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Analysis of the Effect of Third-Party Funds (DPK), Equity, and Money Supply (JUB) on Lending at PT East Java Regional Development Bank Tbk. 2019-2023

Dita Apriliawati, Hafizh Al Ghofran*, Resty Dwi Rahmah, Vidya Purnamasari

Faculty of Economics and Business, Development Economics, State University of Malang

*Corresponding email: hafizh.al.2304326@students.um.ac.id

Abstract: The banking industry has an important role in a country's economic growth and development. One of the important roles of banking is to provide loans to the public through credit. So it can be said that the bank acts as a liaison between people who have financial surplus so that they can save their funds. This study aims to examine the influence of third-party funds (DPK), equity, and total money in circulation (JUB) on lending at PT East Java Regional Development Bank. In this research, the author uses quantitative methods, with time series secondary data. The research period is January 2019 to December 2023. The analysis technique used is the Classical Assumption Test and Multiple Linear Regression with the help of Eviws 12 software. The results showed that third-party funds (DPK) had a significant negative effect on lending. Equity and JUB have a significant positive effect on lending.

Keywords: Credit, Third-Party Funds, Equity, Money Supply

INTRODUCTION

The banking industry has an important role in a country's economic growth and development. Currently, the banking industry is growing rapidly and has increasingly fierce competition, for example, financial institutions with a digital base such as fintech. The existence of this competition makes banks in Indonesia have a strategy for managing banking health so that liquidity is maintained and balanced (Widyatmoko & Wibowo, 2022). PT Bank Pembangunan Daerah Jawa Timur (Bank Jatim) is one of the banking industries that contributes to regional economic development through synergy with the central and regional governments in supporting regional economic development programs and projects.

One of the important roles of Bank Jatim is to provide loans to the community through credit. So it can be said that Bank Jatim acts as a liaison between people who have excess finances so that they can save their funds. The deposits are in the form of Third Party Funds, namely demand deposits, deposits, and savings. Then, Bank Jatim returns the funds to the community in the form of loans or lending. The credit products provided by Bank Jatim include Retail and Medium Micro Loans, Commercial and Corporate Loans, and Consumer Loans.

Where, the need for funds raised by Bank Jatim to meet operational liquidity must also be greater. Therefore, in carrying out its operational activities, Bank Jatim tries to raise funds from the DPK community with a large amount. This is because the greater the collection of funds, the greater the possibility of extending credit with a large amount. So that it can increase the income earned by the bank (Tofan, et al., 2022) The

community and the bank have a relationship that is interrelated and needs each other. The relationship between the two parties must be based on the principle of mutual trust so that banking operations such as lending are maintained in stability (Tobing, et al., 2024). The following is the operational activity of the amount of lending and DPK productivity by Bank Jatim since 2019-2023

Figure 1.

Chart of Lending at Bank Jatim in 2019-2023

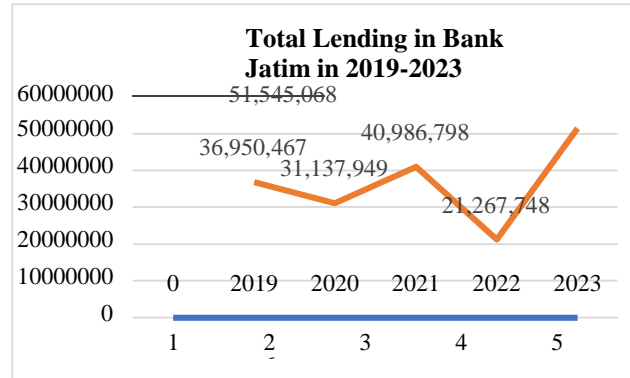
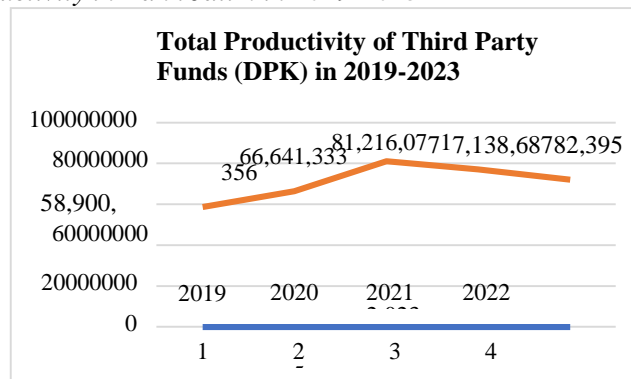


Figure 2.

