

The effect of Third Parties Fund, Non Performing Loan, Capital Adequacy Ratio, Loan to Deposit Ratio, Return On Assets, Net Interest Margin and Operating Expenses Operating Income on Lending (Study in Regional Development Banks in Indonesia)

Sugeng Riadi

Program Doktor Manajemen
Pascasarjana Universitas Mercubuana
Universitas Mercubuana
Jakarta, Indonesia
sugengriadi1701@gmail.com

Abstract

The purpose of this research was to determine whether the Third Parties Fund (TPF), Non Performing Loan (NPL), Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Return On Assets (ROA), Net Interest Margin (NIM), and Operating Expenses Operating Income effect on lending in regional development banks in Indonesia. Object in this study is a regional development banks in Indonesia 2010-2014 (26 banks). Methods of data collection is the historical data with data analysis techniques that multiple linear regression analysis. While hypothesis test using t - test to test the effect of partial variable and F-test to test effect of simultan variable. The results showed that in simultan, all independent variable (TPF, NPL, CAR, LDR, ROA, NIM and BOPO) influence on dependent variable (lending). The results showed that in partial, Third Parties Fund (TPF), Loan to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR) and the Return on Assets (ROA) positive and significant impact on lending. Variable Operating Expenses Operating Income a significant negative effect on the loan portofolio, while the variable Non Performing Loan (NPL) has no effect on lending. The most dominant independent variable affecting on lending of regional development banks in Indonesia is Third Parties Fund (TPF)

Keywords

Third parties fund, non performing loan, capital adequacy ratio, loan to deposit ratio, return on assets, net interest margin, operating expenses operating income, lending

1. Introduction

Tight banking business competition and approaching the enactment of ASEAN Economic Society (MEA) in 2015, national banking industry, including Regional Development Bank (BPD) considered necessary to increase competitive endurance, amongst them through capital increase and good corporate governance. Bank is an institution taking role as financial intermediary between surplus unit and deficit unit and as institution which function to enhance payment traffic stream.

Third Parties Fund (DPK) is fund collected by bank originated from society, either individual society, as well as legal entity. Collected fund from society could reach 80-90% from entire fund managed by the bank. Therefore, DPK has extremely crucial role in bank operationalization (Oka, et al., 2015). According to Regional Development Bank Association (Asbanda) in 2014, Non Performing Loan (NPL) ration in credit distribution especially working and investment capital credit by Regional Development Bank (BPD) was high. Such condition caused by many

inexperienced BPD in distributing productive credit. For many years BPD across numerous region rely on consumption credit distribution in their portfolio.

According to Meydianawathi (2016), high CAR reflect total capital stability and low risk owned by bank so that it enable bank to distribute credit more. In other words, CAR and credit are align, CAR value size would increase banking confidence in distributing credit. Bank liquidity also serve as crucial indicator in bank performance measurement. One of measurement to calculate bank liquidity is Loan to Deposit Ratio, how many bank fund allocated to credit service. The higher LDR then bank profit shall increase (with assumption that such bank could distribute its credit effectively. If bank profit increase, bank liquidity shall increase as well. Therefore LDR ratio size would affect such bank performance.

This research used ROA as banking performance measurement. ROA used to measure company effectiveness in generating profit by utilizing asset they own. The higher the ROA financial performance would be better as well, as return higher. If ROA increase, company profitability increase, resulting final impact of increased profitability enjoyed by shareholders (Husnan, 1998). Banking credit distribution pros and cons could be seen through such bank profitability. Bank profitability measurement ration could be proxied through bank Net Interest Margin (NIM) ratio. Net Interest Margin (NIM) is ration used to observe to what extent bank ability in obtaining net interest income from productive asset average owned by the respective bank (Riyadi, 2004).

Banking operational performance efficiency level is important as well. In which operational level frequently measured using operational expense against operational income or commonly abbreviated into BOPO. Inefficient bank operationalization could be indicated by high BOPO ratio value, therefore it is likely that such bank is in troubled condition. Bank operational activity in distributing credit would be obstructed if such bank in troubled condition (Yulhasnita, 2013).

