

How Does Economic Uncertainty Impact the Banking Sector Performance? Evidence from ASEAN



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ABSTRACT

In recent years, global economic uncertainty has become a growing concern, particularly with the outbreak of the COVID-19 pandemic. Increased economic uncertainty significantly constrains bank risk, at some point weakening bank stability. This study examines and analyses solvency and liquidity on the firm performance of banking sector in ASEAN countries in the 2013-2022 period by economic uncertainty as a moderating variable. The samples obtained amounted to 1080. The results show that liquidity and economic uncertainty negatively affect firm performance. Solvency does not affect firm performance. Economic uncertainty as a moderation variable cannot moderate the effect of solvency on firm performance. Still, economic uncertainty can moderate (strengthen) the effect of liquidity on firm performance. This research contributes to developing strategies and policies to help firms thrive in uncertain economic environments. This knowledge helps businesses adapt, make informed decisions, develop resilience, and enhance their competitive advantage.

1. INTRODUCTION

The banking sector is an important part of modern economies because it facilitates capital allocation, increases market liquidity, and controls risk. Furthermore, Banks can encourage long-term economic growth and development (Wu et al., 2021). However, economic uncertainty, such as volatile macroeconomic conditions, policy upheavals,

How Does Economic Uncertainty Impact the Banking Sektor Performance? Evidence from ASEAN

financial crises, and geopolitical conflicts, considerably influences banking institutions' stability and performance (Shabir et al., 2023).

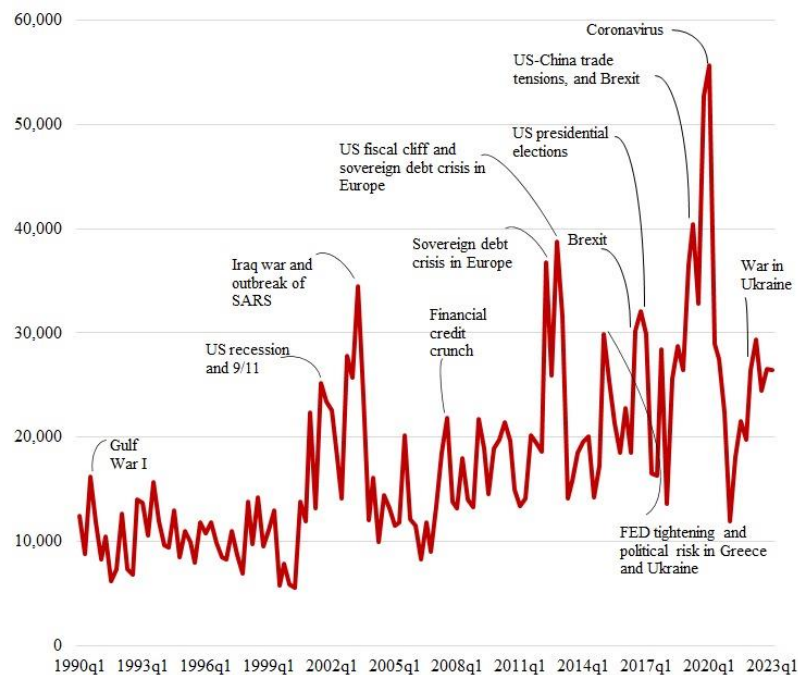
Financial distress occurs when a bank is illiquid and or insolvent. Illiquidity and insolvency directly affect the firm's operating activities and, consequently, its performance. Liquidity refers to a firm's ability to pay its short-term liabilities. A firm that has good liquidity is a firm that is capable of raising cash as quickly as possible by selling its current assets without any significant decrease in the value of the assets when the short-term debt is due. Liquidity is the ratio of current assets to short-term liabilities. On the other hand, solvency means a firm ability to pay off all its long-term liabilities (Yeo, 2016). A solvent firm has a positive net worth and a manageable debt. A firm with adequate liquidity may have enough cash to pay its debts but may still be on the verge of bankruptcy. Healthy firms are both solvent and possess adequate liquidity.