Chart of DPK Productivity in Bank Jatim in 2019-2023



Source: PT East Java Regional Development Bank Tbk Financial Performance Report 2019-2023

From the research period conducted in 2019 to 2023, it was observed that there were many fluctuating movements in the balance sheet of financial statements on each variable, namely third-party fund lending, which was contrary to theory. Where third party funds are one of the factors that can affect lending (Munandar, 2018) if the amount of DPK collected by banks is getting bigger, the credit channeled by banks will also be bigger. However, this is very inconsistent with the two graph depictions above. In 2022 towards 2023 the total deposits decreased by 4,743,323 million. While the amount of lending experienced a sharp increase of 30,277,320 million.

The phenomenon of deposits over the last 5 years reflects that Bank Jatim is experiencing internal problems in the lending process. The bank cannot balance between deposits and lending. There is a decrease in deposits, but in fact, lending has increased. This problem can have an impact on the reduced profit that the bank will get and then affect the amount of profit sharing obtained between creditors and debtors.

Therefore, several things are taken into consideration in lending from both the lender and the borrower. Things that will be considered or influencing factors in lending can be identified how far the influence of these things in providing the impact of lending by Bank Jatim. Several previous studies discuss the factors that influence lending.

Among them, research conducted by (Siagian, 2021) states that DPK has a positive and significant effect on lending. Meanwhile, in contrast to the results of research by (Melinda, et al, 2021) explained that Third Party Funds (DPK), partially does not influence the Lending of Commercial Banks listed on the IDX. Previous research related to the Equity variable conducted by (Haryati, 2019) revealed that equity growth has a positive and significant effect on credit growth. While contrary to research by (Jayanti, 2019) states that Equity has a negative and insignificant effect on the amount of lending. Then, research conducted by (Pratama, 2022) that the money supply has a significant influence with a positive direction on lending. In contrast to the results of research by (Ramadhan & Dahmiri, 2024) revealed that the variable Amount of Money in Circulation (JUB) has a positive and insignificant effect on lending at PT. Jambi Regional Development Bank.

The similarities of some of the previous studies use the variable of lending. However, there are research gaps related to the results of research on the independent variables of DPK, Equity, and JUB. The gap lies in research by (Siagian, 2021) with (Melinda, et al, 2021) regarding the effect of DPK on lending. Then, the research gap by (Sri Haryati, 2019) with (Jayanti, 2019) is related to the effect of Equity variables on lending. Finally, the research gap by (Pratama, 2022) (Ramadhan & Dahmiri, 2024) is related to the effect of JUB on lending. From this gap, the research aims to answer inconsistencies and gaps from previous research. In addition, to determine and prove the effect of DPK, Equity, and JUB on lending. The novelty of this research with previous research is the period and place of research. The research was conducted at the East Java Regional Development Bank in 2019-2023.

LITERATURE

Banking

Based on Law of the Republic of Indonesia No. 10 of 1998 concerning Banking, banks are defined as business entities that collect funds from the public in the form of deposits and channel them to the public in the form of credit and or other forms to improve people's lives. In the Law of the Republic of Indonesia No. 1998, based on the type of bank can be classified into 2 types, namely Commercial Banks and Rural Banks:

- Commercial Bank, which is a bank that runs its operations conventionally or based on Sharia principles which in its activities provide services in payment traffic.
- People's Credit Bank, which is a bank that runs its operations both conventionally and sharia, in its activities do not provide services in payment traffic.