In banking sector, business decision identical with credit decision. Credit grant is main business activity for almost entire bank. In practice, credit could also problematic not due to the careless credit lender officer, or less accurate in credit lender process, or even not due to poor debtor characteristic. But, credit that is decided today, its interest payment and main settlement continuity remain necessary to be proven in near future (Herijanto, 2013).

This research identified problems whether effect from Third Parties Fund (DPK), Non Performing Loan (NPL), Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Return ON Asset (ROA), Net Interest Margin (NIM), and Operational Cost of Operational Income (BOPO) affect toward credit distribution (lending) in Regional Development Bank across Indonesia. This research aimed to discover whether Third Parties Fund (DPK), Non Performing Loan (NPL), Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), Return ON Asset (ROA), Net Interest Margin (NIM), and Operational Cost of Operational Income (BOPO) affect toward credit distribution (lending) in Regional Development Bank across Indonesia.

The results of the study are expected to improve existing theories, explain the phenomenon with existing theories or explain the phenomenon with newly discovered theories. This research is expected to be a policy direction of a manager or credit breaker to be more careful in deciding the policy taken.

2. Literature Review and Hypothesis

2.1 Agency Theory

Manager should perform activity correctly, in order to prevent conflict. In agency theory, good corporate governance is crucial to implement. GCG issue initiated by the emergence of separation between owner and management. Owner or shareholders as principal, meanwhile management as agent. Agency Theory base contract relationship between members within company, with principal and agent as main actor. Principal is party providing mandate to agent to act on behalf of principal, whole agent is party provided with mandate by principle to run the company. Agent oblige to responsible for what had been mandated by principal to them (Endrianto, 2010).

2.2 Bank

Bank is legal entity serves to collect fund from society and distribute such fund into the society in need in order to obtain income from bank and such activity could increase society economic. According to Triandru and Santoso (2006), bank function could be more specifically defined as agent of trust, agent of development, and agent of services. Such three bank functions are expected to provide comprehensive and complete description concerning bank function in economic, so that bank could be defined not merely as financial intermediary.

2.3 Credit

According to Suhardjono (2003) in Small and Medium Business Credit Management Book, credit is money or money-equated provision based on loan agreement between bank with other party in which the borrower oblige to settle their debt after certain period of time with determined total interest. A credit facility provision has certain

intention that could not be separated from such bank establishment mission. Main intentions of credit grant are amongst them (Kasmir, 2007) seeking profit, assisting customer business and supporting government.

2.4 Third Parties Fund (DPK)

According to Act No. 10 year 1998 concerning banking it was explained that bank third parties fund, for hereinafter referred to as DPK, is bank obligation to population in rupiah and foreign exchange. In general fund collected by bank from society shall be utilized for riil sector activity funding through credit distribution (Warjiyo, 2005). Funds collected from society (DPK) turns out to be largest fund sources bank rely on the most (could reach 80% - 90% from entire fund managed by bank) (Dendawijaya, 2003). According to Bank Indonesia Circulation Letter No. 6/23/DPNP dated May 31st, 2014 fund trusted by society to bank or fund originated from third parties and collected by banking sectors are as follow:

- a. Saving Deposit
Saving deposit is deposit which withdrawal could only be carried out according to agreed certain terms, but could not be withdrawn with cheque, transfer form. Saving deposit fund usually owned by society with little or even no business activity.
- b. Time Deposit
Time deposit is deposit which withdrawal could only be carried out in certain time according to agreement between customer with bank. Fund originated from time deposit is the most expensive fund bank should bear. Fund from time deposit commonly collected from middle businessman or society from non business middle element.
- c. Demand deposit
Demand deposit is deposit which withdrawal could be carried out at any time using cheque, transfer form, other government payment facilities, or through book-entry. Demand deposit fund commonly utilized by businessman with high liquidity causing very fast fund movement. Having demand deposit for businessman is absolute necessity for the sake of business enhancement and payment matter.
- d. Certificate of deposit
Certificate deposit is deposit in form of deposit which storage proof certificate could be transferred.

