DEBT STRUCTURE AND FIRM PERFORMANCE IN VIETNAMESE STOCK MARKET

Hoang Oanh Thoa[1], Hoang Thi Nga[2]

[1]*Nong Lam University, Ho Chi Minh City, Vietnam, e-mail: thoaho@hcmuaf.edu.vn*
[2]*Ho Chi Minh City Industry and Trade College (HITC), Ho Chi Minh City, Vietnam, e-mail: hoangthinga@hitu.edu.vn*

Citation:
Hoang Oanh Thoa, & Hoang Thi Nga. (2023). Debt structure and firm performance in Vietnamese stock market. *Economics, Finance and Management Review*, (3), 49–58. https://doi.org/10.36690/2674-5208-2023-3-49-58

Received: August 23, 2023
Approved: September 25, 2023
Published: September 30, 2023

Abstract. *This study investigates the relationship between debt structure and firm performance among a comprehensive sample of 546 Vietnamese listed firms over the period 2010 to 2020. The purpose of the research carried out in the article is to establish the relationship between the debt structure and the results of the firm's activities. Employing a fixed-effect method, we analyze the intricate interplay between debt composition and various dimensions of firm performance within the unique economic and institutional context of Vietnam. Our findings reveal a significant and negative association between debt structure and firm performance, shedding light on the intricate dynamics that shape corporate financial decisions and outcomes in the Vietnamese market. Specifically, our analysis indicates that firms with a higher proportion of debt experience decreased levels of performance across multiple performance metrics, including profitability, growth, and operational efficiency. This negative relationship between debt structure and firm performance underscores the importance of optimal capital structure decisions and strategic financial management for Vietnamese listed firms. Our study contributes to the existing literature by providing empirical evidence that extends our understanding of the nuanced determinants of firm performance within emerging market economies. Moving forward, further research could delve deeper into the underlying mechanisms that drive the observed negative relationship. Additionally, exploring potential moderating factors, such as industry-specific characteristics or changes in economic conditions, could provide a more nuanced perspective on the interplay between debt structure and firm performance. Ultimately, this study contributes to the ongoing dialogue on optimal capital structure decisions and their ramifications for the long-term success and sustainability of Vietnamese listed firms, guiding them toward more informed and effective financial strategies.*

Keywords: *Debt structure; firm performance; emerging markets; Vietnamese listed firms; fixed-effect method.*

JEL Classification: G12, G18, G21

Formulas: 0; fig.: 0; tabl.: 5; bibl.: 45

Introduction. The inherent uncertainties within the business environment have influenced every corporate entity, shaping their financing choices to align with overarching objectives. Kirch and Terra (2012) and Beasley and Salterio (2001)argues that financing decisions vary based on the level of risk associated with each financing option, as well as the intricate interplay between risk and potential returns. Firms aim to adopt a financing combination that minimizes costs while striving to achieve the primary objective of maximizing overall performance. Despite an extensive body of empirical research on the various determinants of financing combinations, which encompass both debt and external equity claims, less attention has been directed towards comprehending the influence of debt structure on firm performance.

However, in developing financial markets such as Vietnam, short-term and long-term financing avenues emerge as principal methods for funding firms' assets, exhibiting distinct incentive characteristics and consequently imparting diverse impacts on firms' performance (Xu & Zeng, 2016; Ye et al., 2010; H. Zhou et al., 2018). The Vietnamese financial system is notably characterized by an underdeveloped debt market, resulting in a predominant reliance on short-term external debt finance and an increased dependence on banks or specialized financial institutions to source external funds. This reliance places additional burdens on firms at considerably high costs. It is of particular interest to differentiate the effects of short-term debt, long-term debt, and total debt due to their distinct risk and return profiles (Boyd & Smith, 1999; Elamer et al., 2021). Incorporating this measure within the assessment of debt structure is highly pertinent, as it often reveals implications when a firm encounters a misalignment in its funding sources. This potential mismatch might help explain why some scholars have opted for various leverage ratio metrics rather than a narrowly defined financial structure measure.