Credit Banking

In Greek, credit comes from the word “credere” or in Latin “credited” in a language that has the meaning of trust, the Indonesian Bankers Association (2018) based on Law No. 10 of 1998 credit is defined as the provision of money or bills that can be equated with it based on an agreement or loan and borrowing agreement between the bank and another party which requires the borrower to repay his debt after a certain period with interest.

Funds Party Third (DPK)

Third-party funds are funds originating from the public, both individuals and business entities obtained by banks through various deposit product instruments, including demand deposits, time deposits, and savings. (Kuncoro and Suhardjono, 2019: 140). Demand deposits are deposits that can be moved at any time through checks, billet giro, with various methods for installment requests or by moving. Savings are deposits whose withdrawals must be made under certain agreed conditions but cannot be made through checks, billet giro, or other similar methods. Then, deposits are deposits whose withdrawals must be made at a certain time depending on the agreement between the borrower and the bank.

Third-party funds are obligations or debts recorded in rupiah value to Indonesian citizens and non-citizens which include deposits in the form of demand deposits, savings, deposits, and other short-term liabilities (Kamil & Rahmawati, 2022). Another definition of deposit Funds from third parties are sources of funds collected from customers, individuals, business entities, government agencies, families, businesses incorporated as cooperatives, or other organizers in the form of nominal rupiah or foreign currencies. In all bank financial institutions, sources of funds from general public customers are the largest amount of funds owned by banks (Jamhuriyah & Nurhayat, 2021).

Equity

Based on PSAK No.21, equity is part of the rights of company owners, which is the ratio of assets to liabilities. Therefore, it cannot be used as a measure of the company's selling point. Equity is the residual right to the company's assets after deducting its liabilities. Equity is the amount of money that would be returned to the shareholders of a company if all its assets were liquidated and all its debts paid. The value of equity is derived from the total amount of the company's assets minus the total debt to be paid. Shareholders' equity reporting is carried out to provide information to interested parties about how effective the management of a company is (Tulaila & Rochmatullah, 2024).

Money Circulating (JUB)

Total Money in Circulation (JUB) is the total amount of money in the community. Money residing in commercial banks or central banks, as well as banknotes or government-owned metals, are not counted as money in circulation. The amount of money in circulation has an important role as a means of driving the economy. The size of the money supply affects the purchasing power of the community and also the availability of commodity needs of the community. The amount of money in circulation must develop at a reasonable level. So that the money supply must be considered and controlled following the state of the economy of a country. The government must be able to control the rate of money circulation so that the amount of money in circulation is not too high and not too little, to avoid inflation and deflation problems (Putri, 2017).

METHOD

The type of research method used is quantitative. Quantitative is a research method supported by data in the form of numbers to answer a research result (Waruwu, 2023). Supported by statistical analysis as a testing process to determine the relationship between the independent variable and the dependent variable. Furthermore, it is sought how much influence the independent variable has on the dependent variable. This study involves one dependent variable, namely lending, and three independent variables,

namely Equity and Third Party Funds (DPK).

As internal factors and the variable Money Supply as an external factor. This research is secondary. Data collection is obtained from the Bank Jatim Annual Financial Performance Report published through the official website www.bankjatim.co.id. In addition, it is also supported by research data obtained through the official website www.bps.go.id. The research data used is monthly period data for a period of 5 years from January 2019 to December 2023 for each independent variable and dependent variable. The statistical analysis used for data analysis and hypothesis testing is the multiple linear regression data processing method to determine the relationship or influence of the independent and dependent variables. Before processing multiple linear regression data, a classic assumption test is first carried out, namely the normality test, multicollinearity test, heteroscedasticity test and autocorrelation test so that the multiple linear regression results are valid and unbiased.

