

THE EFFECT OF BANK RISK RATIO AND EARNING ASSET QUALITY ON PROFITABILITY IN BANKING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

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Abstract

The purpose of this study is to determine the effect of bank risk ratios (represented by credit risk, operational risk and liquidity risk) and the quality of earning assets on profitability in banking companies listed on the Indonesia Stock Exchange for the 2016-2021 period. This study uses data analysis techniques, namely multiple linear regression. The population used in this study were all banking companies listed on the Indonesia Stock Exchange for the 2016-2021 period, the sample used in this study was 15 banks. Based on the results of the analysis conducted, it can be concluded that credit risk represented by Non Performing Loans (NPL) has a significant negative effect on profitability, operational risk represented by Operating Expenses on Operating Income (BOPO) has a significant negative effect on profitability, liquidity risk represented by Loan to deposit Ratio (LDR) has no effect on profitability, and the quality of earning assets has no effect on profitability. Credit risk, operational risk, liquidity risk and earning asset quality significantly affect profitability by 74.4%, while the remaining 25.6% is influenced by factors not included in the research model.

Key words : *NPL, BOPO, LDR, KAP, Profitability*

1. INTRODUCTION

Banks, which are profit-oriented companies, must maintain their level of profitability properly. The performance of a bank in managing its business can be seen from the profit it gets from the activities carried out by the bank. Profit or profit is one of the important things to be achieved by a bank so that banks know whether their business has been carried out efficiently.

One of the goals of the bank is to obtain maximum profitability so that the bank can optimize its operational activities. For owners, depositors, government and society, the profitability of banks is very important, so banks need to maintain their profitability so that the bank remains stable or even increases. The calculations used to measure profitability are Return On Assets (ROA) and Return On Earnings (ROE). ROA and ROE are the main profitability ratios in measuring a bank's profit.

Liquidity risk is one of the factors that affect the profitability of a bank. According to Ramadanti and Meiranto (2015), if a bank is unable to provide funds to depositors when the depositors withdraw funds, it will cause liquidity risk. According to Bank Indonesia regulation No11/25/PBI/2009, liquidity risk is the risk that occurs due to the bank's inability to meet its maturing obligations to customers. Liquidity risk in this study is represented by the Loan to Deposit Ratio (LDR) which is a ratio used to measure the ability of a bank to channel credit from third party funds collected in the bank Ramadanti (2015) The higher the LDR is not a measure of the success of bank management to make a profit. This is because the bank has accumulated funds or it could be that the bank has difficulty in channeling funds so that it does not increase profit (ROA) in other words a high LDR usually reduces profitability (ROA). There are several studies that examine the effect of liquidity on profitability. According to Almsafir (2014) states there is no significant effect of liquidity risk on profitability. This is contrary to the research conducted by Rahman et al. (2015), who found that bank liquidity risk has a significant positive effect on profitability. There are several studies that examine the effect of liquidity on profitability. According to Almsafir (2014) states there is no significant effect of liquidity risk on profitability.

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Credit risk is a risk that must be accepted by a bank as a result of a customer's failure to fulfill its obligations. The most important thing in banking management is how a bank manages the available funds. Most of the funds from bank sources are allocated for credit, so that the largest bank income comes from interest on loans enjoyed by customers Abdullah (2014) In addition to being a source of income and profit, lending activities are also the cause of a bank experiencing credit risk.

According to Bank Indonesia regulation No. 11/25/PBI/2009, credit risk is the risk that occurs due to other debtors being unable to meet their maturing obligations to the bank. Credit risk in this study is represented by Non-Performing Loan (NPL), which is the ratio used to measure the ability of a bank to handle the risk of credit failure by debtors. Putri (2013) stated that a high Npl level indicates the poor quality of bank credit, causing a large number of non-performing loans at the bank. The amount of non-performing loans in a bank causes the bank to bear losses in its operational activities which will reduce the profits earned by the bank. Research on the effect of credit risk represented by NPL on profitability was conducted by Jumono et al. (2015) found that credit risk has a negative but not significant effect on profitability. Research conducted by Buchory (2015) contradicts the results of other studies with the results of credit risk having a significant positive effect on profitability.

