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Strategic Financial and Risk Decisions for Firm Value: Evidence from ASEAN Banks

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ABSTRAK
Penelitian ini bertujuan untuk mengevaluasi dampak struktur modal, risiko kredit, dan risiko strategis terhadap nilai perusahaan perbankan di wilayah ASEAN sekaligus menelaah peran *Capital Adequacy Ratio* (CAR) sebagai variabel mediasi. Penelitian ini menerapkan pendekatan kuantitatif eksplanatori dengan memanfaatkan data panel sekunder yang bersumber dari basis data BANKFOCUS terhadap 78 bank yang terdaftar di bursa pada delapan negara ASEAN selama periode 2020–2024, sehingga menghasilkan 390 observasi. Nilai perusahaan diukur menggunakan Tobin's Q, struktur modal diproksikan oleh *Debt to Asset Ratio* (DAR), risiko kredit oleh *Non Performing Loan* (NPL), dan risiko strategis oleh volatilitas BOPO sebagai indikator *strategic risk*. Analisis data dilakukan dengan menggunakan regresi data panel melalui model *Random Effect*, sedangkan pengujian peran mediasi CAR dilakukan melalui pendekatan *causal steps* dan *sobel test*. Temuan penelitian mengindikasikan bahwa struktur modal dan risiko strategis memiliki pengaruh positif dan signifikan terhadap nilai perusahaan, sementara risiko kredit memberikan pengaruh negatif yang signifikan terhadap nilai perusahaan perbankan di kawasan ASEAN. Selain itu, struktur modal juga terbukti memiliki pengaruh positif yang signifikan terhadap CAR, sementara risiko kredit dan risiko strategis tidak menunjukkan pengaruh signifikan terhadap CAR. Hasil analisis mediasi mengungkapkan bahwa CAR memiliki pengaruh positif yang signifikan terhadap nilai perusahaan dan berfungsi sebagai mediator parsial dalam kaitannya dengan struktur modal, risiko kredit, dan risiko strategis terhadap nilai perusahaan. Riset ini menegaskan pentingnya kecukupan modal dalam memperkuat strategi pendanaan dan pengelolaan risiko guna meningkatkan nilai perusahaan perbankan secara berkelanjutan di kawasan ASEAN.

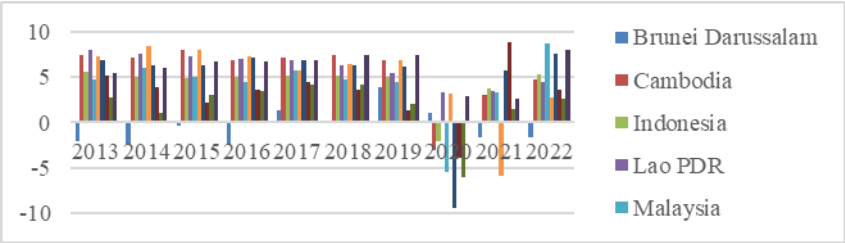
Kata kunci: bank, keuangan, manajemen, risko, strategik

ABSTRACT
This study aims to evaluate the impact of capital structure, credit risk, and strategic risk on the firm value of banks in the ASEAN region, while also examining the role of the Capital Adequacy Ratio (CAR) as a mediating variable. The study employs an explanatory quantitative approach using secondary panel data obtained from the BANKFOCUS database, covering 78 publicly listed banks from eight ASEAN countries over the period 2020–2024, yielding a total of 390 observations. Firm value is measured using Tobin's Q, capital structure is proxied by the Debt to Asset Ratio (DAR), credit risk by the Non-Performing Loan (NPL) ratio, and strategic risk by BOPO volatility as an indicator of strategic risk. The data analysis was conducted using panel data regression employing the Random Effects model, while the mediating role of CAR is tested using the causal steps approach and the Sobel test. The findings indicate that capital structure and strategic risk have a positive and significant effect on firm value, whereas credit risk exerts a significant negative impact on the firm value of banks in the ASEAN region. Furthermore, capital structure is also found to have a positive and significant effect on the Capital Adequacy Ratio (CAR). The mediation analysis results reveal that the Capital Adequacy Ratio (CAR) has a positive and significant effect on firm value and functions as a partial mediator in the relationship between capital structure, credit risk, and strategic risk and firm value. These results emphasize the critical role of CAR in reinforcing financing strategies and strategic risk management to improve sustainable value of banking firms in the ASEAN region.