During crisis periods, such as the 2007-2008 economic downturn and the COVID-19 pandemic, the values of financial institutions plummeted substantially. It was mostly due to a lack of liquidity in their assets that affected the firm's solvency. Most financial institutions have assets susceptible to liquidity risks, such as corporate debt and over-the-counter derivatives (Chang et al., 2022). Even a robust firm might encounter a liquidity crisis if the settings make it difficult to meet short-term liabilities. A liquidity injection may resolve a firm-specific liquidity crisis if the firm is solvent. Insolvency, on the other hand, implies a more significant underlying problem that takes longer to resolve, and it may need significant adjustments and fundamental reorganization of a firm's activities. An insolvent firm's management must make difficult decisions to decrease debt, such as shutting facilities, selling assets, and laying off employees (Yeo, 2016).

In recent years, global economic uncertainty has become a growing concern, particularly with the outbreak of the COVID-19 pandemic. Figure 1 shows increased economic uncertainty from 1990 – 2022; the highest increase occurred during the COVID-19 pandemic. According to Goodell & Goutte (2021), Global economic uncertainty has detrimental effects on global micro and macroeconomics. All nations throughout the world will confront economic uncertainty during the COVID-19 pandemic. Economic uncertainty will reduce investment and employment, as well as decelerate the recovery process; it will also have a substantial influence on financial intermediaries, particularly bank loan pricing, credit growth, and bank stability (Karadima & Louri, 2021; Phan et al., 2021). The rising

economic uncertainty slows bank loan growth, narrows interest rate spreads, and increases risk then encourages banks to raise capital holdings (Demir & Danisman, 2021; Wu et al., 2021). Similarly, Shabir et al. (2023) found that increased economic uncertainty significantly constrains bank risk, at some point weakening bank stability.

Figure 1. World Economic Uncertainty Index (WUI)



Studies within liquidity, solvency, uncertainty, and firm performance topics are highly studied by the researchers. Some of them have studied the liquidity and solvency effect on the firm performance (Batrancea, 2021; Chang et al., 2022; Chen et al., 2017; Fungacova et al., 2021; Sakouvogui & Shaik, 2020; Yeo, 2016). Others have studied the impact of uncertainty on the firm performance (Bilgin et al., 2021; Demir & Danisman, 2021; Karadima & Louri, 2021; Phan et al., 2021; Shabir et al., 2023; Wu et al., 2021; Zhou et al., 2022). However, there is a limited study that uses economic uncertainty as a moderating variable that affects the relationship between liquidity, solvency, and firm performance. This study will give a new point of view on how an external factor, such as economic uncertainty, indirectly affects the firm performance. This study used the World Economic Uncertainty Index (WUI) established by Ahir et al. (2022) as a proxy for economic uncertainty. WUI is computed by counting the occurrences of the word

“uncertainty” in the economic intelligence unit nation's quarterly reports. This indicator reflects a broader perspective on political and economic uncertainty in both near and long-term concerns (Demir & Danisman, 2021). This study examines and analyses solvency and liquidity on the performance of banking sector firms in ASEAN countries by integrating economic uncertainty in 2013-2022.

This research is expected to contribute both theoretically and practically. Theoretically, this research can provide a better understanding of the complex interactions between external factors, such as economic uncertainty, and internal factors, such as liquidity and solvency, to the firm performance. Practically, this research also contributes to developing strategies and policies that help firms thrive in uncertain economic environments. The relationship between economic uncertainty, liquidity, solvency, and firm performance can offer valuable insights for businesses to adapt and thrive in an ever-changing economic landscape. It enables firms to make informed decisions, develop resilience, and enhance their competitive advantage.

2. LITERATURE REVIEW AND HYPOTHESIS

Signaling Theory

Signaling theory was first proposed by Spence (1973). It is a concept in economics and information theory that explores how individuals, organizations, or entities with asymmetric information can use signals to communicate or convey information to other parties. The central idea of signaling theory is based on the premise that in many situations, individuals or entities possess private or hidden information about their characteristics, abilities, or intentions that are not directly observable by others. This information asymmetry can lead to suboptimal decision-making and inefficiencies in various economic and social interactions.

