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Original Article

Examining the Effect of Bank Health Level towards Stock Return of Commercial Banks in Three-Selected ASEAN Countries

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Abstract: Today, various main factors, including the banking sector, support a country's economy. The growth and performance of banks in a country are factors in measuring the country's economic growth. The increasing number of banking stocks traded in ASEAN countries proves banking development. However, since middle-to-low-income countries dominate ASEAN, it opens up a greater risk to the volatility of bank stock returns because of economic turmoil. Non-performing loans (NPL), Good Corporate Governance (GCG), Return on Assets (ROA), and Capital Adequacy Ratio (CAR) are found to influence bank stock return in some studies, but other similar studies show the opposite. Therefore, this study uses 28 banks in ASEAN countries as a sample, consisting of 10 Indonesian banks, 8 Malaysian banks, and 10 Thailand banks. Data analysis uses regression analysis with moderated regression analysis (MRA) and discrimination tests. The result shows NPL and GCG have no significant effect on bank stock return, ROA has a positive and significant effect, and CAR has a negative and significant effect. Price to Book Value (PBV) has a positive and significant effect on bank stock return but can only moderate ROA on stock return. The discrimination test shows that ASEAN countries' NPL, GCG, ROA, and CAR differ significantly. Therefore, banks in ASEAN ought to maintain their health through these factors to maximize their stock return.

Keywords: Non-Performing Loan, Good Corporate Governance, Return On Assets, Capital Adequacy Ratio, Price To Book Value, Bank Stock Return.

1. Introduction

Various main factors, including the banking sector, support a country's economy. The growth and performance of banks in a country are factors in measuring the country's economic growth (Ismail, 2018). Commercial banks are gaining more trust from the public and have the authority to carry out their operational activities on a profit basis (Hafez, 2015; Paruzel et al., 2021). Many banks also operate in the financial markets to generate additional funds. Investors can obtain two forms of return in the financial

market: capital gain and dividend yield. The high volatility makes Capital gain difficult for investors to forecast or estimate. In general, a healthy bank has better capabilities to improve its quality. However, a bank can't continue providing an increasing profit and stock return yearly. It is caused by various internal and external factors that affect the state of the bank.

An internal factor affecting a bank's stock return is the bank's financial performance (Subagyo et al., 2020). The first is a Non-Performing Loan (NPL), as credit risk is higher, and the higher the Non-Performing Loan, the greater the loss for the bank because the loaned money is not returned to the bank. Another profitability metric that influences bank stock return is Return on Assets (ROA). High ROA means that the bank can put its assets to good use and generate high profits, hence offering higher stock returns. A well-capitalized bank can also provide better stock returns and be more risk-resistant. For this reason, Capital Adequacy Ratio (CAR) is a factor for measuring whether a bank has sufficient capital to carry out its activities. How a bank manages its internal conditions is also a highlight for stock return. An indicator that can be used is the number of independent boards. They are unrelated to the bank, so that they can support an objective atmosphere within it. Unfortunately, not all existing banks in Indonesia, Malaysia, and Thailand can survive economic recession. The three countries in Southeast Asia have relatively similar economic progress and banking characteristics.

Table 1. Total of Commercial Banks

Year	Number of Banks		
	Indonesia	Malaysia	Thailand
2017	115	43	30
2018	115	42	30
2019	110	42	30
2020	109	42	30
2021	107	42	30

Source: https://www.ojk.go.id/id, https://www.bnm.gov.my and https://www.bot.or.th.

Table 1 shows a significant difference in the number of banks in 3 ASEAN countries. The first thing to notice is that the number of banks in Malaysia and Thailand is less than half that of Indonesian banks. It does not guarantee bank development in Indonesia because most banks are undercapitalized and have relatively small assets. The Southeast Asian crisis of 1997/1998 impacted ASEAN countries, particularly the banking sector. In addition, the global economy has been shaken up again in recent years by the Covid-19 pandemic. Another challenge faced by banking now is the era of global competition due to globalization, modernization, and financial technology (Fintech). Those things then require banks to assess their health. Hence, in order to find out the bank's health level, it is necessary to conduct an analysis using the RGEC approach, which consists of Risk Profile (NPL), Good Corporate Governance (independent board), Earning (ROA), and Capital (CAR). This study is important as it aims to prepare ASEAN countries to strengthen the banking sector and its ability to provide maximum stock return. The previous study about bank health gave inconsistent results on the impact of bank stock return. Therefore, the researcher intends to prove it again by conducting this research. The researcher uses Price to Book Value (PBV) as a moderating variable because it involves stock prices and relates to a bank's ability to deliver stock returns.

