

The Influence of Mobile Banking, Internet Banking, and Automated Teller Machine (ATM) Transactions on Fee Based Income

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ABSTRACT

This research aims to determine the effect of Mobile Banking, Internet Banking, and Automated Teller Machine (ATM) on Fee Based Income. It is hoped that this research can contribute and explain the factors that influence fee-based income for conventional banking companies on the Indonesian Stock Exchange. The objects of this research are Mobile Banking, Internet Banking, and ATM as independent variables and Fee based income as the dependent variable. The subject of this research is conventional banks listed on the Indonesia Stock Exchange (BEI) in 2018-2022. The research sample consisted of 5 (five) banks, namely Bank Mandiri, Bank Negara Indonesia (BNI), Bank Central Asia (BCA), Bank CIMB Niaga, and Bank Mega. Data analysis using multiple regression using the SPSS 22 application. Research findings that Mobile Banking, Internet Banking and ATM together have a significant effect on Fee based income. There is a positive influence of Mobile Banking on Fee Based Income but there is no influence of Internet Banking on Fee based income. This indicates that the large number of Internet Banking users tends not to increase the bank's Fee Based Income. There is a positive and significant influence of ATMs on Fee based income, this indicates that the more customers who make transactions using ATMs, the greater the Bank's Fee based income will increase.

1. INTRODUCTION

Bank management in carrying out its activities is also always required to maintain a balance between maintaining liquidity with the need for reasonable profitability and sufficient capital in accordance with its investments. This needs to be done because banks in their business activities, apart from investing funds in productive assets, can also provide commitments for other services that produce fee based income (non-interest income) (Gumilang & Azib, 2019). Non-interest income is a "hedge" against non-interest income by generating fees and sales income independently of market interest rates (Arisanti & Prihatiningsih, 2019). The banking sector is starting to compete to increase profits by relying on several strategies to attract customers using banking services, one of which is by utilizing technological developments such as Mobile Banking, Internet Banking and ATMs (Suardana & Kustina, 2017)

Fee-based income is considered a potential source of income because it can be obtained from both providing credit and other non-credit activities. In addition, fee-based revenue is said to contain relatively little risk because payment fees are received immediately when the transaction occurs or when the fee is charged effectively. Therefore, the Bank must have maximum fee-based income so that the Bank can get maximum profits. The role of technology is very important for banks and customers to make transactions easier. The role of this technology in fee-based income can vary depending on the bank's business strategy, the level of technology adoption by customers, competition in the market, and applicable regulations. In addition, banks must consider customer experience and operational costs associated with this technology in optimizing fee based income.

Currently, almost all banks in Indonesia, both government and private, commercial and sharia banks, have issued Mobile Banking products as electronic services. Mobile Banking is one of the

innovative services offered by banks to help customers carry out banking transactions via cell phone. Banking transactions that are usually carried out manually by customers having to go to the bank directly, can now be done without having to visit the bank, and can be accessed via the Mobile Banking application (Mu'asiroh & Darwanto, 2021). The growth in the number of transactions and nominal transactions via Mobile Banking can be an opportunity for banks to increase Fee-based Income to maintain bank health (Surachim et al., 2021).

Banking services use web-based Internet banking technology to help improve services to customers, extraordinary Internet banking facilities change the way banking companies meet business needs with customers. Internet banking services are profitable for banking companies because there are no transfers involving physical goods involved, banking transactions can be carried out electronically on a web basis which includes checking balances, transferring funds to other accounts, paying bills, and so on (Zuliarni et al., 2013).

Another factor to increase fee based income is by using ATM (automated teller machine) transaction services. The banking technology trend still makes Automated Teller Machine (ATM) facilities the main strategy in providing services to customers. This is done not only to obtain fee based income (bank revenue originating from bank services/non-interest income), but also to expand the network (Gumilang & Azib, 2019).

