DOI: https://doi.org/10.31933/dijdbm.v3i2

Received: 18 January 2022, Revised: 30 January 2022, Publish: 10 February 2022



INDONESIAN BANKING STRATEGY IN IMPROVING CREDIT DISTRIBUTION

Aviliani Aviliani

Perbanas Institute, Jakarta, Indonesia, aviliani.perbanas@gmail.com

Corresponding Author: Aviliani Aviliani

Abstract: This research is performed in order to test the influence of the variable Third-party Funds, Capital Adequacy Ratio (CAR), Non Performing Loan (NPL), Loan to Deposit Ratio (LDR), and Operational Efficiency Ratio toward Credit Distribution at Banking in Indonesia. The data used in this research was obtained from the annual financial report data period 2015-2019. The sample used in this research is 10 General Bank of 43 General Bank at Indonesian Stock Exchange. The results show that the Third-party Funds, CAR, NPL, LDR, and Operational Efficiency Ratio against credit distribution. The results show that the partial of five variables that influence are variable Third-party Funds significantly, Capital Adequacy Ratio significantly, and Operational Efficiency Ratio significantly, While variable Non Performing Loan did not influence significantly, and Loan to Deposit Ratio did not influence significantly to credit distribution.

Keywords: CAR, Credit Distribution, Loan to Deposit Ratio, Non Performing Loan, Operational Efficiency Ratio (BOPO), Third-party Funds

INTRODUCTION

In general, the activities of the banking sector in a country have a very important role in advancing the wheels of the community's economy. Commercial Banks as one of the financial institutions function to collect funds and distribute them to the public, including in providing credit and providing banking services both domestically and abroad to meet the needs of their customers (Riyadi, 2017:50). In Indonesia, in general, sources of financing for the business world are dominated by bank lending. Until now, banks in Indonesia still make credit as the most important activity in carrying out the function of channeling funds as the main income if the large amount of credit disbursed can determine the bank's profit. If a bank is unable to extend credit, while the funds raised from large deposits can result in the bank losing money.

The recovery in banking industry activity was still restrained due to weak demand for credit as reflected in the slowing credit growth, which only grew 0.12 percent (yoy) in September 2020, compared to the same period in the previous year which grew 7.89 percent

Available Online: https://dinastipub.org/DIJDBM
Page 310

(yoy). This is due to the fact that domestic demand is not yet strong and the prudential principle of banks due to the ongoing Covid-19 pandemic. However, TPF grew significantly by 12.88 percent (yoy) compared to last year's 7.47 percent (yoy). This causes the banking intermediation function to decline while banking liquidity is quite adequate with an Loan to Deposit Ratio (LDR) ratio of 83.16 percent.

Banks rely on third-party funding (DPK) sources, because DPK sources can control 80 percent – 95 percent of existing sources of funds, so that the ability of banks to disburse credit is influenced by TPF. If viewed from the customer's side, there is an interest if the customer makes a loan and the bank has a large source of funds, then the customer will get a large amount of credit as well.

Operational activities carried out by banks contain risks that will occur in the future. So that in carrying out its operational activities, banks require large funds. The ability of capital as a reserve in case of operational losses can be measured by the Capital Adequacy Ratio (CAR). CAR in a bank shows the bank's ability to bear the risk of each credit/productive asset (Natalia, 2015). CAR also shows how far all assets (including credit) are financed by capital.

Credit distribution provided by banks to the public can pose a risk in the form of non-payment of payments. This affects the performance of the bank which is known as non-performing loans. NPL can be interpreted as a loan that has difficulty repaying due to intentional factors or external factors beyond the ability of the debtor (Putri and Akmalia, 2016).

In addition, in considering lending, banks cannot be separated from only looking at the NPL ratio but also need to consider the Loan to Deposit Ratio (LDR) ratio to see the liquidity shown from time deposits, demand deposits, and savings used to fulfill loan applications to the public. This is because the Loan to Deposit Ratio (LDR) is a ratio used to determine how much the bank's ability to repay its obligations to customers who have given their funds to be invested by relying on loans provided as a source of liquidity (Dendawijaya, 2009:116). LDR can also be considered as a bank's performance, because this ratio is the target of management and is reported to the central bank or Financial Supervisory Agency in Indonesia.