The model used in this study is multiple linear regression as follows:

$$\log Y = \beta_0 + \beta_1 X_1 + \beta_2 \log X_2 + \beta_3 X_3 + e$$

Information:

- Y = Loan disbursement in month i of year i
- β_0 = Constant
- $\beta_1 \beta_2 \beta_3$ = Regression Coefficient
- X_1 = Third Party Funds (DPK)
- X_2 = Equity
- X_3 = Total Money Circulating (JUB)
- e = Error term

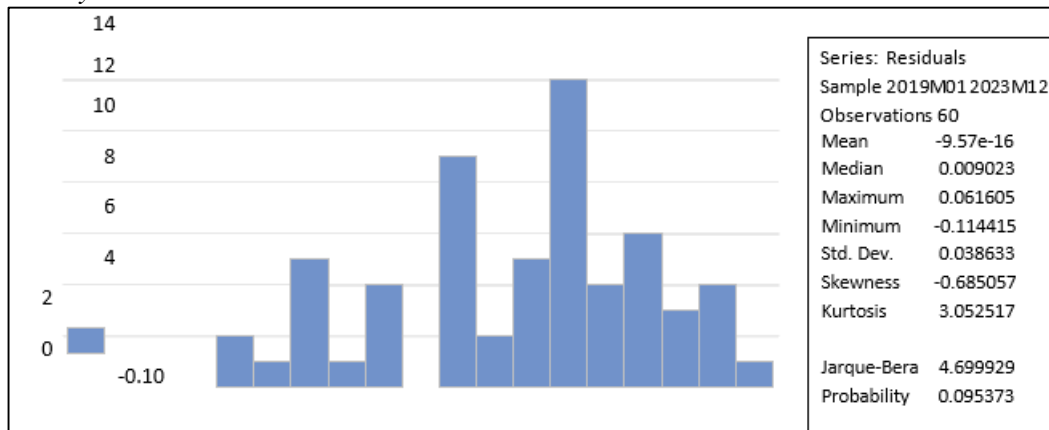
RESULTS

Classic Assumption Test

Normality Test

Figure 3.

Normality Test



Source: Results Exercise Data Eviews 12

The normality test results show a Jarque-Bera Probability value of 0.095373 > 0.05, meaning that the data in this study is normally distributed and passes the normality test.

Multicollinearity Test**Table 1.***Multicollinearity Test*

	DPK	LOG(EQUITY)	JUB
DPK	1	0.817357278066028	0.8398332785860282
LOG(EQUITY)	0.817357278066028	1	0.8552614660012008
JUB	0.8398332785860282	0.8552614660012008	1

Source: Results Exercise Data Eviews 12

The correlation coefficient of the multicollinearity test results shows the correlation between variables:

- i. DPK And Log (Equity) by $0.817357278066028 \leq 0.8$
- ii. DPK And JUB by $0.8398332785860282 \leq 0.8$
- iii. Logs (Equity) And JUB by $0.8552614660012008 \leq 0.8$

The correlation between independent variables is less than equal to 0.08, it can be concluded that the research data is free from multicollinearity problems.

Heteroscedasticity Test**Table 2.***Heteroscedasticity Test*

Obs R-squared	6.235955	Prob. Chi-Square (3)	0.1007
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Source: Results Exercise Data Eviews 12

By using the Glejser Heteroscedasticity Test method, the value of Prob. Obs R-square or count of 0.1007 is greater than 0.05 ($\alpha = 5\%$). So it can be concluded that it is free from heteroscedasticity problems.

Autocorrelation Test**Table 3.***Autocorrelation Test*

Durbin Watson Stat	0.545936
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Source: Eviews 12 Data Processing Results

Deciding whether or not there is autocorrelation using the D-W table criteria with a significance level of 5% is as follows:

- i. D-W value below -2 means there is positive autocorrelation.
- ii. The D-W value between -2 and +2 means there is no autocorrelation.
- iii. The D-W value above +2 means there is negative autocorrelation.

The results of the autocorrelation test show that the Durbin-Watson value is between -2 and +2, which is 0.545936, meaning that the data in this study are free from autocorrelation problems.

Multiple Linear Regression Analysis

Table 4.

