ANALYZING THE EFFECT OF STOCK MARKET CAPITALIZATION AND FINANCIAL TECHNOLOGY ADOPTION ON BANK PROFITABILITY

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ABSTRACT

The main objective of current research work is to examine how stock market capitalization and the adoption of financial technology services affect on banking profitability. This work employed a descriptive and quantitative research design with the research strategy adopted is a case study at Bank Central Asia (BCA). This study utilized the secondary data in an annual time series format spanning from 2017 to 2021. The return on Asset (ROA) of BCA as a proxy of bank profitability is a dependent variable. Whereas the stock market capitalization and value transaction of mobile banking and internet banking is the proxy of financial technology services as the independent variables. Data processing for the Classical Assumption Test, the Multiple Linear Regression, t-Test, and the Coefficient of Determination Test was done using the SPSS version 26 program. The findings of current research prove that stock market capitalization and the adoption of financial technology service has a positive and significant impact on BCA's profitability. Results of the study revealed that profitability grows as stock market capitalization increases and enhance the adoption of financial technology service by the bank.

Keywords: Stock Market Capitalization, Financial Technology, Bank Profitability

INTRODUCTION

The financial services sector plays an important role in the national economy. During the period 2010-2021, this sector's contribution to GDP tends to increase. In 2021, financial services sector contributed 4.34% of the national GDP with a total value of IDR 16.97 quadrillion (Bank Indonesia, 2021). One of the roles of the bank as a financial service institution is to act as a financial intermediary between people who have extra funds and those in need of it. Nowadays, the banking sector's development is becoming more rapid and modern, resulting in new breakthroughs and innovations to streamline bank operations through collaborating the potential of the financial sector and the real sector more broadly.

The expanding role of banking has increased the demand for banking capital. Obtaining funds from investors is one way to make bank operations more efficient. Schell et al., (2014) stated that the greater the private equity funds at the bank, the more effective the company's operations will be. As a result, entering the capital market is one way to obtain funds from a larger number of investors. The capital market is a place where investors can invest their money in companies, including by selling shares that have been issued. The goal of investors who invest their funds is to maximize their wealth (Das et al., 2018). One that influences the value of shareholder wealth is the value of market capitalization.

Market capitalization is a metric used to determine how valuable an organization is. Investors can assess the company's financial performance by understanding its scale. In investing, investors are more interested in investing in companies with larger market capitalization because they are considered safer and have established financial performance with the development of their business. Tarullo (2019) stated that banks with adequate capital are secure, lucrative, and able to become resilient, even during times of economic adversity, and rely less on outside financing.

Bank Central Asia (BCA) is a banking issuer listed on the Indonesia Stock Exchange (IDX). According to data from IDX, the value of the stock market capitalization of BCA was IDR 899.9 trillion at the end of 2021. This achievement brings BCA to the top position on the Indonesian stock exchange. Figure 1 illustrates that stock market capitalization of BCA has increased by more than 60% in the last four years.



Figure 1. IDX's Top 5 Banks' Stock Market Capitalization

Increasing industry competition, particularly in the banking sector, encourages business owners to be more creative and innovative. In response to this situation, Bank BCA implemented a strategy to digitize bank products and services through the development of financial technology applications. BCA is continuously improving the features of its mobile and internet banking applications. Referring to Figures 2 and 3, BCA customer transactions via mobile banking totaled IDR 4049 trillion (11.76%), and transactions via internet banking totaled IDR 15118 (43.9%). Meanwhile, those who use ATMs reached IDR 2152 trillion (6.23%). In total, Customer transactions via internet banking and mobile banking reached IDR 19,167 trillion, accounting for 55.65% of total BCA transactions in 2021.