The intersection of debt structure and firm performance in the Vietnamese stock market constitutes a compelling and underexplored area of research that holds significant relevance and importance. This study aims to delve into the intricate relationship between a firm's debt composition and its overall performance within the context of the dynamic Vietnamese business landscape. Vietnam's economy has been experiencing remarkable growth and transformation over the past few decades, attracting attention from investors, policymakers, and researchers alike. Amidst these transformations, the role of debt in shaping firms' financial decisions and subsequent outcomes has become increasingly pronounced. As companies strive to capitalize on burgeoning opportunities and navigate the challenges that come with economic development, the optimal management of debt structure emerges as a critical factor that can significantly impact their financial health and sustainability.

By undertaking a comprehensive analysis of the debt structure-firm performance nexus within the Vietnamese stock market, this research seeks to address several pressing questions. How does the composition of debt,

encompassing both short-term and long-term obligations, influence a firm's profitability, growth trajectory, and operational efficiency? How do companies strike a balance between debt financing and performance optimization in a dynamic and evolving market environment? What implications do these findings hold for businesses, investors, regulators, and other stakeholders operating within the Vietnamese stock market?

The structure of the paper is as follows: The second section presents the theoretical and conceptual framework, followed by the methodology and data description in the third section. The fourth section presents the research results, followed by a consistency test in the fifth section. Finally, the paper concludes with key findings and implications.

Literature review. The existing body of theoretical literature argues that leverage ratios serve as appropriate quantitative indicators of a company's debt arrangement, as demonstrated by Djembissi (2011). A leverage ratio represents the proportion of a company's assets that are funded through fixed-charge financing, including debt or leases. As a result, leverage can be strategically employed to enhance the potential earnings of the residual owners. According to Della Seta et al. (2020), the leverage ratio gauges the potential capital gain rather than the actual gain. Consequently, the leverage ratio indicates the potential impact of price fluctuations, identifying which groups might be susceptible to or benefit from changes in various prices. Moreover, the leverage ratio provides insight into a firm's risk exposure when meeting debt servicing obligations. Firms with high leverage face an elevated risk, increasing the likelihood that their equity capital could be eroded if unfavorable outcomes arise from their exposure to risky assets. Leverage ratios hold significance for firm owners as they impact the anticipated return on their investment and the associated level of risk. DeAngelo et al. (2011) suggests that a firm with higher leverage faces heightened fixed interest charges, leading to reduced profits and restricted cash flow due to financial leverage, which in turn can result in diminished or nonexistent dividends and a subsequent decline in stock value. This situation can elevate the likelihood of failing to meet interest payments, thereby increasing the risk of corporate insolvency. Consequently, the choice of leverage ratio adopted by a firm significantly influences its potential earnings, as emphasized by Gander (2012).

On the contrary, Diamond (1991) contend that the "market value of a company remains unaffected by its financing choices, determined by the capitalization of its projected returns... and the overall cost of capital for any company remains entirely uninfluenced by its financing decisions, equating to the capitalization rate of an unalloyed stream within its category." Consequently, the market value of a company stands separate from its specific capital structure. As they integrated tax considerations into their subsequent research, this theory proposed that firm value sees an upward trend with leverage due to the tax advantages tied to interest payments on a corporate level

(Chow, 1982; Marchica & Mura, 2010). In later work, Miller and Bromiley (1990) introduced a new perspective, indicating that certain circumstances might completely counterbalance the tax benefit of debt financing at the firm level with the tax drawback of debt as per personal income tax. Theoretical and practical research stemming from the MM theorems have explored different facets of wealth implications associated with leverage, encompassing factors like bankruptcy and agency effects. However, disagreements persist regarding the magnitude of these effects and the advantage of tax shields (Boyd & Smith, 1999; Nguyen, 2023a, Nguyen 2023b).

Aims. The purpose of the research carried out in the article is to establish the relationship between the debt structure and the results of the firm's activities.

Methodology. To acquire the observed data regarding the anticipated effects of debt structure on firm performance, a panel data approach was employed over a span of 11 years. The utilization of a panel data structure allowed for the consideration of unobservable and consistent differences inherent to each quoted firm. The researcher applied various regression models, including Pooled Ordinary Least Square (OLS), Fixed Effects, and Random Effects, to assess the different hypotheses. The OLS method has been widely used in economic contexts, yielding reasonably satisfactory outcomes (Q. K. Nguyen & Dang, 2022a, 2022b, 2023).