In the context of decision-making, signaling theory is often used to explain how individuals or organizations can use signals or information to make informed decisions when asymmetric information is present. Asymmetric information means that one party in a transaction has more or better information than another. Signaling theory helps to understand how the party with the better information can convey that information credibly to the other party. Credible and consistent signals can build trust and confidence, attracting investment and support that improves firm performance over time. Conversely, inconsistent or misleading

signals can lead to mistrust and hinder a firm's ability to achieve its performance goals (Bustani, 2020).

Signaling theory can be applied to the context of bank profitability to understand how banks communicate their financial health and performance to stakeholders, particularly investors, regulators, and depositors. Banks use various signals to convey their profitability, risk management practices, and ability to generate sustainable returns. These signals are crucial in shaping perceptions and influencing decisions in the financial markets and among stakeholders. Signaling theory helps to shed light on how individuals and firms can use signals to navigate economic uncertainty and mitigate its effects. Bank profitability must be preserved for financial stability and economic prosperity. Adequately capitalized financial intermediaries accomplish this and retain earnings necessary for bank capital. A thriving banking sector is critical for keeping credit available to businesses and individuals, encouraging long-term economic growth. The net interest margin (NIM) measures a bank's deposit storage and loan-making efficiency. It has been studied extensively since Ho and Saunders' work, indicating a bank's ability to set loan pricing above interest expenditures. However, financial institutions have become less reliant on NIM, which has contracted during financial instability. Banks' exposure increases during crises, impacting their financial and economic vulnerability (Angori et al., 2019).

Hypothesis Development

Solvency and Firm Performance

Solvency refers to a firm's ability to meet its long-term financial obligations, including debt payments and other obligations that extend beyond the next year (Yeo, 2016). A higher solvency ratio indicates a greater ability to cover long-term liabilities with its resources, positively impacting overall firm performance. A higher solvency ratio implies a lower level of financial risk, as a firm has less interest expense to cover, reducing the burden on its cash flows and freeing up resources for reinvested business, research, development, or shareholder distribution (Batrancea, 2021). Firms with strong solvency ratios are generally viewed as less risky by investors and lenders, leading to a lower cost of capital and improved access to capital (Dahiyat, 2016). A higher solvency ratio also provides greater flexibility in making strategic decisions, allowing the firm to pursue growth opportunities, make capital investments, and undertake mergers and acquisitions without the immediate pressure of

servicing high debt levels (Sakouvogui & Shaik, 2020). Given these points, a strong solvency ratio increases profitability and enhances firm performance.

H₁: The higher the solvency ratio, the higher the firm performance

Liquidity and Firm Performance

The role of banks' liquidity in the financial crisis has been subject to substantial attention. Liquidity is a crucial financial concept indicating a firm's ability to meet short-term obligations quickly without significant loss of value. A higher ratio indicates a better liquidity position. The liquidity ratio has a varying relationship with performance. Liquidity is crucial for a firm's short-term financial stability and efficiency, but excessive focus on liquidity can negatively impact performance. Balancing liquidity with other business aspects is essential. Excess liquidity refers to a firm's excessive investment in low-yielding, highly liquid assets, potentially limiting opportunities for capital expansion, innovation, and market penetration (Fungacova et al., 2021). High liquidity may undermine supply chain optimization, effective inventory management, and customer credit terms, while poor management can increase costs and reduce operational efficiency. As a result, a firm's return on assets (ROA) may decline due to decreased returns from core operations or income-generating activities, resulting in lower profits (Dahiyat, 2016).

Focusing on liquidity preservation may hinder strategic investments in research & product development and market expansion, resulting in underinvestment and stifling innovation and competitiveness (Cron, 2022). Suppose a firm heavily relying on internal funds or short-term debt will have limited access to long-term financing and negatively impact performance because of increased borrowing costs, restricted growth prospects, and reduced financial flexibility. Excessive liquidity indicates a firm's inability to generate sustainable returns, potentially causing lower valuation, reduced investor confidence, and a potential stock price decline (Sakouvogui & Shaik, 2020).

