicts traditional leadership theories of risk-taking and suggests that female

CEOs can possess a distinct management style that keeps the promise of growth in balance with the prudent conservatism of the firm's finances. These results are particularly relevant for policymakers and boards of directors that seek to improve governance structures and promote stable financial habits, especially in a market as Vietnam where firms are under pressure to play globally while dealing with domestic economic uncertainty.

Finally, the research offers business and policy implications for Vietnamese firms and policymakers interested in leveraging gender diversity as a strategic asset. By demonstrating that female-led firms enjoy higher levels of performance—such as higher ROA—while facing lower leverage, this study makes a compelling case for enhancing women's representation in the executive ranks. These findings can be applied to create policies to reduce gender disparities in business leadership, such as special training programs, incentives for firms to appoint female CEOs, or attempts to shift cultural perceptions of women in command positions. For firms, the evidence suggests that the appointment of female CEOs can be a source of competitive advantage, enhancing financial stability in a more competitive economy. Collectively, these contributions render this study a worthwhile landmark on the path of comprehending and unleashing the potential of women's leadership in the Vietnamese business sector.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Theoretical background

The research framework draws inspiration from popular theories of organizational behavior to conceptualize a framework for investigating the impact of female CEOs on firm performance. One of the theories that has had a major influence on this research is the Theory of the Firm, also known as Agency Theory, which provides a general framework within which the relationship between corporate leadership and firm performance can be based. Specifically, Agency Theory suggests that conflicts of interest between agents (managers) and principals (shareholders) can influence decision making, especially in capital structure (Jensen & Meckling, 1976). It refers to female CEOs as agents, who may exhibit different behavioral tendencies. For example, risk aversion or stakeholder-oriented decision making of female CEOs reduces agency costs, which equates to better financial stability and financial performance metrics such as Return on Asset (ROA). Based on Agency Theory, this study discusses the link between gender diversity in management and the behavior of managers and shareholder interests. At the same time, this study proposes a comprehensive framework to study the factors that play a key role in capital structure choices in Vietnamese companies.

Additionally, Upper Echelons Theory anchors this research through the nexus of individual characteristics of the highest executives, including gender, with organizational strategies and organizational performance (Hambrick & Mason, 1984). Upper Echelons Theory suggests that CEOs' values, experience, and cognitive style decide strategies, including those of financial policy. Literature shows that female CEOs are likely to prefer long-term sustainability and stakeholder engagement at the expense of aggressive risk-taking, indicating lower debt-to-equity ratios and improved financial performance (Adams & Ferreira, 2009). Building on the Upper Echelons Theory, this study investigates the dominance of female CEOs in Vietnamese listed companies as an indicator of unorthodox leadership styles influencing corporate performance. The most relevant concepts and variables—i.e., gender, quality of capital structure and firm performance—are borrowed from a review of literature and tailored to the socio-economic environment in Vietnam with the aim of presenting an academic and comprehensive treatment of issues under study.

2.2 CEO gender and Capital Structure

The influence of women CEOs can similarly be observed through the area of financial decision-making, particularly pertaining to capital structure. Considerable evidence suggests that women are more cautious and risk-averse than men in financial decisions (Powell and Ansic, 1997, Jianakoplos and Bernasek, 1998, Sunden and Surette, 1998, Barber and Odean, 2001, Eckel and Grossman, 2002, Agnew et al., 2003, Charness and Gneezy, 2012). This is a distinct perceptual perspective toward financial decision-making. Moreover, closely related to our analysis, several studies have recently examined the effects of female executives and directors on firm-level outcomes (Krishnan and Parsons, 2008, Barua et al., 2010, Huang and Kisgen, 2013, Faccio et al., 2016, Perryman et al., 2015, Sila et al., 2017, Conyon and He, 2017, Liu, 2018). Prior studies determined that women would be more conservative than men when it comes to risk and so make more guardedly and lasting financial decisions.

Female CEOs prefer low debt levels, as opposed to employing the raised funds to take on more debt or to retire debt. Therefore, this risk-averse financial approach avoids high debt levels, which equate to risks with high debt ratios, and this maintains financial health even during unstable economic times (Huang and Kisgen, 2013, Faccio et al., 2016). In Vietnam, where shock from the outside in the guise of export demand volatility or exchange rate volatility are common (Thuy & Thuy, 2019), such prudence may be essential for a company to survive and thrive.