Figure 2. BCA's Transaction Value of M-Banking 2017-2021 Source: BCA Annual Report 2017-2021



Figure 3. BCA's Transaction Value of Internet-Banking 2017-2021

Source: BCA Annual Report 2017-2021

Previous researchers have investigated the determinants of banking profitability, but the author found some gap. First gap came from inconsistencies in research finding. The study by (Eze & Egoro, 2016) revealed that electronic banking has a significant impact on commercial bank profitability in Nigeria. Then, the study of Bett & Bogonko, (2017) revealed that digital finance technologies utilized have significant relationship with banking profitability in Kenya. Furthermore, (Imamah & Safira, 2021) discovered that mobile banking has a positive but statistically insignificant effect on ROA for 27 banks listed in Indonesia stock exchange. Another study by Alshehadeh & Al-Khawaja (2022) concluded that financial technology tools have a significant impact on financial performance measures in the banking industry include return on assets (ROA), return on equity (ROE), and earnings per share (EPS) in the Jordan banking industry. According to the finding study by (Moridu, 2020) revealed that increasing the number of financial transactions using digital banking, specifically SMS Banking, Mobile Banking, and Internet Banking partially has an effect on increasing profits at BNI bank but not significant statistically.

In contrast to research that carried out by Arif & Masdupi (2020) which discovered that internet banking negatively and insignificantly affects Indonesian banks' ability to generate a profit. Then the research's finding by Sudaryanti et al., (2018) conclude that mobile banking has a negative impact on the ROA of banking sector companies listed on the IDX in 2017. The second gap is that the author has yet to come across any research on the relationship between stock market capitalization and profitability of the banking industry in Indonesia. Due to the evidence that there is some gap in previous research, the author conducted the study to investigate the impact of stock market capitalization, M-Banking, and Internet Banking on banking profitability. The current study expects to add insight to the existing body of knowledge.

A research model developed based on a review of the theory and displayed in the Figure 4.



Figure 4. Research Model

Review of literature and Development Hypothesis

Market Capitalization and Bank Profitability

The number of shares outstanding multiplied by the share price on the market generates a value that is called a company's market capitalization (Almumani. 2018). The value of market capitalization of the company is determined by the upwards and downwards of the company's stock price in the market (Hariyanto, 2021). The market capitalization is very important for public companies because it reflects the total value of the company; the greater the market capitalization, the higher the market value of the company. Market capitalization is typically one of the factors that attract investors when selecting stocks (Kumar & Kumara, 2020). The greater a stock's market capitalization, the longer investors hold their shares. Investors believe that companies with large capitalizations are more financially stable, less risky, and have high profitability.

Return on Assets (ROA) is a financial ratio used to measure profitability that measures a company's effectiveness in generating profits by utilizing its assets. ROA can take into account a bank's ability to achieve profitability and improve overall efficiency. The ratio of net profit after tax to total assets is defined as the ROA. An increment in ROA means that the company's profitability rises, resulting in an increase in the profitability enjoyed by shareholders.

According to Angori et al., (2019) the higher margins are needed by banks with greater market capitalization to meet the expenses of equity financing. Bikker & Vervliet (2018) in his study concluded that bank profitability is positively related to capitalization and liquidity levels. The study of Sharma & Anand (2018) utilized the generalized method of moments along with the static regressions and conclude a strong positive relationship between 169 BRICKS banks' market capitalization and profitability. According to the most recent study by Haris et al., (2020) increasing capitalization increases bank profitability in 29 Pakistani banks. Based on this description, the following hypotheses are proposed in this study:

H1: Market capitalization has effects on Bank BCA's profitability

Financial Technology and Bank Profitability

Financial technology, also known as fintech, is a term that refers to financial services innovation. Fintech is a new technology that can support operation of the banks and other financial institutions as well as has improve the financial performance of the company (Simatupang & Siska, 2021; Siska, 2022). Fintech can also be defined as a financial innovation that incorporates modern technology. Financial technology underpins mbanking and internet banking services (fintech). This means that both of them use technology to support banking.

Mobile banking is a service that provides easy access as well as speed in obtaining up-toand real-time date information financial transactions. Mobile banking service products are distribution channels for banks to access customer accounts via GPRS technology via cell phone (mobile). According to Khan et al., (2019) mobile banking serves as a wireless communication channel for customers to create value in banking transactions. Customers will find it easier to conduct payment transactions, view balance information, and transfer funds between accounts and banks using mobile banking services (Kota & Kusumastuti, 2022).