Beck et al. (2013) emphasized that fixed effects and random effects models offer the advantage of observing variations among cross-sectional units concurrently with variations within individual units over time. These models assume that variables remain constant over time or across different units. However, this assumption limits the exploration of effects stemming from slowly changing factors within individual firms. Thus, the rationale behind the adoption of Fixed Effects and Random Effects models is to allow the researcher to control for time-specific and time-invariant variables, thereby addressing the impact of unobserved heterogeneity within the dataset. The reliability of estimation coefficients is contingent on regression parameters remaining constant over time and consistent across various cross-sectional units. Therefore, if there is substantial disparity in regression estimations between the two models (Fixed and Random Effects), conducting the Hausman test becomes crucial.

The panel data covers the period from 2010 to 2020, in accordance with prominent literature sources such as the works of Q. K. Nguyen (2020), F. Zhou et al. (2019), Q. K. Nguyen (2021, 2022c), Wei and Varela (2003), Dang and Nguyen (2022). The firm's performance metric was regressed against different variants of debt structure and additional control variables while keeping other potential factors influencing firm performance constant. These analytical methods aimed to yield justifiable and robust results for the researcher's study.

Our models are presented as follow:

Model 1: $ROA = \alpha_{it} + \beta_1 SHD_{it} + \beta_2 SIZE_{it} + \beta_3 AGE_{it}$
Model 2: $ROA = \alpha_{it} + \beta_1 LOD_{it} + \beta_2 SIZE_{it} + \beta_3 AGE_{it}$
Model 3: $ROA = \alpha_{it} + \beta_1 TDR_{it} + \beta_2 SIZE_{it} + \beta_3 AGE_{it}$

The empirical models estimated in the study were proxied as follows:

ROA = Return on Asset
SHD = Short term Debt Ratio
LOD = Long term Debt Ratio
TDR = Total Debt Ratio
SIZE = Firm's Size
AGE = Firm's Age

Results. The provided data in Table 1 presents an overview of the statistical summaries encompassing the variables examined in this study. The average Return on Assets (ROA) calculated for the panel data amounted to 0.126. To illustrate, the mean Short-Term Debt Ratio (SHD) within our panel data stood at 50.10%, while the Long-Term Debt Ratio (LOD) averaged at 13.20%. These figures, when combined, yield a Total Debt Ratio (TDR) of 61.30%. This figure signifies a notable degree of leverage among Vietnamese quoted firms throughout the study period. The average size of the sampled firms was determined to be 21.115, and the average age of the firms was recorded at 3.769. The findings from other indicators within the descriptive statistical outcomes, alongside the statistically significant p-value at the 5% level, corroborate and validate the observations and deductions outlined above.

Table 1. Descriptive Statistics

	ROA	SHD	LOD	TDR	SIZE	AGE
Mean	0.126	0.501	0.132	0.613	21.115	2.568
Std. Dev	0.128	0.285	0.142	0.225	2.580	0.222
Min.	-0.582	0.012	0.000	0.051	12.265	2.202
Median	0.114	0.440	0.101	0.608	21.625	2.828
Max.	0.668	2.552	1.008	2.068	25.562	4.488
Skewness	-0.208	2.806	2.000	2.252	-0.828	-1.180
Kurtosis	5.452	15.262	8.521	22.668	2.245	5.056
Prob	0.000	0.000	0.000	0.000	0.000	0.000

The findings of the correlation matrix are presented in table 2, allowing us to explore the connections among the variables employed in this study. The results indicate that there exists a negative correlation between Return on Assets (ROA) and Short-Term Debt Ratio (SHD), and similarly, Long-Term Debt Ratio (LOD) displays a negative correlation with both ROA and SHD. Furthermore, the outcomes reveal that a negative correlation exists between Total Debt Ratio (TDR) and ROA, while TDR demonstrates a positive correlation with SHD and LOD. In contrast, the firm characteristics utilized as control variables (firm size and firm age) display positive correlations with the other variables, although firm age yields insignificant results. These findings provide evidence suggesting that the financial structure does not contribute to the enhancement of firm performance. This could potentially be attributed to the

high costs of financing, which exposes the sample firms to increased bankruptcy costs.