H₂: The higher the liquidity, the lower the firm performance

Economic Uncertainty and Firm Performance

When economic uncertainty arises, firms often face more significant challenges, risks, and obstacles, leading to lower performance. Economic uncertainty causes risks to businesses' operations and profitability since it may result in decreased demand for their goods, postponed

investments, increased cash retention, and a fall in debt and equity issues (Gao & Tsusaka, 2023). In times of greater uncertainty, banks typically limit loan growth, take on more credit risk, and impose higher lending rates (Dang & Nguyen, 2022). Economic uncertainty can result in less investment, less consumer spending, more expenses, and less access to financing (Iqbal et al., 2020). Firms might call off investments in new projects, research, and development, resulting in a decline in performance over time. Consumers may also reduce their spending, resulting in a drop in firm sales. Increased expenses may arise from higher loan interest rates or higher raw material costs, reducing profitability and overall business performance. Furthermore, lenders may be less reluctant to lend to riskier businesses, making it more difficult for businesses to fund new projects or expand operations.

Previous studies have shown the impact of economic uncertainty on firm performance. Wu et al. (2021) found that economic uncertainty slows bank growth, narrows interest rate spreads, and increases risk but encourages banks to increase capital holdings. Similarly, Tran et al. (2021) stated that high economic uncertainty increases banks' funding structure, with an increase in economic policy uncertainty raising funding structure for low-funding structure banks but negatively affecting high-funding structure banks. Shabir et al. (2023) found that economic and geopolitical uncertainty significantly constrains bank risk and worsens stability. Bank stability is more immune to uncertainty in listed, domestic, and private-owned banks.

H₃: The higher the economic uncertainty, the lower the firm performance

Economic Uncertainty, Solvency, and Firm Performance

The impact of solvency on firm performance can be strengthened by economic uncertainty. When economic uncertainty rises, lenders and investors become more cautious. Firms with weaker solvency may face challenges securing financing or may have to accept higher borrowing costs. In contrast, financially solvent firms are more likely to maintain access to capital at reasonable rates, which can support their ongoing operations and investment plans, contributing to better performance (Çolak et al., 2020).

Firms with high solvency ratios are more likely to endure through economic cycles and challenging market conditions, as their ability to cover long-term obligations from internal resources reduces the default risk. This long-term viability contributes to the firm's credibility, reputation, and ability to secure long-term contracts and partnerships, positively impacting its

performance (Çolak et al., 2020). When a firm uses solvency effectively during economic uncertainty, it can magnify its returns on equity. This is because the cost of debt is often lower than the expected return on investment, especially during periods of low-interest rates. By borrowing to fund growth or strategic investments, a firm can potentially enhance its profitability and overall performance (Favara et al., 2021).

H4: Economic uncertainty strengthens the impact of solvency on firm performance

Economic Uncertainty, Liquidity, and Firm Performance

Economic uncertainty can create conditions where excess liquidity can have a negative impact on firm performance. It is essential for firms to strike a balance between maintaining an appropriate level of liquidity for risk management and taking strategic actions to ensure that their resources are deployed efficiently and effectively to enhance performance, especially in uncertain economic environments. High liquidity levels often mean that a firm holds significant assets in cash or cash equivalents. During periods of economic uncertainty, the opportunity cost of holding excess cash can become more pronounced. The firm may miss out on potentially profitable investments or expansion opportunities because it is overly conservative with its cash holdings (Batrancea, 2021).

A previous study from Sakouvogui & Shaik (2020) found that commercial and domestic banks' financial liquidity negatively impacts their cost efficiency during the financial crisis, with contagion contributing to this decline. Liquidity buffers against unexpected financial shocks and disasters. Firms often prioritize building up their liquidity positions as a defensive measure during economic uncertainty. But, while building up their liquidity, firms may opt to conserve cash and delay investment in growth initiatives, expansion, or research and development projects. While this may provide short-term stability, it can hinder long-term growth potential and competitiveness. Delayed investments can result in missed opportunities and stagnant performance. Based on signaling theory, investors can capture this as a bad signal that the firm is not investing. Holding excessive liquidity can also result in underutilized assets. Cash and highly liquid assets typically yield lower returns than investments in the core business or other income-generating activities. This can lead to lower overall profitability and reduced net interest margin (Chang et al., 2022).