2.5 Non Performing Loan (NPL)

According to Kuncoro and Suharjono (2002), Non Performing Loan is a condition in which customer has been unable to afford its partly or entirely obligation to bank according to the agreement. Non Performing Loan according to Bank Indonesia provision is credit classified into Substandard, Doubtful and Loss Collectibility. NPL is calculated using the following formula (According to Circulation Letter No. 6/23/DNP Dated May 31st, 2004):

$$\text{NPL} = \frac{\text{Non Performing Loan}}{\text{Total Credit}} \times 100\%$$

2.6 Capital Adequacy Ratio (CAR)

Capital Adequacy is capital sufficiency that reflects bank ability in maintaining sufficient capital and bank management ability in identifying, measuring, monitoring, and controlling emerged risks that could affect toward modal size (Almilia and Herdiningtyas, 2005). Capital Adequacy ratio is based on principle that each investment that contain risk should be provided total capital in certain percentage toward total investment. Alongside with standard stipulated by Bank of International Statement (BIS), entire bank in Indonesia obliged to provide minimum modal of 8% from ATMR (Kuncoro and Suhardjono, 2002). CAR is calculated using the following formula:

$$\text{CAR} = \frac{\text{Own Capital}}{\text{ATMR}} \times 100\%$$

2.7 Loan to Deposit Ratio (LDR)

According to Kasmir (2012), Loan to Deposit Ratio is ratio to measure total credit composition provided compared to total society fund and own capital used. Bank Indonesia Number 15/15/PBI/2013 stated that Loan to Deposit Ratio (LDR) secure limit ranges from 78% to 92%. LDR has crucial role as indicator reflecting credit expansion level performed by bank so that LDR could also be utilized to measure bank function as intermediary institution. LDR is calculated using the following formula (Bank Indonesia Circulation Letter Number 13/30/DNP):

$$\text{LDR} = \frac{\text{Total Credit}}{\text{Third Parties Fund}} \times 100\%$$

2.8 Return On Assets (ROA)

Return On Assets or commonly known as ROA is ratio that measure owned asset optimization level to generate profit. ROA minimum value stipulated by Bank Indonesia is minimum 2%. In order to be able to meet obligation toward shareholders, appraisal on management performance, and increasing investor attractiveness to invest their capital. This is why bank strive to obtain profit. With high ROA value, then bank could provide credit to obtain income. Fund collected from society by bank range between 80%-90% from total managed fund, whilst re-distribution in form of credit by bank range 70-80%. ROA is calculated using the following formula (Bank Indonesia Circulation Letter Number 13/30/DNP):

$$\text{ROA} = \frac{\text{Earnings Before Tax (EBT)}}{\text{Total Assets}} \times 100\%$$

2.9 Net Interest Margin (NIM)

Net Interest Margin (NIM) describes total net interest income level obtained using productive asset owned by bank. The higher this ratio the more increase interest income obtained from productive asset managed by bank, making such bank in lesser possibility to be in troubled condition. Standard stipulated by Bank Indonesia for NIM is 6% upwards. Dendawijaya (2003) stated by NIM former elements are net interest income which is difference between interest income with expense. NIM is calculated using the following formula (Bank Indonesia Circulation Letter Number 13/30/DNP):

$$\text{NIM} = \frac{\text{Net Interest Income}}{\text{Productive Assets Average}} \times 100\%$$