2. Literature review

2.1. Underlying Theory

Signalling theory provides a signal to the phenomena in financial management. In 1973, Spence was the first to introduce the signalling theory. Signals are signs that a company gives to investors, whether positive or negative. Some signs can be understood directly by the recipient, while others require further analysis to understand their true meaning (Fauziah, 2017). This signal is one of the reference guidelines for investors in making investment decisions, whether to buy, not to buy, or to sell their stocks. The signal can be known from the company's financial statements, which reflect all information about the company. According to Delbufalo (2018), agency theory emphasizes the fairest way to overcome the problems stemming from the differences because of key objectives and risks between the managers (agent) and its shareholders (principal), even though both have a cooperative relationship. Not all decisions made by the company will be satisfactory to the shareholders. It can occur when an agent makes a decision that is too

risky for the company. If a conflict arises between the two, it may affect the company's performance and financial condition when investors withdraw their funds.

2.2. The Effect of Risk Profile on Bank Stock Return

A risk profile assessment is a risk analysis of the banking sector's quality of risk management implementation. The mandatory risk profile assessment consists of 8 risk categories: credit risk, market risk, liquidity risk, operational risk, legal risk, strategic risk, compliance risk, and reputation risk. Out of the eight types of risk, this study uses credit risk as measured by Non-Performing Loans (NPL). Sarmigi & Putra (2022) stated that a risk profile is a risk that can affect a bank's financial stability because it is attached to every bank's operational activity. Therefore, improper management can have a fatal impact on bank liquidity, reducing bank performance and healthiness. The decline in bank quality will also impact decreasing profitability, automatically affecting bank stock return. Research by Fordian (2018) found that Non-Performing Loan (NPL) negatively and significantly affect stock return. This result is also supported by Sulaeman et al. (2018) and Khor et al. (2022). Therefore, the hypothesis formed is as follows:

Hypothesis 1 (H1): Credit risk has a negative effect on bank stock return.

2.3. The Effect of GCG on Bank Stock Return

Good Corporate Governance (GCG) first appeared in the 1992 Cadbury Commission report, the Cadbury Report. The Commission stated that GCG is the process that directs and controls the company, intending to balance the power it needs to ensure its continued existence and its responsibility to stakeholders (Swandari & Hadi, 2021). Furthermore, Napitupulu et al. (2020) define GCG as an internal company management mechanism with the primary objective of managing risk to protect the company's assets and enhance shareholder investment value over the long term. GCG can be seen from the number of independent non-executive directors. Good Corporate Governance (GCG) as a formal tool that is a company's way of defining its relationships with the various parties associated with it (Suroso, 2022). In this study, GCG transparency uses the number of independent non-executive directors. The number of independent boards can affect the quality of corporate governance in a bank by mediating the company (the agent) and the shareholders (the principal), alleviating the agency's problems. A study by Harahap & Hairunnisah (2017) shows that GCG positively and significantly affect stock prices. These findings are similar to Sambuaga et al. (2023) and Pasopa (2018). Based on previous findings, the researcher in this study proposed the following hypothesis:

Hypothesis 2 (H2): Good Corporate Governance positively affects bank stock return.

2.4.The Effect of Earning on Bank Stock Return

Earning is a total of profits a company can generate by utilizing its capital (Padangaran, 2021). Therefore, if the earnings ratio is high, it indicates the bank's high ability to generate profits. This study's earning ratio measurement uses Return on Assets (ROA). ROA is chosen as the profit measure because it is a key point prioritized by Bank Indonesia in assessing the profitability level of banks in Indonesia. According to Sudana (2015), using Return On Assets (ROA) as the basis for the earning factor results in the profit a company can generate by utilizing its resources, where the intended profit is net profit before deducting taxes. For this reason, a bank with a high earning value demonstrates its superior ability to provide stock returns to its investors. It is supported by Tami & Riska Kumala Dewi (2022), who stated that ROA positively and significantly affects the stock return of commercial banks listed on the Indonesian Stock Exchange. The same result was also obtained by Nur'aidawati (2018). On the basis of previous research with similar results, the authors formulate a hypothesis for earning as follows:
Hypothesis 3 (H3): Return on Asset (ROA) positively affects bank stock return.