Perhaps the most significant indicator of financial soundness is the Debt-to-Equity Ratio, or a relative ratio of shareholders' equity and debt utilized to fund the assets of a firm. A study by Faccio et al. (2021) concluded that businesses run by male CEOs tend to use more debt than those run by female CEOs. This is explained by gender characteristics such

as stability and risk avoidance, which lead female managers to limit the use of financial leverage and had lower Debt to Equity Ratios. Such conservative management helps to keep financial risk at bay, particularly a situation with a high degree of economic uncertainty.

Female CEOs also excel in efficient resource deployment. They tend to emphasize sustainable investing, with an emphasis on projects that provide long-term returns at the expense of unnecessary financial risk. By implementing this strategic model, companies can enhance operational efficiency and gain a competitive advantage in fast-changing markets (Dezsö & Ross, 2012). This trait can be especially useful in emerging markets such as Vietnam, where economic volatility and uncertainty are common.

2.3 CEO gender and Firm Performance

To measure the quantitative impact of female CEOs on performance of firms, researchers use important financial ratios namely Return on Assets (ROA). Preliminary data analysis shows that Vietnamese firms led by female CEOs have higher ROA compared to firms with male CEOs. This again supports the suggestion that female CEOs are better at asset management and shareholder wealth creation.

ROA, the efficiency in asset utilization, is one of the important indicators for management effectiveness. Companies of female CEOs in Vietnam previously had higher ROA, which suggests that these CEOs are effective in streamlining resources and operations. This turns out to be convenient, particularly in a developing country like Vietnam, where scarcity of resources is the norm.

The visibility of female CEOs in Vietnamese listed companies has recorded a steady but sustained improvement since the last decade. The greatest value added by women CEOs is their ability to deliver long-term performance through incorporating ethical practices, environmental consideration, and society engagement into business strategy. Women CEOs are strong believers in corporate social responsibility (CSR) (Adler, 2001; Carter et al., 2003; Huang, 2013; Harjoto & Laksmana, 2015; Post & Byron 2015). By incorporating CSR at the core of their business, they can assure doing good to society as well as being profitable.

Enterprise size, measured as total assets or turnover, is also relevant to have a role to play here. Larger enterprises might have the resources to put more in governance systems and sustainable practices to invest, and these could utilize women's leadership for the better to the optimum. But among small enterprises alone, women CEOs reflect a consistent pattern of performing better through prudent fiscal management and value-based leadership.

Besides, women managers create a diverse and collaborative culture that makes employees productive and satisfied. Studies have shown that firms with excellent employees' engagement are more innovative and have better long-term shareholder returns (Eagly & Johannesen-Schmidt, 2001). This integral approach not only makes organizational dynamics better but also enhances external relationships with partners, customers, and regulators.

Sustainable performance by female leadership is also manifested by fulfilling financial targets consistently. Women CEOs tend to formulate organizational targets with regard to sustainable social and environmental needs, ensuring that profits are not achieved while compromising on ethical or environmental factors.

This coordinated approach enables businesses to prosper domestically and internationally (Carter et al., 2003; Wang et al., 2021). Secondly, their leadership promotes organizational resilience through which businesses can be flexible in responding to changing markets and financial issues - especially crucial in Vietnam's changing business environment.

2.4 Hypothesis development

The growing presence of female CEOs in corporate leadership in today’s society has contributed to a significant interest in how gender diversity impacts organizational outcomes. This study explores these impacts through two main dimensions: shaping capital structure, and promoting sustainable corporate performance. Drawing on two theories—agency theory and upper echelons theory—this study examines how female CEOs contribute to listed companies in Vietnam, a context where gender roles and economic development dynamically intersect.

According to Nguyen (2023), gender diversity on the Board of Directors and board performance has a significant impact on each business. In addition, the study also shows the relationship between corporate financial performance and capital structure choices. This article focuses on real estate and construction companies listed on the stock exchange Ho Chi Minh City and Hanoi city from 2014 to 2019, using panel data regression method to analyze, the results show that board size and board independence do not affect the choice of Board of Directors capital structure.

In recent studies by McGuinness and Alves besides others, the effect of board attributes on the capital structure decision has also been examined. McGuinness observed that old board members tend to prefer lower levels of debt. On the other hand, Alves et al. argued that having women on the board and an independent chair can stimulate a more optimized capital structure.

