

# THE INFLUENCE OF DIGITAL BANKING AND RISK FACTORS ON PERFORMANCE BANKING COMPANY (CASE STUDY OF A REGISTERED BANK ON THE INDONESIA STOCK EXCHANGE)

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# Abstract

The aim of this research is to determine and analyze the influence of Digital Banking and Risk Factors on Banking Company Performance. The sample in this research was banking companies listed on the Indonesia Stock Exchange in 2017-2022, which were taken using a non-probability sampling method using a purposive sampling technique. This resulted in a sample of 22 companies. The type of research used is quantitative. The data analysis technique uses multiple linear regression techniques with the help of e-views software. The test results show that the digital banking variables, credit risk, inflation and economic growth simultaneously influence performance the the financial of banks listed on Indonesia Stock 2017-2022 period. Meanwhile, digital banking Exchange for the partially, the variable, credit risk has an influence on the financial performance of banks. listed Stock Exchange, while inflation and economic growth variables on the Indonesian have no influence on the financial performance of banks listed on the Indonesian Stock Exchange.

# Keywords: Digital Banking, Credit Risk, Inflation, Economic Growth, Company Performance

# INTRODUCTION

Technology is developing rapidly, technological developments are has quickly brought world society's life into an era of revolution industry 4.0. in the era of industrial revolution 4.0. All daily activities depends on technology which inevitably must be followed by all companies are no exception to banking companies so they don't become outdated and is expected to increase profitability. The purpose of applying technology in banking companies, including increasing performance efficiency financial banking. By implementing technology, it will cut operational costs because all transactions are carried out in a centralized manner and automatically (Masdupi et al., 2020). Utilization of various technologies in the field of financial services has been brought significant changes in the banking industry. Changes in consumption patterns Society towards digital encourages the process of accelerating banking transformation towards digital banking. In total, digital transactions throughout the world since 2017-2021 grew by 118%, from USD 3.09 trillion in 2021. In Indonesia itself, the development of digital transactions is growing much further high, namely 1.556% in the 2017-2020 period. Money transactions electronics will reach IDR 786.35 trillion in 2021. This value is increasing IDR 381.39 trillion (55.73%) compared to the previous year which was only IDR 504.96 trillion (Bank Indonesia, 2021).

To find out the weaknesses and strengths of banking, it is necessary Financial performance is very important for a bank. Wrong''' One method commonly used to analyze bank financial performance is by analyzing the financial ratio Return On Assets (ROA). eturn On Assets (ROA) is a ratio that compares profits net before tax with total assets of a bank. This ratio can show profitability of a bank because it can describe internal management performance generate profits by using its assets. ROA focuses on the ability of a company to obtain earnings by using all assets managed. So ROA

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is used as a tool to measure banking performance. The higher the ROA results, the healthier it is The bank's performance is because the rate of return is getting bigger. If ROA increases, meaning the bank's profitability increases, which has an impact on increased profits to shareholders..





The picture above shows that there is fluctuation in banking ROA in Indonesia during the 2017-2021 period, starting with 2017, recorded ROA 2.41%, then in 2018 there was a recorded decline of 2.27%, in 2019 it returned rose recorded at 2.48%, in 2020 there was a decline again recorded at 2.43%, and in In 2021 there was a recorded decline of 1.82%. long-term increase in ROA several years this was possible due to the use of digital banking growing. Besides the increase, there was a decrease in ROA for 2 consecutive years which can be caused by lower interest rates banking both globally and domestically. A decrease in loan interest rates will causes the bank's interest margin to thin and can impact the bank's income just decreased. Apart from that, the problem of increasing the risk of non-performing loans (Non Performing Loan) NPL can also be one of the reasons ROA experiences decline.

# LITERATURE REVIEW

Financial performance is an analysis carried out to see the extent which a company has implemented using rules managing finances properly and correctly. Financial performance is a an overview of the financial condition of a company analyzed using tools financial analysis, so that you can know whether the situation is good or bad a company's finances that reflect work performance in a period certain. It is also very important that resources are used appropriately optimal in facing environmental changes (Wahyuddin et al, 2022).

Return On Assets (ROA) is one of the profitability ratios. In analysis of financial statements, this ratio is most often highlighted, because it is capable of shows the company's success in generating profits. ROA is capable measures a company's ability to generate profits in the past to then be projected into the future. Assets or assets What is meant is the entire assets of the company, which



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are obtained from its own capital as well as foreign capital that the company has converted into assets companies that are used for the survival of the company.