Operational Efficiency Ratio (BOPO) is a measurement of efficiency as measured by the ratio of operating expenses to operating income. The smaller this ratio means the more efficient the operational costs incurred by the bank concerned. However, if a bank has a high ratio value, it usually indicates that the bank is in a problematic condition which can hamper the bank's operational activities, such as in terms of lending.

The amount of credit extended by banks has an impact that not only affects the performance of the bank itself but can also have an impact on the economy. Therefore, efforts are needed to maintain and increase the growth of banking credit in Indonesia by knowing what factors can influence it. It is very important for bank management and regulators to know the drivers of bank lending activity in Indonesia. This is because commercial banks can make strategies to increase lending activities while increasing their interest income. Meanwhile, the regulator can formulate effective policies to ensure that bank activities in disbursing funds can continue to support Indonesia's economic growth.

E-ISSN: 2715-4203, P-ISSN: 2715-419X

This paper wants to see the effect of Third-party Funds, capital adequacy ratio, non-performing loans, loan to deposit ratios, and operating expenses of operating income on bank lending in Indonesia.

LITERATURE REVIEW

Capital Adequacy Ratio (CAR)

Capital Adequacy Ratio (CAR) is a capital adequacy ratio used to measure the soundness of a bank in managing bank activities that contain or generate risks, such as loans.

Non Performing Loan (NPL)

NPL is a condition where customers cannot pay their obligations to the bank, resulting in bad credit and indirectly reducing the volume of credit. The existence of bad loans can be used as an assessment of the soundness of banks.

Loan to Deposit Ratio (LDR)

Loan to Deposit Ratio is to see how far the bank's ability to repay the withdrawal of funds made by depositors by relying on the credit provided as a source of liquidity. In other words, how far the provision of credit to credit customers can offset the bank's obligation to immediately fulfill the request of depositors who want to withdraw their money that has been used by the bank to provide credit.

Operational Efficiency Ratio (BOPO)

BOPO is a measurement of efficiency as measured by the ratio of operating expenses to operating income. The BOPO ratio will show the level of efficiency of a bank's management performance in using existing resources in the bank.

Third-party Funds (TPF)

Third-party Funds originating from the public and collected by banks are a very important factor in the implementation of banking operations. The more funds raised, the credit extended by the bank will increase. The capital adequacy factor as measured by CAR if the bank has a high CAR value, the bank is said to be healthy and can channel as much credit as possible. The high NPL in a bank causes a decrease in the amount of credit granted by the bank due to a failure in payment of credit granted. The higher the LDR, the higher the ability of the credit that has been disbursed by the bank to pay its short-term obligations. The smaller the BOPO ratio means the more efficient the operational costs incurred by the bank concerned.

Available Online: https://dinastipub.org/DIJDBM

Conceptual Framework Third Party Funds (DPK) Capital Adequacy Ratio (CAR) Non Performing Loan (NPL) Loan to Deposit Ratio (LDR) Operational Efficiency Ratio (BOPO)

Source: previous research

Hypothesis

H₁: Third-party Funds have a significant effect on Credit Distribution

H₂: Capital Adequacy Ratio (CAR) has a significant effect on Credit Distribution.
 H₃: Non-Performing Loans (NPL) have a significant effect on Credit Distribution.

H₄: Loan to Deposit Ratio (LDR) has a significant effect on Credit Distribution

H₅: Operational Efficiency Ratio (BOPO) have a significant effect on Credit Distribution.

RESEARCH METHODS

The type of research used is quantitative research. where, the population used in this study is 42 commercial banks that have gone public on the Indonesia Stock Exchange for the 2015-2019 period. In this study, purposive sampling was used as a sampling technique, in order to obtain a total sample of 10 commercial bank companies listed on the Indonesia Stock Exchange for the 2015-2019 period.