***Keywords*:** *banking, finance, management, risk, strategic*

INTRODUCTION

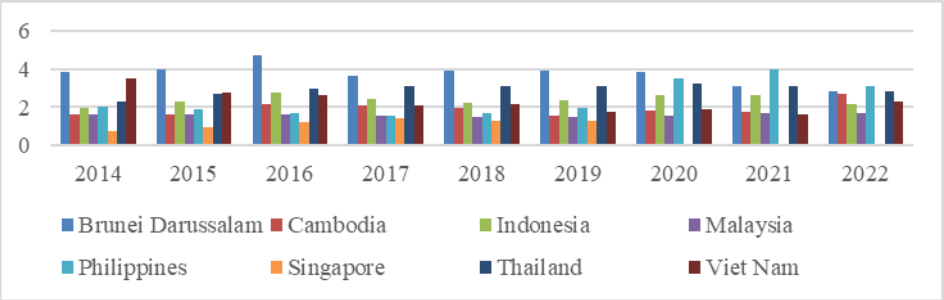
The banking sector in the ASEAN region serves a strategic function in supporting national economic growth. Economic development within ASEAN nations has experienced fluctuations, with several countries showing a tendency toward declining growth during the Covid-19 pandemic. The most severe decline in economic expansion during the timeframe from 2013 to 2022 occurred in 2020, Aligning with the peak period of the Covid 19 outbreak. As illustrated in Figure 1, several ASEAN countries experienced a decline in economic growth rates, encompassing Cambodia, Indonesia, Malaysia, Philippines, Singapore, and Thailand (ASEAN Secretariat, 2023).



Source: ASEAN Statistical Yearbook (2023)

Figure 1.
Rate Economic Growth ASEAN Country

Figure 2 shows that non-performing loan (NPL) performance remained relatively stable during the period 2019–2022, despite the contraction in economic growth during those years (ASEAN Secretariat, 2023). This condition indicates that the banking sector was able to remain resilient and manage credit risk adaptively through the implementation of sound financial strategies and more prudent lending policies. Previous studies have demonstrated that strategic risk management significantly influences the financial soundness of banks; more effective strategic risk management practices contribute to the sustainable improvement of banks' financial health (Mardyaningsih et al, 2025).



Source: ASEAN Statistical Yearbook (2023)

Figure 2.
NPL ASEAN Country

Intensifying competition, rapid technological advancement, ASEAN economic integration, and regulatory requirements that mandate the maintenance of capital structure and risk levels have placed increasing pressure on the banking sector. In the context of capital markets, a firm's performance and future prospects are reflected in firm value, one of which can be measured using Tobin's Q. Empirical studies have found that value of a firm captures both its present financial performance and captures market expectations regarding future profitability and growth (Ananda, 2025) (Hidayat et al, 2022).

Capital structure, as represented through the DAR, reflects the level of leverage used by banks to finance their operational activities. Inappropriate capital structure management may adversely affect financial flexibility and market perceptions of long-term performance. Other empirical studies has shown that capital structure affects firm value through the optimization of capital cost structure (Uddin et al, 2022); (Arhinful et al, 2025a); (Sharma, 2025). Capital structure, as reflected by the Debt to Asset Ratio (DAR), represents the strength of banks' capital in responding to global challenges and

business development. In the banking sector, DAR is one of the key financial ratios used to assess a bank's ability to meet long-term capital adequacy requirements. Strong capital structure management contributes to the enhancement of firm value in both financial performance and overall quality. Previous studies have consistently demonstrated indicating the Capital Adequacy Ratio (CAR), Non Performing Loans (NPL), Good Corporate Governance (GCG), and Return on Assets (ROA) exerts a significant impact on firm value within the banking sector (Sulbahri et al, 2019). However, there are inconsistencies in the literature review findings. Based on the theories presented, there is no definitive consensus regarding whether and to what extent capital structure influences firm value (Kruk, 2021).

