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Influence of Capital on Firm Value Through Enterprise Risk Management in Banking

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Abstract

This study aims to prove and analyze empirically how capital affects firm value and interaction that happened between capital and corporate risk management affects firm value. The hypothesis of this study relates to the effect of capital on firm value at banking companies in Indonesia, and the second hypothesis relates to the effect of capital on corporate risk management at banking companies in Indonesia. The results of statistical analysis for testing the fourth hypothesis are obtained that regression coefficient value is -0.079, and t-count value is -1.510 with a significance value is 0.133, which is greater than the error tolerance set at 0.05. It shows that capital does not have significant effect on firm value in banking companies listed on the IDX for the 2016-2020 period. While the results of statistical analysis for testing the ninth hypothesis obtained a regression coefficient value is 0.213 and t-count value is 2,453 with a significance value is 0.016, which is smaller than the error tolerance set at 0.05. It shows that interaction between capital and enterprise risk management has a significant effect on firm value in banking companies listed on the IDX for the 2016-2020 period.

Keywords: Capital, Enterprise Risk Management, Firm Value

1. Introduction

1.1 Background problem

The value of banking companies in Indonesia is interesting to study, it is due to the decline of banking companies value that listed on the Indonesia Stock Exchange from 2011 to 2017 (Sitompul, 2019). A high company value will make the market, it does not only believe in the company's current performance but it is also in the company's future prospects. Increasing the value of company every year is a long-term goal of a company. The value of company is a measure of prosperity and the owners happiness and shareholders, the higher value of company, it will make more successful and prosperous the owners and shareholders. Various factors that can affect firm value, they are company management, capital structure, dividend policy and investment decisions

(Utomo, 2016). Proper business management can increase profitability and reduce the risk of business losses in the future, thus it has an impact on increasing business value (Handayani, 2017).

Low bank risk can indicate that management has ability to overcome and mitigate risks inherent in the banking industry. The manager's ability shows the bank's future prospects will be good. The bank's good performance is reflected in its ability to manipulate its assets to generate optimal returns, but some investors believe that company is best viewed from its profitability. These advantages will illustrate the company's ability to carry out operational control optimally, so the business continuity in future is more guaranteed.

When the company has sufficient capital to cover all the risks of its assets, the information is received by investors becomes positive information about the bank's capacity. The capital adequacy assessment (*capital adequacy*) is owned by a bank, it can be expected based on CAR coefficient. The CAR (*Capital Adequacy Ratio*) is one of the capital projections to assess the bank's capital adequacy in case of bad loans (Utami, 2015). Then, Alifah (2014) states that bank capital generation is as measured by CAR, it can increase the company value, because the stakeholders consider the company's capital, it is sufficient to cover the amortization of its assets or provide large bank profits.

It is seen from the previous study results, there was a difference between Capital variable and *Firm Value*, this research included the *Enterprise Risk Management* variable as a moderating variable to be studied. So, this study aimed to obtain empirical evidence related to the relationship between Capital variable and *Firm Value*, that is associated with *Enterprise Risk Management* at banking companies in Indonesia for the 2016-2020 period. This research is the development of several previous studies that focused on Capital variable. The difference between this research and previous research, it focuses on adding *Enterprise Risk Management* variables. There has been no previous research that examines the relationship between Capital variable and *Firm Value* through *Enterprise Risk Management* as a moderating variable.

In addition to the above reasons, the other reason that underlies the ERM variable, it is because reinforced by the case of Century Bank's inability to manage risks due to non-compliance with applicable banking laws, they are risk management and banking management. The Century Bank is a bank that experienced a financial crisis caused by problems with foreign exchange securities and sale of fake mutual funds, which caused money to flow into Robert Tantular's account as the bank owner. This agreement resulted in the Century Bank is being taken over by LPS and changed to PT Mutiara Bank Tbk until it was acquired by J Trust Co.Ltd. After the acquisition, the company's value slowly improved.

Risk management plays a role in protecting capital and optimizing *risk-return*. The large scale of operations and growing business volume have forced Indonesian banking industry to implement an integrated risk management model to identify, measure, monitor and control all potential risks. The disclosure of risk management gives a signal to investors in the form of good news or bad news, so it can affect the company value (Supriyadi & Setyorini, 2020).