2.5. The Effect of Capital on Bank Stock Return

Capital is an essential factor in measuring the health of a bank. Sufficient capital characterizes a healthy bank because it has good preparation and can help banks avoid financial problems. Ikatan Bankir Indonesia (2016) states that assessing bank capital is measured through capital adequacy, which is directly related to bank capital's risk profile and management. The capital adequacy measurement used in this study is the Capital Adequacy Ratio (CAR). Bank capital is an important factor. A well-capitalized bank has a better

level of health than an undercapitalized bank. According to Khairani & Dillak (2018), bank capital enables banks to be more efficient in conducting their activities, allowing them to earn better profits and provide stock returns for investors. It is consistent with the research result of Patricia et al. (2021), which shows that CAR positively affects stock return. The same result was also proven by Azzahra (2022). Therefore, the formation of the hypothesis for CAR is as follows:
Hypothesis 4 (H4): Capital Adequacy Ratio (CAR) has a positive effect on bank stock return

2.6. Moderating Role Market Value Ratio between Bank Health Level and Bank Stock Returns

PBV is a ratio that measures a market stock price and compares it to a company's book value, where the book value is obtained from the comparison value of the total equity with the number of stocks outstanding in a company (Cahyani & Diantini, 2016). A high PBV indicates an investor's willingness to buy the stock at a price above the bank's book value. It also indicates a profit for the bank, as the stock price is higher than its book value. At the same time, profitability influences higher returns for stocks. According to Bangun & Rahadian (2018), the more funds a bank receives from the public and the financing it provides, the more profit it can generate. Therefore, a high PBV shows that investors value a company's stock price as high and are willing to invest. The more people invest, the stronger the bank's capital will generate profits and stock return. Mikrad & Pambudi (2021) found a significant positive impact of Price to Book Value (PBV) on the stock return of manufacturing companies. Thus, the hypothesis for the market value ratio as a moderating variable is as follows:
Hypothesis 5 (H5): PBV can strengthen the effect of NPL on bank stock return.
Hypothesis 6 (H6): PBV can strengthen the effect of GCG on bank stock return.
Hypothesis 7 (H7): PBV can strengthen the effect of ROA on bank stock return.
Hypothesis 8 (H8): PBV can strengthen the effect of CAR on bank stock return.

2.7. The Difference of Bank Health Level in ASEAN Countries

Currently, each bank is competing to expand its business to other countries. In order to do this, the bank must be in healthy condition. The condition of banks between one country and another can be reflected by comparing each ratio between countries. Some countries excel at a certain ratio, but some countries perform less. This statement is proven by the result of research by Ab-Rahim et al. (2018), who compared the healthiness of banks in ASEAN with the CAMEL approach, and it is known that Singapore is a country that overall has better performance among other ASEAN countries. Based on this finding, the hypothesis regarding the comparison of bank health among ASEAN countries is as follows:
Hypothesis 9 (H9): There is a difference in bank health levels using the RGEC approach.

2.8. Conceptual Framework

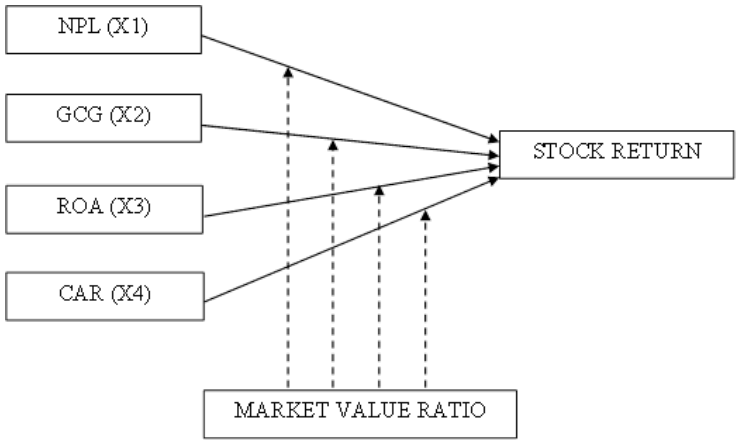

Figure 1. Conceptual Framework

Note: NPL is Non-Performing Loan, GCG is Good Corporate Governance, ROA is Return on Assets and CAR is Capital Adequacy Ratio.