The object of this research is Banking Companies Listed on the Indonesia Stock Exchange (IDX). Banking companies were chosen as research objects because banking companies are companies that really support the Indonesian economy as a whole, both in providing loan credit services for micro and macro businesses and also as a safe medium for storing funds for their customers. The research period was conducted from 2016 to 2021, assuming the greater the number of objects observed and the longer the research period, the more accurate the research results obtained and can show the performance of the banking company to be studied so that it becomes Novelti in this study compared to with previous research.

2. LITERATURE REVIEW

2.1. Productive Theory of Credit (Commercial Loan Theory)

This theory states that banks will only provide credit to customers who have been approved by the parties concerned, because credit is very influential on the health of the bank. There is credit risk or non-performing loans if the customer is unable to pay within the agreed time period. (Sudiyanto and Surosi, 2010)

2.2. Signalling Theory

Signal theory is based on the assumption that the information received by each party is not the same. In other words, signal theory is concerned with information asymmetry. Signal theory shows the existence of information asymmetry between company management and parties with an interest in information. For this reason, managers need to provide information for interested parties through the issuance of financial statements. Signal theory suggests about how a company should give signals to users of financial statements. This signal is in the form of information about what management has done to realize the owner's wishes. Signals can be in the form of promotions or other information stating that the company is better than other companies. (Jogiyanto, 2013)

2.3. The Anticipated Income Theory

Anticipated Income Theory explained that the bank has the right to extend credit and the repayment time is in line with the agreement. There are two forms of payment, namely principal and interest

installments, the fulfillment of liquidity needs depends on the flow of principal and interest installment payments. Liquidity is the main thing in the income anticipation theory, because it will make it easier for banks when predicting current assets to be used and banks can also meet obligations as soon as possible (Utomo, 2010).

From the introductory description and theoretical basis, the theoretical conceptual framework is described as follows

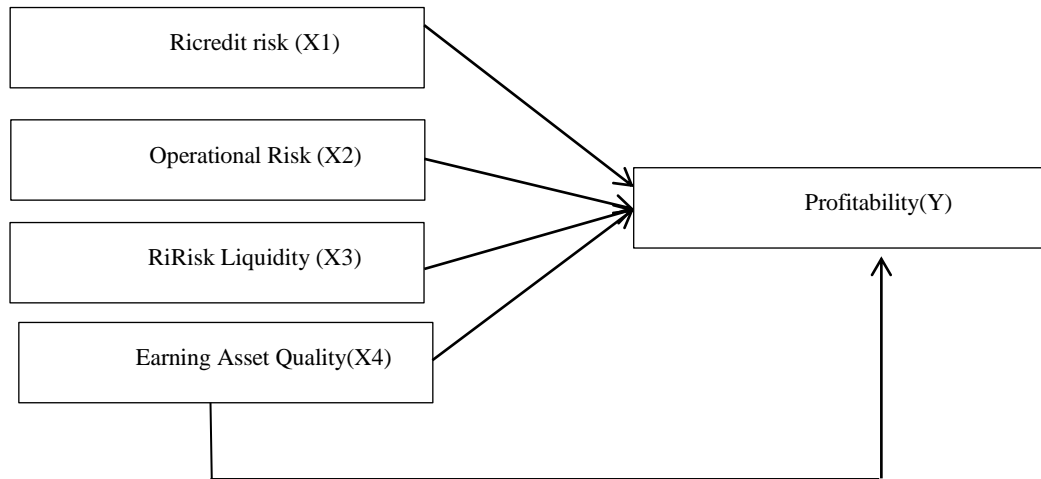


Figure 1. Conceptual Framework

2.4. Hypothesis

Based on the background and problem formulation, the following hypotheses can be drawn:

H1 : Credit risk affects the profitability of banking companies listed on the BEI

H2 : Operational risk affects the profitability of banking companies listed on the IDX

H3 : Liquidity risk affects the profitability of banking companies listed on the BEI

H4 : The quality of productive assets affects the profitability of banking companies listed on the BEI

H5 : Credit risk, operational risk, liquidity risk and productive asset quality simultaneously affect the profitability of banking companies listed on the IDX.

3. RESEARCH METHOD

3.1. Object and Location of Research

PeThis research was conducted in Indonesia, which is located on the Indonesia Stock Exchange. The object of this research is a banking company that is listed on the Indonesia Stock Exchange.