1.2 Problem Formulation and Research Benefits

Based on the description above, the formulation of research problem are: (1) Does *Capital* have an effect on *Firm Value*? (2) Does the interaction between *Capital* and *Enterprise Risk Management* affect Firm Value? While this research has theoretical benefits, it is to improve a good analysis about the comparison of *Capital* influence on *Firm value* through *Enterprise Risk Management* as a moderating variable in Banking Companies. It also gives the contribution as study material and references for similar research. While the practical benefits, this research result is expected to be an input for banking companies in Indonesia, to understand the importance of effect from *Risk Profile*, *Good Corporate Governance*, *Earnings* and *Capital* on *Firm Value* through *Enterprise Risk Management* as Moderating Variables in Banking Companies. Furthermore, it can be practiced and considered as one of means for banking companies to achieve high corporate performance in accordance

with expectations, so it can become a orientation in standard procedures that have high quality, it is as to achieve competitive advantage.

1.3 Relevant Previous Research

According to the research of Luo et al. (2016) which explained that to identify high-quality companies and low-quality companies were 92.16 percent and 93.75 percent, respectively, which indicated that the model has realized good predictions. While research on Wierzbicka (2018) with her research about these elements, they included corporate governance mechanisms. The basic role associated with corporate governance recommendations is to create the framework and guidelines on which the company runs its operations, if it is to fulfill its competitiveness requirements and increase its market value.

Then, in the research of Ochego et al. (2020), the findings of study determined that there was a significant influence between corporate governance and the firm value of commercial banks in Kenya. Therefore, this study concluded that companies with good corporate governance had high firm value, and therefore, commercial bank management should improved the company which will greatly assist in increasing firm value. In contrast, the research was conducted by Yang et al. (2018), it showed that the company's risk management practices significantly affect the competitive advantage and performance of SMEs. The competitive advantage mediated relationship between enterprise risk management practices and SME performance. In addition, financial literacy significantly moderated the relationship between corporate risk management practiced and competitive advantage. While, the research of Pratama et al. (2020), based on the hypothesis that company risk management disclosure, intellectual capital disclosure, independent commissioners and audit committees do not have significant effect on firm value. While, the board of commissioners do not have significant effect on firm value, the directors have a significant effect to the company value.

This research is different from previous research. This research is the development of several previous studies that focused on Capital variable. The difference between this research and previous research is the focus, it is on adding *Enterprise Risk Management* variables. There has been no previous research that examines the relationship between *Capital* variable and *Firm Value* through *Enterprise Risk Management* as a moderating variable.

1.4 Research Framework

Based on the theoretical foundation on the influence of *Capital* on *Firm Value* through *Enterprise Risk Management* as a moderating variable in banking companies (empirical studies at banking companies listed on the Indonesia Stock Exchange for the 2016-2020 period) above, as a guide in formulating hypotheses, a theoretical framework will be presented which included in this research.

Agency theory seeks to solve agency problems that arise because the parties working together have different goals. The Agency theory is proposed to address two problems that can arise in agency relationships. First, the agency problems arise when the desires or goals of principal and agent conflict with each other, and it is difficult for the principal to verify whether the principal is doing the right thing. Second, the problem of risk sharing arises when the principal and the agent have different attitude towards the physical. The essence of agency relationship lies in the agency relationship, it is separation between ownership, and it is called the shareholders, then the controlling party is called the manager who runs the company.

Contingency theory which illustrates in this study, there is special characteristics possessed by the company, it is by adding *Enterprise Risk Management* (ERM) variable. The ERM variable in this study functions as a moderating variable between *Capital* variable and *Firm Value*. The ERM variable was added with the aim of making the company's performance better.

Based on the framework above, it states that the independent variable or variable X is *Capital*, with the moderating variable being *Enterprise Risk Management* and the dependent variable or variable Y is *Firm Value*.

The first hypothesis is proposed in the study, it is a hypothesis related to the influence of capital on firm value at banking companies in Indonesia. Then, the second hypothesis is related to the influence of capital on enterprise risk management at banking companies in Indonesia.

2. Method

2.1 Types of research

This research is a quantitative research, because the data used in this study is classified as documentary data which includes collection, recording and review of secondary data in the form of bank financial statements. This type of research is an empirical study, it is conducted at banking companies listed in the Indonesia Stock Exchange from 2016 – 2020 using secondary data, it is the data that is obtained indirectly (by external parties), which are collected and recorded, especially financial reports and annual reports from the banking industry. The company is published on www.idx.co.id for the period 2016 to 2020. This research design uses quantitative descriptive analysis to explain an empirical phenomenon accompanied by statistical data and patterns of relationships between variables as an analysis of the influence.