2.10 Operational Expense of Operational Income (BOPO)

Operational expense ratio used to measure efficiency level and bank ability in performing its operational activity. Considering that bank main activity is primarily act as intermediary, specifically collecting and distributing fund, then bank operational cost and income dominated by interest expense and interest result (Dendawijaya, 2003). Bank with high BOPO ratio reflect that such bank does not operate efficiently due to this high ratio value reflects huge total operational expense bank should disbursed to obtain operational income. In addition, huge total operational expense would reduce total profit obtained due to operational cost or expense acts as reducing factor in income statement. BOPO ratio ideal value range between 50-75% according to Bank Indonesia provision. BOPO is calculated using the following formula (Bank Indonesia Circulation Letter Number 13/30/DNP):

$$\text{BOPO} = \frac{\text{Operational Cost}}{\text{Operational Income}} \times 100\%$$

2.11 Credit Distribution (Lending)

Total credit distribution depend on credit grant decision. Credit decision contain the largest moral element, as it related to many other people interest. According to Oka, et al. (2015), decision is any official action that according to its authority deserve to make decision to refuse, approve and or suggest credit facility application to the higher official. Any single credit application decision should consider general terms appraisal that basically listed in credit examination and credit analysis report. Consideration or other information materials obtained by decision maker official, should be added in written. According to Winarta in Herijanto (2013), credit grant legal basic are:

- 1) Credit agreement between parties
- 2) Banking acts
- 3) Implementation regulation of banking acts
- 4) Jurisprudence
- 5) Habit in banking practice
- 6) Other Bank Indonesia provisions

Total credit distribution distributed by bank highly depend on total fund collected from society (third parties fund). So that the higher total third parties fund collected by bank from society, that would increase bank ability and role in distributing such fund to society. According to Febrianto (2013), Tenrilau (2012), Oktaviani (2011) and Wijayanti (2015), third parties funs positively and significantly affect credit distribution. From previous researches, the following are the proposed hypotheses:

H1: Third parties fund variable suspected to positively and significantly affects toward credit distribution (lending)

The amount of capital that have effect toward credit distribution activity that eventually would be eroded as well if such capital should provide higher back up (Pratama, 2010). Therefore, the higher non performing loan reflected through NPL ratio, than it would lower total credit bank would distribute. According to Arisandi, et al (2015) and Giovanni (2014), NPL variable had negative and significant effect toward credit distribution decision. Based on previous research, the proposed hypothesis is:

H2: Non Performing Loan (NPL) variable suspected to negatively affects toward credit distribution (lending)

Briefly, it could be said that CAR value amount would increase bank confidence in distributing credit. With CAR above 20%, bank could trigger credit growth into 20 – 25 percents per year. According to Oktaviani (2011) and Arisandi et al., (2015), CAR positively affect toward credit distribution. Based on previous research, the proposed hypothesis is:

H3: Capital Adequacy Ratio (CAR) variable suspected to positively affects toward credit distribution (lending)

The higher LDR in certain bank would cause lower liquidity of such bank due to total fund needed to fund credit become higher, conversely the higher LDR in certain bank would cause higher liquidity. Research result of Chumaidi (2014) and Febrianto (2013) and Galih (2011) stated that *Loan to Deposit Ratio* (LDR) positively and significantly affects toward credit distribution. Based on previous research, the proposed hypothesis is:

H4: Loan to Deposit Ratio (CAR) variable suspected to positively and significantly affects toward credit distribution (lending)

The higher *Return On Asset* (ROA) of certain bank, the higher profit level bank could achieve. Higher profit would enable bank to distribute credit more. Galih (2011) and Ratnawati (2013) research stated that ROA variable positively and significantly affects toward credit distribution. Based on previous research, the proposed hypothesis is:

H5: Return On Asset (CAR) variable suspected to positively affects toward credit distribution (lending)

Higher *Net Interest Margin* (NIM) reflects higher credit distributed to society (Dewiyani, 2014). According to Arianti et al., (2016) *Net Interest Margin* positively effect toward credit distribution. Similar result also shown by Primasari (2015) who stated that *Net Interest Margin* (NIM) had positive effect toward credit distribution. Therefore, *Net Interest Margin* (NIM) is predicted to have positive effect toward credit distribution. Based on previous research, the proposed hypothesis is:

H6: Net Interest Margin (CAR) variable suspected to positively affects toward credit distribution (lending)

The smaller BOPO ratio of certain bank means the more efficient operational cost disbursed by such bank, putting that bank in lesser probability to be in troubled condition and more credit to distribute (Siamat, 2005). This would certainly support bank in performing its function as intermediary institution. Chumaidi (2014) and Pratama (2014) research result stated that BOPO variable negatively and significantly affects toward credit distribution. Based on previous research, the proposed hypothesis is:

H7: Operational Expense of Operational Income (BOPO) variable suspected to negatively affects toward credit distribution (lending)

Credit grant decision closely related with fund availability. Huge credit grant without considering fund position, especially third parties fund, would cause liquidity risk. The higher the fund of DPK then the more easier credit grant decision would be, conversely the lower the fund, the more difficult credit grant (Oka et al., 2015). Research result of Tenrilau (2012), Oka et al., (2015) stated that DPK is the most influential variable toward credit distribution. Therefore, the proposed hypothesis is:

H8: DPK suspected to be the most positive influential dominant variable toward credit distribution (lending)

Based on literature review and affirmed by previous researches, it is suspected that Third Parties Fund (DPK), *Non Performing Loan* (NPL), *Capital Adequacy Ratio* (CAR), *Loan to Deposit Ratio* (LDR), *Return On Asset* (ROA), *Net Interest Margin* (NIM) and *Operational Expense of Operational Income* (BOPO) affect toward credit distribution. Therefore, the following is research framework from Tenrilau (2012), Arisandi., et.al (2015), Febrianto (2013), Chumaidi (2014), Galih (2011) , Oktaviani (2011), Ratnawati (2013) dan Primasari (2015):

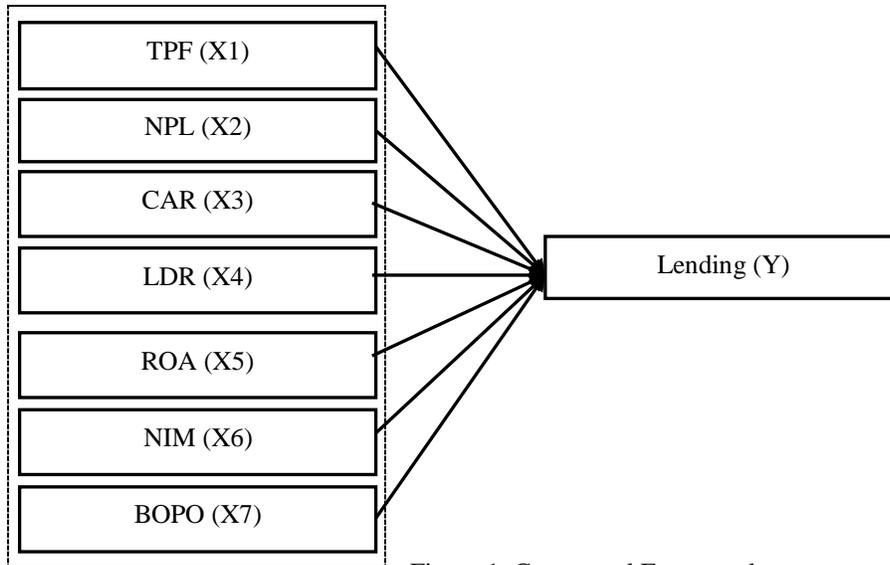


Figure 1. Conceptual Framework

3. Research Method

This research used causal quantitative approach, a research that describes generalization or describe causality between two or more variables. Independent variables in this research were Third Parties Fund (X1), *Non Performing Loan* (NPL) (X2), *Capital Adequacy Ratio* (CAR) (X3), *Loan to Deposit Ratio* (LDR) (X4), *Return On Asset* (ROA) (X5), *Net Interest Margin* (NIM) (X6), Operational Expense of Operational Income (BOPO) (X7). Meanwhile the dependent variable was credit distribution (lending) (Y). X1,X2,X3,X4,X5,X6,X7 had causality with Y Variable.