3.2. PPopulation and Sample

PThe population that is the object of this research includes all banking companies listed on the Indonesia Stock Exchange. The sample selection in this study used a purposive sampling method, namely a sample selection method based on certain criteria to obtain a representative sample of the population. The sample selection criteria are as follows:

1. PerBanking companies listed on the IDX that have complete data during the observation period to be used in this study.
2. Pera banking company that publishes financial statements in rupiah.
3. Perbanking companies that have not experienced losses in the last 3 years.

Based on these criteria, a sample of 15 banks met these criteria for 6 years of observation, namely from 2016-2021.

3.3. Types and Sources of Data

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The source of research data is an important factor that is considered in determining the method of data collection. Sources of data used in this study is secondary data. According to Sugiyono (2013) what is meant by secondary data is as follows: "Data sources that do not directly provide data to data collectors, for example through other people or documents".

Secondary data are generally in the form of evidence, notes, historical reports that have been compiled in published archives. The secondary data taken in the annual financial statements obtained on the internet site are www.idx.co.id, in the 2016-2021 observation period.

3.4. Data Collection Techniques

The data collection technique in this study is the documentation method in the form of the financial statements of the issuer companies that are used as samples, namely banking companies. The source of data in this study is secondary data obtained from the Indonesia Capital Market Directory (ICMD) on the website www.idx.co.id.

The analytical method used is multiple linear regression model. The multiple linear regression equations set are as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

4.RESULTS AND DISCUSSION

4.1. Statistical Descriptive Test Results

Descriptive statistics are used to provide an overview or descriptive of a data that provides a minimum value, maximum value, average value (mean), and standard deviation. The results of descriptive statistics in this study are as follows:

Table 2
Statistical Descriptive Test
Descriptive Statistics

	N	Minimum	Maximum	mean	Std. Deviation
X1	90	.41	4.48	1.7344	1.08719
X2	90	51.70	161.41	82.8047	16.81666
X3	90	29.67	163.00	81.6326	19.40016
X4	90	.09	7.21	2.0647	1.26104
Y	90	-5.25	4.73	1.7633	1.55874
Valid N (listwise)	90				

Source: Research results, processed (2022)

In the analysis of descriptive statistical tests, if the standard deviation > the mean then the mean value is a bad representation of the overall data, and vice versa if the standard deviation < the mean then a good representation of the overall data.

Based on the average value (mean) Credit Risk During the 2016-2021 observation period, the sample companies obtained were 1.7344 with a standard deviation of 1.08719 which means that the standard deviation value is smaller than the mean value so that the mean value is a good data

representation of the entire data. The highest value of Credit Risk in this study is 4.48 while the lowest value is 0.41 and for observations is 90.

4.2. Classic Assumption Test

Normality test

Normality test aims to test whether in the regression model the dependent variable and the independent variable both have a normal distribution or not. A good regression model is to have a normal distribution or close to normal. According to Ghozali (2006:148), it was revealed that the provisions of the normality probability plot graph if the data spreads around the diagonal line and follows the direction of the diagonal line, the regression model meets the assumption of normality. Based on the results of the normality test with computer aids using the SPSS 16.0 program, it can be seen in Figure 4.1 below:

Normal P-P Plot of Regression Standardized Residual

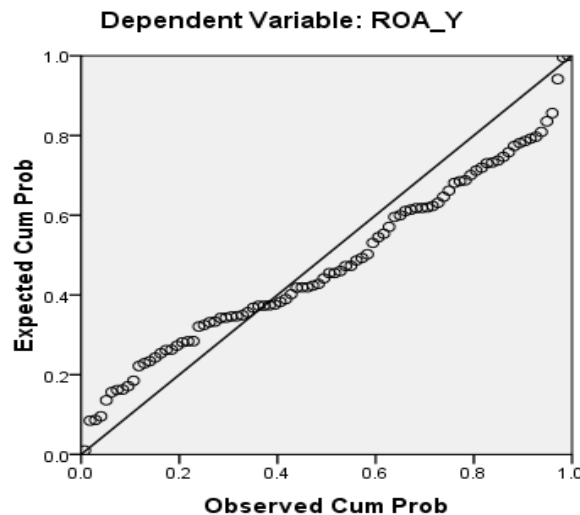


Figure 2 normality probability plot graph

Source: Research results, processed data (2022)