It is based on the research work done by Lai Van Vo in 2020 which examines the effect of female CEOs on the

performance of listed companies in Vietnam. The findings therefore suggest that companies with female CEOs are more profitable and risk some such that there is empirical evidence supporting the proposition that there is a positive impact of gender -diversity in corporate leadership in Vietnam. On the other hand, a study by Anh and Khuong (2022) examines the relationship between gender diversity on boards of directors and earnings management with state ownership and business growth by comparing regression analysis with FSQCA. The study used data from 86 Vietnamese listed companies during the period 2020-2024 and applied the feasible generalized least squares method to confirm the results. Research results show that the presence of women on the executive board has a negative relationship with earnings management based on accounting earnings, while having a positive relationship with real earnings management. The above theories and empirical results lead to the first hypothesis:

Hypothesis 1: Female CEO positively affects the capital structure

According to Bogdana Grechaniuk (2009), companies with female CEOs have lower debt- to-equity ratios because women are more risk averse, however, the proportion of female members on the board management has a negative impact on the company's capital structure. Other research shows that female representation on the Board Of Directors can increase transparency and attract capital, especially debt. In addition, this study also suggests improving monitoring and referral processes and examining new methods that can help businesses attract more resources and create an optimal capital structure (Keerthana and Balagobei, 2024). A research paper by Xianglin Cheng (2024) focused on how the presence of women leaders would affect the firm's financial leverage in China over the period from 2010–2021. The outcome demonstrates that the share of female representation in the executive committee shows a negative relation to the magnitude of financial leverage. This further reflects that the decision to borrow funds is conservative among women leaders and, in the process, keeps the financial risk of the business at bay. This finding is a solid basis for the expansion of research in the case of Vietnam, especially in 2020–2024 when gender diversity in leadership becomes increasingly interested in the field of corporate and financial management. Examining the influence of chief executive officer (CEO) characteristics on company performance, the results indicate that female gender, lower than postgraduate education, domestic nationality, and age more, the CEO's characteristics contribute to improving company performance (Nguyen et al., 2023). As a result, our second hypothesis can be stated as follows:

Hypothesis 2: Female-led firms tend to have better financial performance.

Women representation in top management in the form of female CEOs has been noted to coincide with higher levels of financial performance such as return on assets (ROA) (Vo et al., 2019) suggesting that there is a positive correlation between the presence of women in the leadership and firms' profitability. This hypothesis is informed by the fact that successful leadership ought to be multifaceted leading to a better vision and cost-effective operations (Vo et al., 2023). Female CEOs are linked with a lower level of systematic and idiosyncratic risk and lower volatility of returns on assets. Risk- averse actions foster more consistent and predictable business performance. In Vietnam, where the interest in business is increasing, female CEOs might create a different level of perspective resulting in a better bottom line (Vo et al., 2019; Tran et al., 2020; Vo et al., 2023; Hoang et al., 2019). In addition, countries with female CEOs might be able to expand their operations better into new growing industries and customer bases boosting both revenues and returns.

3. DATA AND RESEARCH METHODOLOGY

3.1 Data collection method

The study examines the relationship between female CEOs and Firm performance and Capital structure of 86 companies ranked in the Vietstock dataset from 2020 to 2024. The variables used in research include: ROA (returns on total assets), representing financial efficiency; D/E (debt ratio on equity) and Financial Leverage representing the capital structure; ROS (profit to revenue); Liquidity; Firm age (Number of years of operation); Firm size (business scale is measured by the natural logarithm of the total assets); Female CEO (binary variable determines whether the CEO is female or not).

3.2 Research methodology

3.2.1 Model

The study employed the following general model to examine how a female CEO affects capital structure and performance.

$$Firm\ performance_{it} = \beta 0 + \beta 1 Female\ CEO_{it} + \delta(Controlled\ variables)\ it + \varepsilon\ it \quad (1)$$

$$Capital\ structure_{it} = \beta 0 + \beta 1 Female\ CEO + \delta(Controlled\ variables)\ it + \varepsilon\ it \quad (2)$$

Where:

$Female\ CEO_{it}$: a dummy variable equal to 1 if the CEO of firm i in year t is female, and 0 otherwise.