3. Materials and Methods

The data investigated in this research are in the form of numbers presented statistically. Therefore, the most suitable and appropriate approach for this research is quantitative. Furthermore, this study is also a comparative analysis comparing bank health levels in ASEAN countries. This research is conducted on the commercial banks in the ASEAN region by focusing on banks in Indonesia, Malaysia, and Thailand listed on each country's central banks and stock exchanges. The period studied in this study is five (5) years, precisely from 2017 to 2021. Secondary data used in this study with documentation data collection are in the form of each bank's annual reports, financial reports, and GCG reports. In this study, the population included all commercial banks in Indonesia, Malaysia, and Thailand listed on the respective stock exchanges. The research sample in this study is selected based on a sampling technique called purposive sampling. The criteria for choosing the samples are commercial banks that have gone public and are listed on IDX for banks from Indonesia, listed on Bursa Malaysia for banks from Malaysia, and listed on The Stock Exchange of Thailand (SET) for banks from Thailand, Banks have never been delisted since 2017–2021, Included in the group of top 10 banks with the largest assets for banks in Indonesia and Thailand, The banks publish reports related to the variables used in the study and can be accessed by researcher. Based on the criteria, there are a total of 28 commercial banks, with 10 Indonesian banks, 8 Malaysian banks, and 10 Thailand banks. Three research variables are the dependent variable for this research is Bank Stock Return (Y). Independent variables used in this research are Non-Performing Loan/NPL (X1), Good Corporate Governance/GCG (X2), Return on Assets/ROA (X3), and Capital Adequacy Ratio/CAR (X4). The moderating variable in this research is the Market Value Ratio/PBV (Z). Data analysis techniques used are multiple regression analysis, hypothesis significance test, moderated regression analysis, and discrimination test.

3.1. Panel Regression Analysis

Multiple regression uses at least two independent variables to increase and decrease its value, so the estimated effect on the dependent variable is obtained (Sugiyono, 2013). The model used to predict problems in this study is as follows:

$$SR_{i,n,t} = \alpha + \beta_1 NPL_{i,n,t} + \beta_2 GCG_{i,n,t} + \beta_3 ROA_{i,n,t} + \beta_4 CAR_{i,n,t} + \varepsilon_{i,n,t} \quad (1)$$

Where SR is Stock Returns, i is Cross-section subject, n is sampled country, t is time, α is constant, β_1-β_4: Regression Coefficient, NPL is Non Performing Loan, GCG is Good Corporate Governance, ROA is Return On Asset, CAR is Capital Adequacy Ratio and e is Error

3.2. Moderated Regression Analysis (MRA)

MRA analysis is a tool for multiple linear regression by multiplying two or more independent variables in the form of an equation which aims to measure the effect given by the moderating variable, whether it strengthens or weakens the relationship of the independent variables to the dependent variable. Based on Sharma et al. (1981), there are four types of moderation: Pure Moderator, Quasi Moderator, Homologiser Moderator, and Predictor Moderator. The equation in the MRA is as follows:

$$\begin{aligned} SR_{i,n,t} = {} & \alpha + \beta_1 NPL_{i,n,t} + \beta_2 GCG_{i,n,t} + \beta_3 ROA_{i,n,t} + \beta_4 CAR_{i,n,t} + \ldots \\ & + \beta_1 NPL_{i,n,t} Z_{i,n,t} + \beta_2 GCG_{i,n,t} Z_{i,n,t} + \beta_3 ROA_{i,n,t} Z_{i,n,t} + \ldots \\ & + \beta_4 CAR_{i,n,t} Z_{i,n,t} + \varepsilon_{i,n,t} \end{aligned} \quad (2)$$

Where SR is Stock Returns, i is Cross-section subject, n is sampled country, t is time, α is constant, β_1-β_4: Regression Coefficient, NPL is Non Performing Loan, GCG is Good Corporate Governance, ROA is Return On Asset, CAR is Capital Adequacy Ratio, Z is Market Value Ratio and e is Error.