Based on Figure 4.1 the normal plot graph, it shows that the regression model is feasible to use in this study because the normal plot graph shows the points spread around the diagonal line and the distribution follows the direction of the diagonal line so that it meets the assumption of normality. Testing the normality of the data was also carried out using the Kolmogorov-Smirnov Test. The results of the normality test can be seen in Table 3 below:

Table 3
Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		90
Normal Parameters	mean	.0000000
	Std. Deviation	.78912871
Most Extreme Differences	Absolute	.131
	Positive	.131

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	negative	-105
Kolmogorov-Smirnov Z		1,243
asymp. Sig. (2-tailed)		.091
a. Test distribution is Normal.		
b. Calculated from data.		

Source: Research results, processed data (2022)

Based on the results in the table above, it shows that the data in the study are normally distributed because the significance value is above 0.05, which is 0.091. These results are in accordance with Ghozali's theory (2006:149) which reveals that the provisions of the Kolmogorov Smirnov test (Ks) if the significant value is > 0.05 then the data distribution is normal.

4.3. Multicollinearity Test

Multicollinearity test is a situation where there is a correlation of independent variables between one another. Multiple regression models must be free from multicollinearity for one dependent variable. To detect the presence or absence of multicollinearity in the regression model, it can be seen from the Tolerance and Variance Inflation Factor (VIF) values. If the tolerance value is > 0.10 or $VIF < 10$, then there is no multicollinearity. The results of the multicollinearity test are described in Table 4 below:

Table 4
Multicollinearity Test

Coefficientsa			
Model		Collinearity Statistics	
		Tolerance	VIF
1	NPL_X1	.504	1984
	BOPO_X2	.679	1.473
	LDR_X3	.937	1.068
	KAP_X4	.548	1.826

a. Dependent Variable: ROA_Y

Source: Research results, processed data (2022)

The results of the calculation of the tolerance value show that there is no independent variable that has a tolerance value of less than 0.10 which means there is no correlation between the independent variables. The results of the calculation of the value of the variance inflation factor (VIF) also show the same thing that there is no one independent variable that has a VIF of more than 10. So it can be concluded that there is no multicollinearity between the independent variables in the regression model.

4.4. Autocorrelation Test

Autocorrelation test is a relationship between nuisance errors that appear in time series data. The estimation of the linear regression model contains the assumption that there is no autocorrelation between the confounding errors. Autocorrelation test can be done by calculating Durbin-Watson (dw), by comparing the value of d to dl and du. After calculating the next statistical

value compared with the table with a significant level of 5%. The results of the autocorrelation test can be seen from the following table:

Table 5
Autocorrelation Test Results

Model Summaryb					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.840a	.706	.692	.86102	1,792
a. Predictors: (Constant), X4, X3, X2, X1					
b. Dependent Variable: Y					

Source: Research results, processed data (2022)

Based on table 5 the Durbin-Waston (DW) value is 1,792 the value of dl (outer limit) is 1.5656, and the value of du (inner limit) is 1.7508 (see Durbin-Waston table). The value of Durbin-Waston $< (4-du)$ is $(4-1.5656 = 2.4344)$ or $1.5656 < 1.792 < 2.4344$, so there is no autocorrelation both positive and negative autocorrelation.

4.5. Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residual of one observation to another observation. If the residual variance from one observation to another observation remains, it is called homoscedasticity or there is no heteroscedasticity. The results of the scatterplot of heteroscedasticity testing using the graph method can be seen from Figure 4.2 as follows:

Scatterplot

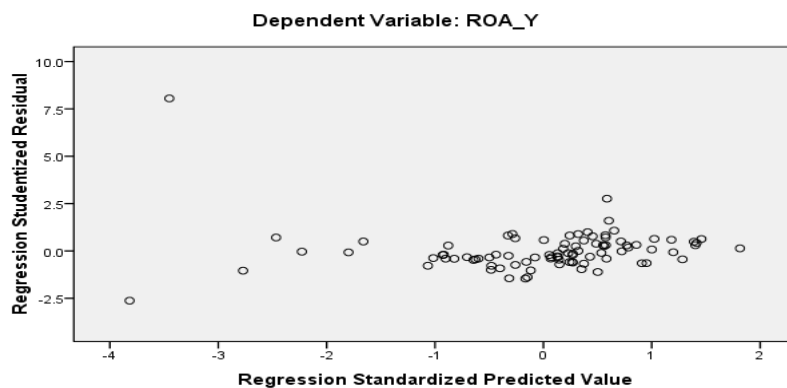


Figure 3 Heteroscedasticity Test Results

Source: Research results, processed data (2022)

Based on Figure 3, it can be illustrated that there is no heteroscedasticity. This is based on a graphic image where the points in the graph do not form a clear particular pattern and the points are spread over the number 0 on the Y axis.

4.5. Discussion

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The results of this study indicate that credit risk has a negative and significant effect on profitability. This is indicated by the results of the value of t count $>$ t table, namely $-2,138 >$

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1.98827 and a significant value of $0.035 < 0.05$. (Hypothesis 1 is accepted). The existence of a negative influence indicates that if credit risk increases, it will reduce profitability.

In accordance with the Commercial Loan Theory, loan repayment implies repayment. This means that if the bank provides a loan to a customer, the customer is obliged to return the loan in accordance with the agreed agreement. But in reality it is not like that. Some customers choose not to fulfill their obligation to pay credit for certain reasons, so the bank has to bear the burden of bad loans which is illustrated by the NPL ratio.

The results of this study indicate that the higher the credit risk, the lower the value of profitability and conversely, the lower the credit risk, the higher the value of profitability. Obtaining a negative and significant effect of the credit risk variable on profitability is because credit risk compares non-performing loans to total credit, the higher the credit risk, the higher the non-performing loans, high non-performing loans will lead to high bank risk so that it will reflect the value of the firm. low. This is because investors think that the higher the NPL ratio will reduce the company's income, so that the value of the company will decrease. It can be concluded that the higher the NPL, the lower the profitability. This is also in line with signaling theory, where a good signal will have a good effect on the market. A low NPL value reflects a good signal so that it can have an effect on increasing profitability.

The results of this study are in line with research conducted by Srihayati (2015) and Suryanto (2017) which found that credit risk has a significant negative effect on profitability, while research by Ogboi and Unuafe (2013), and Jumono et al. (2015) found that credit risk has a negative but not significant effect on profitability. Research conducted by (Jha and Hui, 2012) and (Buchory, 2015) contrary to the results of other studies with the results of credit risk having a significant positive effect on profitability.

5. CONCLUSIONS AND SUGGESTIONS

5.1. Conclusion

Based on the data analysis that has been described, several conclusions can be drawn as follows:

1. Credit risk has a negative and significant effect on profitability in banking companies listed on the Indonesia Stock Exchange in 2016-2021
2. Operational risk has a negative and significant effect on the profitability of banking companies listed on the Indonesia Stock Exchange in 2016-2021
3. Liquidity risk has a negative and insignificant effect on the profitability of banking companies listed on the Indonesia Stock Exchange in 2016-2021
4. Earning Asset Quality has a negative and insignificant effect on profitability in banking companies listed on the Indonesia Stock Exchange in 2016-2021
5. Credit Risk, Operational Risk, Liquidity Risk, and Quality of Earning Assets Affect Profitability of banking companies listed on the Indonesia Stock Exchange in 2016-2021.

5.2. SUGGESTIONS

Paand future research is expected to further examine this issue in depth in a more focused and applicable way. The deepening of this research will be more accurate and maximal if the researcher includes several variables that are considered necessary or support this research, and maximize the sample taken by expanding, both from the types of banks and the period of the years studied.

