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THE EFFECT OF USE OF MOBILE BANKING, INTERNET BANKING AND CREDIT RATIO ON THE VALUE OF BANKING COMPANIES

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ABSTRACT

This research aims to determine the influence of the use of mobile banking and internet banking as well as the credit ratio on the value of banking companies listed on the Indonesia Stock Exchange (BEI) in 2019-2022. This research uses the dependent variable company value proxied by price to book value (PBV) and the independent variables mobile banking and internet banking as well as the credit ratio proxied by non-performing loans (NPL). The design of this research is quantitative research with a descriptive approach. Based on sampling using purposive sampling, the number of banks in Indonesia is 40 banks and a sample of seven banking sector companies listed on the Indonesia Stock Exchange (BEI) was obtained, where the data was processed using multiple linear regression analysis. The research results show that partially or simultaneously mobile banking and internet banking and non-performing loans (NPL). has a significant effect on the value of banking companies. This means that the value of mobile banking and internet banking transactions as well as the credit ratio proxied by non-performing loans (NPL) can influence the increase in the value of banking companies listed on the Indonesia Stock Exchange (BEI) in 2019-2022.

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INTRODUCTION

Financial technology is a very important aspect in the competitive environment relate to financial services, namely innovative financial technology, because the rapid development of electronics or e-channel services using

electronic channels has created new added value for customers provided by banking, especially now that banking applications are easily accessible. - download (downloaded) via the banking customer's gadget. Moreover, this mobile banking service can also collaborate with digital wallet services or what are usually called electronic wallets (e-wallets) such as OVO, ShopeePay, GOPAY, etc., but these e-wallets are not issued by banks but only as a means of payment and transfer money from all three is pushing for a cashless era.

Previously, internet only banking activities were not permitted (Bank Indonesia Decree Letter No. 6/18/ DPNP of 2004). Although Internet Banking Services are one of the services provided by banking services to allow customers to obtain the information needed to easily communicate and carry out banking transactions via the internet network. There are still many people who think that internet banking services and mobile banking services are the same thing even though there are similarities, firstly the aim of being a way to go cashless and then another similarity in that both are a combination of financial services (banks) and also technology. In line with the emergence of time-sharing breakthroughs based on the ability of industrial lines to synergize with technology in the so-called era 4.0 and currently 5.0, the development of technology and information systems continues to give birth to various innovations, especially those related to technology that meets society's needs. various communities, including access to financial Services and Transaction Processing. Therefore, to support this development, the Government through Bank Indonesia Regulation no. 19/12/PBI/2017 concerning the Implementation of Financial Technology, considering that Fintech currently has a legal umbrella, where Financial Services Authority Regulation (POJK) No. 13/POJK.02/2018 concerning digital financial innovation in the field of financial services as an umbrella for industrial regulatory provisions. In fact, if you compare the two, the difference is that internet banking services are a form of banking, while mobile banking itself is just a service available at banks.

On the other hand, banks, some of which are public companies, tend to increase company value to attract the attention of investors. Normatively, one of the objectives of financial management is to maximize company value (Wiagustini, 2014: 9). According to Husnan (2014: 7) defines company value as the price that potential buyers can pay when a company is sold. When a company opens or sells shares to the public, company value is defined as investors' perception of the company itself. Therefore, this research will examine the relationship between banking services and technology services on the value of listed banking companies in Indonesia.

METHODS

Population is the number of research objects multiplied by the year of observation, namely 40 banking companies registered on the IDX in 2019-2022. Of that number, 8 banks do not use internet banking or mobile banking and 25 banks do not record internet banking and mobile banking transactions so that the bank data is only 7 times the year of observation 3 for a total of 21 companies. This research is panel data, namely a combination of time series and cross-sectional data because it will use financial report data from banks registered with BI for the period 2019 to 2022 to become the research sample.

Table 1
List of Sampling Data of Banking Corporation Listed in IDX of Year 2019 – 2022

No.	Kode Saham	Nama Bank
1	BBCA	PT. Bank Central Asia Tbk
2	BBNI	PT. Bank Negara Indonesia Tbk
3	BBRI	PT. Bank Rakyat Indonesia Tbk
4	BBTN	PT. Bank Tabungan Negara Tbk
5	BMRI	PT. Bank Mandiri Tbk
6	BNII	PT. Bank Maybank Indonesia Tbk
7	PNBN	PT. Bank Pan Indonesia Tbk

Source: Indonesia Direct Exchange 2024

Multiple Linear Regression Analysis

According to Ghozali (2016), the use of multiple linear regression aims to determine whether there is a relationship between the dependent variable and the independent variable, as well as to determine the magnitude and direction of the sign of the independent variable. This analysis is used to determine how much influence the independent variables, namely Mobile Banking (X1), Internet Banking (X2) and Non-Performing Loans (NPL) (X3) have on the dependent variable, namely Company Value (Y).