According to OJK (2016) digital banking services are banking activities which can be accessed independently using electronic means, either through digital media belonging to customers, prospective customers and the bank itself. With this digital banking service, it can make things easier for customers and prospective customers to obtain information, registration, open an account, carrying out communications, closing accounts, banking transactions, and incl obtain other information and transactions outside banking products as well information regarding financial advice, system transactions electronic-based trading (e-commerce), investment, and so on.

Financial ratios that can be used to measure credit risk are Non Performing Loans (NPL), this ratio is used to measure capability banks in minimizing the problem loans they face (Puspitasari, 2009). Non-Performing Loans (NPL) are non-performing loans or bad credit a bank. NPL occurs due to the failure of the debtor to fulfill its obligations to pay the principal installments of credit along with the agreed interest both parties to the credit agreement.

Inflation is a condition that describes the price of one item has been increasing continuously. The influence of unstable inflation investor uncertainty in making decisions Rachmawati (2018) has high risk for investors to invest in stocks if inflation is not stable, because there will be a decrease in trading volume which will have an impact on impairment (Amanda et al., 2022).

According to Sukirno (2002) economic growth is a development in economic activities that can result in goods and services that have been produced by the community can increase the prosperity of the community increase. So that economic growth can also be interpreted as a process of increasing production capacity in an economy that is realized in the form of an increase in national income. There is economic growth is an induction of successful economic development. Investment will too can increase the amount of capital goods. Technology used today growing very rapidly. Besides that, the number of workers must increase as well as population development, and work experience and education as well will add to their skill

#### **METHOD**

In this research, secondary data is used, namely research data obtained by researchers indirectly through intermediary media generally in the form of evidence of historical records or reports that have been compiled and published by banking companies. Data sources used in this research is the annual financial report for 2017-2022 which is accessed via the Financial Services Authority (OJK) website or on the banking company website the. In this research, the method used is linear regression analysis multiple, because this research uses more than one variable. Analysis This research data uses statistical calculations with the application of Eviews. Apart from measuring the strength of the relationship between two or more variables, regression analysis also shows the relationship between the dependent variable and the independent variable. Method The analysis used in this research is data testing, namely statistics descriptive, classical assumption testing and then hypothesis testing..



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#### Date: 12/09/23 Time: 15:04 Sample: 2017 2022 DIGIT AL BANKIN **RISIKO INFLA** KREDIT PDB SI ROA G 0.8712 0.0477 0.5300 0.0416 0.0221 Mean 12 88 00 82 19 1.0000 0.0300 0.5950 0.0500 0.0100 Median 00 00 00 00 00 Maximu 1.0000 0.5700 0.7100 0.0500 0.3110 00 00 00 00 00 m Minimu 0.0000 0.0010 0.2800 0.0200 0.0000 00 00 00 00 00 m 0.3362 0.0787 0.1626 0.0121 0.0484 Std. Dev. 41 70 87 04 66 4.0158 5.1533 0.534879 0.884930 Skewness 2.216423 60 62 1.5974 5.9125 21.665 1.9951 30.118 32 87 34 08 Kurtosis 85 154.73 17.112 22.781 Jarque-2271.0 4628.9 Bera 13 73 84 88 03 Probabilit 0.0000 0.0000 0.0001 0.0000 0.0000 00 00 92 11 00 у 115.00 6.3080 69.960 5.5020 2.9197 00 Sum 00 00 00 00 Sum Sq. 14.810 0.8128 3.4672 0.0193 0.3069 Dev. 91 61 12 00 28 Observati 132 132 132 132 132 ons

#### **RESULTS AND DISCUSSION**

Table 4.1 above shows that there are five variables, namely ROA DIGITAL\_BANKING, CREDIT\_RISK, INFLATION and GDP, with amounts The total sample was 132 samples. Explanation of the calculation results statistics are described as follows

1. ROA

From the results of descriptive statistical testing, it is known that the average ROA of The banks sampled during the research period were 0.022119 or 2.21% with a standard deviation of 0.048404 or 4.8%. Minimum value ROA is 0.000000 and the maximum value is 0.311000 or equal to 31.1%, the higher the ROA value of a bank, the better its performance its finances and shows the efficiency of managing bank assets in the bank generate profits.