Regression Linear Multiple Test

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	10.09216	2.603791	3.875949	0.0003
DPK	-1.30E-09	6.43E-10	-2.027938	0.0473
LOG(EQUITY)	0.426392	0.169031	2.522564	0.0145
JUB	8.78E-08	1.95E-08	4.510935	0.0000

Source: Eviews 12 Data Processing Results

Multiple Linear Regression Equation:

$$\text{LOG (CREDIT)} = 10.0921590484 - 1.3041190487\text{e-}09*\text{DPK} + 0.426392495824 * \text{LOG(EKUITAS)} + 8.78087346251\text{e} - 08*\text{JUB}$$

The regression estimation results show a constant value of 10.0921590484, meaning that without the DPK, Equity, and JUB variables, the CREDIT variable will increase by 10.09 million. The beta coefficient value of the DPK variable (X1) is -1.3041190487e, meaning that if the value of other variables is constant and the DPK variable (X1) has increased by 1 million, the CREDIT variable (Y) will decrease by 1.304 million. The beta coefficient value of the Equity variable (X2) is 0.426392, meaning that if the value of other variables is constant and the Equity variable (X2) has an increase of 1 million, the CREDIT variable (Y) will increase by 0.42 million. The beta coefficient value of the JUB variable (X3) is 8.78E-08, meaning that if the value of other variables is constant and the JUB variable (X3) has an increase of 1 billion, the CREDIT variable (Y) will increase by 8.78 million.

Statistics Test Results

Results Test Q (Hypothesis Test)

Table 5.

Test Q (Hypothesis)

Variable	Probability
C	0.0003
DPK	0.0473
LOG(EQUITY)	0.0145
JUB	0.0000

Source: Eviews 12 Data Processing Results

The effect of the independent variable on the dependent variable partially is as follows:

- i. The probability t-statistic value of 0.0473 < 0.05 means that the DPK variable has a significant effect on CREDIT at Bank Jatim in 2019-2023.
- ii. The probability t-statistic value of 0.0145 < 0.05 means that the Equity variable has a significant effect on CREDIT at Bank Jatim in 2019-2023
- iii. The probability t-statistic value of 0.0000 < 0.05 means that the JUB variable has a significant effect on CREDIT at Bank Jatim in 2019-2023.

F Test Results

Table 6.

Test F

Prob(F-statistic)	0.000000
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Source: Eviews 12 Data Processing Results

The probability value of F-statistic $0.000000 < 0.05$ means that the independent variables of DPK, Equity, and JUB together (simultaneously) have a significant effect on the dependent variable CREDIT at Bank Jatim in 2019-2023.

Test Coefficient of Determination (R Square)

Table 7.

Test Coefficient Determination (R Square)

R-squared	0.892085
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Source: Eviews 12 Data Processing Results

The R-Square value is 0.892085 or 89.2085%. The coefficient of determination shows that in the research model, the contribution or influence of the independent variables consisting of DPK, Equity, and JUB on the dependent variable CREDIT is 89%, while the remaining 11% is influenced by other variables.

DISCUSSION

The Effect of Third-Party Funds on Lending

The results showed that the effect of Third Party Funds (DPK) had a significant effect with a negative direction. As indicated by the significance value of $0.0473 < 0.05$. From the results of the study it can be concluded that when DPK increases, it will be accompanied by a decrease in the amount of lending. This research is not by the findings (Siagian, 2021) which state that DPK has a positive and significant effect on lending. This is because DPK is still collected at the bank and has not been allocated optimally in supporting banking operational activities that require the expenditure of funds, namely lending. Banks still see the high incentives provided in the ownership of Bank Indonesia Certificates (SBI) compared to lending to the public. This is due to the prudent principle of banks to anticipate the occurrence of bad credit due to unstable economic conditions, thus making banks implement a decrease in the amount of lending through tight credit policies. As a result, the deposits collected from the public are still deposited in the bank in the form of ownership of Bank Indonesia Certificates (SBI).

Another factor in the decline in lending, while DPK increases, is also that people tend to be more careful in applying for loans in banks with unstable economic conditions and high interest rates on bank loans. This research is in line with research by (Mukhlis, 2011) and (Tanjung, 2020) stating that Third Party Funds (DPK) have a significant influence on the bank's performance.