2.2 Data Source

The data source is used in this research; it is a secondary data. The secondary data is data obtained indirectly from a source, such as quotes from books, literature, scientific readings, and others, related to the topic of the article (Ghozali, 2016). The data sources in this study were obtained from IDX (*Indonesia Stock Exchange*), and the *official website* of each bank for 2016-2020 in the form of financial reports. This study prioritizes the validity of financial statement data which is more reliable, so the researchers took data from www.idx.co.id and the *official website* of each bank.

2.3 Sampling Technique

The sample in this study was selected by purposive sampling, it is a sample selection technique based on certain considerations and criteria in accordance with the research (Sujarwini, 2019). The criteria used in this study, they are go public banking companies listed in the Indonesia Stock Exchange (IDX) from the 2016-2020 period. A banking company that publishes financial reports and annual reports for 2016-2020. Banking companies that did not conduct mergers and acquisitions during 2016-2020. Banking companies that implement *Non-Performing Loans*, Managerial Ownership, *Return On Assets*, *Capital Adequacy Ratios*, *Enterprise Risk Management* in their annual reports for 2016-2020.

2.3.1 Research Variables and Operational Definitions

There are three kinds of variables in this research, they are:

Independent Variable

The independent variable in this study is *Capital*, that is each bank has and provides minimum capital to operate. The bank soundness ratio that can be used to assess a bank's ability to provide minimum capital, it is the Capital Adequacy Ratio (CAR). The CAR coefficient is a coefficient that describes the minimum capital adequacy required to cover the risk of loss from investing in risky assets and finances all fixed assets and bank shares.

Dependent Variable

The dependent variable in this study is *Firm Value*. Company value is a measure of success that a company has achieved in the past and in the future. If the company value can be seen through the price of ordinary shares per share from the company compared to the book value per share where the book value is obtained as a result of equity held by the number of shares outstanding. In this study, the value of company variables is measured by Price to Book Value (PBV), it is by the following formula (Rahma, 2020).

Moderating Variables

The moderating variable in this study is *Enterprise Risk Management*. The ERM is a variety of methods and procedures used to identify, measure, monitor and control risks arising from all banking activities.

The ERM measurement uses 108 disclosure items criteria based on COSO ERM Framework 2017 which includes 8 dimensions, they are (1) internal environment, (2) goal setting, (3) incident identification, (4) risk assessment, (5) risk response, (6) monitoring activities, (7) information and communication and (8) monitoring. The calculation of each ERM item used, it is given a value. It is 1, if the company discloses risk and 0 if the company does not disclose risk. Each item is added to obtain the overall ERM of each company by calculating the number of disclosures and it is divided by the number of disclosures of 108 items. Information regarding ERM disclosure is obtained from the annual report and the company's website.

2.3.2 Data Collection Techniques

The data collection technique used is the annual report documentation method and audited financial statements of banking companies listed in the Indonesia Stock Exchange for the 2016-2020 period, which contains information on Capital, Enterprise Risk Management, Firm Value and complete financial information. This research uses empirical studies, it studies of real facts/data that are collected and tested systematically. This secondary data collection is done through internet searches by downloading data from the Indonesia Stock Exchange (IDX) website. It is <http://www.idx.co.id> and related company websites.

2.3.3 Data Analysis Technique

The purpose of this study was to determine the effect of *good corporate governance* on the company's financial performance. During data processing, the researchers used statistical software called SPSS. The data analysis technique used is multiple linear regression analysis. This data model is then estimated using Ordinary Least Squares (OLS).

2.3.4 Hypothesis testing

According to Bahri (2018) states that hypothesis is a declaration, that is still calculated temporarily, it is not verified. Hypothesis testing is used to test partial and concurrent effects. Hypothesis testing is done in three ways, they are:

Coefficient of Determination (R^2)

The amount of R^2 , it is between 0 and 1 or between 0% to 100%. When the value of $R^2 = 0$, so the model is not able to explain the effect of independent variable to dependent variable, but if it is almost perfect or close to 1, so the model is able to explain almost all information needed by independent variable.

Simultaneous Significance Test (F Statistics Test)

The F test shows whether the independent variable simultaneously or simultaneously affects the dependent variable. If the research hypothesis is stated in the hypothesis, then the F test criteria used are as follows:

H_0 is rejected: $F_{\text{count}} > F_{\text{table}}$

H_0 is accepted: $F_{\text{count}} < F_{\text{table}}$

Or

H_0 is rejected: $\text{sig} < \alpha$

H_0 is accepted: $\text{sig} > \alpha$

Partial Significance Test (t Test)

Testing of regression results is carried out using t-test at the confidence level is 95% or = 5% with the following conditions:

If the significance level is $< 5\%$, it can be concluded that H_0 is rejected and H_a is accepted.