The data analysis method used in this research is panel data regression. Panel data regression is used to determine the difference in the influence of each individual and the effect of differences in the observation period (Widarjono, 2013: 353). The methods commonly used to estimate the regression model with panel data are the Common Effect, Fixed Effect and Random Effect approaches. In panel data regression, there are 3 ways to determine which technique is the most appropriate in estimating the panel data regression parameters, namely the Chow test, the Langrange Multiple (LM) test, and the Hausman test. The Chow test is a test used to choose between the CE model or the FE model. The LM test was carried out to see which CE or FE model was the best to use. Meanwhile, Hausman test is used to choose

between CE or FE models. The classical assumption test that must be met in the panel data regression model includes the heteroscedasticity test and the multicollinearity test. Panel data regression model analysis includes the F test, t test, and the coefficient of determination.

FINDINGS AND DISCUSSION

The results of the processed data used in statistical analysis with the dependent variable in credit distribution are the RE model as shown in table 1. In the RE model, the constant (intercept) does not only indicate the average value of the dependent variable when the independent variable is fixed, but also means as random variable in which each Commercial Bank has a different value.

Table 1 Results of Regression of Commercial Bank Loans with Random Effect Model

Variable	Coefficient	t-Statistic	p-value	
С	1,2927	1,6821	0,0996	
DPK	0,9553	39,434	0,0000	
CAR	0,0074	4,0249	0,0002	
NPL	0,0217	1,1020	0,2765	
LDR	0,0004	0,5563	0,5808	
BOPO	-0,0013	-2,6830	0,0102	

R-squared = 0,9630

Adj, R-squared = 0,9588

F-statistic = 229,123

Prob(F-statistic) = 0,0000

Source: Processing Result with PLS (2020)

The models that can be estimated from the research data are the CE, FE and RE models. To choose the right model from the three models, then the three models are tested. The test is enough to do with the Chow test (F test), and the Hausman test as summarized in table 2.

Table 2. Panel Data Regression Model Selection Results

Nama Uji	Effects Test	Test Statistics	p-value
Chow test	Cross-section F-test	18,2011	0,0000
	Cross-section Chi-Square	86,8501	0,0000
Hausman test	Cross-section Chi-Square	8,1093	0,1503

Source: Processing Result with PLS (2020)

Based on the output results in table 2, the value of Prob. for Cross-section F and chi-square 0.0000 and 0.0000 whose value is smaller than the error rate (alpha) of 5%. This means that the FE model is more appropriate than the CE model. Then the results of the output show that the value of prob. The random cross-section is greater than alpha, which is 0.1503. Therefore, it can

Available Online: https://dinastipub.org/DIJDBM

be concluded that the RE model is more appropriate to be used to explain the effect of the independent variable on the dependent variable in credit distribution than the FE model. From the results obtained based on two model selection tests, FE is the best model during the Chow Test, the RE model is the best model compared to the FE model in the Hausman Test. Thus, it can be concluded that the RE model is better than the FE and CE models without having to do the Langrangge Multiplier Test.

The multicollinearity test aims to test whether or not there is a correlation between the independent variables in the regression model. The regression model is said to be good if there is no correlation between the independent variables. Correlation between independent variables occurs if the value of the correlation coefficient is greater than 0.8. In table 3, it can be seen that the test of the correlation coefficient value between TPF variables with a capital adequacy of 0.0005. TPF with an NPL of 0.1570. TPF with an LDR of 0.3830. DPK with BOPO of 0.5932. CAR with NPL of 0.2519. CAR with an LDR of 0.1498. CAR with BOPO of 0.4920. NPL with an LDR of 0.0125. NPL with BOPO of 0.1027. And the correlation coefficient between LDR and BOPO is 0.1858. Seeing that each independent variable has a correlation coefficient value of < 0.8, it can be concluded that the model does not experience multicollinearity problems in the data of this study.

Table 3. Result of Multicollinearity

	DPK	CAR	NPL	LDR	ВОРО
DPK	1,0000	-	-	-	-
CAR	0,0005	1,0000	-	-	-
NPL	0,1570	-0,2519	1,0000	-	-
LDR	-0,3830	0,1498	0,0125	1,0000	-
ВОРО	-0,5932	-0,4920	0,1027	0,1858	1.0000

Source: Processing Result with PLS (2020)

Of the three panel data regression models, only REM does not experience heteroscedasticity, because REM has used the generalize least square (GLS) approach, which is one of the regression techniques. While CEM and FEM still use the OLS approach.