Internet banking is the practice of performing financial operations using the internet as an instrument. The internet network serves as a mediator or point of contact between bank clients and the bank in its operations. Aside from that, transactions are conducted virtually or without the interactions need for face-to-face between customers and bank officers (Wulandari & Novitasari, 2021). In its transformation, the banking industry created Internet banking, a technology or system that uses the internet as an intermediary medium. Banks benefit from the use of Internet technology, which increases efficiency by lowering transaction costs.

The transformation of e-banking services in the banking sector has resulted in changes in the distribution channel structure. This new m-banking channel has significantly reduced the banking sector's costs. Banks that provide m-banking services can benefit from cost savings, reduce the number of branch offices and employees, and improve their profitability (Esmaeili et al., 2021). Study of Eze & Egoro, (2016) revealed mobile banking has a significant impact on the profitability of commercial banks in Nigeria. Moreover, the study of Yudaruddin (2020) revealed that mobile banking adoption encourages banks to improve their financial performance and stability, resulting in increased bank profitability. In term of internet banking, the study of Medyawati et al., (2021) demonstrated that internet banking service of banks listed on the IDX has an impact on ROA during the 2014-2020 period. Another study by (Wulandari & Novitasari, 2021) indicated that the adoption of internet banking can improve the ROA of banks listed on the IDX in 2019. Thus, the second hypothesis is formulated as follows:

- H2: Transaction Value of M-Banking has effects on BCA's profitability
- H3: Transaction Value of Internet Banking has effects on BCA's profitability

RESEARCH METHODS

Research Approach and Research Design

In conducting the research, the two major strategies commonly used are deductive and inductive approaches. The deductive approach works from the broad topic to the specific with focuses on developing the hypothesis based on existing theory, followed by designing a research strategy to verify the hypothesis. Whrease, the inductive approach, works in the opposite direction, progressing from specific information to broader generalizations and theories. The deductive research approach was applied to this study along with the quantitative descriptive research design. The research strategy adopted is a case study at Bank Central Asia (BCA).

The research object was chosen due to BCA having the highest stock market capitalization in the national banking industry, reaching IDR 899,983 trillion by the end of 2021. Another factor to consider is that BCA is a bank that keeps up with developments in the digital world and technology by launching a variety of products and services based on financial technology, such as BCA mobile banking, internet banking, Flazz BCA, Sakuku e-wallet, and the most recent banking solutions, such as Webchat BCA, VIRA BCA, QRku, OneKlik BCA, Keyboard BCA, and Opens an Account Online.

The current study was based on secondary data of ROA as a proxy for bank profitability, stock market capitalization, and the value of mobile banking and internet banking transactions as the proxy of financial technology services adopted by bank. The authors only use the ROA ratio as a proxy for bank profitability in this study. This is due to the fact that the ROA reflects the ability of bank assets to generate profits, with the majority of funds coming from third-party funds (DPK) originating in the community. Furthermore, Bank Indonesia, as the central bank, prioritizes a bank's profitability as measured by assets, the majority of which come from third-party funds, so ROA is more representative of object research. The data is presented in annual time series spanning the years 2010-2021 or 12 series of observations. The data was gathered from the BCA annual report by downloading it at https://www.bca.co.id.

Analysis Technique Classical Assumption Test

To generate a prediction model that is Best, Linear, Unbiased Estimation (BLUE) using linear regression, the classical conditions or assumptions must be met in the model. Multicollinearity, autocorrelation, heteroscedasticity, and normality tests are some of the classic assumptions in multiple linear regression.

To find out whether the independent variables in a regression model are correlated or not, the multicollinearity test was employed. There should be no correlation between the variables in a good regression model. Typically, tolerance and VIF values are used to identify multicollinearity. Multicollinearity does not exist if the VIF value is smaller than 10 or the Tolerance value is greater than 0.1.

The autocorrelation assessment was used to determine whether or not the confounding error in period t and the confounding error in period t-1 are related. To detect autocorrelation, the Durbin -Watson test was used. The classification table for d values is used to demonstrate autocorrelation.