If the significance level is $> 5\%$, it can be concluded that H_0 is accepted and H_a is rejected.

The hypothesis in this study is formulated as follows:

(1) The effect of *capital to firm value*

$H_0: \beta_4 \leq 0$, it means that there is no *capital* effect to *firm value*

$H_a: \beta_4 > 0$, it means that there is *capital* effect to *firm value*

(2) The interaction between *capital* and *enterprise risk management* affects *firm value*

$H_0: \beta_8 \leq 0$, it means *enterprise risk management* does not moderate the effect of *capital* on *firm value*

$H_a: \beta_8 > 0$, it means *enterprise risk management* moderating the effect of *capital* on *firm value*

3. Results

3.1 Description of Research Object

This study emphasizes testing the effect of risk profile, good corporate governance, earnings, capital on firm value through enterprise risk management. It is intended to test how much influence RGEC has on firm value through ERM. The object of research is used in this study, it is a banking company listed in the Indonesia Stock Exchange that implements ERM during the research period. The researchers used purposive sampling method to obtain samples that match with the research criteria, then 26 banking companies were selected that fulfills the criteria and were used as samples in this study. The data used in this study were taken from the annual financial statements of banking companies that were the sample of study, especially in the financial ratio calculation report, then it is necessary to add in this study at 5-year observation period from 2016-2020 with 26 banking companies spread throughout Indonesia.

3.2 Statistics Description

Based on the results of descriptive statistical tests, it can be concluded that minimum Price to Book Value (PBV) is 0.00 and maximum value is 31.42. It shows that PBV value in the sample of this study ranges from 0.00 to 31.42 with an average is 1.7764 and a standard deviation is 2.80890. The minimum value of Capital Adequacy Ratio (CAR) is 3.41 and the maximum value is 148.28. It shows that CAR value in the sample of this study ranges from 3.41 to 148.28 with an average is 27.7302 with a standard deviation is 19.60477. The minimum value for Enterprise Risk Management (ERM) is 0.41 and the maximum value is 0.71. It shows that ERM value in the sample of this study ranges from 0.41 to 0.71 with an average is 0.5780 and a standard deviation is 0.07584.

3.3 Descriptive Analysis

Capital variable in this study is calculated by the ratio of *Capital Adequacy Ratio* (CAR). The NPL value of banking companies listed in the Indonesia Stock Exchange (IDX) from 2016 to 2020 tends to increase.

The *Enterprise Risk Management* variable in this study is calculated by Enterprise Risk Management (ERM) disclosure ratio. The ERM value of banking companies listed in the Indonesia Stock Exchange (IDX) from 2016 to 2020 tends to increase that the highest ERM value of banking companies listed in the IDX was in 2020, which was 0.605, while the lowest ERM value of banking companies listed in the IDX occurred in 2016 which was 0.558.

3.4 Classic Assumption Test

The normality test was carried out with the aim of testing whether in regression model, confounding or residual variables had a normal distribution. The normality test in this study was carried out with the *Kolmogorov-Smirnov One-Sample* statistical test. The results of normality test using the *Kolmogorov-Smirnov One-Sample* statistical test can be seen in the table as follows:

Table 1: Normality Test Results

	Unstandardized Residual	Conclusion
Asymp Sig (2-tailed)	0.200	Normal

Based on the results of normality test above, it shows that all variables in this study have a significance value greater than 0.05 ($\text{sig} > 0.05$), so it can be concluded that all research variables in this regression model are normally distributed.

Multicollinearity test aims to test whether in the regression model, there is a correlation between independent variables. The presence or absence of multicollinearity problems can be seen from tolerance value or *Variance Inflation Factor* (VIF) provided that, if tolerance value is greater than 0.10 or VIF value is less than 10 ($\text{VIF} < 10$), it means that there is no multicollinearity problem. Based on the results of multicholinearity test, it shows that all free variables in this study have a tolerance value greater than 0.1 and a VIF value smaller than 10 ($\text{VIF} < 10$), so it can be concluded that the regression model in this study did not occur multicholinearity.

Heteroskedasticity test aims to find out whether in regression model, there is a variance inequality of residual one observation to another. The heteroskedasticity testing in this study used the Glejser statistical test. If the significance value for the independent variable is greater than 0.05, so it can be concluded that there is no problem of heteroskedasticity.