The results of previous research show that there is a positive and significant influence of Mobile Banking on Fee based income (Pranata & Dewi, 2023), this research method uses quantitative methods, the results of this research use multiple regression analysis with secondary data in the form of the 2017-2021 annual financial report. The population of this study used PT's annual financial report. Bank Negara Indonesia for the 2015-2021 period. The sampling technique uses purposive sampling, the criteria used are financial reports regarding the number of active Mobile Banking users, the number of Mobile Banking, and Fee based income in the last four years, namely 2017-2021. Previous research further shows that Internet Banking has a positive effect on Fee Based Income (Anita & Christine, 2023). The research method is Verifiable and Descriptive with the conclusion that the more customers make transactions via e-banking, the higher the fee based income. The research results show that ATM has a positive and insignificant effect on fee based income (Ansyary et al., 2022). The research method used is a quantitative method. The research data consists of primary and secondary data in the form of information on the development and innovation of product features and the number of Internet transactions. Banking PT. Bank NTB Syariah analyzes data using Quantitative analysis techniques consisting of Descriptive Analysis and Inferential Analysis. The inferential statistical analysis used is Structural Equation Modeling (SEM) analysis with the PLS Warp Software approach. However, the results of other research conclude that Internet Banking has no effect on Profitability (Lazuardi et al., 2023) and the research results show that ATMs have a significant influence in the opposite direction on Fee Based Income, the higher the Automated Teller Machine (ATM) transaction value, the higher operational expenses and reduce Fee Based Income (Gumilang & Azib, 2019). However, in this study there are differences in the research time span (2018-2022), company criteria (conventional banking), and number of variables studied. Technology-based financial innovation has had a major impact on the financial industry as a whole over the last few decades (Alubisia, 2018).

2. LITERATURE REVIEW

This research aims to obtain empirical evidence of Mobile Banking, Internet Banking, ATM on Fee Based Income in providing information on the importance of factors that influence Fee Based Income for conventional banking companies on the Indonesia Stock Exchange, which can be useful for shareholders and investors to analyze fundamentals. banking companies in decision making.

3. METHOD

The type of research used is explanatory cross-sectional annual. The objects of this research are Mobile Banking, Internet Banking, and ATM as independent variables. Fee based income as the dependent variable. Research subjects are conventional banks listed on the Indonesia Stock Exchange.

This research is quantitative research with secondary data. Regression analysis is used to understand the strength of relationships between variables.

Causal-comparative research design using secondary data in the form of annual financial reports published on the Indonesia Stock Exchange via the official website www.idx.co.id and via the company's official website. This type of research method is quantitative as data collection and the data source for this research uses BEI data for the 2018-2022 period which will be tested for classical assumption testing and multiple linear regression analysis.

So the data from the survey that will be conducted using the BEI database is secondary data, namely data obtained by researchers from pre-existing data sources through the media indirectly.

The population of this study uses secondary data taken from the financial reports of companies included in the group of conventional banking companies listed on the Indonesia Stock Exchange in 2018-2022. This data was obtained from the BEI website, namely www.idx.co.id. The research population for conventional banks listed on the Indonesia Stock Exchange for the 2018-2022 period was 46 banks and the sample size was 5 banks, namely Bank Mandiri, Bank Negara Indonesia (BNI), Bank Central Asia (BCA), Bank CIMB Niaga, and Bank Mega.

The sampling decision used in this research uses a purposive sampling technique, namely by directing a population based on the characteristics or characteristics of the sample, with the aim of obtaining a representative sample according to the specified criteria. The sample selection criteria are all conventional banking companies listed on the Indonesia Stock Exchange as the main sector that publish audited financial reports from 2018 to 2022 in Rupiah currency, banking companies that publish financial reports for 2018-2022. The research sample is 5 large banks in Indonesia listed on the IDX.

The data collection analysis technique in this research was carried out using quantitative methods, where research data is in the form of numbers and analysis uses statistics from 2018-2022 BEI data. Therefore, in this research measurements were carried out using two analytical test methods, namely hypothesis testing and multiple linear regression analysis. In this research, hypothesis testing using the Simultaneous Test (f-Test) was carried out to find out whether the dependent variable was jointly influenced by the independent variable and the Partial Test (t-Test) was carried out to find out how far the individual independent variables explained the dependent variable. Multiple linear regression analysis is used to determine the direction of the relationship between the independent variable and the dependent variable, whether each independent variable is positively or negatively related and to predict the value of the dependent variable if the value of the independent variable increases or decreases (Sugiyono., 2019). The multiple linear regression equation can be stated as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Information :

- Y = Fee Based Income
- α = constanta
- $\beta_{1,2,3..}$ = Regression Coefficients
- X1 = Mobile Banking
- X2 = Internet Banking
- X3 = ATM
- ϵ = Error

Results and Discussion

The results of this descriptive statistical test research are based on data processing of the Annual Reports of five banking companies from 2018 to 2022, with samples of Bank Mandiri, Bank Central Asia, Bank Negara Indonesia, Bank CIMB Niaga, and Bank Mega. This research uses four independent variables consisting of Mobile Banking, Internet Banking, and ATM, as well as one dependent variable Fee Based Income. Valid sample data during this research amounted to 25 data. Description of research data as follows:

Table 1. Descriptive Statistical Test

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
<i>Mobile Banking</i>	25	2.48	15205	1901.1228	3629.481
<i>Internet Banking</i>	25	0.84	4874	767.648	1448.594
ATM	25	11	2156	928.23	821.59045
<i>Free Based Income</i>	25	1784703	34280703	14048336	10818023
Valid (listwise)	N 25				

Based on table 1 above, the results of the Mobile Banking variable with the minimum value are PT Bank Mega Tbk. amounted to 2.48 in 2018 and the maximum value was PT Bank Central Asia Tbk. amounting to 15,205 in 2022. and an average value of 1,901.1228 with a standard deviation value of 3,629.48097. The result of the Internet Banking variable with the minimum value is PT Bank Mega Tbk. amounted to 0.84 in 2018 and the maximum value was PT Bank Central Asia Tbk. amounting to 4,874.00 in 2022. and an average value of 767.6480 with a standard deviation value of 1,448.59402. The ATM variable result with the minimum value is PT Bank Mega Tbk. amounted to 11 in 2018 and the maximum value was PT Bank Central Asia Tbk. amounting to 2,156.00 in 2022. and an average value of 928.2300 with a standard deviation value of 821.59045. The result of the Fee Based Income variable with the minimum value is PT Bank CIMB Niaga Tbk. amounting to 1,784,703 in 2020 and the maximum value is PT Bank Mandiri (Persero) Tbk. amounting to 34,280,703 in 2022. and an average value of 14,048,336.1600 with a standard deviation value of 10,818,023.2145.

Before testing the hypothesis, the classical assumption test was carried out with the normality test, multicollinearity test, autocorrelation test and heteroscedasticity test, obtained with the following results:

The normality test aims to find out whether the data collected is normally distributed or not. The normality test was carried out using the Kolmogorov-Smirnov test. Based on the results of data processing, the Asymp sig value. amounting to $0.101 > 0.05$, it can be concluded that the research data is normally distributed and research can be continued.

To determine whether there are symptoms of multicollinearity, one can use the co-linearity effect. Symptoms of multicollinearity can be identified if between the independent variables there is a strong or close to perfect correlation or the Variance Inflation Factor (VIF) value is less than 10 and the Tolerance value is more than 0.1. The calculation results show that the VIF value for each variable is less than 10, while the Tolerance value for each variable is greater than 0.1, so it can be concluded that there are no symptoms of multicollinearity.

The autocorrelation test aims to test whether in the linear regression model there is a correlation between the confounding error in the time period and the confounding error in the previous time period.

The results of the autocorrelation test, the Durbin Watson value of 2.466, is greater than the limit (dU), namely 1.654, so it can be concluded that there are no symptoms. autocorrelation.

The heteroscedasticity test aims to test the occurrence of differences in variace of residual values in a research period. The results of the heteroscedasticity test, in the heteroscedasticity test image, the data points spread above and below around the number 0, thus it can be concluded that there is no heteroscedasticity problem, so the regression model the good and ideal are fulfilled.

Multiple linear regression analysis is used to determine the effect of two or more independent variables (X) on changes in the dependent variable (Y). The results of the calculation can be written as the following multiple regression equation:

$$\hat{Y} = 6,451 + 1,119X_1 - 1,717X_2 + 5.059X_3 + s$$

From this equation, a constant (fixed) value of 6.451 is obtained. This means, without Mobile Baking, Internet Banking, and ATM, Fee Based Income has a value of 6,451. Constant value is a fixed value that comes from variables other than Mobile Banking, Internet Banking and ATM. Then, the Mobile Banking regression value of 1.119 indicates that when the Mobile Banking variable is increased one-fold, Fee Based Income will increase by 1.119. Likewise, the Internet Banking regression value has a value of -1.717, indicating that when the Internet Banking variable is increased one-fold, Fee Based Income will decrease by 1.7171 and the ATM regression value is 5.059, indicating that when the ATM variable is increased one-fold, then fee based income will increase by 5,059. From the results of the regression coefficient, it appears that ATM has a greater influence than Mobile Banking and Internet Banking.