4. Results and Discussion

4.1. Descriptive Statistics Analysis

Descriptive statistics describe each study variable according to the input data. The information presented is, therefore, limited to providing information about the state of a particular variable and is not conclusive. The descriptive analysis table for this study is as follows:

Table 2. The Result of Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
ASEAN				
SR	-47.68000	87.60000	3.755571	23.63886
NPL	0.300000	8.000000	2.645714	1.219189
GCG	30.77000	77.78000	53.61536	11.44936
ROA	-2.200000	5.240000	1.490500	1.012665
CAR	13.64900	27.82000	19.72111	2.788038
PBV	0.050000	4.700000	1.121429	0.818645
INDONESIA				
SR	-47.68000	87.60000	3.755800	28.26210
NPL	0.900000	8.000000	2.746800	1.149253
GCG	50.00000	70.00000	56.00980	5.830470
ROA	0.130000	4.000000	2.146600	0.952536
CAR	16.80000	27.82000	21.75120	2.865097
PBV	0.380000	4.700000	1.489000	1.141916
MALAYSIA				
SR	-34.21000	45.01000	3.000250	16.24091
NPL	0.300000	3.600000	1.727000	0.987284
GCG	44.44000	77.78000	63.88525	8.613802
ROA	-2.200000	1.800000	0.902500	0.608064
CAR	13.64900	23.26200	17.98353	2.054878
PBV	0.370000	2.300000	1.037000	0.483116
THAILAND				
SR	-34.22000	53.97000	4.359600	23.99237
NPL	1.550000	5.140000	3.279600	1.005262
GCG	30.77000	58.33000	43.00500	8.484426
ROA	0.000000	5.240000	1.304800	0.975065
CAR	15.59000	25.21000	19.08110	1.841959
PBV	0.050000	1.730000	0.821400	0.419334

Table 2 shows the bank health level in ASEAN countries for 2017–2021. Stock Return (SR) in ASEAN ranges from a minimum value of -47.68000 to a maximum of 87.60000. The banks in ASEAN with the lowest (minimum) and highest (maximum) stock return values are owned by banks from Indonesia. The minimum stock return came from Bank Danamon in 2019, and the maximum stock return value was also from Bank Danamon in 2017. Non-Performing Loan (NPL) results in a minimum value of 0.300000 and a maximum of 8.000000. The bank with the minimum NPL value is Public Bank from Malaysia in 2021. The maximum NPL value comes from Bank Tabungan Pensiunan National (BTPN) 2019, an Indonesian bank. From the descriptive statistics, each country also has a relatively small standard deviation, indicating that the number of independent boards among banks in each ASEAN country is relatively similar.

Good Corporate Governance (GCG) has a minimum value of 30.77000 from TMB Thana Chart Bank (Thailand) in 2019. The maximum value is 77.78000, the GCG value from Alliance Bank (2020 and 2021) and Affin Bank (2021). Both Alliance and Affin Bank are Malaysian banks. From the descriptive statistics, each country also has a relatively small standard deviation, indicating that the number of independent boards among banks in each ASEAN country is relatively similar. Return on Assets (ROA) has a minimum value of -2.200000 and a maximum of 5.240000. The minimum value of ROA comes from a Malaysian bank in 2021, namely Am Bank. The bank with the highest ROA (maximum value) in 2020, namely Thana Chart Capital, comes from Thailand Bank. With a standard deviation of 1.012665, which is lower than the mean of 1.490500, the distribution of ROA data in this study is quite uniform.

Capital Adequacy Ratio (CAR) displays a minimum and maximum value of 13.64900 and 27.82000. The bank with the minimum CAR value was Am Bank (Malaysia) in 2018, while the bank with the maximum CAR was Panin Bank (Indonesia) in 2021. The standard deviation of this variable is 2.788038, with a mean value of 19.72111. This value indicates a fairly even distribution of data values in the sample. Price to Book Value (PBV) is a moderating variable; the minimum value is 0.050000, and the maximum is 4.700000. The minimum value of PBV comes from Thailand in 2019, namely LH Financial Group. The bank with the highest PBV (maximum value) comes from Indonesia in 2019, specifically Bank Central Asia (BCA). With a standard deviation of 0.818645, which is lower than the mean of 1.121429, this study's distribution of the PBV data is quite even.