Tabel	1.	Scoring	of	d	Value
Lanci	1.	Scoring	UL.	u	v aiuc

		8
	d value	Meaning
	< 1.10	Autocorrelation exists
	1.10 - 1.54	No conclusion
	1.55 - 2.45	No autocorrelation exists.
	2.46 - 2.90	No conclusion
	> 2,91	Autocorrelation exists
~	D 11	

Source: Ramadhayanti (2019)

Heteroskedasticity occurs when the variance of residuals varies unequally across a range of measured values. Heteroscedasticity was detected using the plot graph. If no obvious trend emerges and the points on the Y-axis are evenly distributed above and below 0, there is no heteroscedasticity.

A normal distribution of the dependent and independent factors is determined by the normality test. The normal P-P Plot of Regression Standardized Residual's figure is employed to verify normality. The regression model satisfies the premise of normality if the normal graph pattern displays the spread of the points around the diagonal line and follows the direction of the diagonal line.

Multiple Linear Regression

The relationship of stock market capitalization (X1), M-banking transaction value (X2), internet banking transaction value (X3) towards ROA (Y) will be tested by using the multiple linear regression. The model of the study can be formulized as:

$ROA_t =$	$\alpha + \beta_1$ Market-Cap _t	+	$\beta_2 M$ -
Banking _t +	β_3 Internet-Banking _t	+	e
	(1)		

Where α is constant and β_1 - β_3 refer to the regression coefficients.

The Hypothesis Testing

To evaluate the hypothesis, a partial t-test was utilized. The independent variable has a significant effect on the dependent variable if the t statistic is higher than the t table, or sig. value is smaller than 0.05 (the null hypothesis is rejected). Otherwise, if the value of t statistic is smaller t table or sig. value > 0.05, it indicates that the independent variable has no significant effect on the dependent variable (the null hypothesis is accepted).

Evaluation the Coefficient Determination

The coefficient determination determines the degree of relationship between independent

variables and the dependent variable simultaneously which can be represented by the adjusted R - Squared value (Ghozali, 2016). Determination coefficient indicates how much the independent factors in the regression model contribute to explaining the variation within the dependent variable. A small coefficient of determination value indicates that the independent variables' ability to explain the dependent variable is very limited. Conversely, if the value is close to 1. it indicates that the independent variables can provide all of the information required to predict the dependent variable. The data for this study were processed using the SPSS 26 program.

RESULTS AND DISCUSSION

Classical Assumption Test

The first diagnostic the test is multicollinearity. The outcomes of the multicollinearity test are displayed in Table 2 which summarizes that the VIF value for Market_Cap, M_Banking, and Internet_Banking is less than 10 and the tolerance value for each variable is more than 0.1, implying that the model multicollinearity does not reveal issue.

12. The Multiconnicality	y Test's Findings (De	pendent variable is k
Model	Tolerance	VIF
(Constant)		
Market_Cap	.307	2.817
M_Banking	.804	7.126
Internet_Banking	.219	3.208

Tabel 2. The Multicollinearity Test's Findings (Dependent Variable is ROA)

The second diagnostic test is autocorrelation checking. Table 3 summarizes the findings of the autocorrelation evaluation. Table 3 demonstrates that the value of Durbin-Watson is 2.441, which falls within the range of 1,55 - 2,46. It is feasible to conclude that the model contains no autocorrelation.

Tabel 3. Outcome of Autocorrelation Analysis ((Dependent Variable is ROA)				
R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
795 ^a	632	494	17288	2 441

a. Predictors: (Constant), Internet_Banking, M_Banking, Market_Cap

The third diagnostic test is heteroscedasticity investigation. The scatter plot in Figure 4 shows the finding of the heteroscedasticity test. The scatter plot depicts that the pattern and dots on the Y-axis are evenly distributed above and below zero. As a result, the data is not identifiable heteroscedasticity issue.



Figure 4. Outcome of the Heteroscedasticity Test

The last diagnostic test is normality identification. Figure 5 demonstrates the findings of the normality essessment. The distribution of the points around the diagonal line and also follows the diagonal line's the direction. As a result, he regression model complies with the requirement of normalcy.



Multiple Linear Regression

The summary of multiple linear regression displayed in the Table 4.