Third Party Funds (DPK) have a significant influence with a negative direction. This is influenced by the weak funding or financing system at Bank Muamalat because the bank is unable to maximally manage the funds that have been successfully led to be channeled back (Tanjung, 2020). The increase in third party funds (DPK) will affect lending capital for banks which will then be distributed to people who are short of funds (loans). The increase in funds obtained from the community also shows how much confidence the community has in trusting the bank to carry out savings and loan transactions.

Effect of Equity on Lending

The results showed that equity has a significant influence with a positive direction on lending at PT East Java Regional Development Bank. As indicated by the significance value of $0.0145 < 0.05$. It can be concluded that when the amount of equity increases, lending will also increase. Banks with higher equity tend to be more maximized and free in lending because they can absorb greater risk. This is because bank equity serves as a buffer for potential losses from bad credit. This research is by previous research conducted by (Haryati, 2019), (Ismawanto, et al., 2020), and Prihartini & Dana, (2018) which state that equity growth has a significant effect with a positive direction on credit growth.

Conversely, banks with a low amount of equity are less able to face stricter credit requirements or higher interest rates. Lenders may perceive higher risks in providing credit to entities that have little equity, so they apply stricter loan conditions.

Effect of JUB on Lending

The results showed that JUB has a significant influence with a positive direction on lending at PT East Java Regional Development Bank. As indicated by the significance value of $0.0000 < 0.05$. It can be concluded that, when the Money Supply (JUB) increases, it will be followed by an increase in the amount of lending. Assuming the money supply is stable and the country's economy is conducive. When the economy is conducive, producers will increase the amount of production because there is an increase in people's purchasing power marked by an increase in the money supply. This is in line with previous research conducted by (Pratama, 2022), (Rifai, 2017), and (Anwar, 2016) which states that the money supply has a significant effect with a positive direction on lending and Islamic financing of banks in Indonesia.

Then, from this research if it is connected to the theory of money supply which explains that in regulating the money supply the bank pays attention to the amount of money demanded by debtors. If the debtor's demand for money increases, it will affect the increase in the money supply due to an increase in the amount of lending. Too much money supply is also not good for a country because it can lead to a decrease in the value of the currency. The money supply is sufficient so that the wheels of the economy spin well. If the money supply in the community is high and associated with high inflation can affect lending. Empirically in the long run money is needed for exchange and economic growth, on the other hand it has a very significant influence on inflation, therefore the circulation of money must be managed properly and according to the needs of the economy properly and according to the needs of the economy

CONCLUSION

Based on the results of the discussion this research was conducted to determine the effect of DPK, Equity, and JUB variables on lending at PT. East Java Regional Development Bank in 2019-2023, so it can be concluded as follows:

- a. Lending in 2019-2023 at PT East Java Regional Development Bank experienced fluctuating movements every year. In 2023 lending experienced a sharp increase.
- b. The Third Party Fund (DPK) variable has a significant and negative effect with a coefficient of $-1.3041190487e$. Where if there is an increase in DPK by 1 million, it will cause a decrease in lending by 130%.
- c. The Equity variable has a significant and positive effect with a coefficient of 0.426392 . Where if there is an increase in Equity of 1 million, it will cause an

increase in lending of 42%.

- d. The Total Money in Circulation (JUB) variable has a significant and positive effect with a coefficient of 8.78E-08. Where if there is an increase in JUB by an increase of 1 billion, it will cause an increase of 878%.

ADVICE

After conducting the research that has been discussed and then drawn conclusions, the suggestions that can be given are:

- a. For future researchers, it would be nice to add other variables to the research to be carried out. The intended variable is a variable that can affect lending in Commercial Banks. In addition, researchers can use quarterly period data and use the latest data so that the discussion is more detailed and more specific. Then, researchers can also use other research models so that the research results are more accurate and better.
- b. For Banks
For PT East Java Development Bank in particular, and generally for Commercial Banks in Indonesia in accordance with the research that has been done, it can be useful for evaluation and reference materials so that banks are more advanced and better at carrying out their activities in channeling credit to the public.

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