This multiple linear regression analysis uses SPSS 22 software with the regression equation: $Y = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 + e$, where Y = Company Value; α = Constant; β = Regression coefficient; X1 = Mobile Banking; X2 = Internet Banking; X3 = Non Performing Loans (NPL); e = Standard error.

RESULTS AND DISCUSSION

Statistical Test

Descriptive Test

From the results of descriptive statistical analysis, it can be seen that the mobile banking variable has the lowest transaction value of 2.72 trillion owned by PT Bank Pan Indonesia Tbk and the highest mobile banking transaction value of 5,873 trillion owned by PT. Bank Central Asia Tbk.

Table 2
Descriptive Test Results

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Mobile Banking (X1)	28	2.72	5873.00	1089.1735	1342.19912
Internet Banking (X2)	28	9.00	17838.00	2340.5916	4947.30938
Non Performing Loan (X3)	28	.70	3.98	2.7375	.84609
Nilai Perusahaan (Y)	28	.59	5.75	2.2596	1.33446
Valid N (listwise)	28				

Source: Data processed by the author

Meanwhile, the average value of mobile banking transactions is 880.44 trillion and the standard deviation is 1342.20. The next variable is internet banking with the lowest transaction value of 9 trillion which is owned by PT Bank Tabungan Negara Tbk (BTN). Meanwhile, the highest internet banking transaction value of 17,838 trillion is owned by PT. Bank Central Asia Tbk. Meanwhile, the average value of internet banking transactions is 2,340 trillion and the standard deviation is 4947.31. In the credit ratio variable which is proxied by Non-Performing Loans (NPL), it is known that the lowest NPL value is 0.70 owned by PT. Bank Central Asia Tbk. The highest NPL is 3.98 owned by PT Bank Maybank Indonesia Tbk. Meanwhile, the average NPL for banking companies is 2.73 and the standard deviation is 0.846. In the company value variable which is proxied by Price to Book Value (PBV), it is known that the lowest PBV value is 0.59 owned by PT. Bank Maybank Indonesia Tbk. For the highest PBV of 5.75 owned by PT. Bank Central Asia Tbk. Meanwhile, the average PBV for banking companies is 2.25 and the standard deviation is 1.334. The results of the dependent variable profitability test are 0.160>0.05, and it can be concluded that the data is normally distributed.

Autocorrelation Test Results

Tabel 3
Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.825[a]	.680	.640	8.84391	1.857

Source: Data processed by the author

The DW value in the independent variable test for the firm value variable (Y) is between dU and 4-dU (1.538 < 1.857 < 2.462), so the regression model does not have autocorrelation.

Multiple Linear Regression Analysis Test Results

Table 4
Multiple Linear Regression Analysis Test Results

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.058	2.838		10.770	.000
	Mobile Banking (X1)	.102	.081	.361	3.003	.006
	Internet Banking (X2)	.092	.099	-.218	2.873	.033
	Non Performing Loan (Y)	-.124	.188	-.814	3.819	.000
a. Dependent Variable: PBV (Y)						

Source: Data processed by the author

Based on Table 4, the following regression equation is obtained:
Y = 1.058 + 0.102 X1 + 0.092 X2 – 0.124 X3. From the equation above it can be interpreted as follows: 1) The constant value (a) is 1.058. This means that if the independent variables mobile banking, internet banking, and non-performing loans (NPL) are zero, then the company value is 1.058. 2) The regression coefficient value for the mobile banking variable (X1) is 0.102, indicating that there is a positive relationship between mobile banking and company value. This shows that each mobile banking unit will cause an increase in the coefficient value (0.102) of the company value variable. The coefficient is positive, indicating that there is a positive relationship between mobile banking and company value. The higher the level of mobile banking utilization, the higher the company value. 3) The regression coefficient value for the internet banking variable (X2) is 0.092, which indicates that there is a positive relationship between internet banking and company value. This shows that every increase in internet banking units causes

an increase in the company value variable by the coefficient value (0.092). If the coefficient is positive, it means that there is a positive relationship between internet banking and company value. The higher the level of internet banking use, the higher the company value. 4) The regression coefficient value of the non-performing loan (NPL) variable (X3) is 0.124, which indicates that there is a negative relationship between non-performing loans (NPL) and company value. This shows that every increase in non-performing loans (NPL) causes a decrease in the company value variable by the coefficient value (-0.24). If the coefficient is negative, it means that there is a negative relationship between non-performing loans (NPL) and company value. The higher the level of non-performing loans (NPL), the lower the company value. 5) The positive and negative relationships between variables in this regression coefficient can be explained in their use. If bad credit is higher, the use of mobile banking and internet banking services is lower. Monitoring the use of these services can affect bad credit, namely, the greater the use of bank services, the presence of bad credit will become smaller because it can be seen directly.