Based on the results of heteroscedasticity test, all the independent variables in this study has a significance value greater than 0.05 ($\text{sig} > 0.05$), so it can be concluded that the regression model in this study does not occur heteroscedasticity.

Autocorrelation test was conducted to determine whether in the regression model, there is a correlation between confounding error in period t and period t-1 (previous period). The autocorrelation test in this study used the *Durbin-Watson* test (DW Test) with a significance level is 5% or 0.05, that the Durbin-Watson value is 1.006, it is between -2 and +2 ($-2 < 1.930 < +2$), so it can be concluded that the regression model in this study does not have an autocorrelation problem.

3.5 Moderation Regression Analysis Results

Moderating Regression Analysis method to test *enterprise risk management* as a moderating variable on the effect of *capital* to *firm value*. This method uses the equation that is used to see the moderating effect of *enterprise risk management* on the *capital* on *firm value* effect. This analysis was processed using SPSS 25 program. The results of Moderation Regression Analysis can be seen in the following table:

Table 2: Equation Regression Result

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	0.552	0.400		1.381	0.170
CAR	-0.079	0.052	-0.550	-1.510	0.133
CAR*ERM	0.213	0.087	0.892	2.453	0.016

Dependent Variable: PBV

Based on the regression analysis results in table 4.1, the following regression equation can be obtained:

$$\text{PBV} = \beta_4 \text{CAR} + \beta_8 \text{CAR*ERM} \dots \dots \dots \text{(IV)}$$

$$\text{PBV} = -0,079 \text{CAR} + 0,213 (\text{CAR*ERM})$$

3.6 Hypothesis test

The determination coefficient test results obtained the adjusted R² value is 0.313. It shows that the ability of independent variable consisting of capital moderated by enterprise risk management in explaining the variation of dependent variable is 31.3%, while the remaining 68.7% is explained by other factors, it is not examined in this study.

3.6.1 F Statistic Test

The F test shows whether independent variable simultaneously or simultaneously affects dependent variable. If the research hypothesis is stated in the hypothesis, then the F test criteria used are as follows:

H_0 is rejected: $F_{\text{count}} > F_{\text{table}}$

H_0 is accepted: $F_{\text{count}} < F_{\text{table}}$

or

H_0 is rejected: $\text{sig} < \alpha$

H_0 is accepted: $\text{sig} > \alpha$

The result of F test in this research, it can be seen in this table as follows:

Based on the results of first model F test, the F value is 10,585, and the significance value is $0.000 < 0.05$. It shows that simultaneously the CAR variable has a significant effect on the PBV variable, and the interaction between the CAR and ERM variables has a significant effect on the PBV variable.

3.6.2 Test of t-Statistic

The results of t-test equation in this study can be seen in the table as follows:..

Table 3: The result of t-test Equation

Variable	B	t	Sig.	Conclusion
CAR	-0.079	-1.510	0.133	Not significant
CAR*ERM	0.213	2.453	0.016	Significant

Source: SPSS Data Output Moderation Regression Test Results Equation

Based on the second equation t-test the results in the table 4.19 above, it can be explained as follows:

The influence of *capital* (CAR) to *firm value* (PBV). Based on the table above, the regression coefficient value is -0.079 and the t value is -1.510 with a significance value is $0.133 > 0.05$. It shows that *capital* (CAR) does not have significant influence to *firm value* (PBV) at banking companies listed in the IDX for the 2016-2020 period. The influence of interaction between *capital* (CAR) and *enterprise risk management* (ERM) to the *firm value* (PBV). Based on the table above, the regression coefficient value is 0.213 and the t-count value is 2.453 with a significance value is $0.016 < 0.05$. It shows that interaction between *capital* (ROA) and *enterprise risk management* (ERM) have significant effect on *firm value* (PBV) at banking companies listed in the IDX for the 2016-2020 period.

4. Discussion

The results of statistical analysis for testing the fourth hypothesis obtained a regression coefficient value, it is -0.079 and a t-count value is -1.510 with a significance value is 0.133, which is greater than the error tolerance set at 0.05. It shows that capital doesn't has a significant effect on firm value at banking companies listed in the IDX for the 2016-2020 period. The results of this study are in line with research conducted by Wardoyo dan Agustini (2015) which states that capital does not has a significant effect on firm value.