Conversely, banking risk especially credit risk captures asset quality and the effectiveness of banks risk management. Elevated levels of non performing loans (NPLs) may diminish profitability and weaken investor confidence (Arhinful et al, 2025b). Empirical evidence suggests that credit risk, proxied by non-performing loans (NPLs), exerts a significant negative impact on bank profitability. This finding confirms that an increase in problem loans reduces banks' ability to generate profits (Sagara-gara & Prasetya, 2025); (Yudha & Nurlaela, 2025). Effective risk management is essential for enhancing firm value, given the diverse risks encountered by banking institutions (Mardyaningsih et al., 2025). Other empirical studies further demonstrate that credit risk, proxied by non-performing loans (NPLs), has a significant negative impact on banking profitability, reinforcing the notion that rising problem loans diminish banks' capacity to generate earnings (Sagara-gara & Prasetya, 2025); (Yudha & Nurlaela, 2025). Several studies also indicate that debt ratios exert a positive influence on corporate profitability and market value, as measured by Tobin's Q (Bui & Nguyen, 2023). Therefore, capital structure represents a critical element for empirical investigation. In addition to capital structure, NPL constitute a key component in assessing credit risk. Previous studies have shown that NPLs negatively impact firm value, suggesting that higher NPL levels are linked to lower firm value (Arhinful et al, 2025b).

The Capital Adequacy Ratio (CAR) plays a vital role in indicating financial strength of a bank's capital. CAR also has the potential to serve as a mediating variable, as capital structure and credit risk influence capital adequacy, which in turn affects firm value. The literature presents mixed findings regarding the factors affecting NPLs and their implications for bank performance and stability, including the role of CAR as a key factor interacting with credit risk and other determinants (Ozili, 2025). Other studies have shown that non-performing loans (NPLs) have a significant negative impact on bank growth and bank size, while the Capital Adequacy Ratio (CAR) moderates this relationship. (Arhinful et al, 2025c). Studi empiris pada bank komersial Bangladesh menemukan bahwa *leverage* dan risiko kredit memainkan peran penting dalam menjelaskan variasi CAR (Naoaj, 2023). In the long term, leverage ratios, liquidity ratios, capital-to-asset ratios, and liquid asset-to-deposit ratios have a positive relationship with the Capital Adequacy Ratio (CAR) that is statistically significant (Gharaibeh, 2023). Other studies indicate a direct correlation between increases in non-performing loans (NPLs) and capital adequacy conditions (CAR) (Thapa et al, 2025). Other studies have found relationships among leverage, NPLs, and CAR within models analyzing profitability, indicating that these variables are interrelated in the context of commercial banks (Uddin, 2022). A different study examined the effect of the Capital Adequacy Ratio (CAR) on systemic risk in Chinese commercial banks, indicating that changes in CAR can mitigate systemic risk. This study also serves as empirical literature linking strategic risk and CAR (Bo, 2024).

An empirical study analyzing banks listed on the Indonesia stock exchange, with firm value proxied by Tobin's Q and CAR as one of the independent variables, which indicated that CAR exerts a significant impact on firm value (Jonardy & Avionita, 2024). Other literature indicates that CAR is considered a significant indicator of capital health for investors and the capital market, thereby influencing firm value through perceptions of risk and financial stability (Jagirani et al, 2023). Research on banks listed on the Indonesia Stock Exchange indicated that the Capital Adequacy Ratio (CAR) has a positive and significant impact on firm value, supporting the hypothesis that banks with higher capital adequacy receive higher market valuations (Wangarry et al, 2023).