H5: Economic uncertainty strengthens the impact of liquidity on firm performance

3. RESEARCH METHOD

This research uses quantitative data collected from banking sector firms in ASEAN Countries from 2013 to 2022. The sample was collected using a purposive sampling technique with the criteria used: 1) Banking sector firms in ASEAN Countries in the 2013-2022 period, 2) Banking firms that consistently publish annual reports in 2013-2022, 3) Banking firms that have complete data used in the study.

Table 1. Sampling Criteria

No	Criterion	Total
1	Banking sector firms in ASEAN Countries in the period 2013-2022	117
2	Banking firms that did not consistently publish annual reports in 2013-2022	(2)
3	Banking firms that do not have complete data used in the study	(7)
Number of research sample firms		108
Total research data (108 x 10 years)		1080

Table 2 shows the measurement of research variables. This study's dependent variable is firm performance proxied with net interest margin. Independent variables of this study are solvency using a solvency ratio proxy and liquidity using a current ratio proxy. This study uses the world uncertainty index proxy to integrate economic uncertainty as a moderation variable.

Table 2. Variables Measurement

Variables	Proxy	Measurement	Sources
Firm Performance	Net Interest Margin (NIM)	$NIM = \frac{\text{Interest Received} - \text{Interest Paid}}{\text{Average Invested Assets}}$	Ross et al. (2022)
Solvency	Solvency Ratio (SR)	$SR = \frac{\text{Total Shareholder Equity}}{\text{Total Assets}}$	Ross et al. (2022)
Liquidity	Current Ratio (CR)	$CR = \frac{\text{Current Asset}}{\text{Current Liability}}$	Ross et al. (2022)
Economic Uncertainty	World Economic Uncertainty Index (WUI)	WUI = Average of Quarterly World Uncertainty Index	Ahir et al. (2022)

The dataset was analyzed using panel data and moderated regression analysis (MRA). The stages in moderated regression analysis consist of 1) determining the estimation model, 2) method, and 3) hypothesis testing. The three-panel regression approaches (estimation model) that will be used are the ordinary least square (OLS) or common effect model, fixed effect model, and random effect model. It is necessary to do the Chow and Hausman tests with regression analysis estimation techniques. The data processing tool used in this study was Eviews version 12. The research analysis model is presented with the following formula:

$$NIM_{it} = \beta_0 + \beta_1 SR_{it} - \beta_2 CR_{it} - \beta_3 WUI_{it} + \beta_4 SR_{it} * WUI_{it} + \beta_5 CR_{it} * WUI_{it} + e_{it}$$

4. RESULTS AND DISCUSSIONS

Testing the Assumptions of the Regression Model

First, the descriptive statistics of firm performance (NIM), solvency (SR), liquidity (CR), and economic uncertainty (WUI) presented in Table 3 are examined within the scope of the analysis. The firm value ranged from -0,068500 to 0,272200 with an average value of 0,040691 and a standard deviation of 0,025700. The mean of the solvency variable is 0,135207 with a standard deviation equal to 0,086743. The liquidity variable has 0,230350 means, with 0,213892 standard deviation. The mean of the economic uncertainty variable with the world economic uncertainty index (WUI) proxy is 0,134952, while the standard deviation is 0,086251.

Table 3. Descriptive Statistics

Variables	N	Mean	Maximum	Minimum	Std. Dev.
NIM	1080	0,040691	0,272200	-0,068500	0,025700
SR	1080	0,135207	0,888900	0,031200	0,086743
CR	1080	0,230350	3,478800	0,041700	0,213892
WUI	1080	0,134952	0,384456	0,000000	0,086152

Source: Output Eviews12 (2023)

The Chow and the Hausman tests are performed to select the appropriate estimator in the regression analysis. The Chow test selects the best model between the fixed effect model and the common effect model. This result can be seen in Table 4. If the probability value < 0,05, then choose the fixed effect model. If the probability value > 0,05, then choose the common effect model.

Table 4. Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	23,449979	(112,960)	0,0000
Cross-section Chi-Square	1418,135992	112	0,0000

Source: *Output Eviews12 (2023)*

Table 4 shows the Chow test statistics probability value is 0,0000, indicating that the probability value is less than 0,05 ($0,0000 < 0,05$). Therefore, the model selected in the Chow test is a fixed effect model. Next, the Hausman test is carried out to select between the fixed effect model and the random effect model. The fixed effect model is chosen if the probability value $< 0,05$. If the probability value $> 0,05$, then choose the random effect model.