The results of statistical analysis for testing the ninth hypothesis obtained a regression coefficient value, it is 0.213 and a t-count value, it is 2.453 with a significance value is 0.016, which is smaller than the error tolerance set at 0.05. It shows that the interaction between capital and enterprise risk management doesn't has a significant effect on firm value at banking companies listed in the IDX for the 2016-2020 period. The results of this study are in line with research conducted by Idowu dan Awoyemi (2014) which states that the interaction between capital and enterprise risk management has a significant effect on firm value.

So, in this study resulted that *Capital* doesn't has significant effect on *Firm Value*. It is evidenced by the regression coefficient value, it is -0.079 with a significance value is 0.133, which is greater than error tolerance that has been set at 0.05. Meanwhile, the interaction between *Capital* and *Enterprise Risk Management* has a

significant effect on *Firm Value*. It is evidenced by the regression coefficient value of 0.213 with a significance value of 0.016 which is smaller than the error tolerance that has been set at 0.05.

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References

- Alifah, Y. B. (2014). The Influence of CAR, NPL, BOPO, and LDR, on Bank Profitability (ROA) at Banking Companies Listed in the Indonesia Stock Exchange for the Period 2009-2012. *Management Journal*, 15(1).
- Bahri, S. (2018). *Business Research Methods – Complete With SPSS Data Processing Techniques*. Andi Offset.
- Ghozali, I. (2016). *Multivariate Analysis Application with IBM SPSS 23 . Program*. Diponegoro University Publishing Agency.
- Handayani, B. D. (2017). Corporate Governance Mechanism, Enterprise Risk Management, And Value of Banking Companies. *Journal of Finance and Banking*, 21(1), 70–81.
- Idowu, A., & Awoyemi, S. O. (2014). The Impact of Credit Risk Management on the Commercial Banks Performance in Nigeria. *International Journal of Management & Sustainability*, 3(15), 295–306.
- Luo, N., Yang, J., Zhu, Y., & Zhang, Y. (2016). The Risk Management of Commercial Banks Credit Risk Assessment of Enterprises. *International Journal of Economics and Finance*, 8(9), 69–77.
- Ochego, E. M., Omagwa, J., & Muathe, S. (2020). Corporate Governance Strategy nad Firm Value in the Context of Commercial Banks in Kenya. *International Journal of Business, Economics and Management Works*, 7(4), 5–7.
- Pratama, B. C., Putri, I., & Innayah, M. N. (2020). The Effect of Enterprise Risk Management Disclosure, Intellectual Capital Disclosure, Independent Board of Commissioners, Board of Director and Audit Committee Towards Firm Value. *Jurnal Manajemen Dan Keuangan*, 9(1), 60–72.
- Rahma, T. L. (2020). *The Effect of Profitability, Sales Growth, and Good Corporate Governance on Tax Avoidance in Property, Real Estate, and Building Construction Companies Listed in the Indonesia Stock Exchange 2015-2018*. Andalas University.
- Sitompul, P. L. (2019). *The Factors Affecting Company Value With Corporate Social Responsibility as Moderating Variable in Banking Companies Listed on the Indonesia Stock Exchange*. University of Northern Sumatra.
- Sujarweni, V. W. (2019). *Financial Management : Theory, Application, and Research Results*. Pustaka Baru Press.
- Supriyadi, A., & Setyorini, C. T. (2020). The Effect of Risk Management Disclosure on Company Value Through Financial Performance in the Indonesian Banking Industry. *Research and Accounting Journal*, 4(2), 467–484.
- Utami, S. B. (2015). Comparison of CAMELS and RGEC Analysis in Assessing the Soundness of Banks in Government-Owned Sharia Business Units (Case Study: PT Bank Negara Indonesia, Tbk in 2012-2013). *State University of Yogyakarta*.
- Utomo, N. A. (2016). Factors that Affecting Firm Value of LQ45 Index Companies on the Indonesia Stock Exchange. *Dynamics of Accounting, Finance and Banking*, 5(1), 82–94.
- Wardoyo, & Agustini, R. M. (2015). The Impact of RGEC Implementation on the Value of Companies That Go Public on the Indonesia Stock Exchange. *Kinerja*, 19(2), 126–138.
- Wierzbicka, A. (2018). The Impact of Corporate Governance on the Value of Enterprises. *Wydział Zarządzania UW*, 27(2), 143–150.
- Yang, S., Ishtiaq, M., & Anwar, M. (2018). Enterprise Risk Management Practices and Firm Performance, the Mediating Role of Competitive Advantage and the Moderating Role of Financial Literacy. *Journal of Risk and Financial Management*, 11(35).