REFERENCES

- Abdullah, MNNJ (2014). The Impact of Liquidity on Profitability in Banking Sector of Bangladesh: A Case of Chittagong Stock Exchange. *EPR. International Journal Of Economics and Business Review*, 2 (10), Pp.17-22.
- Abel, Sanderson and Roux, P. Le. (2016). Determinants of Banking Sector Profitability in Zimbabwe. *International Journal of Economics and Financial Issues*, 6(3), Pp.845-854.
- Alkhazaleh, Ayman Mansour and Almsafir, M. (2014). Bank Specific Determinants of Profitability in Jordan. *Journal of Advanced Social Research*, 4 (10), Pp.1-20.
- Attar. (2014). The Effect of Risk Management Implementation on the Financial Performance of Banks Listed on the Indonesia Stock Exchange. *ISSN Accounting Journal 2302-0164 Postgraduate Syiah Kuala University*.
- Bhattarai, YR (2016). Effect of Non-Performing Loan on the Profitability of Commercial Banks in Nepal. *The International Journal Of Business & Management*, 4(6), Pp.435-442.
- Buchory, HA (2015). Banking Profitability: How does the Credit Risk and Operational Efficiency Effect. *Journal of Business and Management Sciences*. 3(4), pp.118-123.
- Bustani, B., Gaddafi, M., & Nur Ilham, R. (2022). REGIONAL FINANCIAL MANAGEMENT SYSTEM OF REGENCY/CITY REGIONAL ORIGINAL INCOME IN ACEH PROVINCE PERIOD YEAR 2016-2020. *International Journal of Educational Review, Law And Social Sciences (IJERLAS)*, 2(3), 459–468.<https://doi.org/10.54443/ijerlas.v2i3.277>
- Capriani, Ni Wayan Wita and Dana, IM (2016). The Effect of Credit Risk on Operational Risk and Liquidity Risk on the Profitability of Rural Banks in Denpasar City. *E-Journal of Unud Management*, 5 (3), p.1486-1512.
- Dahiyat, A. (2016). Does Liquidity and Solvency Affect Banks Profitability? *Evidence from Listed Banks in Jordan. International Journal of Academic Research in Accounting, Finance and Management Sciences*.6(1), Pp.35-40.
- Dawood, U. (2014). Factors Impacting Profitability of Commercial Banks in Pakistan for The Period of (2009-2012). *International Journal of Scientific and Research Publications*, 4(3), Pp.1-7.
- Dewi, Luh Eprima., Herawati, Nyoman Trisna and Sulindawati, LGE (2015). **Analysis of the Effect of NIM, BOPO, LDR, and NPL on Profitability (Case Study on National Private Commercial Banks Listed on the Indonesia Stock Exchange 2009-2013 Period)**. *E-Journal SI Ak. Ganesha University of Education*, 3 (1), pp.1-11
- Falahuddin, F., Fuadi, . F., Munandar, M., Juanda, R. ., & Nur Ilham, R. . (2022). INCREASING BUSINESS SUPPORTING CAPACITY IN MSMES BUSINESS GROUP TEMPE BUNGONG NANGGROE KERUPUK IN SYAMTALIRA ARON DISTRICT, UTARA ACEH REGENCY. *IRPITAGE JOURNAL*, 2(2), 65–68.<https://doi.org/10.54443/irpitage.v2i2.313>
- Geovani, I. ., Nurkhotijah, S. ., Kurniawan, H. ., Milanie, F., & Nur Ilham, R. . (2021). JURIDICAL ANALYSIS OF VICTIMS OF THE ECONOMIC EXPLOITATION OF CHILDREN UNDER THE AGE TO REALIZE LEGAL PROTECTION FROM HUMAN RIGHTS ASPECTS: RESEARCH STUDY AT THE OFFICE OF SOCIAL AND COMMUNITY EMPOWERMENT IN BATAM CITY. *International Journal of Educational Review, Law And Social Sciences (IJERLAS)*, 1(1), 45–52.<https://doi.org/10.54443/ijerlas.v1i1.10>
- Gitman, LJ and Zutter, CJ (2012). *Principles of Managerial Finance*. United States: Prentice Hall.
- Herlina., Nugraha and Purnamasari, I. (2016). The Effect of Credit Risk on Profitability (Case Study on National Private Foreign Exchange Commercial Banks 2010-2014). *Journal of Business Management and Entrepreneurship Education*, 1 (1), pp.31-36.