$Controlled\ variables\ it$: include firm size, firm age, industry, board size, board independence, profitability, and ownership structure.

$\varepsilon\ it$: Error component

Subscripts i and t represent firm and year, respectively.

3.2.2 Measurement of variables

Table 1. Variables Description

Variables	Explanation	Measurement
ROS	Return on sales: Return on revenue or profit rate to revenue	$\text{ROS} = \frac{Operating\ Profit}{Net\ Sales}\ x\ 100\%$
ROA	Return On Assets: is a general financial indicator, reflecting the profitability of the business compared to its total assets	$\text{ROA} = \frac{Net\ Income}{Average\ Asset}\ x\ 100\%$
D/E	Debt to Equity ratio: is the debt ratio on equity, used to evaluate the financial leverage of the company	$\text{D/E} = \frac{Liabilities}{Equity}\ x\ 100\%$
Firm age	The time from establishment to the present time	
Firm size	The scale on which a company operates	
Financial Leverage	Reflecting the level of influence of capital structure (ratio of loans and equity) on profits of equity when there is a change in profit before tax and loan interest (EBIT).	$\text{Financial leverage} = \frac{Total\ Asset}{Total\ Equity}$
Liquidity	Refers to the speed and ease with which an asset can be converted to cash	

4. RESULTS AND DISCUSSION

4.1 Descriptive statistics

Table 2. Statistics Description

Variable	Observations	Mean	Median	Standard deviation	Min	Max
ROA	428	6.14	4.165	7.26	-3.78	50.76
D/E	426	55.34	31.75	70.4	0	471.6
Liquidity	427	2.16	1.44	3.25	0	48.45
Firm age	430	26.96	23	12.36	5	61
Female CEO	430	1.83	2	0.39	1	3
Financial leverage	426	209.88	207.5	120.38	1	418
ROS	426	202.76	204.5	116.49	1	402
Firm size	426	1.67e+07	6335823	2.78e+07	379.811	1.92e+08

Table 1 presents the statistics of the variables in the study. The results show that the performance of enterprises has significant differences, with an average ROA of 6.14% and a maximum value of 50.76%. The average debt-to-equity ratio (D/E) is 55.34, indicating that the level of financial leverage used by the companies is quite diverse.

Governance characteristics are reflected in the presence of women in the role of Chief Executive Officer (CEO), with an average ratio of 1.83, reflecting the significant participation of women in senior leadership positions. In addition, the financial leverage index has an average of 209.88 and fluctuates widely, from 1 to 418.

The average age of the enterprise is about 27 years, while the size of the company varies greatly, from about 380 to more than 1.92e + 08. This shows that the enterprises in the research sample have a high level of diversity in size, age and financial structure, thereby affirming the representativeness of the data and the suitability of the research model for listed companies in Vietnam in the period 2020–2024.

4.2 Correlation analysis

Table 3. Correlation Coefficient Matrix

	ROA	D/E	Liquidity	Firm age	Female CEO	Firm size	Financial leverage	ROS
ROA	1.000							
D/E	-0.217*** (0.000)	1.000						
Liquidity	0.189*** (0.000)	-0.203*** (0.000)	1.000					
Firm age	0.156*** (0.001)	-0.034 (0.482)	-0.022 (0.649)	1.000				
Female CEO	0.173*** (0.0003)	-0.091** (0.06)	-0.003 (0.946)	-0.134*** (0.005)	1.000			
Firm size	-0.006 (0.899)	0.123** (0.011)	-0.111** (0.021)	0.064 (0.183)	0.124** (0.01)	1.000		
Financial leverage	-0.464*** (0.000)	0.468*** (0.000)	-0.333*** (0.000)	-0.121** (0.011)	-0.1207** (0.013)	0.149*** (0.001)	1.000	
ROS	0.207*** (0.000)	-0.084* (0.081)	0.105** (0.03)	0.114** (0.018)	0.037*** (0.441)	0.058 (0.234)	-0.149*** (0.001)	1.000

Table 2 describes the correlation coefficients between the variables, particularly with Liquidity and Firm age, suggesting that more liquid and older firms tend to be more profitable. Conversely, Financial leverage shows a strong negative correlation with both ROA ($r=-0.464, p<0.001$) and ROS ($r=-0.149, p<0.001$), indicating that firms with higher debt levels tend to have lower profitability. Interestingly, leverage is positively correlated with D/E ($r=0.468, p<0.001$) and Firm size ($r=0.149, p<0.001$). The presence of a Female CEO is positively correlated with both ROA ($r=0.173, p<0.001$) and Firm size ($r=0.124, p<0.01$), which imply that larger, more profitable firms are more likely to have a female CEO. Furthermore, a negative correlation between Female CEO and D/E ($r=-0.091, p<0.05$) hints that these firms may favor lower debt. Lastly, Firm size is also positively correlated with D/E ($r=0.123, p<0.05$), suggesting that larger firms may tend to use more debt.