Table 5. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	62,231167	3	0,0000

Source: *Output Eviews12 (2023)*

Table 5 shows the Hausman test statistics probability value is 0,0000, indicating that the probability value is less than 0,05 ($0,0000 < 0,05$). The model selected in the Hausman test is a fixed effect model, so the test has been completed. After the test, the selected panel data regression model is a panel data regression model with a fixed effect model (FEM).

Hypothesis Testing

Coefficient of Determination (R²) Test

Table 6 shows the value of the coefficient of determination (R²) is equal to 0,766529. The results of the coefficient of determination show that variations of the dataset of solvency, liquidity, and economic uncertainty can explain 76,66% of the variation of firm performance and 23,34% explained by other factors outside the model.

Table 6. Coefficient of Determination (R²) dan F-Test

R-squared	0,766529	Mean dependent var	0,040691
Adjusted R-squared	0,738015	SD dependent var	0,025700
SE of regression	0,013155	Sum squared resid	0,165777
F-statistic	26,88279	Durbin-Watson stat	0,920038
Prob(F-statistic)	0,000000	Log Likelihood	3195,849

Source: *Output Eviews12 (2023)*

F-Test (Simultaneous Test)

Table 6 shows that the F statistical test produces an F-statistic probability value of 0.00000, which means the value is less than 0,05 ($0,00000 < 0,05$). An F-statistic probability value smaller than 0,05 indicates that solvency, liquidity, and economic uncertainty simultaneously affect firm performance.

Moderated Regression Analysis (MRA)

The Fixed Effect Model (FEM) is the most appropriate in this study. Panel-data regression equation with economic uncertainty being a moderating variable can confirm the effect of solvency and liquidity on firm performance that can be expressed as follows:

Table 7. MRA Statistical Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	0,046908	0,002035	23,05109	0,0000
SR	0,020128	0,025139	1,329570	0,1840
CR	-0,037012	0,007260	-5,098270	0,0000
WUI	-0,027692	0,012177	-2,274173	0,0232
SR*WUI	0,028410	0,090336	0,315597	0,7532
CR*WUI	0,087686	0,041878	2,093850	0,0365

Source: *Output Eviews12 (2023)*

If the probability value $< 0,05$, then the independent variable partially has a significant effect on the dependent variable. Table 7 shows that the probability value of the solvency ratio (SR) variable is more than 0,05 ($0,1840 < 0,05$) with a t-statistic value of 1,329570, so it can be concluded that solvency does not have a significant effect on firm performance. Thus, **H₁ is rejected**. The liquidity (CR) variable shows a probability value of 0,0000 ($0,0000 < 0,05$) with a t-statistic value of -5,098270. Economic uncertainty (WUI) also shows a probability value of 0,0232 ($0,0232 < 0,05$) with a t-statistic value of -2,274173 so that it can be concluded that liquidity and economic uncertainty negatively affect firm performance. Thus, **H₂ and H₃ are accepted**.

Considering the result of the moderating variable test in Table 7, the p-value of the interaction between solvency (SR) and economic uncertainty (WUI) is $0,7532 > 0,05$, with a t-statistic of 0,315597 meaning that there is no significant effect. Thus, it can be concluded that economic uncertainty cannot moderate the effect of solvency on firm performance.

Thus, **H₄ is rejected**. Table 7 also shows the p-value of the interaction between liquidity (CR) and economic uncertainty (WUI) is $0,0365 < 0,05$, with a t-statistic of 2,093850, meaning that economic uncertainty moderates (strengthens) the effect of liquidity on firm performance; thus, **H₅ is accepted**. The equation can be written as follows:

$$NIM_{it} = 0,046908 + 0,020128SR_{it} - 0,037012CR_{it} - 0,027692WUI_{it} + 0,028410SR_{it}*WUI_{it} + 0,087686CR_{it}*WUI_{it} + e_{it}$$