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- Ilham, Rico Nur. et all (2019). Investigation of the Bitcoin Effects on the Country Revenues via Virtual Tax Transactions for Purchasing Management. *International Journal of Supply Management*. Volume 8 No.6 December 2019.
- Ilham, Rico Nur. et all (2019).. Comparative of the Supply Chain and Block Chains to Increase the Country Revenues via Virtual Tax Transactions and Replacing Future of Money. *International Journal of Supply Management*. Volume 8 No.5 August 2019.
- Jha, Suvita and Hui, X. (2012). A Comparison of Financial Performance of Commercial Banks: A Case Study of Nepal. *African Journal of Business Management*, 6 (25), Pp.7601-7611.
- Lasta Irawan, A. ., Briggs, D. ., Muhammad Azami, T. ., & Nurfaliza, N. (2021). THE EFFECT OF POSITION PROMOTION ON EMPLOYEE SATISFACTION WITH COMPENSATION AS INTERVENING VARIABLES: (Case Study on Harvesting Employees of PT. Karya Hevea Indonesia). *International Journal of Social Science, Educational, Economics, Agriculture Research, and Technology (IJSET)*, 1(1), 11–20.<https://doi.org/10.54443/ijset.v1i1.2>
- likdanawati, likdanawati, Yanita, Y., Hamdiah, H., Nur Ilham, R., & Sinta, I. (2022). EFFECT OF ORGANIZATIONAL COMMITMENT, WORK MOTIVATION AND LEADERSHIP STYLE ON EMPLOYEE PERFORMANCE OF PT. ACEH DISTRIBUS INDO RAYA. *International Journal of Social Science, Educational, Economics, Agriculture Research, and Technology (IJSET)*, 1(8), 377–382. <https://doi.org/10.54443/ijset.v1i8.41>
- Majied Sumatrani Saragih, M. ., Hikmah Saragih, U. ., & Nur Ilham, R. . (2021). RELATIONSHIP BETWEEN MOTIVATION AND EXTRINSIC MOTIVATION TO ICREASING ENTREPRENEURSHIP IMPLEMENTATION FROM SPP AL-FALAH GROUP AT BLOK 10 VILLAGE DOLOK MASIHUL. *MORFAI JOURNAL*, 1(1), 1–12.<https://doi.org/10.54443/morfai.v1i1.11>
- Mirawati. (2013). The Effect of Ownership Structure and Company Size on Profitability of Property and Real Estate Companies Listed on the Indonesia Stock Exchange. King Ali Hajj Maritime University. Tanjung Pinang.
- Nur Ilham, R. ., Arliansyah, A., Juanda, R., Multazam, M. ., & Saifanur, A. . (2021). RELATHIONSIP BETWEEN MONEY VELOCITY AND INFLATION TO INCREASING STOCK INVESTMENT RETURN: EFFECTIVE STRATEGIC BY JAKARTA AUTOMATED TRADING SYSTEM NEXT GENERATION (JATS-NG) PLATFORM. *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS)*, 1(1), 87–92.<https://doi.org/10.54443/ijevas.v1i1.27>
- Nur Ilham, R. ., Arliansyah, A., Juanda, R., Multazam, M. ., & Saifanur, A. . (2021). RELATHIONSIP BETWEEN MONEY VELOCITY AND INFLATION TO INCREASING STOCK INVESTMENT RETURN: EFFECTIVE STRATEGIC BY JAKARTA AUTOMATED TRADING SYSTEM NEXT GENERATION (JATS-NG) PLATFORM. *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS)*, 1(1), 87–92.<https://doi.org/10.54443/ijevas.v1i1.27>
- Nur ilham, R., Likdanawati, L., Hamdiah, H., Adnan, A., & Sinta, I. . (2022). COMMUNITY SERVICE ACTIVITIES “SOCIALIZATION AVOID STUDY INVESTMENT” TO THE STUDENT BOND OF SERDANG BEDAGAI. *IRPITAGE JOURNAL*, 2(2), 61–64.<https://doi.org/10.54443/irpitage.v2i2.312>
- Pamularsih, D. (2015). The Influence of LDR, NPL, NIM, BOPO, CAR and Interest Rates on Profitability in the Banking Sector Listed on the Indonesia Stock Exchange for the Period of 2009-2013. *Scientific Journal of S1 Accounting Students, Pandanaran University*, 1 (1), 1-20.