The R-square test aims to determine the contribution or percentage of the independent variables to the rise and fall of the dependent variable, in this case Mobile Baking, Internet Banking and ATM to Fee Based Income. The calculation results

R-square using the SPSS version 22 application. Based on the calculation results, the R-square value = 0.816 or 81.6%. These results show that the Mobile Banking, Internet Banking and ATM variables together determine the variation or rise and fall of the Fee Based Income variable by 81.6%. Meanwhile, the remaining 18.4% is explained by other variables not involved in this research.

The F statistical test (Simultaneous) is used to prove whether Mobile Banking, Internet Banking and ATM together have a significant effect on Fee Based Income, the results of the F test calculation are presented in the following table:

Table 2. F Test Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	3	.000	31.106	.000 ^b
	Residual	.000	21	.000		
	Total	.000	24			

a. Dependent Variable: Fee based Income

b. Predictors: (Constant), ATM, Mobile Banking, *Internet Banking*

From the calculation results in Table 2, a significance value of 0.000 < 0.05 or calculated F is obtained

= 31.106 > F table = 3.098. Thus, Mobile Baking, Internet Banking and ATM together have a positive and significant effect on Fee Based Income. This means that hypothesis 1 (H1) which states that there is an influence between Mobile Banking, Internet Banking and ATM on fee based income, is accepted.

The t (partial) statistical test is used to test whether the originally determined hypothesis is accepted or rejected, done by comparing tcount with ttable, presented in the following table:

Table 3. T Test Results

Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	6.451E-008	.000		2.993	.007
	Mobile Banking	1.119E-006	.000	.579	2.415	.025
	Internet Banking	-1.717E-007	.000	-.301	-1.237	.230
	ATM	5.059E-006	.000	.767	7.626	.000

a. Dependent Variable: Fee based Income

Based on table 3 above, the results of the t test using the SPSS version 22 application. To find out the significance of the relationship between the Mobile Banking, Internet Banking and ATM variables with Fee Based Income, it can be done in two ways, namely by comparing the sig. 0.05 and $\alpha = 0.05$ or the calculated t-value and t-table value for sample 25 at $\alpha = 0.05$ is 2.079. The summary results of hypothesis testing are as follows:

Table 4. Research Model Hypothesis Testing

Hypothesis	Statement	Results	Positive/Negative	Decision
H1	<i>Mobile Banking, Internet Banking and ATMs affect fees Based Income</i>	F hitung > F tabel 31,106 > 3,098 Nilai Sig < 0,05 0,000 < 0,05	Positive	Hypothesis accepted
H2	<i>Mobile Banking affects Fee Based Income</i>	t hitung > t tabel 2,415 > 2,079 Nilai Sig < 0,05 0,025 > 0,05	Positive	Hypothesis accepted
H3	<i>Internet Banking affects fees Based Income</i>	t hitung > t tabel -1,237 < 2,079 Nilai Sig < 0,05 0,230 > 0,05	Negative	Hypothesis rejected
H4	<i>ATM affects Fee Based Income</i>	t hitung > t tabel 7,626 > 2,079 Nilai Sig < 0,05 0,000 < 0,05	Positive	Hypothesis accepted

4. DISCUSSION

The Influence of Mobile Banking, Internet Banking and ATM Transactions on Fee Based Income

The results of this research show that Mobile Banking, Internet Banking and ATM have an effect on Fee Based Income, with an indication of the Fcount > Ftable value (31.106 > 3.098) and a significance value of 0.00 < 0.05. This finding is in line with and confirms the results of previous research conducted by Gumilang & Azib (2019) and Suratman & Manurung (2021) which proves that H1 is acceptable. Mobile Banking, Internet Banking, and ATMs influence Fee Based Income. Fee Based Income refers to the income generated by banking companies from the fees charged for the services they offer, including operational costs and other costs. The use of technology such as Mobile Banking, Internet Banking, and

ATMs has impacted how banks interact with customers and how they generate revenue from fees and commissions. Increasing the volume of Mobile Banking, Internet Banking and ATM transactions such as fund transfers, bill payments and account openings can increase Fee Based Income (Gumilang & Azib, 2019).

The Effect of Mobile Banking Transactions on Fee Based Income

Based on the research results, it shows that Mobile Banking has an effect on Fee Based Income, with an indication of $t_{count} > t_{table}$ ($2.415 > 2.079$) and a significance value of $0.025 > 0.05$. These findings are in line with and confirm the results of previous research conducted by Ansyary et al. (2022), Pranata & Dewi (2023) and Surachim et al. (2021) which proves that H2 is acceptable, Mobile Banking has an effect on Fee Based Income. Mobile Banking allows customers to carry out various types of transactions, such as fund transfers, bill payments, and purchasing financial investment products via applications/Apps on smartphones. The more these transactions are carried out via the Mobile Banking platform, the more potential Fee Based Income income received from transaction fees and commissions received by the bank (Ansyary et al., 2022), (Pranata & Dewi, 2023), (Surachim et al., 2021) .