4.2. Panel Regression Analysis

There are three ways to choose a panel data regression model: Common Effect, Fixed Effect, and Random Effect. Here are the regression results for each model:

Table 3. Result of Panel Regression (The Best Model Selection)

Variable(s)	CEM	FEM	REM
C	20.90147* (0.0953)	57.51028* (0.1262)	20.90147* (0.0953)
NPL	-0.889786* (0.3549)	-1.888973* (0.2283)	-0.889786* (0.3549)
GCG	0.028592* (8042)	0.161789* (0.6747)	0.028592 (8042)
ROA	7.843900** (0.0000)	8.667706** (0.0020)	7.843900** (0.0000)
CAR	-1.420613** (0.0325)	-3.567274** (0.0309)	-1.420613** (0.0325)
R^2	0.099182	0.193577	0.099182
F-stat	0.006671	0.710269	0.006671
DW	1.998677	2.245044	1.998677
Chow Test		15.497256* (0.9619)	
Hausman Test			4.156043* (0.3853)
Breusch-Pagan Test	5.708104** (0.0169)		

Notes: *,**,*** is a significant at the level 10%, 5% and 1%; () is standard error

Table 3 captures the result of choosing the best regression model for the data. From the Chow Test, the chi-square value is 0.9619, which indicates a probability value greater than 0.05 (0.9619 > 0.05), so the Chow Test shows that the Common Effect Model is selected. The probability of the Hausman Test is higher than 0.05 (0.3853 > 0.05), so the best model chosen is the Random Effect Model (REM). The result of the LM Test has a probability of less than 0.05 (0.0169 < 0.05), so the best model selected is the Random Effect Model (REM). Because REM is selected two times, the Random Effect Model (REM) is the best model for estimating panel data in this study.

4.3. Hypothesis Testing

The test result by the selected Random Model shows a probability value of 0.006671, which is lower than the 5% significance level. Thus, H0 is rejected, and Ha is accepted, so all independent variables (NPL, GCG, ROA, and CAR) simultaneously affect bank stock returns in ASEAN countries. The partial influences exerted by each independent variable on bank stock return as the dependent variable are as follows:

a. Non-Performing Loan (NPL): The probability value generated is 0.3549, and the coefficient value is negative. It can be concluded that NPL has no significant negative effect on bank stock return in ASEAN countries (H1 rejected).

b. Good Corporate Governance (GCG): The probability value generated is 0.8042, and the coefficient value is positive. It can be concluded that GCG has no significant negative effect on bank stock return in ASEAN countries (H2 rejected).
c. Return on Assets (ROA): The probability value generated is 0.0000, and the coefficient value is positive. It can be concluded that ROA has a significant and positive effect on bank stock return in ASEAN countries (H3 accepted).
d. Capital Adequacy Ratio (CAR): The probability value generated is 0.0325, and the coefficient value is negative. It can be concluded that CAR has a significant and negative effect on bank stock return in ASEAN countries (H4 accepted).

The Coefficient of Determination demonstrates how much influence can be given by the independent variables to explain the dependent variable. The R-square from the chosen Random Effect Model is 0.099182 or 9.9182%. Therefore, the independent variables in this study (NPL, GCG, ROA, and CAR) can influence the dependent variable (bank stock return) by 9.9182%. The remaining 90.0818% is influenced by other variables not included in this study (residual variables).

4.4. Moderated Regression Analysis

Moderated Regression Analysis (MRA) model selection with Chow Test generated a probability value lower than 0.05 (0.0142 < 0.05), so the Fixed Effect Model (FEM) is selected. The probability of the Hausman Test obtained is less than 0.05 (0.0004 < 0.05), so FEM is selected. Therefore, FEM is chosen as the most appropriate model for the interpretation of moderated regression in this study.

Table 4. Result of Fixed Effect Model using MRA

Variable(s)	FEM
C	1.761384*
	(0.8778)
NPL	1.917928*
	(0.6533)
GCG	0.216337*
	(0.5152)
ROA	-3.547311*
	(0.4702)
CAR	-0.152729*
	(0.9173)
Log(PBV)	45.30786**
	(0.0010)
NPL*PBV	-2.163698*
	(0.6797)
GCG*PBV	0.071128*
	(0.7507)
ROA*PBV	6.366276**
	(0.0319)
CAR*PBV	-0.607066*
	(0.6159)

Notes: *,**,*** is a significant at the level 10%, 5% and 1%; () is standard error

The equation of Moderated Regression Analysis can be formulated as: SR = 1.761384 + 1.917928 NPL + 0.216337 GCG – 3.547311 ROA – 0.152729 CAR + 45.30786 PBV – 2.163698 NPL*PBV + 0.071128 GCG*PBV + 6.366276 ROA*PBV – 0.607066 CAR*PBV

