

# The Effect Of Electronic Banking Transactions On Fee-Based Income At PT. Bali Regional Development Bank

I Gusti Nyoman Bagus Rama Mahamertha <sup>1\*</sup>, I Komang Sugiarta <sup>2</sup>, I Made Sarjana <sup>3</sup>

<sup>1</sup> Managerial Accounting Undergraduate Study Program, Accounting Department, Bali State Polytechnic

<sup>2</sup> Managerial Accounting Undergraduate Study Program, Accounting Department, Bali State Polytechnic

<sup>3</sup> Managerial Accounting Undergraduate Study Program, Accounting Department, Bali State Polytechnic

\*Corresponding Author: [rmahamertha@gmail.com](mailto:rmahamertha@gmail.com)

**Abstract:** PT. Bank Pembangunan Daerah Bali has increased the work unit in the field of technology, the technology that is superior in helping to improve services to customers by the PT. Bank Pembangunan Daerah Bali is Electronic Banking or generally better known as E-Banking. This study aims to determine the progress of increasing the number of e-banking transactions at PT Bank Pembangunan Daerah Bali in the last 5 years, to find out the progress of increasing fee-based income at PT Bank Pembangunan Daerah Bali in the last 5 years, and to determine the effect of e-banking transactions on fee-based income at PT Bank Pembangunan Daerah Bali. This type of research uses quantitative research. The population that is the object of this research is the monthly report of electronic banking transactions and fee based income of PT. Bank Pembangunan Daerah Bali for the 2015-2020 period, using the saturated sampling technique. The data collection technique is observation using primary data and secondary data. The data analysis technique in testing the data is using classical assumption testing, multiple linear regression analysis, t statistic test, and coefficient of determination test. The results of this study are the number of e-banking transactions at PT. Bank Pembangunan Daerah Bali has experienced a significant increase every year from 2017-2021, the amount of fee based income of PT. Bank Pembangunan Daerah Bali has experienced a significant increase every year from 2017-2021, and e-banking transactions have a positive and significant impact on fee-based income of PT. Bank Pembangunan Daerah Bali.

**Keywords:** transaction, electronic banking, fee based income, mobile banking

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## Introduction

In the modern world, the role of banking is very large in advancing the economy of a country. The banking sector is one part of the financial sector that is the backbone of a country's economy. According to Anindynta (2016), the bank's sources of income are interest income and fee-based income. According to Kustina and Dewi (2016), the current strategy that is widely applied in the banking industry in an effort to grow profits is to increase fee-based income. In addition to these two main activities, banks also carry out other supporting services. The purpose of providing these bank services is to support and facilitate the activities of raising funds and distributing funds. -banking is one of the products of the banking world that implements a computerized accounting information system. The advantages of E-Banking can overcome the difficulties of distance and time.

Pt. Bank Pembangunan Daerah Bali as one of the commercial banks that has a real performance that has been successfully realized, namely the level of profitability in 2016 with profit growth reaching 21.24%. And in the last five years PT. Bank Pembangunan Daerah Bali always experiences an increase in interest income which is in line with the increase in fee-based income. The Bali Regional Development Bank noted that non-cash transactions carried out by the community during the Covid-19 pandemic had reached almost 90% of the total transactions. The trend of increasing non-cash transactions occurred partly due to the Covid-19 pandemic so that customers in making transactions would be safer through bank BPD Bali's E-Banking service which already has the same transaction features as other banks.

The operational gains from the interest showed good development over the past five years. From 2016 to 2019 it continued to experience a significant increase, but decreased in 2020 to 1,624 billion. The development of bank income from interest was also followed by the development of income from other operations which

can be seen that from 2016 to 2019 it experienced a significant increase but decreased in 2020 in line with the decrease in operating income from interest earned by the bank. It is known that other operating income at the Bali Regional Development Bank has experienced a good development and can certainly increase the bank's income. Therefore, service activities that generate other operating income or fee-based income need to be optimized for banks to support bank income from credit interest. This fee-based income is obtained from services carried out by banks related to ATM transactions, mobile banking, internet banking and other activities. Based on the explanation above regarding the importance of fee-based income in increasing bank income, which in this case is obtained through bank service activities such as ATM transactions, mobile banking transactions, internet banking transactions, it is important to conduct research related to the influence of electronic banking on fee-based income at PT. Bali Regional Development Bank.

## Method

The type of research used is quantitative research with a descriptive statistical approach. The type of data source used is primary data obtained by the object under study including information about e-banking transactions and fee-based income at PT. Bali Regional Development Bank. and secondary data obtained from the company including the annual report of PT. The Bali Regional Development Bank obtained by accessing [www.bpd Bali.go.id](http://www.bpd Bali.go.id), the population sampled in the study, namely the population that is the object of this study is the Quarterly Report on the number of electoral banking transactions and the amount of fee-based income of PT. Regional Development Bank of Bali for the period 2017-2021. This research was conducted at PT. Bali Regional Development Bank located at Jalan Gurita I No. 17A, Renon, Denpasar, Bali. The data collection technique used is observation. The data analysis used is multiple linear regression analysis, multiple linear regression tests are carried out to calculate the degree of influence of independent variables on dependent variables in regression models (Sugiono, 2016). This study used independent variables and dependent variables. The independent variables in this study are mobile banking and internet banking. The dependent variable in this study is fee-based income. Data analysis techniques in the form of quantifiable data that have been collected then go through the data processing process. In this process, quantitative data is processed through SPSS software by conducting classic assumption tests such as: normality test, autocorrelation, Multicholnearity, Heteroskedasticity Test and hypothesis test such as: t test, f test and determination coefficient test.