Recent research in the banking sector has shifted towards a risk-based approach, emphasizing the role of capital adequacy as a buffer for stability and a driver of long-term value creation. Recent studies highlight that bank firm value is determined not only by profitability but also by funding strategies, asset quality, and capital resilience in response to economic shocks. However, these studies also indicate that it is not only financial risk that affects bank value. Strategic risk, reflecting the

misalignment between a bank's strategy and changes in the business environment, is increasingly regarded as a critical factor in determining long-term resilience. Strategic risk can be quantitatively measured using the volatility of BOPO ratios or ROA, metrics commonly employed in international research. Strategic risk has become a major concern for banks in promoting long-term corporate development. Banks are required to monitor all risks that could lead to reductions in profit or firm value. Evidence shows that strategic risk is effective in ranking systemic financial institutions and can provide early warning signals of financial crises, particularly in identifying high-risk institutions (Brownlees & Engle, 2017). Other studies have shown that strategic risk management directly affects financial health, which in turn impacts firm value (Mardyaningsih et al., 2025). Beyond the banking sector, studies on enterprise risk management (ERM) in industrial firms in Vietnam have shown indicating that the implementation of ERM is strongly and positively associated with firm value (Duong et al., 2020).

Therefore, this study examines how strategic risk, capital structure, and banking risk influence firm value, as well as how CAR mediates these relationships in the rapidly evolving ASEAN banking industry. The role of CAR in mediating the relationship between risk and firm value provides support for the measurement of strategic or systemic risk (SRISK), which may impact firm value through changes in CAR. Consequently, this study focuses on assessing the direct impacts of capital structure, credit risk, and strategic risk on firm value, as well as their effects on ASEAN bank firm value when mediated by CAR.

METHOD

This study is an explanatory quantitative approach, tilizing secondary data to examine causal relationships among strategic financial decisions, banking risk, capital adequacy, and firm value. The research population comprises banks across all ASEAN countries, reflecting the diversity of financial systems and regulatory environments within the region. The sampling technique employed is purposive sampling for the period 2020–2024, with the following inclusion criteria: banks that are publicly listed, serve as parent companies, and have complete financial statements and financial ratios available in BANKFOCUS for the years 2020–2024. A total of 78 samples met these criteria, sourced from eight countries: Indonesia, the Philippines, Vietnam, Thailand, Malaysia, Singapore, Cambodia, and Laos. Two countries Brunei Darussalam and Myanmar, did not meet the sampling criteria due to incomplete data availability. The purposive sampling method guarantees that the selected banks represent the ASEAN banking sector in terms of size, capital structure, and market activity.

Table 1
Variable and Indicator

Variable	Code	Indicator
Firm Value (Dependent Variable)	Y	Tobin's Q is calculated by adding the market value of equity (stock price times the number of outstanding shares) to total debt, and then dividing the sum by total assets.
Capital Structure (Independent Variable)	X1	In terms of the Debt to Asset Ratio (DAR), it reflects the level of leverage.
Credit Risk (Independent Variable)	X2	NPL Ratio: Reflects the likelihood of borrower default and overall credit risk, which has been shown to influence both profitability and firm value in previous studies.
Strategic Risk (Independent Variable)	X3	Captures misalignment between a bank's strategy and business dynamics, measured by operational efficiency volatility (BOPO volatility), which has been increasingly recognized as a proxy for systemic and strategic risk in banking research (Brownlees & Engle, 2017).
CAR (Mediating Variable)	M	Represents a bank's ability to withstand potential losses and serves as a buffer against risk. CAR has been widely employed as a mediating variable in studies linking bank risk to firm performance.

Source: processed data

Based on Table 1 above, this study employs three variables, Capital structure, measured using the Debt to Asset Ratio, serves as the independent variable (DAR), credit risk represented by the Non-Performing Loan (NPL) ratio, and strategic risk represented by BOPO volatility. The dependent variable, firm value, is measured by Tobin's Q, whereas the mediating variable is captured by the Capital Adequacy Ratio (CAR). CAR is considered a mediating variable, supported by previous studies that demonstrate the use of mediation in the link between risk and banks' performance outcomes. The methodological approach applied in this study includes path analysis and the Sobel test

(Safitri et al, 2020). Based on the above reasoning, the empirical research model are proposed as follows:

Model 1: Effect of Independent Variables on Firm Value

$$TQ_{it} = \alpha + \beta_1 DAR_{it} + \beta_2 NPL_{it} + \beta_3 S\_RISK_{it} + \varepsilon_{it}$$

Model 2: Effect of Independent Variables on the Mediating Variable

$$CAR_{it} = \alpha + \beta_1 DAR_{it} + \beta_2 NPL_{it} + \beta_3 S\_RISK_{it} + \varepsilon_{it}$$