The F Test on Moderated Regression Analysis, according to Table 4, shows a result of 0.000650, which means that all independent variables simultaneously significantly affect bank stock return as the dependent variable. This decision is made because the probability value of the F statistic is less than 0.05 (0.000650 < 0.05). The interpretation of the t-test must be carried out by looking at the probability value of each variable that interacts with the moderating variable. Therefore, some primary points can be summarized as follows:

a. The interaction of NPL and PBV yields a probability value above the 5% significance level (0.6797 > 0.05). In other words, PBV does not significantly affect the relationship of NPL toward bank stock return in ASEAN countries (H5 rejected).
b. The interaction of GCG and PBV produces a probability value above the 5% significance level (0.7507 > 0.05). In other words, PBV does not significantly influence the relationship of GCG toward bank stock return in ASEAN countries (H6 rejected).
c. The interaction of ROA and PBV produces a probability value below the 5% significance level (0.0319 < 0.05). In other words, PBV significantly influences the relationship of ROA toward bank stock return in ASEAN countries (H7 accepted).
d. The interaction of CAR and PBV yields a probability value above the 5% significance level (0.6159 > 0.05). In other words, PBV does not significantly influence the relationship of CAR toward bank stock return in ASEAN countries (H8 rejected).

4.5. Discrimination Testing

This test is performed to see if there are significant differences among the sample in this study, which consists of three countries, with one country having a different amount of data than the other two. This study uses a non-parametric with the Kruskal Wallis test. Statistical results for NPL, GCG, ROA, and CAR show probability values 0.000, which are less than the significance level of 5% (0.05), so H9 is accepted. It means there is a significant difference in Risk Profile among commercial banks in the sample with Non-Performing Loans (NPL) as a parameter.

5. Conclusion

In conclusion, this study has identified that NPL, GCG, ROA, and CAR simultaneously significantly affect bank stock return in ASEAN countries with a contribution of 9.9182%. Partially, Return on Assets (ROA) has a positive and significant effect on bank stock return in the three selected ASEAN countries. The higher the ROA, the greater the bank can provide stock return. Partially, the Capital Adequacy Ratio (CAR) negatively and significantly affects bank stock returns in ASEAN countries. Higher CAR contributes to lowering bank stock return in ASEAN countries; PBV as market value ratio significantly positively affects bank stock return in ASEAN countries. Hence, PBV can be an independent and moderator variable in this study. This result also indicates that higher PBV contributes to increasing bank stock return in ASEAN countries; PBV as market value ratio has a significant negative influence on the relationship between Return on Assets (ROA) and Bank Stock Return; and All countries in the sample have significant differences in each of the independent variables of NPL, GCG, ROA, and CAR.

From the research results, several recommendations can be taken for investors, banks, and researchers on the health level of banks in the future. Even though NPL has no significant effect on stock return, it is still mandatory for each bank to maintain its NPL ratio so that it does not exceed the 5% requirement. Banks must increase public trust in independent directors to meet formal requirements, make their presence known, and influence the bank's performance. Each bank is advised to have a continuously increasing ROA to increase stock return and attract new investors. Even though CAR generally have a good impact on bank capital, each bank should be wiser in determining the portion of CAR because a high CAR does not always guarantee the efficiency and effectiveness of bank performance. It can be detrimental to the bank if the CAR becomes idle fund. Banking in ASEAN countries should manage CAR better so that a high CAR can positively affect bank stock return, especially in Indonesia, which has a CAR that exceeds 20%. Banking in Thailand should lower NPL because the ratio is the highest compared to Indonesia and Malaysia. Malaysian banks are advised to increase their return on assets as this factor positively and significantly impacts bank growth. Malaysia has the lowest ROA with a moderate predicate among the other two countries.

Adding other variables, such as LDR, NIM, ROE, or external variables such as exchange rates, is better for future researchers. Good Corporate Governance should be replaced with other factors in the form of financial ratios so that they can further influence stock return. This study has several limitations due to the large gap in stock return data of some banks in specific years. This study was conducted based on 4 stock return data to improve the data to be balanced with others, namely the Bank Tabungan National (BTN) from Indonesia in 2017, OCBC NISP from Indonesia in 2018, Thana chart Capital from Thailand in 2020, and Alliance Bank from Malaysia in 2020. Moreover, the global economy in 2017 showed upward trends, while in 2019 and 2020, banks experienced significant turmoil in the financial sector, causing the data to have abnormal distribution.

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