Tabel 4. Multiple	Linear Regressio	on Findings (Dep	endent Variable is ROA)

Model	Unstandardized Coefficients of B	Unstandardized Coefficients of Std. Error	t	Sig.
(Constant)	3.702	.125	29.688	.000
Market_Cap	.963	.037	2.603	.003
M_Banking	.307	.098	3.132	.004
Internet_Banking	.258	.102	2.529	.002

Referring to the outcomes of multiple linear regression in Table 4, It is recognized that the constant of the model is 3.7. The regression coefficients for Market_Cap, M_Banking, and Internet_Banking are 0.639, 0.307, and 0.258, respectively. So that the regression model can be written as follows:

ROA = 3.702 + 0.963Market_Cap + 0.307M_Banking + 0.258Internet_Banking

This model has the following interpretations:

- 1. If the value of stock market capitalization (X1), the transaction value of Mobile Banking (X2), and the transaction value of Internet Banking all have 0, then the ROA of bank BCA 3.7. This result is significant at a 5% level of significance (Sig = 0.000 < 0.05).
- 2. The coefficient value of the stock market capitalization variable (X1) is 0.963, which implies that if the stock market capitalization value (X1) rises by one unit, bank BCA's profitability (ROA) rises by 0.963 units. It can be concluded that the stock market capitalization value (X1) has a positive effect on the profitability of bank BCA. This result is significant at a 5% level of significance (Sig = 0.003 < 0.05).
- 3. The Mobile Banking (X2) variable has a positive coefficient value of 0.307, which means that if the value of Mobile Banking

(X2) increases by one unit, the profitability (ROA) of bank BCA will increase by 0.307 units. It can be concluded that the Mobile Banking transaction value (X2) has a positive impact on the profitability of bank BCA. This result is significant at a 5% level of significance (Sig = 0.004 < 0.05).

4. The Internet Banking variable (X3) has a positive coefficient value of 0.258, which suggests that if the Internet Banking transaction value (X3) increases by one unit, BCA bank profitability (ROA) increases by 0.258 units. It can be concluded that the Internet Banking transaction value (X3) has a positive impact on the profitability of bank BCA. This result is significant at a 5% level of significance (Sig = 0.002 < 0.05).

Testing for Hypothesis using Partial t-Test

Stock market capitalization and the variable of financial technology adoption used in this study include mobile banking and internet banking variables. Each of these variables will be investigated for their impact on BCA bank profitability as measured by the Return on Assets (ROA) ratio. The t-test was used to examine the effect of BCA's stock market capitalization (X1), Mobile Banking transaction value (X2), and Internet Banking transaction value (X3) on its profitability (ROA). Table 5 shows the t-test results.

Model	Unstandardized Coefficients of	Unstandardized Coefficients of	Sig.	df	Sig. Level	t-table
	В	Std. Error				
(Constant)	3.702	.125	.000	7	0.025	2.364
Market_Cap	.963	.037	.003			
M_Banking	.307	.098	.004			
Internet_Banking	.258	.102	.002			

Tabel 5. Partial t-Test Results (Dependent Variable is ROA)

It is required to compare the value of the t statistic with the value of the t table to determine the impact of stock market capitalization, value transaction of Mobile Banking, and value transaction of Internet Banking on bank BCA profitability (ROA). The following formula is used to compute the t table:

t (
$$\alpha/2$$
: n-k-1) = t (0.025:12-4-1) = t (0.025:7) = 2.364.

The Effect of Stock Market capitalization on Bank BCA's Profitability

The partial test using the t-test for the stock market capitalization of bank BCA generated a sig value of 0.003, which is less than 0.05 and the value of the t statistic is 2,603 greater than the ttable value of 2,264, implying that the market capitalization value of bank BCA shares has a significant influence on bank BCA's profitability. As a result, the research hypothesis that formulated market capitalization affects Bank BCA's profitability can be accepted. This finding support the study of Bikker & Vervliet (2018), Sharma & Anand (2018), and Haris et al., (2020).