The Effect of Internet Banking Transactions on Fee Based Income

Based on the research results, it shows that Internet Banking has no effect on Fee Based Income, with an indication of $t_{count} > t_{table}$ ($-1.237 < 2.079$) and a significance value of $0.230 > 0.05$. This finding is not in line with the results of previous research conducted by Ansyary et al. (2022), Pranata & Dewi (2023) Surachim et al (2021) which proves that H3 is rejected, Internet Banking has no effect on Fee Based Income. Web-based services in Internet Banking provide services such as electronic checking accounts, domestic and international financial transactions, or access to financial analysis. Internet banking can be a source of Fee Based Income through web-based income which is usually used by business entities (Ansyary et al., 2022). Previously, Internet Banking was also used by individual customers, due to the digitalization era, banks began to launch Mobile Banking products that were more user friendly. Therefore, individual Internet Banking users migrate to Mobile Banking.

The Effect of Automated Teller Machine (ATM) Transactions on Fee Based Income

Based on the research results, it shows that ATM has an effect on Fee Based Income, with an indication of $t_{count} > t_{table}$ ($7.626 > 2.079$) and a significance value of $0.000 < 0.05$. This finding is not in line with the results of previous research conducted by Gumilang & Azib (2019) which proves that H4 is acceptable, ATM has an effect on Fee Based Income. ATM banking facilities that function for financial transactions, these service fees can contribute to the bank's fee-based income. By expanding the ATM network or partnering with other ATM providers, banks can increase Fee Based Income through transaction fees (Gumilang & Azib, 2019).

5. CONCLUSION

Based on the discussion above, Mobile Banking, Internet Banking and ATM transactions together have an effect on Fee Based Income, this indicates that when customers use Mobile Banking, Internet Banking and ATM, the bank's Fee Based Income can increase. There is a positive influence of Mobile Banking on Fee based income, this indicates that the number of transactions in mobile banking by customers can influence the bank's Fee based income. There is no influence of internet banking on Fee Based Income, this indicates

that internet banking transactions do not increase the bank's Fee Based Income. There is a positive influence of ATMs on Fee Based Income, this indicates that the more customers who make transactions using ATMs, the more the Bank's Fee Based Income will increase. The limitations of the research lie in collecting data from the research sample, among the 43 research samples there were only 5 companies that met the sample criteria. For further research, it is necessary to expand the research by selecting variables that influence the Fee Based Income that is studied, because only a few large banks include detailed Mobile Banking, Internet Banking and ATM transaction data in their Annual Report.

The limitations of this research lie in collecting data from the research sample. Among the 43 research samples, there were only 5 companies that met the sample criteria. This research sample was

only from banks registered on the IDX so that BPD banks could not be included in the criteria even though the Annual Report contained variables that were examined. The research taking period is recommended to be more than five years so that the results can better explain the influence of each variable as well as adding other variables related to the bank's Fee Based Income such as third party funds collected by the bank and foreign exchange transactions.

This research can also be considered by investors in fundamental analysis when choosing a company to invest in, especially by considering the characteristics of technological services and facilities, because these aspects have an impact and are related to revenue. With the hope that investors can achieve profits (Gain) by considering aspects of service facilities within a bank which can influence the increase in income at the banking company.