Discussion

Based on the hypothesis testing results, the solvency regression coefficient is positive but not significant. That is, solvency does not affect firm performance. This result differs from the signaling theory that proposes increasing the solvency ratio, usually accompanied by increased production activities. This means the firm is trying to increase its operational activities to obtain revenue and profit that will give a positive signal to investors. This result shows that the solvency ratio cannot measure an increase in firm performance or profits. Increasing solvency is not only used to earn profits but also to make investments. Some firms experience an increase in debt but do not focus on operational activities used for investment. The lack of solvency came from firms' decisions to fund their assets, which tend to use their capital derived from retained earnings and share capital rather than using debt so that the firm can reduce the proportion of its debt (Dahiyat, 2016). The lack of influence of solvency on financial performance will create a gap between agents and principals because they can prioritize personal interests through the financial statements presented (Diana & Osesoga, 2020). Dahiyat (2016) also found that solvency does not significantly affect firm performance.

The regression coefficient of liquidity proxied with the current ratio is negative and significant; thus, this research concludes that liquidity negatively impacts firm performance. According to signaling theory, a firm that maintains high liquidity levels may signal to investors that it is not fully committed to pursuing growth opportunities. This can hinder its ability to attract investment capital for expansion, innovation, or strategic initiatives that could enhance long-term firm performance. If the current ratio of the Banks increases, the firm performance of the banks measured by net interest margin will decrease. Insufficient or excess liquidity may harm the smoothing of operations (Fungacova et al., 2021).

Additionally, the bank may not effectively use its current assets if the liquidity is too high. Dahiyat (2016) and Oshoke & Sumaina (2015) are consistent with this study's findings.

The regression coefficient of economic uncertainty proxied with the world economic uncertainty index is negative and significant; thus, this research concludes that the higher the economic uncertainty, the lower the firm performance. Economic and geopolitical uncertainty significantly constrains bank risk and worsens stability. Bank stability is more immune to uncertainty in listed, domestic, and private-owned banks. Wu et al. (2021) and Shabir et al. (2023) are consistent with this study's findings.

Based on the results of MRA testing, it was found that economic uncertainty could not moderate the effect of solvency on firm performance. However, economic uncertainty moderates (strengthens) the effect of liquidity on firm performance. Holding excessive liquidity can also result in underutilized assets during economic uncertainty. Cash and highly liquid assets typically yield lower returns than investments in the core business or other income-generating activities. This can lead to lower overall profitability and reduced net interest margin. Chang et al. (2022) and Sakouvogui & Shaik (2020) are consistent with this study's findings.

5. CONCLUSIONS

This study examines and analyses the effect of solvency and liquidity on the performance of banking sector firms in ASEAN in 2013-2022. This study also examines economic uncertainty as a moderating variable in influencing solvency and liquidity on firm performance. The test results show that liquidity and economic uncertainty negatively affect the firm performance. Meanwhile, solvency does not affect firm performance. Economic uncertainty as a moderation variable cannot moderate the effect of solvency on firm performance. Still, economic uncertainty can moderate (strengthen) the effect of liquidity on firm performance.

6. IMPLICATIONS, LIMITATIONS AND SUGGESTIONS

This research is expected to contribute both theoretically and practically. Theoretically, this research can help to understand better the complex interactions between external factors, such as economic uncertainty, and internal factors, such as liquidity and solvency, to the firm performance. Practically, this research also contributes to developing

strategies and policies that help firms thrive in uncertain economic environments. The relationship between economic uncertainty, liquidity, solvency, and firm performance can offer valuable insights for businesses to adapt and thrive in an ever-changing economic landscape. It enables firms to make informed decisions, develop resilience, and enhance their competitive advantage.

The limitations of this study are limited to ASEAN countries, where most ASEAN countries are developing countries. Further research can expand the scope of research to include developed countries to broaden the sample. Another suggestion for further research is using other proxies to measure economic uncertainty for the more robust model. Proxies that can be used are geopolitical risk (GPR) or Economic Policy Uncertainty (EPU). GPR shows geopolitical events like terrorism, local and regional political volatility, political aggression, coups d'état, territorial disputes, and war (Caldara & Iacoviell, 2022). EPU indicates a non-zero probability of monetary, fiscal, or regulatory policy changes that affect the decision-making patterns of investors and consumers (Baker et al., 2016).

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