The stock market capitalization reflects the bank's size, which has a significant positive effect on Bank BCA's profitability. The capitalization of Bank BCA's stock grew substantially by 472% during the research period, from IDR 157,342 trillion in 2010 to IDR 899,892 trillion by the end of 2021. The market capitalization of BCA has increased by almost 40% annually on average. In terms of profitability, BCA's net profit grew by 271%, or 22.5% per year, from IDR 8.479 trillion in 2010 to IDR 31.423 trillion in 2021. Among the three major banks, Bank BRI, BCA, and Bank Mandiri, BCA's net profit was the highest.

The performance of the bank will improve as its size grows. This is because banks have more opportunities to distribute loans, allowing them to increase their profits. The size of the bank can influence the company's performance. Investors typically place more trust in banks with large stock capitalizations. This is because large corporations are thought to be capable of improving performance by increasing the quality of earnings. Furthermore, as a company grows in size, the continuity of its business grows, which, in turn, increases the bank's profitability performance.

The Effect of Financial Technology Adoption on Bank BCA's Profitability

The t-test for mobile banking transaction values yielded a sig value of 0.004, which is less than 0.05, and the t statistic value is 3.132 greater than the t table value of 2.264, implying that the Mobile Banking transaction value has a significant influence on BCA's profitability. Therefore, the research hypothesis that formulated M-Banking has effects on BCA's profitability can be accepted. These findings imply that mobile banking contributes significantly to BCA Bank's increased profitability.

The t test for internet banking transaction values yielded a sig value of 0.002, which is less than 0.05, and the t statistic value is 2.529, which is greater than the t table value of 2.264, implying that the value of internet banking transactions has a significant influence on BCA's profitability. Therefore, the research hypothesis that formulated Internet Banking has effects on BCA's profitability can be accepted. These findings suggest that internet banking, as one of the financial technology (fintech) adoption, can have a positive impact on bank BCA profitability. This finding support the study of (Eze & Egoro, 2016), Bett & Bogonko (2017), Imamah & Safira (2021), Alshehadeh & Al-Khawaja (2022), Moridu, (2020). However, this research contradicts research that carried out by Arif & Masdupi (2020) and Sudaryanti et al., (2018).

The use of financial technology makes it easier for customers to conduct financial transaction activities, and the Covid -19 pandemic has increased demand for financial technology in Indonesia. Mobile banking and internet banking are examples of fintech applications. If digital transactions continue to rise, operating income will rise, and then potentially increasing banking profitability. The value of mobile banking transactions continues to rise, according to data from the Financial Services Authority (OJK). Mobile banking transactions increased by 46.15 percent from IDR 1,159 trillion in 2016 to IDR 7,730 trillion in 2021.

The number of transactions initiated through Bank BCA's M-Banking grew by 1.091% during the study period, from IDR 340 trillion in 2010 to IDR 4.049 trillion at the end of 2021, or an increase of almost 91% per year. At the same time, the number of transactions made through internet banking platforms grew by 1.073% from IDR 1.289 trillion in 2010 to IDR 15.118 trillion at the end of 2021, or an increase of almost 90% per year.

Ease of access and time efficiency, as well as technological advancements such as today, which demand speed in transaction processing, keep mobile banking as a viable option for customers. The mobile banking service, which is equipped with a variety of functional and appealing features, makes it simple for people to conduct financial transactions via mobile banking. As a result, mobile banking is one of the FinTech products that the community prefers to use. Mobile banking, which is becoming more popular, will eventually be able to reduce operational costs while increasing revenue in banking operations.

Coefficient of Determination Test

How much the independent factors explain the dependent variable is shown by the coefficient of determination (R square). The coefficient of determination quantifies the strength of the overall relationship between the independent and dependent variables. The correlation number ranges from 0 to 1 where 0 indicating an extremely weak relationship and 1 indicating an extremely relationship. Table 6 exhibits strong the Coefficient of Determination Test results.