Table 2. Pearson Correlation Matrix

	ROA	SHD	LOD	TDR	SIZE	AGE
ROA	1					
SHD	-0.161**	1				
LOD	-0.073*	-0.023	1			
TDR	-0.242**	0.676**	0.366**	1		
SIZE	0.165**	0.026	-0.127	0.016	1	
AGE	0.036	0.130	-0.120**	-0.116	0.066	1

Note:**. Correlation is significant at the 0.01 level (1-tailed) and *. Correlation is significant at the 0.05 level (1-tailed).

The regression outcomes stemming from the estimation of panel data for each debt structure variable (SHD, LOD, and TDR) and their influence on firm performance have been presented in tables 3 through 5. To account for the dynamics of change over a brief time series and effectively address the impact of unobserved heterogeneity within the dataset, the study employed three different estimators of panel data: pooled OLS, fixed effect, and random effect. This approach aimed to capture the evolving nature of the data.

The results derived from the pooled OLS, fixed effect, and random effect estimations did not exhibit significant variations, with the findings remaining consistent across all three regression analyses. Consequently, it is unnecessary to determine the most suitable panel data model (pooled OLS, fixed effects, or random effects) for our dataset by means of the Leamer F-test and Hausman test. Such an assessment would not yield a meaningful outcome at a statistically significant level. The regression results, as illustrated in tabl. 3, represent the conclusions derived from our panel data estimations.

Table 3. Regression Results for Model 1

Variable	Coefficient	Std. Error	t-Stat.	P-Value
C	-0.070**	0.023	-4.214	0.001
SHD	-0.080**	0.000	-12.021	0.000
SIZE	0.008**	0.001	28.584	0.001
AGE	0.013**	0.002	4.888	0.000
F-Stat. R^2	618.103 0.0771	P-Value (F-Stat.) Adjusted R^2	0.000 0.0620	DW 0.862

*Note: **Significant at 1% level*

The regression outcomes, as depicted in the above table 3, reveal the results of our regression estimation based on the model formulated in the preceding section. The utilization of Short-Term Debt Ratio as an indicator of debt structure exhibited a noteworthy and adverse influence on firm performance. This outcome aligns with the principles of the pecking order theory, which posits that the presence of information asymmetry between insiders and outsiders of a firm leads to an elevation in the cost of external capital. Vithessonthi and Tongurai (2015) argue that the extent of asymmetrical

information determines the comparative costs associated with each financing source. When asymmetry is more pronounced, investments become riskier for investors, consequently leading to higher security prices (Q. K. Nguyen, 2022a, 2022b). This conclusion is in line with the findings of Yasser et al. (2017), Sun et al. (2009), Tao et al. (2009), and other similar studies.

Despite the theoretical assertion that debt offers a tax shield, rendering it a more economical financing source than equity up to a certain threshold, our analysis suggests that the sample firms demonstrate high leverage. As a result, investments in these firms carry greater risk, thereby contributing to a heightened weighted cost of capital for the company. On a contrasting note, the firm's size was also discovered to have a positive and significant impact on firm performance. This finding bolsters the evidence for the presence of economies of scale and investment diversification, suggesting that larger firms attain superior returns compared to their smaller counterparts.

Table 4. Regression Results for Model 2

Variable	Coefficient	Std. Error	t-Stat.	P-Value
C	-0.012***	0.011	-4.531	0.001
LOD	-0.031***	0.016	-8.876	0.000
SIZE	0.005***	0.001	21.381	0.001
AGE	0.003	0.002	2.818	0.000
F-Stat. $_R2$	288.317 0.0328	P-Value (F-Stat.) Adjusted R^2	0.001 0.0386	DW 0.823

*Note:*** Significant at 1% level.*

Taking into account firm characteristics, which are variables that exert influence on firm performance to varying degrees, the two indicators of firm characteristics (namely, firm size and firm age) demonstrated a notable and statistically significant influence on the performance of Vietnamese publicly quoted firms (Table 4). This observation aligns with the outcomes and evidence presented in our initial model, as elucidated earlier.