Appendix A**Company Sample List**

Table 4: Company Sample List

No	Code	Company
1	AGRO	PT Bank Raya Indonesia Tbk
2	AGRS	PT Bank IBK Indonesia Tbk
3	ARTO	PT Bank Jago Tbk
4	BBCA	PT Bank Central Asia Tbk
5	BBHI	PT Allo Bank Indonesia Tbk
6	BBKP	PT Bank KB Bukopin Tbk
7	BBMD	PT Bank Mestika Dharma Tbk
8	BBNI	PT Bank Negara Indonesia (Persero) Tbk
9	BBRI	PT Bank Rakyat Indonesia (Persero) Tbk
10	BBTN	PT Bank Tabungan Negara (Persero) Tbk
11	BDMN	PT Bank Danamon Indonesia Tbk
12	BINA	PT Bank Ina Perdana Tbk
13	BJTM	Bank Pembangunan Daerah Jawa Timur Tbk
14	BMAS	PT Bank Maspion Indonesia Tbk
15	BMRI	PT Bank Mandiri (Persero) Tbk
16	BNGA	PT Bank CIMB Niaga Tbk
17	BSIM	Bank Sinarmas Tbk
18	BSWD	Bank of India Indonesia Tbk
19	BTPN	PT Bank BTPN Tbk
20	DNAR	PT Bank Oke Indonesia Tbk
21	MAYA	PT Bank Mayapada Internasional Tbk
22	MCOR	PT Bank China Construction Bank Indonesia Tbk
23	NISP	PT Bank OCBC NISP Tbk
24	NOBU	PT Bank Nationalnobu Tbk
25	PNBN	Bank Pan Indonesia Tbk
26	SDRA	PT Bank Woori Saudara Indonesia 1906 Tbk

Appendix B

Variable Data Tabulation

Table 6: Price to Book Value (PBV)

No	Code	<i>Price to Book Value (PBV)</i>				
		2016	2017	2018	2019	2020
1	AGRO	2,842	3,023	1,51	0,94	5,15
2	AGRS	0,835	2,143	2,35	0,8	0,88
3	ARTO	1,311	1,457	1,92	5,49	31,42
4	BBCA	0,678	0,822	0,84	0,95	0,9
5	BBHI	0,631	1,03	2,13	1,74	5,11
6	BBKP	0,842	0,783	0,37	0,29	2,22
7	BBMD	2,288	1,849	1,83	3,29	1,53
8	BBNI	1,154	1,83	1,49	1,17	1,02
9	BBRI	0,392	2,683	2,44	2,6	2,57
10	BBTN	0,963	1,745	1,13	0,94	0,91
11	BDMN	0,977	1,701	1,74	0,85	0,67
12	BINA	1,067	2,252	1,51	3,98	1,54
13	BJTM	1,182	1,36	1,22	1,14	1,02
14	BMAS	1,455	1,499	1,36	1,29	1,49
15	BMRI	0,88	2,196	1,86	1,71	1,52
16	BNGA	0,621	0,918	0,58	0,56	0,61
17	BSIM	2,965	2,794	1,74	1,64	1,46
18	BSWD	1,927	2,125	2,15	2,09	2,3
19	BTPN	0,945	0,835	1,04	0,84	0,77
20	DNAR	0	1,341	1,28	0,74	0,79
21	MAYA	1,801	2,099	3,88	5,04	2,42
22	MCOR	1,027	1,456	0,94	0,77	0,88
23	NISP	0,609	0,493	0,8	0,7	0,63
24	NOBU	2,533	3,061	3,14	2,7	2,41
25	PNBN	0,528	0,757	0,68	0,72	0,54
26	SDRA	1,262	0,979	0,86	0,79	0,67
Total		32	43	41	44	71
Mean		1.219807692	1.644076923	1.568846154	1.683462	2.747308

Table 7: Capital Adequacy Ratio (CAR)

No	Code	<i>Capital Adequacy Ratio (CAR)</i> (%)				
		2016	2017	2018	2019	2020
1	AGRO	23,68	29,58	28,34	24,28	24,33
2	AGRS	17,17	3,41	15,63	28,46	14,89
3	ARTO	22,87	21,04	18,62	148,28	91,38
4	BBCA	21,9	23,1	23,4	23,8	25,8
5	BBHI	21,73	19,6	16,85	16,2	19,61
6	BBKP	11,62	10,52	85,43	92,59	84,86
7	BBMD	35,12	34,68	34,58	38,6	46,49
8	BBNI	19,4	18,5	17,4	18,7	15,7
9	BBRI	22,91	22,96	21,21	22,55	20,61
10	BBTN	20,34	18,87	18,21	17,32	19,34
11	BDMN	20,9	22,1	22,2	24,2	25
12	BINA	30,36	66,43	55,03	37,41	40,08
13	BJTM	23,88	24,65	24,21	21,23	21,64