Tabel 6. Outcome of Coefficient Determination Test				
R	R Square	Adjusted R Square	Std. Error of the Estimate	
.795 ^a	.632	.494	.17288	

^aPredictors: (Constant), Internet_Banking, M_Banking, Market_Cap

Based on the coefficient of determination results shown in Table 6, a R Square value of 63.2 percent is obtained. That is, the variables of stock market capitalization, mobile banking transaction value, and internet banking explain approximately 63.2% of the variance or change in Bank BCA's profitability performance (ROA) from 2017 to 2021. The remaining 36.8% are determined by other factors not included in this research model. The coefficient of determination obtained can be said to be high that is at 63.2%. This suggests that stock market capitalization, mobile banking transaction value, and internet banking transaction value all have a significant impact on BCA's profitability.

CONCLUSION

Based on the findings of the study it can be concluded that value of stock market capitalization and adoption fo financial service in term of mobile banking and internet banking application have a positive and statistically significant impact on BCA's profitability. This research can be used as an evaluation for the overall banking industry in improving financial technology adoption in terms of mobile banking internet banking service by increasing convenience in using the application, service quality, and reducing risk levels so that customers can be more interested in using these financial technology services.

BIBLIOGRAPHY

- Almumani, M. A. Y. (2018). An Empirical Study on Effect of Profitability and Market Value Capitalization Ratios Market on of Infrastructural Companies in India. International Journal of Business and Social 9(4). 39-45. Science. https://doi.org/10.30845/ijbss.v9n4p6
- Alshehadeh, A. R., & Al-Khawaja, H. A. (2022). Financial Technology as a Basis for Financial Inclusion and its Impact on Profitability: Evidence from Commercial Banks. *International Journal of Advances in Soft Computing and Its Applications*, 14(2), 125– 138. https://doi.org/10.15849/IJASCA.220720.09

Angori, G., Aristei, D., & Gallo, M. (2019). Determinants of Banks ' Net Interest Margin : Evidence from the Euro Area during the Crisis and Post-Crisis Period. *Sustainability*, *11*(14), 1–20.

Arif, M., & Masdupi, E. (2020). Pengaruh Internet Banking Terhadap Kinerja Perbankan. *Jurnal Ecogen*, 3(4), 598. https://doi.org/10.24036/jmpe.v3i4.10435

- Bank Indonesia. (2021). Laporan Perekonomian Indonesia 2021. http://journal.umsurabaya.ac.id/index.php/JKM/article/view/2 203
- Bett, F. C., & Bogonko, J. B. (2017). Relationship between Digital Finance Technologies and Profitability of Banking Industry in Kenya. ... Academic Journal of Economics and Finance, 2(3), 34–56. http://www.iajournals.org/articles/iajef_v2_i3 _34_56.pdf
- Bikker, J. A., & Vervliet, T. M. (2018). Bank profitability and risk - taking under low interest rates. *International Journal of Finance & Economics*, 23(1), 3–18. https://doi.org/10.1002/ijfe.1595
- Das, S. R., Ostrov, D., Radhakrishna, A., & Srivastav, D. (2018). A New Approach to Goals-Based Welath Management. *Journal of Invesmnet Management*, 16(3), 4–30.
- Esmaeili, A., Haghgoo, I., Davidaviciene, V., & Meidute-kavaliauskiene, I. (2021). Customer Loyalty in Mobile Banking: Evaluation of Perceived Risk, Relative Advantages, and Usability Factors. *Inzinerine Ekonomika-Engineering Economics*, 32(1), 70–81.
- Eze, G. P., & Egoro, S. (2016). Electronic Banking and Profitability of Commercial Banks in Nigeria. *Journal of Finance and Economic Research*, 3(1), 2251–15. http://absudbfjournals.com/wpcontent/uploads/2017/02/Electronic-Bankingand-Profitability-of-Commercial-Banks-in-Nigeria.pdf
- Haris, M., Tan, Y., Malik, A., & Ain, Q. U. (2020).
 A Study on the Impact of Capitalization on the Profitability of Banks in Emerging Markets: A Case of Pakistan. *Journal of Risk* and Financial Management, 13(9), 1–21. https://doi.org/10.3390/jrfm13090217
- Hariyanto, D. (2021). Effect of Trading Volume, Market Capitalization, Firm Size in explaining Return on Vultures. Journal of Advanced Research in Economics and Administrative Sciences, 2(2), 50–64. https://doi.org/10.47631/jareas.v2i2.228
- Imamah, N., & Safira, D. A. (2021). Pengaruh Mobile Banking Terhadap Profitabilitas Bank