## Result and Discussion

### 1. Test of Classical Assumptions

#### a. Normality Test

The normality test in this study was tested using the Kolmogorov-Smirnov test. The data is said to be distributed normally if it has a Kolmogorov Smirnov value with a significance value of  $> 0.05$ . The results of the normality test in this study are presented in Table 1 as follows:

Tabel 1 Normality Test Results

|                                  |                | <i>Unstandardized Residual</i> |
|----------------------------------|----------------|--------------------------------|
| N                                |                | 20                             |
| Normal Parameters <sup>a,b</sup> | Mean           | 0,0000000                      |
|                                  | Std. Deviation | 0,75381107                     |
| Most Extreme Differences         | Absolute       | 0,129                          |
|                                  | Positive       | 0,129                          |
|                                  | Negative       | -0,058                         |
| Test Statistic                   |                | 0,129                          |
| Asymp. Sig. (2-tailed)           |                | 0,200                          |

Source : Data processed on IBM SPSS 25 (2022)

Based on the data in Table 1 it can be seen that the value of Kolmogorov Smirnov is 0.129 with a significance of  $0.200 > 0.05$ . This shows that the data is distributed normally and can be used in research.

b. Multicholinerity test

The multicholinerity test aims to test whether the regression model found a correlation between free (independent) variables. The presence or absence of multicholinerity can be seen from the magnitude of the tolerance value and variance inflation factor (VIF). If the tolerance value > 0.10 and the VIF value < 10, it is free from multicholinerity. The results of the multicholinerity test in this study are presented in Table 2 below

Tabel 2 multicholinerity test Results

| Model                                | Colinearity Statistics |       | Keterangan              |
|--------------------------------------|------------------------|-------|-------------------------|
|                                      | Tolerance              | VIF   |                         |
| Transaksi ATM ( $X_1$ )              | 0,147                  | 6,812 | Bebas Multikolinearitas |
| Transaksi Mobile Banking ( $X_2$ )   | 0,165                  | 6,055 | Bebas Multikolinearitas |
| Transaksi Internet Banking ( $X_3$ ) | 0,107                  | 3,921 | Bebas Multikolinearitas |

Source : Data processed on IBM SPSS 25 (2022)

Based on the data in Table 2, it can be seen that all independent variables have a VIF value smaller than 10 and a tolerance value greater than 0.10, so it can be concluded that the model is free of multicholinerity and data can be used in research.

c. Heteroskedasticity test

The heteroskedasticity test was carried out with the Glesjer test with significance value criteria above 0.05. A good regression model is one that does not contain the presence of symptoms of heteroskedasticity. A model is said to contain no symptoms of heteroskedasticity if it has a significance value greater than 0.05. The results of the heteroskedasticity test in this study are presented in Table 3 as follows.

Tabel 3 heteroskedasticity test result

| Model                      | Unstandardized Co-efficients |            | Standardized Coefficients | t      | Sig.  |
|----------------------------|------------------------------|------------|---------------------------|--------|-------|
|                            | B                            | Std. Error |                           |        |       |
| (Constant)                 |                              |            |                           |        | 0,928 |
| Transaksi ATM              | -0,083                       | 0,910      | 0,471                     | -0,092 | 0,452 |
| Transaksi Mobile Banking   | 0,004                        | 0,005      | 0,705                     | 0,770  | 0,239 |
| Transaksi Internet Banking | 0,003                        | 0,003      | -1,229                    | 1,223  | 0,179 |

Source : Data processed on IBM SPSS 25 (2022)

Based on the data of Table .3, it can be seen that the significance value of the ATM transaction variable is 0.452 > 0.05. The significance value of the mobile banking variable was 0.239 > 0.05. The significance of the internet banking variable is 0.179. All variables have significance values greater than 0.05. This suggests that the regression model does not contain the presence of symptoms of heteroskedasticity and data can be used in the study.

d. Autocorrelation test

The autocorrelation test was carried out with the Durbin Watson (DW) test with criteria, namely: (a) positive autocorrelation occurs, if the DW value is below -2 or DW < -2, (b) no autocorrelation occurs, if the DW value is between -2 to +2 or -2 < DW < +2, and (c) negative

autocorrelation occurs, if the DW value is above +2 or  $DW > +2$ . The results of the autocorrelation test in this study are presented in Table 4.4 as follows.

Table 4 Autocorrelation Test Results  
Model Summary<sup>b</sup>

| Model | R                  | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|--------------------|----------|-------------------|----------------------------|---------------|
| 1     | 0,980 <sup>a</sup> | 0,959    | 0,952             | 0,82145                    | 1,567         |

Source : Data processed on IBM SPSS 25 (2022)

Based on the data in Table 4, it can be seen that durbin Watson's value is 1.567, so it is stated that no autocorrelation occurs and the data can be used in the study.