Panel data regression model analysis includes F test, coefficient of determination, and t test. The three results can be seen from Table 1. The F-statistic value is 229.123 with a probability of 0.0000. By using an alpha of 0.05 indicating that the probability (F-statistic) is less than 0.05 (5%), so it can be concluded that the random effect model can be used to explain the effect of Third-party Funds, capital adequacy ratio, non-performing loan, loan to deposit ratio, and operating expenses of operating income to lending.

Based on the results of the coefficient of determination shown by the adjusted R-squared of 0.9588. This reflects that the variation/fluctuation of the independent variables of Third-party Funds, capital adequacy ratio, non-performing loan, loan to deposit ratio, and operating expenses of operating income affect credit distribution by 95.88%. While the other 4.12% are influenced by other variables outside the research model. These results also indicate that the percentage

Available Online: https://dinastipub.org/DIJDBM

influence of Third-party Funds, capital adequacy ratio, non-performing loans, loan to deposit ratios, and operating expenses of operating income on lending reached 95.88%.

The results of the t-test from the random effects model, Third-party Funds that have been used as natural logarithms (ln) and have a t-statistic value of 39.434 with a p-value of 0.0000 which means that the t-statistic value is greater than the t-table, then first hypothesis is accepted. So that the conclusion obtained is that Third-party Funds have a significant effect on bank lending in Indonesia up to a 95% confidence level. This research is in line with that conducted by Rabab'ah (2015); Ayieyo (2016); Rahmawati (2017); and Adzis, et al (2018) show the results that TPF has a significant effect on bank lending. A different study was produced by Alkhazaleh (2017) which states that TPF has no effect on bank lending.

The capital adequacy ratio (CAR) has a t-statistic value of 4.0249 with a p-value of 0.0002 which means that the t-statistic value is greater than t-table, then second hypothesis is accepted. So the conclusion obtained is that the capital adequacy ratio has a significant effect on bank lending in Indonesia until it reaches a 95% confidence level. When the value of the Capital Adequacy Ratio has increased by 1%, it will increase lending by 0.74%. And conversely, when the value of the Capital Adequacy Ratio decreases by 1%, it will reduce lending by 0.74%. This empirical finding is in line with the first hypothesis which states that the greater the CAR value, the greater the bank's capital in maintaining the possibility of risk of loss arising from lending activities. This research is in line with previous research on the effect of the Capital Adequacy Ratio (CAR) on credit distribution proposed by Arianti, et al (2016); and Khangalah (2016) stated that CAR has a significant effect on bank lending. Different studies were produced by Suana (2018); Haryanto and Widyarti (2017); and Rabab'ah (2015) which states that CAR has an effect on bank lending.

Non-performing loans have a t-statistic value of 1.1020 with a p-value of 0.2765, greater than the 0.05 significance level, then third hypothesis rejected. So the conclusion obtained is that non-performing loans have no significant effect on bank lending in Indonesia until it reaches the 95% confidence level. NPL is only 2.3%, where the ratio value is still below the maximum 5%. Thus, the non-performing loan repayments by customers to banks will not significantly affect the distribution of commercial bank loans in Indonesia. This research is in line with that conducted by Khangalah (2016); Awdeh (2016); Haryanto and Widyarti (2017); and Suana (2018) state that Non Performing Loans (NPL) have no effect on bank lending. Research with different results and in accordance with the theory proposed by Rabab'ah (2015); Arianti, et al (2016); Alkhazaleh (2017); Rahmawati (2017); and Adzis, et al (2018) which states that NPL has a significant effect on lending to commercial banks in Indonesia.

The loan to deposit ratio (LDR) has a t-statistic value of 0.5563 with a p-value of 0.5808, greater than the 0.05 significance level, then fourth is rejected. So the conclusion obtained is that the loan to deposit ratio has no significant effect on bank lending in Indonesia until it reaches a 95% confidence level. This means that LDR only shows the percentage of lending from Third-party Funds owned by a bank. So the greater the percentage of LDR, we can find out the amount of Third-party Funds channeled in the form of credit, but it does not have a significant effect.

This research is in line with that conducted by Putri and Akmalia (2016); and Yuliana (2014) which states that LDR has no effect on credit distribution. Different research results were conducted by Khangalah (2016); and Rahmawati (2017) stated that the LDR has an effect on bank lending.