Model 3: Mediation Model (Full Model)

$$TQ_{it} = \alpha + \beta_1 DAR_{it} + \beta_2 NPL_{it} + \beta_3 S\_RISK_{it} + \beta_4 CAR_{it} + \varepsilon_{it}$$

This research adopts a quantitative methodology with an explanatory design, aiming to examine the causal relationships among strategic financial decisions, banking risk, capital adequacy, and firm value. This approach is selected because it allows for the analysis of both direct and indirect effects among variables through empirical testing based on secondary data. Data analysis is conducted using STATA software through several stages, including descriptive analysis to summarize each variable, correlation and multicollinearity tests, panel data regression analysis, mediation testing of CAR, as well as classical assumption tests and robustness checks. The selection of the best model is performed using the Chow test and Hausman test (Baltagi, 2021). Furthermore, the role of the Capital Adequacy Ratio (CAR) as a mediating variable is tested using the causal steps approach, as well as the Sobel test and bootstrap mediation (Preacher, 2008).

A robustness check is conducted to ensure the absence of heteroskedasticity and autocorrelation. Subsequently, an in-depth analysis is performed regarding the financial strategies implemented. To mitigate the effect of extreme observations, all financial variables underwent winsorization at the 1st and 99th percentiles. This method is employed to enhance data stability and reliability, reducing potential research bias without eliminating observations. Next, panel data regression analysis is used to examine the relationships among capital structure, credit risk, strategic risk, capital adequacy, and firm value. All three models will be empirically tested, and the results will be compared with the initial hypotheses formulated.

RESULT

Based on the methodology outlined, the initial stage involves descriptive analysis. Following testing in STATA, a total of 390 observations were obtained, comprising five variables. However, some variables exhibited extreme values, which can be attributed to small-scale banks with high leverage levels, resulting in significant differences compared to large-scale banks with relatively stable capital structures. Therefore, winsorization was applied at the 1% and 99% percentile levels. The descriptive statistics after winsorization show improved characteristics of the data distribution. Strategic risk is proxied by BOPO volatility, measured as the standard deviation of BOPO for each bank over the period 2020-2024.

Table 2
Test Results

Variable	N	Mean	Std. Dev.	Min	Max
Tobin's Q (TQ)	390	0,25	0,46	0,02	3,43
Debt to Asset Ratio (DAR)	390	197,12	335,10	1,15	1617,47
Non-Performing Loan (NPL)	390	3,02	2,58	0,01	17,91
BOPO	390	63,52	52,38	27,89	411,60
Strategic Risk (S_RISK)	390	25,58	18,53	7,37	119,23
Capital Adequacy Ratio (CAR)	390	16,91	34,95	0,72	174,05

Source: processed data

The descriptive statistical analysis presented in Table 2 indicates that the mean Tobin's Q is 0.25, with a standard deviation of 0.46, indicating that, in general, ASEAN banks' market values are relatively moderate but exhibit variation across banks influenced by the economic characteristics and financial system stability of each country. The Debt to Asset Ratio (DAR) has a relatively high average, reflecting the leverage-based characteristics of the banking industry. Non-Performing Loans (NPLs) have an average of 3.02%, which remains within regulatory limits, while the average Capital

Adequacy Ratio (CAR) of 25.58% reflects strong capitalization. BOPO volatility, as a proxy for strategic risk, shows considerable variation, indicating differences in operational cost management effectiveness across ASEAN banks.

Banks in Indonesia tend to show moderate to relatively high Tobin's Q values, in line with domestic economic growth and market expectations regarding long-term profitability. Malaysian banks generally exhibit stable Tobin's Q, reflecting a relatively mature market. In Singapore, banks tend to have high Tobin's Q, reflecting international market confidence and the country's reputation as a financial hub. Thai banks show relatively moderate Tobin's Q, influenced by domestic economic dynamics and the real sector. Banks in the Philippines tend to have more fluctuating Tobin's Q, corresponding to dynamic economic growth. Regionally, the variation in descriptive statistics across countries indicates that ASEAN banks' firm value is not solely determined by internal performance but also by the maturity of the financial system, macroeconomic stability, banking regulation effectiveness, and each country's risk management strategies. The generally high CAR across ASEAN banks indicates strong capitalization, enabling banks to mediate the impact of capital structure and risk on firm value.