Discussions

Mobile Banking Services with Banking Company Value

The results of data analysis show that mobile banking has a significant influence on the value of banking companies, see in Table 4. This can be seen from the average number of Mobile Banking transactions from the seven banks sampled in this research, showing an increasing trend from year to year. Mobile Banking services are assets that need to be constantly maintained or require maintenance to ensure that an asset functions well because this service provides banking companies with the opportunity to develop innovative products and services so that they can increase the Return on Assets (ROA) of banking companies. Basically, online banking innovation by banking companies is to increase the efficiency of paper use by banks because most services are via the internet. Service fees charged to customers can be a source of income for banks (Egan & Prawoto, 2013; Kombe & Wafula, 2015; Barasa et al. 2017). Apart from banking, the presence of mobile banking services also brings benefits to customers, especially in terms of time and energy efficiency, because transactions via mobile banking services can be carried out anytime, anywhere (Alfatihah and Sundari, 2021). Kisaka et al (2015) found a positive relationship between mobile banking and financial performance. According to Luo et al (2010), mobile banking is an innovative way to access banking services, where customers interact with the bank via mobile devices. Mobile banking is a new initiative by financial institutions to provide services to customers and capture technological opportunities with new business models (Riquelme & Rios, 2010). The rapid

adoption of mobile devices and easier and cheaper internet access helped increase the adoption of mobile banking by customers (Ratten, 2011). According to Sumra et al (2011), electronic banking applications reduce operational costs and will have an impact on increasing bank profitability. This is supported by research by Akhisar, Tunay, and Tunay (2015) which states that e-banking services have a significant effect on bank performance. E-Banking applications reduce operational costs and increase bank profitability. Mobile banking services provide opportunities for banks to increase their income. Khitaka's (2014) findings also show that the number of users and the number of annual transactions have a significant positive influence on the financial performance of Kenyan commercial banks. Mobile banking offers the potential for banks to expand their corporate networks and sell products to customers. Transfer itself is one of several banking products that can generate fee income.

Internet Banking Services with Banking Company Value

The results of data analysis show that internet banking has a significant influence on the value of banking companies. This can be seen from the average number of Internet Banking transactions from the seven banks sampled in this research, showing an increasing trend every year. This Internet Banking service can be accessed directly using a browser which can be used for other transactions when you don't want to come to the bank. Even though it actually has almost the same features, the difference is Mobile Banking which can be used for urgent and fast transaction needs but uses an application that must be downloaded. Yasin's (2018) research found that internet banking is positively correlated with bank financial performance. So banks implementing internet banking tend to produce better bank financial performance than banks that don't. According to Demoulin and Djjelasi (2013), internet banking helps customers complete financial transactions through secure websites enabled by banks. Internet banking is emerging as a strategic resource for achieving greater efficiency, optimizing operational control, and reducing costs by replacing paper-based and labor-intensive approaches with automated processes, thereby increasing productivity and financial performance (Pooja & Balwinder, 2019).

Credit Ratio Services with Banking Company Value

The results of data analysis show that the Credit Ratio which is proxied as Non-Performing Loans partially has a significant influence on the value of banking companies. This can be seen from the average number of Internet Banking transactions from the seven banks sampled in this research, showing an increasing trend every year. According to Latumaerissa (2014: 164), the NPL ratio

is an indicator in determining the level of bank health, where the high NPL of a bank indicates the bank's inability to process the assessment up to the disbursement of credit to debtors. Based on descriptive analysis, Conventional Commercial Banks had an average NPL of 3.17% in the 2015-2017 period. In accordance with the Bank Indonesia Codification Regarding Bank Health Assessment, it is determined that the minimum NPL ratio is no more than 5%, therefore the Conventional Commercial Banks that are the research sample have met the criteria for the amount of NPL that must be achieved. The negative influence shown by the research results means that every increase in NPL will be followed by a decrease in company value. This is because investors think that a higher NPL ratio will reduce the company's income, so that the company value will decrease (Repi et al., 2016). The effect of NPL is not significant because investors do not see the NPL ratio or bad credit as the main reference for investing their capital. According to Alvianji and Soejono (2014), credit performance is information that investors consider on a small scale because of bank products that offer credit, so that the size of non-performing loans is the final alternative information for investors in making investment considerations.

CONCLUSION

This research aims to determine the influence of mobile banking and internet banking as well as non-performing loans on the value of banking companies listed on the IDX in 2019 - 2022. Based on the results of data analysis and discussion in the previous chapter, the following conclusions can be drawn: 1) Use mobile banking partially has a significant effect on the value of banking companies listed on the BEI in 2019 - 2022. 2) The use of internet banking partially has a significant effect on the value of banking companies listed on the BEI in 2019 - 2022. 3) Credit ratio as proxied by partial non-performing loans have a significant effect on the value of banking companies listed on the BEI in 2019 - 2022. 4) The use of mobile banking and internet banking as well as non-performing loans simultaneously have a significant effect on the value of banking companies listed on the BEI in 2019 - 2022 The results of the coefficient of determination test show that the Adjusted R Square figure is 0.640 or 64%, which means that the independent variables mobile banking and internet banking and non-performing loans can explain or influence the variable value of 66 companies by 64% and the remaining 36% is influenced by other variables outside the regression model.

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