Independent variables in this research were Third Parties Fund (X1), *Non Performing Loan* (NPL) (X2), *Capital Adequacy Ratio* (CAR) (X3), *Loan to Deposit Ratio* (LDR) (X4), *Return On Asset* (ROA) (X5), *Net Interest Margin* (NIM) (X6), Operational Expense of Operational Income (BOPO) (X7). Meanwhile the dependent variable in this research was credit distribution (Y). Population in this research were *annual report* of Regional Development Bank (BPD) across Indonesia amounted to 26 Bank with 2010 through 2014 period (5 years). Meanwhile research data was *annual report* financial overview of Regional Development Bank (BPD) across Indonesia in 2010-2014 period. Such financial review data consist of Independent variables in this research were Third Parties Fund (DPK), *Non Performing Loan* (NPL), *Capital Adequacy Ratio* (CAR), *Loan to Deposit Ratio* (LDR), *Return On Asset* (ROA), *Net Interest Margin* (NIM), Operational Expense of Operational Income (BOPO) and Credit Distribution data.

Data analysis technique used in this research was multiple linear regression to obtain comprehensive description concerning relationship between one variable with other variable. *Statistical Package for Social Science* (SPSS) version 22.0 for window used to process research data. In order to discover whether there is significant effect from independent variables of Third Parties Fund (DPK), *Non Performing Loan* (NPL), *Capital Adequacy Ratio* (CAR), *Loan to Deposit Ratio* (LDR), *Return On Asset* (ROA), *Net Interest Margin* (NIM), Operational Expense of Operational Income (BOPO) toward dependent variable (Credit Distribution), multiple linear regression model was used with the following formulation (Tenrilau, 2012):

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + e$$

Where:

Y	= Credit Distribution of BPD Bank in t period
a	= Regression Coefficient Constant
$b_1, b_2, b_3, b_4, b_5, b_6, b_7$	= Regression Constant
X_1	= Third Parties Fund of BPD Bank in t period
X_2	= <i>Capital Adequacy Ratio</i> of BPD Bank in t period
X_3	= <i>Non Performing Loan</i> of Bank BPD in t period
X_4	= <i>Loan to Deposit Ratio</i> of BPD in t period
X_5	= <i>Return On Asset</i> of BPD in t period
X_6	= <i>Net Interest Margin</i> of BPD in t period
X_7	= <i>Operational Expense of Operational Income</i> in t period
e	= <i>Standard Error</i>

4. Result and Conclusion

4.1 Statistic Descriptive

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
DPK	130	9.50	36.75	19.9998	4.97826
NPL	130	.04	9.01	2.1195	1.78569
CAR	130	8.34	34.36	18.9932	5.02150
LDR	130	43.83	128.43	87.0428	14.75281
ROA	130	.01	7.44	3.3888	1.10909
NIM	130	4.95	18.04	8.6653	2.19045
BOPO	130	55.29	99.38	72.7536	7.53292
KREDIT	130	8.99	40.98	19.9822	5.70601
Valid N (listwise)	130				

According to above table it could be seen that with N = 130 of observational time, credit distribution dependent variable had minimum value of 8.99% and maximum value of 40.98%. meanwhile *standard deviation* value was 5.70601% and *mean* as of 19.9822%. DPK independent variable had minimum value and maximum value of 9.50% and 36.75% respectively. Meanwhile *standard deviation* value was 4.977826% and *mean* of 19.9998%. NPL independent variable had minimum value of 0.04% and maximum value of 9.01% with *standard deviation* value of 1.78569% and *mean* value of 2.1195%. CAR independent variable had minimum value of 8.34% and maximum value of 34.36%. its *standard deviation* value was 5.021150% and *mean* value of 18.9932%.