Table 3
Testing Model 1 Random Effect

Variable	Coefficients	Std. Error	z-Stat	p-value
DAR	0,0004184	0,0000873	4,79	0,000
NPL	-0,0195741	0,0084352	-2,32	0,020
S_RISK	0,0034398	0,0010693	3,22	0,001
Konstanta	0,1692298	0,0465347	3,64	0,000

Source: processed data

The estimation of Model 1 using the Random Effects model shows that, simultaneously, the variables DAR, NPL, and strategic risk (SRISK) significantly affect the firm value of ASEAN banks, as indicated by a Wald chi² value of 44.69 with a probability of 0.000. This suggests the results indicate that the regression model is suitable for explaining variations in firm value. The Debt to Asset Ratio (DAR) coefficient is positive and statistically significant at 0.0004184, with a z-value of 4.79 and a p-value of 0.000. This indicates that an increase in bank leverage is still positively perceived by the market. In the ASEAN banking industry, increased utilization of debt-based funds can be productively employed to drive asset growth and enhance firm value. The estimated coefficient for Non Performing Loans (NPL) is negative at -0.0195741, with a z-value of –2.32 and a p-value of 0.020 (<0.05). This result shows that higher levels of non-performing loans negatively affect firm value. Elevated NPLs reflect declining asset quality and increased default risk, thereby undermining investor confidence in the bank's performance and future prospects.

Strategic Risk (SRISK) is proxied by BOPO volatility, SRISK has a positive and significant coefficient of 0.0034398, with a z-value of 3.22 and a p-value of 0.001 (<0.01). This indicates that dynamics and variations in operational cost management across banks reflect adaptive managerial strategies in responding to changes in the business environment. Strategically managed BOPO volatility can be considered a long-term efficiency effort, thereby positively impacting firm value. Based on these results, Model 1 provides empirical evidence that capital structure, credit quality, and strategic risk are important determinants of bank corporate value within the ASEAN region.

Table 4
Testing Model 2 Random Effect

Variable	Coefficients	Std. Error	z-Stat	p-value
DAR	0,0312722	0,002826	11,06	0,000
NPL	-0,3236642	0,306430	-1,06	0,291
S_RISK	0,0208530	0,029943	0,7	0,486
Konstanta	20,04346	1,386622	14,45	0,000

Source: processed data

The estimation of Model 2 using the Random Effects model shows a Wald chi² value of 140.85 with a probability of 0.000, indicating that, simultaneously, DAR, NPL, and strategic risk (SRISK) significantly affect the Capital Adequacy Ratio (CAR). This demonstrates that the model is suitable for explaining variations in bank capital adequacy across the ASEAN region. Findings indicate that DAR exhibits a positive and significant coefficient of 0.0312722, with a z-value of 11.06 and a p-value of 0.000 (<0.01), indicating that higher bank leverage is associated with a higher Capital Adequacy Ratio (CAR). This finding reflects that ASEAN banks tend to offset debt-based asset growth with strengthened capitalization, either through retained earnings or other capital strategies, to ensure compliance with banking regulatory requirements. In contrast, NPL has a negative coefficient of –0.3236642 but is not statistically significant, with a z-value of –1.06 and a p-value of 0.291 (>0.05). This suggests that, although theoretically an increase in non-performing loans could exert pressure on bank capital due to higher provisioning requirements, in the context of ASEAN banking, this effect is not strong enough to directly influence CAR. This may be due to relatively controlled NPL levels as well as effective risk management policies and regulatory support.

Furthermore, strategic risk (SRISK) shows a positive coefficient of 0.020853 but is not statistically significant, with a z-value of 0.70 and a p-value of 0.486 (>0.05). This finding indicates that variations in strategic risk, as reflected by BOPO volatility, do not have a direct impact on capital adequacy. It suggests that strategic risk primarily affects bank performance and market value rather than capital decisions, which are generally more structural and tightly regulated. In conclusion, the results of Model 2 confirm that funding structure (DAR) is the main determinant of CAR, while credit quality (NPL) and strategic risk do not yet exhibit a significant direct effect on the capital adequacy of ASEAN banks.