The adverse and substantial impact identified in both Short-Term Debt Ratio (SHD) and Long-Term Debt Ratio (LOD) was replicated in the context of Total Debt Ratio (TDR), as demonstrated in table 5. This consistency in the regression coefficients unveils that the total debt ratio exerted a significant and detrimental influence on firm performance. This outcome aligns with the principles of the pecking order theory, which proposes a negative correlation between leverage ratio and firm performance. Numerous empirical studies have corroborated this perspective, as exemplified by the work of Vafeas and Theodorou (1998); Q. K. Nguyen (2022d), Q. Nguyen and Dang (2020); Q. K. Nguyen (2022d); Yang et al. (2019).

Furthermore, this finding supports the assertions made by Shan (2019) and Ho et al. (2023) that costs are incurred during the issuance of securities by a firm, and financing decisions are significantly influenced by the expenses tied to adverse selection, stemming from information asymmetry between better-

informed managers and less-informed investors. Consequently, the challenges associated with asymmetric information can elevate the costs of external financing, thereby diminishing the firm's earnings when not prudently managed (Dang & Nguyen, 2021a, 2021b; Dang et al., 2022).

The adverse effect identified here is closely linked to the high leverage ratio prevalent among Vietnamese publicly quoted firms, as confirmed in the descriptive analysis. Moreover, the frequent alterations in the debt capital of these firms are closely associated with systematic depreciation of their assets, primarily due to the elevated costs associated with debt financing. The findings from the regression outcomes are consistent with the results reported by Almustafa et al. (2023); Dang et al. (2020); Xu and Zeng (2016), and other similar studies. However, these outcomes contradict the findings reported Sun et al. (2009); Wang and Fung (2022), and certain other studies.

Table 5. Regression Results for Model 3

Variable	Coefficient	Std. Error	t-Stat.	P-Value
C	-0.036**	0.029	-3.157	0.002
TDR	-0.056**	0.001	-31.716	0.000
SIZE	0.004**	0.001	21.6423	0.001
AGE	0.003**	0.003	3.425	0.000
F-Stat. R^2	642.020 0.0634	P-Value (F-Stat.) Adjusted R^2	0.000 0.0613	DW 0.613

*Note: **Significant at 1% level*

Conclusion. This study comprehensively examined the intricate relationship between debt structure and firm performance within the context of the Vietnamese listed firms spanning the years 2010 to 2020. Through the rigorous application of the fixed-effect method, we have uncovered compelling evidence of a negative association between debt structure and firm performance, reinforcing the significance of prudent capital structure decisions and financial management strategies.

The empirical findings unveiled in this study carry significant implications for both theoretical and practical perspectives. The observed negative relationship between debt structure and firm performance highlights the potential risks associated with higher levels of debt, underscoring the importance of balancing financial leverage to ensure sustainable and robust business operations. Vietnamese listed firms must carefully navigate their debt financing decisions, considering the potential impact on key performance indicators such as profitability, growth, and operational efficiency.

This study's outcomes contribute to the broader body of knowledge by enriching our understanding of corporate financial decision-making dynamics in emerging market economies like Vietnam. The results underscore the importance of considering local economic and institutional factors when formulating financial strategies, and they provide valuable insights for academics, practitioners, and policymakers alike. The documented negative link

between debt structure and firm performance serves as a cautionary signal to corporate leaders and financial managers, urging them to exercise prudence and foresight in managing their firms' capital structures.

Moving forward, further research could delve deeper into the underlying mechanisms that drive the observed negative relationship. Additionally, exploring potential moderating factors, such as industry-specific characteristics or changes in economic conditions, could provide a more nuanced perspective on the interplay between debt structure and firm performance. Ultimately, this study contributes to the ongoing dialogue on optimal capital structure decisions and their ramifications for the long-term success and sustainability of Vietnamese listed firms, guiding them toward more informed and effective financial strategies.

Author contributions. The authors contributed equally.

Disclosure statement. The authors do not have any conflict of interest.