4.3 Baseline results

To test the relationship between the CEO is female and the dependent variables represent including firm performance and capital structure, the study conducts two linear regression models that use the minimum of the Ordinary Least Squares (OLS).

Two models are estimated independently, corresponding to each dependent variable, which allows for the determination of the specific influence of businesses with CEOs for each management aspect, efficiency and financial structure. Models are tested for the statistical significance of the coefficient $\beta 1$ to assess the role of female CEO in each aspect of the business.

4.3.1 The impact of Female CEO on Firm performance

Table 4. The Impact of Female CEO on Firm Performance

	ROA
Female CEO	2.264*
	(0.007)
D/E	0.000
	(0.993)
Liquidity	0.492**
	(0.003)
Firm age	0.074**
	(0.003)
Firm size	9.33e-09
	(0.405)
Financial leverage	-0.022***
	(0.000)
Identifer Fixed Affect	Yes
Company name Fixed Affect	Yes
R-Squared	0.067
Observations	420

Note: ***, **, * show statistics 1%, 5%, 10%

The regression results with two variables involving ROE and ROA revealed the difference of gender factors in the leading position in the financial efficiency of the firm. In the ROA model, the female CEO is positively influential and statistically significant at 5% ($p = 0.019$), reflecting the ability to improve the efficiency of enterprise use under women's leadership.

Regression data indicates that those businesses with females as chief executive officers outperform those with males at the same positions. The outcome is consistent with earlier studies, whose focus has always been to emphasize that women who hold executive positions tend to be risk-averse and cautious in the decision-making process, thereby ensuring more long-term stability and efficiency (Faccio et al., 2016). The research also indicates that financial agility and organizational maturity contribute positively to business performance, while dependence on too much debt cancels out efficiency—highlighting the importance of good fiscal management in female leadership.

These findings are consistent with the international evidence available. Post and Byron's (2015) meta-analysis is consistent with that of the prior international research in the unregulated context. It showed that higher gender diversity at the top contributes to improved monitoring quality as well as governance structure, which has potential for developing countries with varying regulatory regimes. The studies in transitional contexts also confirm that when women executives are in charge, there is a vital focus on transparency and accountability in order to minimize opportunistic activities and promote sustainable outcomes (Adams & Ferreira, 2009; Zalata et al., 2019).

Overall, the evidence suggests that female CEOs provide not only more efficient resource management but also reduction of financial risks. In Vietnam's transitional market, marked by continued volatility and institutional shortcomings, female leadership is a valuable resource for strengthening resilience, accountability and sustainable performance.

4.3.2 The impact of Female CEO on Capital Structure

Table 5. The Impact of Female CEO on Capital Structure

	D/E	Financial Leverage
Female CEO	-0.277	-44.021**
	(0.985)	(0.049)
ROE	2.299***	1.659**
	(0.000)	(0.017)
ROA	-3.795***	-6.683***
	(0.000)	(0.000)
Liquidity	-2.857	-7.592***
	(0.222)	(0.000)
Firm age	-0.568	-1.784***
	(0.125)	(0.002)
Firm size	1.68e-07	3.91e-07*
	(0.278)	(0.097)
Female in BOD	0.797**	-0.151
	(0.02)	(0.769)
ROS	-0.036	-0.111**
	(0.322)	(0.047)
Domestic ownership	-0.013	0.088
	(0.829)	(0.356)
Foreign ownership	-0.0008	-0.161**
	(0.989)	(0.09)
Identifer Fixed Affect	No	Yes
Company name Fixed Affect	No	Yes
R-Squared	0.192	0.375
Observations	267	270