Table 5
Testing Model 3 Random Effect

Variable	Coefficients	Std. Error	z-Stat	p-value
DAR	0,0002286	0,0000849	2,69	0,007
NPL	-0,0195848	0,0078821	-2,48	0,013
S_RISK	0,0029608	0,0009603	3,08	0,002
CAR	0,0093598	0,0012521	7,48	0,000
Konstanta	-0,0246846	0,0494821	-0,5	0,618

Source: processed data

Model 3 is used to analyze the effect of capital structure (DAR), credit risk (NPL), and strategic risk on firm value (Tobin's Q) by incorporating CAR as a mediating variable. Based on the Random Effects estimation, the model yields a Wald chi² value of 112.26 with a probability of 0.000, indicating that the model is overall significant and suitable for further analysis. The results presented in Table 5 show that DAR has a positive coefficient of 0.0002286, with a z-statistic of 2.69 and a p-value of 0.007. This indicates that, after accounting for the mediating role of CAR, bank leverage continues to contribute positively and significantly to firm value. In other words, debt-based funding is still positively perceived by the market as long as it is supported by adequate capital, supporting Hypothesis 8. NPL has a negative coefficient of –0.0195848, with a z-statistic of –2.48 and a p-value of 0.013. This confirms that credit risk continues to negatively affect firm value even when mediated by CAR. The finding demonstrates that higher levels of non-performing loans have a direct negative impact on investor confidence in banks, thereby supporting Hypothesis 9, which demonstrates a negative effect.

Strategic risk (SRISK), proxied by BOPO volatility, has a positive coefficient of 0.0029608 after mediation by CAR, with a z-statistic of 3.08 and a p-value of 0.002, indicating a positive and statistically significant effect on Tobin's Q, supporting Hypothesis 10. The finding suggests that strategically managed operational efficiency dynamics reflect managerial adaptability, conveying a positive signal to investors. Meanwhile, CAR as the mediating variable shows a positive coefficient of 0.0093598, with a z-statistic of 7.48 and a p-value of 0.000, indicating a positive and significant effect on firm value. This confirms that strong capitalization enhances investor confidence while strengthening the stability and resilience of banks.

Table 6
Hypotesis Test Result

Hypotesis	Relationships between Variables	Model	z-Stat	P-value	Decision
H1	DAR → Tobin's Q	Model 1	4,79	0,000	Accepted
H2	NPL → Tobin's Q	Model 1	-2,32	0,020	Accepted
H3	Strategic Risk → Tobin's Q	Model 1	3,22	0,001	Accepted
H4	DAR → CAR	Model 2	11,06	0,000	Accepted
H5	NPL → CAR	Model 2	-1,06	0,291	Rejected
H6	Strategic Risk → CAR	Model 2	0,7	0,486	Rejected
H7	CAR → Tobin's Q	Model 3	7,48	0,000	Accepted
H8	DAR → Tobin's Q (via CAR)	Model 3	2,69	0,007	Partial Mediation
H9	NPL → Tobin's Q (via CAR)	Model 3	-2,48	0,013	Partial Mediation
H10	Strategic Risk → Tobin's Q (via CAR)	Model 3	3,08	0,002	Partial Mediation

Source : Processed Data

Overall, as presented in Table 6, the findings of this study suggest that the firm value of ASEAN banks is significantly influenced by capital structure, credit risk, and strategic risk, both directly and through capital adequacy. The Capital Adequacy Ratio (CAR) is proven to act as a partial mediator, strengthening the effects of leverage and strategic risk on firm value, yet it is not sufficient to fully mitigate the negative impact of credit risk. These findings emphasize the importance of balancing funding strategies, risk management, and capital strengthening to enhance the firm value of banks in the ASEAN region.