14	BMAS	24,32	21,59	21,28	20,19	16,53
15	BMRI	21,36	21,64	20,96	21,39	19,9
16	BNGA	17,96	18,6	19,66	21,47	21,92
17	BSIM	16,7	18,31	17,6	17,32	17,1
18	BSWD	34,5	37,17	39,46	45,78	45,49
19	BTPN	25	24,6	24,6	24,2	25,6
20	DNAR	77,76	98,28	51,28	41,27	53,98
21	MAYA	13,34	14,11	15,82	16,18	15,45
22	MCOR	19,43	15,75	15,69	17,4	35,28
23	NISP	18,28	17,51	17,63	19,17	22,04
24	NOBU	26,06	26,83	23,26	21,57	22,02
25	PNBN	20,49	21,99	20,13	20,81	27,04
26	SDRA	17,2	24,86	23,04	20,02	19,98
Total		624	677	692	820	792
Mean		24.01077	26.02615	26.59692	31.55346	30.46385

Table 8: Enterprise Risk Management (ERM)

No	Code	<i>Enterprise Risk Management (ERM)</i>				
		2016	2017	2018	2019	2020
1	AGRO	0,58	0,65	0,61	0,64	0,66
2	AGRS	0,47	0,47	0,47	0,54	0,56
3	ARTO	0,56	0,55	0,59	0,61	0,65
4	BBCA	0,64	0,65	0,69	0,71	0,69
5	BBHI	0,51	0,54	0,55	0,57	0,58
6	BBKP	0,6	0,57	0,55	0,7	0,7
7	BBMD	0,56	0,57	0,56	0,6	0,61
8	BBNI	0,66	0,69	0,67	0,68	0,68
9	BBRI	0,63	0,64	0,68	0,69	0,7
10	BBTN	0,67	0,65	0,68	0,69	0,68
11	BDMN	0,5	0,5	0,51	0,51	0,53
12	BINA	0,48	0,48	0,52	0,56	0,55
13	BJTM	0,61	0,58	0,62	0,63	0,63
14	BMAS	0,45	0,45	0,46	0,49	0,51
15	BMRI	0,62	0,67	0,67	0,69	0,71
16	BNGA	0,55	0,56	0,56	0,6	0,59
17	BSIM	0,52	0,54	0,52	0,54	0,52
18	BSWD	0,56	0,53	0,55	0,58	0,59
19	BTPN	0,53	0,52	0,52	0,53	0,55
20	DNAR	0,46	0,46	0,49	0,57	0,59
21	MAYA	0,53	0,52	0,62	0,63	0,63
22	MCOR	0,65	0,55	0,56	0,58	0,54
23	NISP	0,64	0,63	0,65	0,65	0,63
24	NOBU	0,42	0,41	0,42	0,42	0,44
25	PNBN	0,62	0,64	0,63	0,66	0,67
26	SDRA	0,48	0,5	0,49	0,49	0,53
Total		15	15	15	16	16
Mean		0.557692	0.558462	0.570769	0.598462	0.604615

Appendix C

SPSS Data Output Moderation Regression Test Results Equation

Table 9: Variables Entered/Removed^a

Model	Variables	Variables	Method
	Entered	Removed	
1	CAR*ERM, CAR ^b	.	Enter

a. Dependent Variable: PBV

b. All requested variables entered.

Table 10: Model Summary

Model	R	R Square	Adjusted	R	Std. Error of the
			Square	Estimate	
1	.378 ^a	.143	.129	2.62091	

a. Predictors: (Constant), CAR*ERM, CAR

Table 11: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	145.414	2	72.707	10.585	.000 ^b
	Residual	872.385	127	6.869		
	Total	1017.799	129			

a. Dependent Variable: PBV

b. Predictors: (Constant), CAR*ERM, CAR

Table 12: Coefficients^a

Model		Standardized			t	Sig.
		Unstandardized Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	.552	.400		1.381	.170
	CAR	-.079	.052	-.550	-1.510	.133
	CAR*ERM	.213	.087	.892	2.453	.016

a. Dependent Variable: PBV