REFERENCES

- Alubisia, L. B. (2018). Effect of Technology Based Financial Innovations on Non-Interest Income of Commercial Banks in Kenya. *European Scientific Journal*, 14(7), 337–349. <https://doi.org/10.19044/esj.2018.v14n7p337>
- Anita, G., & Christine, D. (2023). The Influence of Electronic Banking Transactions on Fee Base Income in Conventional Banking Listed on the Indonesia Stock Exchange for the 2018-2021 Period. *JASa (Jurnal Akuntansi, Audit Dan Sistem Informasi Akuntansi)*, 7(2), 293–301.
- Ansyary, M. I., Dharmayanda, H. R., & Dharmawansyah, D. (2022). Analisis Inovasi Produk Layanan (E-Banking) Terhadap Peningkatan Fee Base Income Pada Pt. Bank NTB Syariah. *JISIP (Jurnal Ilmu Sosial Dan Pendidikan)*, 6(2).
- Arisanti, O. R., & Prihatiningsih, P. (2019). Pengaruh Transaksi Electronic banking Terhadap Fee based Income Pada PT Bank Cimb Niaga, Tbk Periode 2014–2017. *Keunis*, 7(1), 77–90.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39–67.
- Dendawijaya, L. (2015). *Manajemen Perbankan*. Jakarta: Ghalia Indonesia.
- DeYoung, R., Lang, W. W., & Nolle, D. L. (2007). How the Internet affects output and performance at community banks. *Journal of Banking & Finance*, 31(4), 1033–1060.
- Ellen, F. (2004). The Money Machines The humble ATM revolutionized the way we deal with money and turned global commerce into a 24/7 affair. *FORTUNE Magazine*.
- Fauzi, M. (2015). Pengaruh Kinerja Anjungan Tunai Mandiri (ATM) terhadap Kepercayaan Partisipasi Relationship dan Loyalitas Nasabah Bank Syariah di Jawa Tengah. *Jurnal Pemikiran Dan Penelitian Ekonomi Islam*, 2.
- Gumilang, R., & Azib, A. (2019). Pengaruh Transaksi Automated Teller Machine (ATM), Internet Banking dan Mobile Banking terhadap Fee Based Income. *Prosiding Manajemen*, 516–521.
- IAI. (2000). *Standar Akuntansi Keuangan*. Jakarta: Salemba Empat.
- Ismaya, S. (2015). *Kamus Perbankan*. Bandung: Pustaka Grafika.
- Kusnadi, L. dan. (2000). *Akuntansi Perbankan*. Jakarta: Salemba Empat.
- Lazuardi, J., Muktiyanto, A., & Budiyantri, H. (2023). Analysis of the Influence of Digital Banks on Bank Profitability. *Jurnal Ilmu Keuangan Dan Perbankan (JIKA)*, 12(2), 171–180.
- Spence. (1973). Job market signaling. *Quarterly Journal of Economics*, 87, 354–374.
- Mu'asiroh, L. R., & Darwanto, D. (2021). Analisis Penggunaan Mobile Banking pada Generasi Milenial dengan Pendekatan Technology Acceptance Model (TAM). *Ad- Deenar: Jurnal Ekonomi Dan Bisnis Islam*, 5(02), 155–178.
- Pranata, I. N. F. D., & Dewi, L. G. K. (2023). Pengaruh Mobile Banking Bank Negara Indonesia Terhadap Fee based income Periode 2017-2021. *Jurnal Akuntansi Profesi*, 14(02), 457–468.
- Riswandi, B. A. (2005). *Aspek Hukum Internet Banking*. Yogyakarta: Persada.
- Sarwono, J. (2006). *Buku Metode penelitian kuantitatif dan kualitatif*. Buku, (1), 1–14.

- Suardana, P. A. K. P., & Kustina, K. T. (2017). Pengaruh Fee Based Income dan transaksi e-banking terhadap perubahan laba pada PT. Bank Pembangunan Daerah Bali. *Jurnal Ilmiah Akuntansi Dan Bisnis*, 2(2), 331–343.
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: PT Alfabeta.
- Surachim, A., Hidayat, Y. M., & Zain, N. H. (2021). Pengaruh Mobile Banking Terhadap Fee Based Income. *Strategic: Jurnal Pendidikan Manajemen Bisnis*, 21(2), 55–67.
- Suratman, A., & Manurung, E. (2021). The Influence of Electronic Banking and Fee Based Income on Profitability in The Banking Industry Registered on Indonesia Stock Exchange, *International Journal of Scientific and Research Publications* 11(10), 562–568. <https://doi.org/10.29322/IJSRP.11.10.2021.p11863>
- Utaminingsih, P., & Sularto, L. (2015). Pengaruh Transaksi Electronic Banking Terhadap Fee Based Income pada PT. Bank CIMB Niaga, Tbk. *Jurnal Akuntansi, Keuangan Dan Perbankan*, 1(3), 187–194.
- Zuliarni, S., Haroon, H. H., & Yahya, S. (2013). The Extent Of Internet Banking Services Usage In Relation With Customers' Perceived E-Service Quality (PESQ) Of Malaysian Banks In Penang: The Moderating Role Of Adopters Risk Profil. *Jurnal Aplikasi Bisnis*, 1(2), 78–83.