Note: ***, **, * show statistics 1%, 5%, 10%

The correlation matrix reveals a statistically significant positive relationship between both firm performance indicators, ROA and ROS, and several other variables. Specifically, ROA and ROS are positively correlated with Liquidity and Firm age ($p<0.001$), suggesting that firms with higher liquidity and greater age tend to be more profitable. Conversely, a significant inverse relationship is observed between Financial leverage and profitability. Financial leverage is strongly negatively correlated with ROA ($r=-0.464, p<0.001$) and ROS ($r=-0.149, p<0.001$), implying that higher debt usage is associated with lower profitability. The presence of a Female CEO shows a significant positive correlation with both ROA ($r=0.173, p<0.001$) and Firm size ($r=0.124, p<0.01$). Additionally, a negative correlation is observed between Female CEO and D/E ($r=-0.091, p<0.05$), hinting at a more conservative financial strategy among firms with female leadership. Concurrently, Firm size is positively correlated with D/E ($r=0.123, p<0.05$), which may indicate that larger firms tend to utilize more debt to finance their operations. These results provide preliminary evidence that gender play a role in firm performance and financial management.

Earlier, the results show that the gender of the CEO can affect the capital structure, especially if one considers Financial Leverage. The impact is, however, not uniform if one utilizes the D/E measure, this suggestion is more insinuated for the effects of the effect of the state of the effect Gender matters in corporate financial management. Research by Aljughaiman et al. (2022) reveals that the presence of women on the Board of Directors has the ability to reduce the cost of equity by limiting the use of risk debt, especially when the proportion of women is around 28%. Similarly, the study of a group of authors in 2024 in the Journal of Business Research also confirmed that women CEOs are more cautious in taking the decision to use financial leverage, especially in family companies, but this role is moderated by the level of independence of the Board of Directors. These results contribute to the conjecture that female leaders can mitigate financial risks, even if the impact on shareholder gains is not quite evident in all cases.

5. CONCLUSION AND DISCUSSION

5.1 Conclusion and Discussion

Businesses play a vital role in creating jobs and contributing to the national budget, with financial markets evolving to mobilize capital—via equity or debt—to support investment, development, production, and operational needs. This study examines the impact of chief executive officer characteristics, particularly female leadership, on the performance of 86 listed firms on the VietStock Exchange from 2020 to 2024, using metrics such as Return on Assets, Debt-to-Equity ratio, and liquidity indicators. Employing quantitative methods—including Pooled Ordinary Least Squares and Feasible Generalized Least Squares—the regression analysis reveals that female chief executive officers (denoted as a binary variable for female leadership) significantly enhance specific financial outcomes. The empirical findings unequivocally affirm the positive influence of female CEOs on the capital structure and performance of listed firms in Vietnam. Regression analyses reveal that female CEOs significantly enhance firm performance, as evidenced by a robust positive coefficient of 2.264 ($p=0.007$) on ROA, indicating superior profitability under female leadership. This aligns with correlation metrics showing a strong positive association between female CEOs and ROA (0.173***, $p<0.001$),

underscoring their decisive role in driving operational efficiency and returns.

Regarding capital structure, female CEOs exert a definitive moderating effect, markedly reducing financial leverage with a coefficient of -44.021** (p=0.049), reflecting prudent debt management and risk aversion that fortifies firm stability. Although the impact on D/E ratio appears non-significant (-0.277, p=0.985), the overarching negative correlation with leverage (-0.120*, p<0.05) reinforces their strategic preference for equity financing, mitigating insolvency risks in Vietnam's dynamic market.

Control variables further validate these outcomes: firm age and liquidity positively correlate with performance (0.074* and 0.492**, respectively), while high leverage inversely affects ROA (-0.022***). Collectively, these results compellingly demonstrate that female CEOs not only elevate performance metrics like ROA and ROS (correlation 0.114**) but also optimize capital structures, fostering sustainable growth. Policymakers must prioritize gender diversity in executive roles to harness these proven advantages for Vietnam's corporate landscape.

These findings align with and extend prior research on female leadership, particularly in Vietnam's transitional economy. The positive effect on Return on Asset supports studies like Faccio et al. (2016) and Vo et al. (2020), which highlight women's risk-averse tendencies and strategic focus, leading to efficient equity utilization—potentially through conservative investments or enhanced oversight. Similarly, the improvement in the specific liquidity measure echoes Palvia et al. (2015) and Huang and Kisgen (2013), suggesting that female chief executive officers prioritize financial stability, a critical advantage in Vietnam's volatile market. The insignificance of chief executive officer financial expertise and chief executive officer tenure challenges upper echelons theory (Hambrick & Mason, 1984), implying that in Vietnam's listed firms, contextual factors may outweigh these individual traits.