Operational Efficiency Ratio (BOPO) has a t-statistic value of -2.6830 with a p-value of 0.0102, less than a significance level of 0.05, then hypothesis five is accepted. So that the conclusion obtained is that the operating expenses of operating income have a significant effect on the distribution of bank credit in Indonesia until it reaches the 95% confidence level. The reduced value of BOPO will further increase the amount of Credit Distribution. The decrease in the BOPO value indicates an increase in operational efficiency, so that the more efficient the operations of commercial banks, the more loans will be disbursed. Therefore, the higher the operational efficiency of a commercial bank, the higher its ability to increase credit growth.

This research is in line with that conducted by Aljufri, Oemar and Onasis (2015) showing that BOPO has an effect on Credit Distribution. According to Febrianto (2013), it is stated that BOPO does not significantly affect credit distribution. The regression coefficient value of Thirdparty Funds shows the elasticity of the influence of growth of Third-party Funds on lending. When Third-party Funds increase by 1%, the loans disbursed will increase by 0.96%. And conversely, when the growth of Third-party Funds decreased by 1%, the loans disbursed would also decrease by 0.96%. This empirical finding is in line with the first hypothesis which states that the higher the Third-party Funds obtained, the greater the amount of credit that will be disbursed by the bank.

CONCLUSION AND RECOMMENDATION

Based on the results of the analysis carried out, there are several conclusions that can be drawn in this study, including the following:

- 1. The higher the growth of Third-party Funds obtained, the greater the credit growth that will be disbursed by the bank. Vice versa, the slower the growth of Third-party Funds obtained by banks, the smaller the growth of credit disbursed by commercial banks in Indonesia.
- 2. The greater the CAR value, the greater the bank's capital in maintaining the possibility of risk of loss arising from lending activities which in turn provides security for banks in lending.
- 3. The NPL factor in lending tends to be unpredictable and avoided by banks because NPL is an inherent risk. Overall bank loan repayments can be maintained. Thus, the loss of credit returns by customers to banks will not affect the amount of credit extended by banks in Indonesia.
- 4. LDR has no significant effect on bank lending in Indonesia. It can be interpreted that LDR only shows the percentage of lending from Third-party Funds owned by a bank. The increase in the percentage of LDR only indicates that the additional credit disbursed is greater than the additional Third-party Funds that can be raised but does not have a significant impact on the size of credit growth.

5. When the value of Operational Efficiency Ratio (BOPO) decreases, bank lending will increase. The declining BOPO value indicates that the bank's operational efficiency is high which will ultimately increase the amount of credit disbursed by the bank itself.

The authors suggest in this study, among others, that further researchers should be able to add research samples both in the number of banks and the time span of the study, so that they have more observation points and better reflect the actual situation. Further research needs to be done by developing and adding other independent variables in order to find out whether there are variables that theoretically affect credit distribution. Then, commercial banks are expected to be able to maintain and increase their DPK, judging from the significant research results. This is done so that the amount of credit disbursed to the community is greater so that the expected benefits from lending activities are also increasing. In addition, commercial banks also need to maintain and even increase their CAR and operational efficiency (BOPO), because this can encourage the growth of loans disbursed.