2 ISSN Cetak : 2337-3997 ISSN Online : 2613-9774 Di Bursa Efek Indonesia. *Profit: Jurnal Administrasi Bisnis*, 15(01), 95–103. https://doi.org/10.21776/ub.profit.2021.015.0 1.10

- Khan, M. Y., Javeed, A., Mehmood, N., & Khan, W. (2019). Mobile Banking Service Quality and Customer Satisfaction: An Application of Carter Model. Sarhad Journal of Management Sciences, 5(1), 15–26. https://doi.org/10.31529/sjms.2018.5.1.2
- Kota, T. P., & Kusumastuti, S. Y. (2022). Analisis Pengaruh Minat Nasabah Dalam Menggunakan Mobile Banking Dengan Menggunakan Kerangka Technology Acceptance Model (Tam). Jurnal Apresiasi Ekonomi. 10(3), 276-288. https://doi.org/10.31846/jae.v10i3.515
- Kumar, M. P., & Kumara, N. V. M. (2020). Market capitalization: Pre and post COVID-19 analysis. *Materials Today: Proceedings*, *37*(2), 2553–2557. https://doi.org/10.1016/j.matpr.2020.08.493
- Medyawati, H., Yunanto, M., & Hegarini, E. (2021). Financial Technology as Determinants of Bank Profitability. *Journal* of Economics, Finance and Accounting Studies, 3(2), 91–100. https://doi.org/10.32996/jefas.2021.3.2.10
- Moridu, I. (2020). Pengaruh Digital Banking terhadap Nilai Perusahaan Perbankan (Studi Pada PT . Bank Negara Indonesia (Persero) Tbk). Jurnal Riset Akuntansi Politala, 3(2), 67–73.
- Ramadhayanti, A. (2019). *Aplikasi SPSS untuk Penelitian dan Riset Pasar*. Elex Media Komputindo.
- Schell, J. M., Koren, K. M., & Endreny, P. L. (2014). Private Equity Funds. In Law Journal Press. https://doi.org/10.4337/9781849805957.0004 3
- Sharma, S., & Anand, A. (2018). Income diversification and bank performance: evidence from BRICS nations. *International Journal of Productivity and Performance Management*, 67(9), 1625–1639. https://doi.org/10.1108/IJPPM-01-2018-0013

- Simatupang, A., & Siska, E. (2021). Strategi Financial Technology dalam Mengatasi Lonjakan Transaksi Lender pada Masa Pandemi Covid 19. *KAMBOTI: Jurnal Ilmu Sosial Dan Humaniora*, 1(2), 174–181. https://doi.org/https://doi.org/10.51135/kamb otivol1iss2pp173-181
- Siska, E. (2022). Financial Technology (FinTech) and Its Impact on Financial Performance of Islamic Banking. ARBITRASE: Journal of Economics and Accounting, 2(3), 102–108. https://doi.org/10.47065/arbitrase.v2i3.338
- Sudaryanti, D. S., Sahroni, N., & Kurniawati, A. (2018). Analisa Pengaruh Mobile Banking terhadap Kinerja Perusahaan Sektor Perbankan yang Tercatata di Bursa Efek Indonesia. *Jurnal Ekonomi Manajemen*, 4(2), 96–107.
- Tarullo, D. K. (2019). Financial regulation: Still unsettled a decade after the crisis. *Journal of Economic Perspectives*, 33(1), 61–80. https://doi.org/10.1257/jep.33.1.61
- Wulandari, S., & Novitasari, N. (2021). Pengaruh E-Banking Terhadap Kinerja Keuangan Perbankan Yang Terdaftar Di Bursa Efek Indonesia. Jesya Jurnal Ekonomi Dan Dan Ekonomis Syariah, 4(1), 166–177. https://doi.org/10.47354/mjo.v3i1.284
- Yudaruddin, R. (2020). Mobile Banking, Kinerja dan Stabilitas Keuangan: Studi Empiris di Perbankan Indonesia. *Buletin Riset Kebijakan Perbankan*, 2(1), 3–23.