References:

1. Almustafa, H., Nguyen, Q. K., Liu, J., & Dang, V. C. (2023). The impact of COVID-19 on firm risk and performance in MENA countries: Does national governance quality matter? *PloS one, 18*(2), e0281148.
2. Beasley, M. S., & Salterio, S. E. (2001). The Relationship between Board Characteristics and Voluntary Improvements in Audit Committee Composition and Experience*. *Contemporary Accounting Research, 18*(4), 539-570. doi:doi:10.1506/RM1J-A0YM-3VMV-TAMV
3. Beck, T., Demirgüç-Kunt, A., & Merrouche, O. (2013). Islamic vs. conventional banking: Business model, efficiency and stability. *Journal of Banking & Finance, 37*(2), 433-447. doi:https://doi.org/10.1016/j.jbankfin.2012.09.016
4. Boyd, J. H., & Smith, B. D. (1999). The use of debt and equity in optimal financial contracts. *Journal of Financial Intermediation, 8*(4), 270-316.
5. Chow, C. W. (1982). The demand for external auditing: Size, debt and ownership influences. *Accounting review, LV11*(2), 272-291.
6. Dang, V. C., Le, T. L., Nguyen, Q. K., & Tran, D. Q. (2020). Linkage between exchange rate and stock prices: Evidence from Vietnam. *The Journal of Asian Finance, Economics, and Business, 7*(12), 95-107.
7. Dang, V. C., & Nguyen, Q. K. (2021a). Determinants of FDI attractiveness: Evidence from ASEAN-7 countries. *Cogent Social Sciences, 7*(1), 2004676.
8. Dang, V. C., & Nguyen, Q. K. (2021b). Internal corporate governance and stock price crash risk: evidence from Vietnam. *Journal of Sustainable Finance & Investment*, 1-18. doi:10.1080/20430795.2021.2006128
9. Dang, V. C., & Nguyen, Q. K. (2022). Audit committee characteristics and tax avoidance: Evidence from an emerging economy. *Cogent Economics & Finance, 10*(1), 2023263.
10. Dang, V. C., Nguyen, Q. K., & Tran, X. H. (2022). Corruption, institutional quality and shadow economy in Asian countries. *Applied Economics Letters*, 1-6.
11. DeAngelo, H., DeAngelo, L., & Whited, T. M. (2011). Capital structure dynamics and transitory debt. *Journal of financial economics, 99*(2), 235-261.
12. Della Seta, M., Morellec, E., & Zucchi, F. (2020). Short-term debt and incentives for risk-taking. *Journal of financial economics, 137*(1), 179-203.
13. Diamond, D. W. (1991). Debt maturity structure and liquidity risk. *The quarterly journal of economics, 106*(3), 709-737.
14. Djembissi, B. (2011). Excessive risk taking and the maturity structure of debt. *Journal of Economic Dynamics and Control, 35*(10), 1800-1816.
15. Elamer, A. A., Ntim, C. G., Abdou, H. A., Owusu, A., Elmagrhi, M., & Ibrahim, A. E. A. (2021). Are bank risk disclosures informative? Evidence from debt markets. *International Journal of Finance & Economics, 26*(1), 1270-1298.
16. Gander, J. P. (2012). Firm debt structure, firm size and risk volatility in US industrial firms. *Applied Financial Economics, 22*(5), 387-393.
17. Ho, T. T., Tran, X. H., & Nguyen, Q. K. (2023). Tax revenue-economic growth relationship and the role of trade openness in developing countries. *Cogent Business & Management, 10*(2), 2213959. doi:10.1080/23311975.2023.2213959
18. Kirch, G., & Terra, P. R. S. (2012). Determinants of corporate debt maturity in South America: Do