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# 2. DIGITAL\_BANKING

Based on the results of descriptive statistical testing, it can be seen that DIGITAL\_BANKING average is 0.871212 which means that 87.1% of all banks sampled have adopted the system digital banking.

# 3. CREDIT\_RISK

Based on the results of statistical tests that have been carried out, the average CREDIT\_RISK is 0.047788, this shows the comparison non-performing loans with total credit provided or 4.77% with a standard deviation of 0.078770 or 7.87%. Minimum value CREDIT\_RISK is 0.001000 or 0.1% and the maximum value is 0.570000 or 5.70%. Average NPL at banks listed on the Stock Exchange Indonesia is below the maximum limit set by the Bank Indonesia is 5% so it can be concluded that the bank Have good ability in dealing with problem loans.

# 4. INFLATION

Based on the results of descriptive statistical tests carried out on average Indonesian inflation during the 2017-2022 period was 0.530000 or 53% with a standard deviation of 0.162687 or 16.2%. During the period research minimum inflation value of 0.280000 or 28% and value

maximum of 0.710000 or 71%. This shows that during during the research period, economic conditions in Indonesia were not stable or high.

# 5. GDP

Based on the results of the descriptive statistics that have been carried out, Indonesia's economic growth was the smallest during the 2017-2022 period amounting to 0.020000 or 2% and the largest economic growth during research period of 0.050000 or 5% and average growth economy is 0.041682 or 4.1%. Standard deviation of 0.012166 which means that the maximum increase in average Indonesia's economic growth variable is + 0.012166, whereas

maximum decrease in the average economic growth variable Indonesia is - 0.012166.



The results show that Jarque Bera's probability value changed to 0.114060, Thus it can be concluded that the data from the variables in this study normally distributed.



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#### 2. Multicollinearity Test

Variance Inflation Factors
Date: 12/10/23 Time: 20:06
Sample: 1 132
Included observations: 132

	Coeffi cient Varian	Uncent ered	Center ed
Variable	ce	VIF	VIF
	0.109	23.72	
С	142	861	NA
DIGITAL_BA	0.041	7.909	1.018
NKING	760	815	688
RISIKO_KRED	0.758	1.391	1.014
IT	154	387	968
	0.259	17.29	1.479
INFLASI	017	741	149
	46.48	19.04	1.484
PDB	905	466	730

The results of the test show that all variables have VIP values less than 10 so it can be said that there is no multicollinearity in the data.

## 3. Autocorrelation Test

Breusch-Godf	rey Serial Cor	rrelation LM Test:	
	9.295		0.00
F-statistic	157	Prob. F(2,125)	02
	17.08	Prob. Chi-	0.00
Obs*R-squared	974	Square(2)	02

Test Equation: Dependent Variable: RESID Method: Least Squares Date: 12/10/23 Time: 20:08 Sample: 1 132 Included observations: 132 Presample missing value lagged residuals set to zero.

Variable	Coeff	Std.	t-	Prob
	icient	Error	Statistic	
C DIGITAL_BA NKING	0.035450 0.058 169	0.3108 07 0.1927 73	0.114058 0.3017 48	0.90 94 0.76 33



0.062	0.8191	0.0761	0.93
336	11	02	95
-	0.4796	-	0.94
0.035869	88	0.074775	05
-	6.4320	-	0.99
0.078235	88	0.012163	03
0.269	0.0884	3.0472	0.00
562	61	33	28
0.173	0.0893	1.9423	0.05
509	29	63	43
	Mear	n dependent	-
			2.24E-16
	S.D.	dependent	0.76
	vai	•	7209
0.732	Ak	aike info	2.26
802	criter	ion	7691
67.12			2.42
491	Schw	arz criterion	0567
-	Han	nan-Quinn	2.32
142.6676	crite	er.	9813
3.098	Durb	oin-Watson	2.03
386	sta	t	4175
0.007			
302			
	0.078235 0.269 562 0.173 509 0.129 468 0.087 682 0.732 802 67.12 491 142.6676 3.098 386 0.007	336 11   - 0.4796   0.035869 88   - 6.4320   0.078235 88   0.269 0.0884   562 61   0.173 0.0893   509 29   0.129 Mear   468 var   0.087 S.D.   682 var   0.732 Ak   802 criter:   67.12 -   491 Schw   142.6676 criter   3.098 Durb   386 stat   0.007	336 11 02   - 0.4796 -   0.035869 88 0.074775   - 6.4320 -   0.078235 88 0.012163   0.269 0.0884 3.0472   562 61 33   0.173 0.0893 1.9423   509 29 63   0.129 Mean dependent   468 var   0.087 S.D. dependent   682 var   0.732 Akaike info   802 criterion   67.12 491   491 Schwarz criterion   142.6676 criter.   3.098 Durbin-Watson   386 stat   0.007

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The test results show that the Prob Chi Square (2) value is The p value of the Breusch-Godfrey Serial Correlation LM test is 0.9329 where > 0.05 which means there is no autocorrelation problem.