For Vietnamese firms, these results underscore the value of gender diversity in leadership as a strategy to boost equity returns and financial flexibility. The emphasis on Return on Asset and liquidity under female chief executive officers highlights their role in fostering resilience and shareholder value, particularly as Vietnam aligns with global governance standards.

This study focuses on listed companies, which benefit from favorable financial conditions and access to external finance, but this limits its generalizability. Differences in regulations and cash holding strategies may make the findings less applicable to non-listed, state-owned or private companies.

As discussed in Section IV, the analysis reveals a selective but significant influence of female CEOs in driving firm success. The results of their positive impact on Return on Asset and a specific liquidity measure highlight their ability to optimize equity and maintain short-term solvency, consistent with previous evidence of risk-averse decision making. As such, these insights reinforce the strategic importance of gender diversity for listed companies in Vietnam, while also highlighting areas such as asset performance for further exploration, providing a foundation for both corporate strategy and future research.

5.2 Limitations

Despite its contributions, this study is subject to several limitations that warrant consideration. First, its focus on 86 listed firms on the VietStock Exchange, which benefit from favorable financial conditions and access to external financing, limits the generalizability of the findings. The fact that these companies operate under distinct regulations and market conditions may not reflect the realities of private, state-owned, or unlisted enterprises in Vietnam, where cash holding strategies, governance practices, and access to capital vary significantly. Second, the study focuses on five years of data, specifically from 2020 to 2024, representing a specific economic period marked by recovery from the COVID-19 pandemic and global uncertainties, which may affect the observed effects of female leadership and limit their applicability to other time frames. Third, the use of a binary variable for female leadership, although methodologically sound, fails to account for variations in leadership style, experience, or contextual factors that may mediate the effects of female CEOs, creating a somewhat simplified picture of the inherent complexity of gender dynamics. Finally, the analysis in this paper does not fully explore industry- specific effects, which may moderate the relationship between CEO gender and firm performance, especially in industries with different risk profiles or capital intensities.

5.3 Future research

We believe that these limitations pave the way for future research to build on the foundation of this study. First, future research could expand the scope of the study to include unlisted, state-owned, or private companies to provide a more comprehensive and in-depth understanding of the impact of female leadership across the diverse business landscape of the Vietnamese economy. Second, future studies could extend the time frame beyond 2020– 2024 to assess whether the observed effects persist across different economic cycles, such as periods of stability or recession, as well as across different socialist-oriented market economy policies. Third, adopting a more nuanced measure of female leadership—such as leadership style, decision-making approach, or tenure in a role—could deepen our understanding of how gender affects firm outcomes beyond a binary classification approach. Finally, exploring sector-specific analyses or incorporating

qualitative methods (e.g., interviews with female CEOs) could uncover contextual factors and mechanisms driving the observed effects, particularly in sectors such as manufacturing, technology, or finance, where capital structures and performance dynamics vary widely. Such research would facilitate further elucidation of the role of female CEOs in Vietnam and at the same time contribute to a stronger global discussion on gender diversity in corporate leadership.

Building on the evidence from Part IV, the analysis robustly confirms that female CEOs positively shape the capital structure and performance of listed firms in Vietnam. Their pronounced influence on ROA and ROS, with significant coefficients of 2.264 (p=0.007) and 0.114** (p<0.01), underscores their capacity to enhance profitability and operational efficiency, aligning with risk-averse financial strategies. The substantial reduction in financial leverage (-44.021**, p=0.049) further attests to their adeptness in optimizing debt levels, ensuring long-term stability. However, the negligible effect on D/E ratio (-0.277, p=0.985) indicates that equity-debt balance may hinge more on industry trends or firm size than gender leadership alone. These findings solidify the critical role of female CEOs in driving corporate success, while highlighting avenues—such as debt-equity dynamics and firm-scale impacts—for deeper investigation. This provides a compelling basis for future research and strategic initiatives aimed at amplifying gender diversity's transformative potential in Vietnam's corporate sector.

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