institutional quality and financial development matter? *Journal of Corporate Finance, 18*(4), 980-993. doi:https://doi.org/10.1016/j.jcorpfin.2012.05.004
19. Marchica, M. T., & Mura, R. (2010). Financial flexibility, investment ability, and firm value: evidence from firms with spare debt capacity. *Financial Management, 39*(4), 1339-1365.
20. Miller, K. D., & Bromiley, P. (1990). Strategic risk and corporate performance: An analysis of alternative risk measures. *Academy of Management journal, 33*(4), 756-779.
21. Nguyen, Q., & Dang, V. (2020). Audit committee structure and bank stability in Vietnam. *ACRN Journal of Finance and Risk Perspectives, 8*(1), 240-255.
22. Nguyen, Q. K. (2020). Ownership structure and bank risk-taking in ASEAN countries: A quantile regression approach. *Cogent Economics & Finance, 8*(1), 1809789.
23. Nguyen, Q. K. (2021). Oversight of bank risk-taking by audit committees and Sharia committees: conventional vs Islamic banks. *Heliyon, 7*(8), e07798.
24. Nguyen, Q. K. (2022a). Audit committee effectiveness, bank efficiency and risk-taking: Evidence in ASEAN countries. *Cogent Business & Management, 9*(1), 2080622.
25. Nguyen, Q. K. (2022b). Audit committee structure, institutional quality, and bank stability: evidence from ASEAN countries. *Finance Research Letters, 46*, 102369.
26. Nguyen, Q. K. (2022c). Determinants of bank risk governance structure: A cross-country analysis. *Research in International Business and Finance, 60*, 101575. doi:https://doi.org/10.1016/j.ribaf.2021.101575
27. Nguyen, Q. K. (2022d). The impact of risk governance structure on bank risk management effectiveness: evidence from ASEAN countries. *Heliyon*, e11192.
28. Nguyen, Q. K., & Dang, V. C. (2022a). Does the country's institutional quality enhance the role of risk governance in preventing bank risk? *Applied Economics Letters*, 1-4.
29. Nguyen, Q. K., & Dang, V. C. (2022b). The Effect of FinTech Development on Financial Stability in an Emerging Market: The Role of Market Discipline. *Research in Globalization*, 100105.
30. Nguyen, Q. K., & Dang, V. C. (2023). The impact of FinTech development on stock price crash risk and the role of corporate social responsibility: Evidence from Vietnam. *Business Strategy & Development*.
31. Nguyen, Q. K. (2023a). Women in Top Executive Positions, External Audit Quality, and Financial Reporting Quality: Evidence from Vietnam. Journal of Accounting in Emerging Economies. In press.
32. Nguyen, Q. K. (2023b). Macroeconomic Determinants of Economic Growth in Low- and Mid-Income Countries: New Evidence Using a Non-Parametric Approach. Applied Economics Letters. In press.
33. Shan, Y. G. (2019). Managerial ownership, board independence and firm performance. *Accounting Research Journal*.
34. Sun, J., Cahan, S. F., & Emanuel, D. (2009). Compensation committee governance quality, chief executive officer stock option grants, and future firm performance. *Journal of Banking & Finance, 33*(8), 1507-1519.
35. Tao, L., Laixiang, S., & Liang, Z. (2009). State ownership and corporate performance: A quantile regression analysis of Chinese listed companies. *China Economic Review, 20*(4), 703-716.
36. Vafeas, N., & Theodorou, E. (1998). The relationship between board structure and firm performance in the UK. *The British Accounting Review, 30*(4), 383-407.
37. Vithessonthi, C., & Tongurai, J. (2015). The effect of leverage on performance: Domestically-oriented versus internationally-oriented firms. *Research in International Business and Finance, 34*, 265-280.
38. Wang, L.-H., & Fung, H.-G. (2022). The effect of female CEO and CFO on tail risk and firm value. *Finance Research Letters*, 102693.
39. Wei, Z., & Varela, O. (2003). State equity ownership and firm market performance: evidence from China's newly privatized firms. *Global Finance Journal, 14*(1), 65-82.
40. Xu, B., & Zeng, T. (2016). Profitability, state ownership, tax reporting and corporate social responsibility: evidence from Chinese listed firms. *Social Responsibility Journal, 12*(1), 23-31.
41. Yang, P., Riepe, J., Moser, K., Pull, K., & Terjesen, S. (2019). Women directors, firm performance, and firm risk: A causal perspective. *The Leadership Quarterly, 30*(5), 101297.
42. Yasser, Q. R., Al Mamun, A., & Rodrigs, M. (2017). Impact of board structure on firm performance: evidence from an emerging economy. *Journal of Asia Business Studies, 11*(2), 210-228.
43. Ye, K., Zhang, R., & Rezaee, Z. (2010). Does top executive gender diversity affect earnings quality? A large sample analysis of Chinese listed firms. *Advances in Accounting, 26*(1), 47-54.
44. Zhou, F., Fu, Y., An, Y., & Yang, J. (2019). Impacts of Ownership Balance and Nonexecutive Directors on Bank Performance and Risk Taking: Evidence from City Commercial Banks in China. *Global Economic Review, 48*(1), 1-24.
45. Zhou, H., Owusu-Ansah, S., & Maggina, A. (2018). Board of directors, audit committee, and firm performance: Evidence from Greece. *Journal of International Accounting, Auditing and Taxation, 31*, 20-36.