## 2. Hypothesis Test

### a. T test

Statistical test t shows how far the influence of one explanatory and independent variable individually is in explaining the variance of the dependent variable.

Table 5 t Test Results  
Coefficients<sup>a</sup>

| Model                      | Unstandardized Coefficients |            | Standardized Coefficients |  | t     | Sig.  |
|----------------------------|-----------------------------|------------|---------------------------|--|-------|-------|
|                            | B                           | Std. Error | Beta                      |  |       |       |
| 1 (Constant)               | 3,999                       | 1,774      |                           |  | 2,255 | 0,039 |
| Transaksi ATM              | 0,033                       | 0,010      | 0,421                     |  | 3,207 | 0,005 |
| Transaksi Mobile Banking   | 0,050                       | 0,005      | 1,231                     |  | 9,935 | 0,000 |
| Transaksi Internet Banking | 0,117                       | 0,033      | 0,668                     |  | 3,555 | 0,003 |

a. Dependent Variable: Fee Based Income

Source : Data processed on IBM SPSS 25 (2022)

Based on the data in Table 5 it can be interpreted as follows:

The first hypothesis test (H1) that ATM transactions have a significance value of  $0.005 < 0.05$ , it is stated that the variable X1 has a significant influence on Y. Positive t value indicates that X1 has a unidirectional relationship with Y. So it can be concluded that H1 is accepted, namely ATM transactions with a positive and significant impact on fee-based income.

Testing the second hypothesis (H2) that mobile banking transactions have a significance value of  $0.000 < 0.05$ , it is stated that the variable X2 has a significant influence on Y. Positive t value indicates that X2 has a unidirectional relationship with Y. So it can be concluded that H2 is accepted, namely mobile banking transactions with a positive and significant impact on fee-based income.

Testing the third hypothesis (H3) that internet banking transactions have a significance value of  $0.003 < 0.05$ , it is stated that variable X3 has a significant influence on Y. Positive t value indicates that X3 has a unidirectional relationship with Y. So it can be concluded that H3 is accepted, namely internet banking transactions have a positive and significant impact on fee-based income.

## b. F test

Statistical test F shows how much influence the independent variables simultaneously have on the dependent variables. Statistical decisions can be concluded by looking at the probability on the statistical test F.

Tabel 6 Hasil uji f

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | ,345 <sup>a</sup> | ,119     | ,090              | ,734409                    |

**Predictors: (Constant), PERTUMBUHAN LABA(Y), EVA(X)**

Source : Data processed on IBM SPSS 25 (2022)

Based on the data in Table 6 , it can be seen that the significance value in the F statistical test is  $0.000 < 0.05$ . This shows that ATM transactions, mobile banking transactions and internet banking transactions have a significant effect simultaneously on fee-based income. So it can be concluded that H<sub>4</sub> is accepted, namely ATM transactions, mobile banking transactions and internet banking transactions simultaneously have a significant effect on fee-based income.

## c. Coefficient of determination

The coefficient of determination test was carried out to find out how much the variable contribution of ATM transactions, mobile banking transactions, and internet banking transactions to the fee-based income variable. The results of the coefficient of determination test in this study are presented in Table 7 as follows

Tabel 7 coefficient of determination

**Model Summary**

| Model | R     | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|----------------------------|
| 1     | 0,980 | 0,959    | 0,952             | 0,821                      |

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

Source : Data processed on IBM SPSS 25 (2022)

Based on the data in Table 4.8, it can be seen that the Adjusted R Square value is 0.952. The coefficient of determination can be calculated with adjusted R Square x 100%, so that a coefficient of determination of  $0.952 \times 100\% = 95.2\%$  is obtained. This shows that the contribution of ATM transactions, mobile banking transactions, and internet banking transactions to fee-based income is only 95.2%, the remaining 4.8% is influenced by other factors that have an influence on fee-based income.

## Conclusion

ATM transactions have a positive and significant effect on pt. Bali Regional Development Bank. This is evidenced by the significance value in the t statistical test of  $0.005 < 0.05$ . Mobile banking transactions have a positive and significant effect on pt. Bali Regional Development Bank. This is evidenced by the significance value in the t statistical test of  $0.000 < 0.05$ . Internet banking transactions have a positive and significant effect on the fee-based income of PT. Bali Regional Development Bank. This is evidenced by the significance value in the statistical test t of  $0.003 < 0.05$ . ATM transactions, mobile banking transactions and internet banking transactions simultaneously have a significant effect on pt. Bali Regional Development Bank. This is evidenced by the significance value in the F statistical test of  $0.000 < 0.05$ . Theoretically, this research has implications in complementing the results of previous research and existing theories regarding banking, especially e-banking transactions and fee-based income. The results of this study complement the results of previous research which stated that e-

banking transactions affect fee-based income with the number of transactions and fee-based income increasing every year. In practical terms, this study has implications for increasing the number of e-banking transactions for banks in an effort to increase income through fee-based income.

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