BIBLIOGRAPHY

- Adzis, A. A., Sheng, L. E., & Bakar, J. A. (2018). Bank Lending Determinants: Evidence from Malaysia Commercial Banks. *Journal of Banking and Finance Management*, 1(3), 36–48.
- Aljufri, Oemar, F., & Onasis, D. (2015). Pengaruh Tingkat kesehatan Keuangan terhadap penyaluran kredit Pada PT. BPR Cempaka mitra Nagori Kuansing di Taluk Kuantan. *Jurnal Ilmiah Ekonomi dan Bisnis*, 12(2), 147–156.
- Alkhazaleh, A. M. K. (2017). Factors may drive the commercial banks lending: Evidence from Jordan. *Banks and Bank Systems*, 12(2), 31–38.
- Arianti, D., Andini, R., & Arifati, R. (2016). Pengaruh BOPO, NIM, NPL dan CAR terhadap Jumlah Penyaluran Kredit Pada Perusahaan Perbankan yang Go Public Di Bursa Efek Indonesia Periode Tahun 2010-2014. *Journal of Accounting*, 2(2), 1-13.
- Awdeh, A. (2016). The Determinants of Credit Growth in Lebanon. *International Business Research*, 10(2), 9-19.
- Haryanto, S. B., & Widyarti, E. T. (2017). Analisis Pengaruh NIM, NPL, BOPO, BI RATE dan CAR Terhadap Penyaluran Kredit Bank Umum Go Public Periode Tahun 2012-2016. *Diponegoro Journal of Management*, 6(4), 1–11.
- Khangalah, M. O. (2016). Determinants of Commercial Banks' Lending Behavior in Kenya: Case of State Owned Banks in Kenya. *University of Nairobi*. Kenya.
- Khasanah, U., Meiranto, W. (2015). Analisis Pengaruh Faktor Internal dan Eksternal terhadap Volume Penyaluran Kredit Perbankan. *Diponegoro Journal of Accounting*. 4(2), 1-13.
- Kuncoro, M. (2013). Metode Riset Untuk Bisnis dan Ekonomi. Erlangga.
- Ningsih, F. E. (2013). Analisis Perbandingan Beban Operasional dan Pendapatan Operasional (BOPO) pada PT. Bank Muamalat Indonesia Tbk.Cabang Batam. *Jurnal Akuntansi*, *Ekonomi dan Manajemen Bisnis*. 1(2), 140-146.
- Niteriasihani, M., Cipta, W., & Suwendra, I. W. (2015). Pengaruh Dana Pihak Ketiga, Capital Adequacy Ratio dan Non Performing Loan terhadap Penyaluran Kredit pada Bank

- Perkreditan Rakyat (BPR) di Kabupaten Klungkung tahun 2011-2013. *Jurnal Manajemen Indonesia*. 4(2), 1-11.
- Putri & Akmalia. (2016). Pengaruh CAR, NPL, ROA dan LDR terhadap penyaluran kredit pada Perbankan (Studi Pada Perusahaan Perbankan yang Listed di Bursa Efek Indonesia Periode 2011-2015). *Balance*. *13*(2), 82–93.
- Rabab'ah, M. (2015). Factors Affecting the Bank Credit: An Empirical Study on the Jordanian Commercial Banks. *International Journal of Economics and Finance*, 7(5), 166–178.
- Rahmat & Ruchiyat, E. (2021). Analisis Rasio Modal, Efisiensi Operasional, Bunga Bersih, Likuiditas, dan Kredit Bermasalah terhadap Rasio Laba. *Copetition*. *12*(3), 413–430.
- Rahmawati, A., Ilmi, Z., & Tricahyadinata, I. (2017). Kebijakan Pemberian Kredit Kepada Debitur Bankaltim. *Jurnal Ilmu Manajemen Mulawarman (JIMM)*, 2(1), 1-23.
- Riyadi, S. (2017). *Manajemen Perbankan Indonesia: Teori, Praktek dan Studi Kasus*. Raja Grafindo Persada.
- Setiawan, D., & Afrianti, D. (2018). Pengaruh Dana Pihak Ketiga terhadap Pemberian Kredit dan Laba Bersih Bank (Studi Kasus pada PT Bank Rakyat Indonesia Kantor Cabang Majalaya unit Dayeuhkolot). *Akurat: Jurnal Ilmiah Akuntansi*, 9(3), 1-20.
- Suana, E. A. R. (2018). Pengaruh Non Performng Loan, Capital Adequacy Ratio dan Net Interest Margin Terhadap Penyaluran Kredit Perbankan yang Terdaftar di Bursa Efek Indonesia. *Sekolah Tinggi Ilmu Ekonomi Perbanas Surabaya*, 1–22.
- Undang-Undang Nomor 10 Tahun 1998. *Tentang Perubahan atas UU No. 7 Tahun 1992 Tentang Perbankan*. Jakarta.
- Yuliana, A. (2014) Pengaruh LDR, CAR, ROA, dan NPL terhadap Penyaluran Kredit pada Bank Umum di Indonesia Periode 2008-2013. *Jurnal Dinamika Manajemen*, 2(3), 169–186.
- Widarjono, A. (2013). Ekonometrika Pengantar dan Aplikasinya. UPP STIM YKPN.