4. Heteroscedasticity Test

#### Heteroskedasticity Test: White

	0.742		0.71
F-statistic	219	Prob. F(13,118)	83
	9.977	Prob. Chi-	0.69
Obs*R-squared	740	Square(13)	58
-	6.988	Prob. Chi-	0.90
Scaled explained SS	427	Square(13)	27

Test Equation: Dependent Variable: RESID^2 Method: Least Squares Date: 12/11/23 Time: 10:21 Sample: 1 132 Included observations: 132 Collinear test regressors dropped from specification

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Variable	Coeff icient	Std. Error	t- Statistic	Prob
v allable	ICICIII	LIIU	Statistic	•
	3.401	10.733	0.3169	0.75
С	662	40	23	19
	0.887	0.9453	0.9385	0.34
DIGITAL_BANKING^2	197	01	34	99
DIGITAL_BANKING*RIS	-	10.343	-	0.85
IKO_KREDIT	1.931225	71	0.186705	22
DIGITAL_BANKING*INF	-	1.4613	-	0.34
LASI	1.383442	25	0.946704	57
DIGITAL_BANKING*PD	3.169	20.460	0.1549	0.87
В	863	08	29	71
	3.935	6.0508	0.6503	0.51
RISIKO_KREDIT^2	098	32	40	67
RISIKO_KREDIT*INFLA	-	10.029	-	0.72
SI	3.580421	38	0.356993	17
	25.91	116.93	0.2216	0.82
RISIKO_KREDIT*PDB	893	13	59	50
	-	11.024	-	0.97
RISIKO_KREDIT	0.324750	01	0.029458	65
	13.10	7.8214	1.6750	0.09
INFLASI^2	169	74	92	66
	-	724.26	-	0.70
INFLASI*PDB	279.5767	89	0.386012	02
	1.723	36.681	0.0469	0.96
INFLASI	969	88	98	26
	5007.	20800.	0.2407	0.81
PDB^2	021	00	22	02
	-	1254.2	-	0.83
PDB	260.1982	89	0.207447	60
	0.075	Mean dependent		0.58
R-squared	589	var	•	4151
-	-	S.D.	dependent	0.72
Adjusted R-squared	0.026253	var	•	1332
	0.730	Aka	aike info	2.31
S.E. of regression	739	criteri	on	0483
2	63.00			2.61
Sum squared resid	958	Schwa	arz criterion	6235
-	-	Hanr	nan-Quinn	2.43
Log likelihood	138.4919	criter	-	4727
~	0.742		in-Watson	1.96
F-statistic	219	stat		0335
	0.718			
Prob(F-statistic)	287			

The test results show that the probability of all variables is above 0.5 so it can be concluded that the data in this study did not occur heteroscedasticity.



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# CLOSING

Based on research that has been carried out with the aim of analyze the influence of digital banking and risk factors on company performance banks listed on the Indonesia Stock Exchange for the 2017-2022 period, then you can The conclusions drawn from the results of this research are as follows:

1. Test Results

The test results show that the digital banking variables, credit risk, inflation and economic growth simultaneously influence financial performance of banks listed on the Indonesia Stock Exchange for the period 2017- 2022 Meanwhile, partially, the digital banking variable, credit riskhas an influence on the financial performance of banks listed on the Stock Exchange Indonesia effect, while inflation and economic growth variables do not has an influence on the financial performance of banks listed on the Stock Exchange Indonesia effect, while inflation and economic growth variables do not has an influence on the financial performance of banks listed on the Stock Exchange Indonesia effect.

2. Adjusted R-Square value

Adjusted R-Square value from the regression model formed in this research amounted to 0.039288 which means that the ability is variable digital banking, credit risk, inflation and economic growth in influencing bank financial performance by 39.28%. Whereas the rest is influenced by other variables outside this regression model

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