The positive and meaningful influence of the Debt to Asset Ratio (DAR) on firm value suggests that, when banks employ debt efficiently, the market perceives this leverage as a strategic tool to expand operations and achieve higher returns. These findings support the trade-off theory, indicating that firm value can be maximized at an optimal debt level by taking advantage of tax shields while maintaining manageable financial risk. Conversely, the negative impact of Non-Performing Loans (NPL) highlights the critical role of credit quality in shaping investor perceptions. Higher NPLs signal deteriorating asset quality and heightened default risk, which can undermine market confidence and reduce the attractiveness of bank stocks. This emphasizes the need for proactive credit risk management and robust monitoring systems to mitigate potential losses and maintain investor trust. The positive effect of strategic risk (S_RISK) on firm value indicates that banks capable of strategically managing operational volatility are perceived as more adaptive and resilient by the market. These findings highlight that strategic risk management is more than just a defensive mechanism but also a source of competitive advantage that can enhance long-term value creation.

Furthermore, the mediating role of CAR emphasizes the significance of maintaining capital buffers to bolster investor confidence. CAR enhances the positive impact of leverage and strategic risk, its inability to fully counteract the negative effects of credit risk suggests that regulatory capital alone is not sufficient to neutralize all operational risks. This highlights the need for integrated risk management approaches that combine strong capitalization with effective credit monitoring and strategic planning. Regionally, these findings reflect the heterogeneity of ASEAN banking markets, where variations in regulatory frameworks, economic stability, and market maturity affects the relationships among capital structure, risk management, and firm value. Policymakers and bank managers should consider both country-specific and bank-specific factors when designing strategies to optimize firm value.

CONCLUSION

Based on the empirical testing of banks in the ASEAN region during the period 2020–2024, this study concludes that capital structure, credit risk, and strategic risk are key determinants of bank firm value, through both direct effects and the mediating influence of capital adequacy. Capital structure, measured by the Debt to Asset Ratio (DAR), exerts a positive and significant effect on firm value, suggesting that leverage continues to be favorably viewed by the market when managed effectively and within a prudent regulatory framework. In contrast, credit risk, measured by Non-Performing Loans (NPL), exhibits a significant negative effect on firm value, suggesting that an increase in non-performing loans consistently reduces investor confidence and reflects a deterioration

in the quality of banking assets. Meanwhile, strategic risk, proxied by BOPO volatility, plays a significant and favorable role in determining firm value, indicating that operational efficiency managed adaptively can be perceived as a signal of managerial capability in responding to changing business environments.

Furthermore, the findings show that the Capital Adequacy Ratio (CAR) plays a crucial role in the mechanism of value creation for banks. DAR positively and significantly affects CAR, indicating that increases in leverage are offset by strengthened capitalization to maintain stability and regulatory compliance. However, NPL and strategic risk do not have a significant effect on CAR, suggesting that bank capitalization decisions are more influenced by structural policies and regulatory requirements than by short-term risk fluctuations. In the mediation model, CAR has a positive and significant effect on firm value and functions as a partial mediator in the relationship between capital structure, credit risk, and strategic risk on firm value. This partial mediation indicates that while capital adequacy can strengthen the positive influence of capital structure and strategic risk on firm value, it is not yet sufficient to fully offset the negative impact of credit risk on the market value of banks.

Overall, these findings confirm that the firm value of ASEAN banks is determined not only by current financial performance but also by the quality of risk management, funding strategies, and capital resilience. CAR functions as both a stability buffer and a risk transmission mechanism affecting firm value; however, its effectiveness depends on the characteristics of the risks faced. Therefore, the policy implications of this study emphasize the importance of integrating funding strategies, strategic risk management, and sustainable capital strengthening to enhance the resilience and long-term value of banks amidst the dynamic economic environment in the ASEAN region.

Additionally, the study highlights that bank managers and regulators should prioritize not only the optimization of capital structure but also proactive monitoring of credit risk and strategic risk alignment. Strengthening internal governance, improving operational efficiency, and maintaining adequate capitalization are essential for sustaining investor confidence and ensuring financial stability. Finally, these results suggest that strategic interventions, such as adaptive risk management practices and regulatory support for capital adequacy, can provide ASEAN banks with competitive advantages in both regional and global markets, supporting sustainable growth and value creation over the long term.

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