- Presetyo, Dwi Agung and Darmayanti, NPA (2015). The Influence of Credit Risk, Liquidity, Capital Adequacy, and Operational Efficiency on Profitability at PT BPD Bali. *E-Journal of Unud Management*, 4 (9), p.25902617.
- Rahmaniar, R., Subhan, S., Saharuddin, S., Nur Ilham, R. ., & Anwar, K. . (2022). THE INFLUENCE OF ENTREPRENEURSHIP ASPECTS ON THE SUCCESS OF THE CHIPS INDUSTRY IN MATANG GLUMPANG DUA AND PANTON PUMP. *International Journal of Social Science, Educational, Economics, Agriculture Research, and Technology (IJSET)*, 1(7), 337–348.<https://doi.org/10.54443/ijset.v1i7.36>
- Rahman, Mohammad Morshedur., Hamid, Md. Kowsar and Khan, MAM (2015). Determinants of Bank Profitability: Empirical Evidence from Bangladesh. *International Journal of Business and Management*, 10 (8), Pp.135-150.
- Ramadanti, F. (2015). Analysis of the Effect of Liquidity Risk on Banking Profitability in Indonesia (Case Study on Banks Listed on the IDX During the 2011-2013 Period).
- Riyadi, S. (2014). The Effect of Profit Sharing Financing, Sales and Purchase Financing, Financing To Deposit Ratio (FDR) and Non Performing Financing (NPF) on the Profitability of Islamic Commercial Banks in Indonesia. ISSN:2252(Semarang State University. Semarang.).
- Sandi, H. ., Afni Yunita, N. ., Heikal, M. ., Nur Ilham, R. ., & Sinta, I. . (2021). RELATIONSHIP BETWEEN BUDGET PARTICIPATION, JOB CHARACTERISTICS, EMOTIONAL INTELLIGENCE AND WORK MOTIVATION AS MEDIATOR VARIABLES TO STRENGTHENING USER POWER PERFORMANCE: AN EMPERICAL EVIDENCE FROM INDONESIA GOVERNMENT. *MORFAI JOURNAL*, 1(1), 36–48.<https://doi.org/10.54443/morfai.v1i1.14>
- Sinta, I., Nur Ilham, R., Kumala Sari, D., M, M., Khaidir, K., & Ekamaida, E. (2021). Training The Processing Of Tomato Sauce For A Home-Based Business The Scale Of SMES. *IRPITAGE JOURNAL*, 1(1), 26–28.<https://doi.org/10.54443/irpitage.v1i1.24>
- Sinurat, M. ., Heikal, M. ., Simanjuntak, A. ., Siahaan, R. ., & Nur Ilham, R. . (2021). PRODUCT QUALITY ON CONSUMER PURCHASE INTEREST WITH CUSTOMER SATISFACTION AS A VARIABLE INTERVENING IN BLACK ONLINE STORE HIGH CLICK MARKET: Case Study on Customers of the Tebing Tinggi Black Market Online Store. *MORFAI JOURNAL*, 1(1), 13–21.<https://doi.org/10.54443/morfai.v1i1.12>
- Sugiyono. (2013). *Business Research Methods*. CVAAlphabeta. Bandung.
- Yunita, Nur Afni (2016). Effect of Capital Adequacy and Allowance for Earning Assets on Profitability with Non-performing Loans Ratio as Moderating Variable in Banking Companies (Case Study at Regional Development Bank of North Sumatra Period 2011-2014). *Journal of Accounting and Finance*, Vol. 5 No. 1, p. 73-86 .
- Yunita, Nur Afni (2018). Analysis of Bank Soundness Level Using Camels and Pearls Method at Indonesian Commercial Banks. CV. Sefa Bumi Persada. Aceh.
- Yusuf Iis, E., Wahyuddin, W., Thoyib, A., Nur Ilham, R., & Sinta, I. (2022). THE EFFECT OF CAREER DEVELOPMENT AND WORK ENVIRONMENT ON EMPLOYEE PERFORMANCE WITH WORK MOTIVATION AS INTERVENING VARIABLE AT THE OFFICE OF AGRICULTURE AND LIVESTOCK IN ACEH. *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS)*, 2(2), 227–236.<https://doi.org/10.54443/ijebas.v2i2.191>