LDR independent variable had minimum value of 43.83% and maximum value of 128.43% with *standard deviation* of 14.75281% and mean of 87.0428%. *Return On Asset* (ROA) dependent variable had minimum value of 0.01% and maximum value of 7.44% with *standard deviation* and *mean* 1.101909% and 3.3888% respectively. NIM variable had minimum and maximum value of 4.95% and 18.05% respectively with *standard deviation* of 2.19045% and *mean* of 8.6653%. BOPO variable had minimum value of 55.29% and maximum value of 99.38% with *standard deviation* and *mean* 7.53292% and 72.7536% respectively.

Above result showed that during research period, it could be statistically described that DPK, NP, CAR, LDR, ROA, NIM, BOPO and credit distribution level carried out by BPD bank toward its assets were categorized in passably condition. *Mean* value which was higher than *standard deviation* value demonstrated that data were well distributed.

Table 2. Result of Multiple Regression Analysis
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	10.413	5.339		1.950	.053
DPK	.904	.055	.789	16.337	.000
NPL	.005	.138	.002	.039	.969
CAR	.115	.052	.101	.202	.030
LDR	.091	.019	.236	4.905	.000
ROA	.895	.393	.174	.278	.024
NIM	.024	.131	.009	.184	.004
BOPO	-.152	.057	-.201	-2.685	.008

a. Dependent Variable: LENDING

4.2 Individual Parameter Significance Test (t-test)

1. Based on t-test of Third Parties Fund (DPK) variable it was found that t count value was (+) 16.337 with significance level of 0.000. As significance level was smaller than 0.05 and t count had positive mark, then partially DPK variable had significant effect toward credit dependent variable. Therefore it could be concluded that DPK positively and significantly affected toward BPD Bank credit distribution across Indonesia.

2. Based on t-test of *Non Performing Loan* (NPL) variable it was found that t count value was (+) 0.039 with significance level of 0.969. As significance level was higher than 0.05 and t count had positive mark, then partially NPL variable had positive but no significant effect toward credit dependent variable. Therefore it could be concluded that NPK did not affect toward BPD Bank credit distribution across Indonesia.
3. Based on t-test of *Capital Adequacy Ratio* (CAR) variable it was found that t count value was (+) 0.202 with significance level of 0.030. As significance level was smaller than 0.05 and t count had positive mark, then partially DPK variable had significant effect toward credit dependent variable. Therefore it could be concluded that CAR ratio positively and significantly affected toward BPD Bank credit distribution across Indonesia.
4. Based on t-test of *Loan to Deposit Ratio* (LDR) variable it was found that t count value was (+) 4.905 with significance level of 0.000. As significance level was smaller than 0.05 and t count had positive mark, then partially DPK variable had significant effect toward credit dependent variable. Therefore it could be concluded that LDR ratio positively and significantly affected toward BPD Bank credit distribution across Indonesia.
5. Based on t-test of *Return On Asset* (ROA) variable it was found that t count value was (+) 0.278 with significance level of 0.024. As significance level was smaller than 0.05 and t count had positive mark, then partially DPK variable had significant effect toward credit dependent variable. Therefore it could be concluded that ROA ratio positively and significantly affected toward BPD Bank credit distribution across Indonesia.
6. Based on t-test of *Net Interest Margin* (NIM) variable it was found that t count value was (+) 0.184 with significance level of 0.04. As significance level was smaller than 0.05 and t count had positive mark, then partially NIM variable had significant effect toward credit dependent variable. Therefore it could be concluded that NIM positively and significantly affected toward BPD Bank credit distribution across Indonesia.
7. Based on t-test of *Operational Expense of Operational Income* (BOPO) variable it was found that t count value was (-) 2.685 with significance level of 0.008. As significance level was smaller than 0.05 and t count had negative mark, then partially NIM variable had negative and significant effect toward credit dependent variable. Therefore it could be concluded that BOPO negatively and significantly affected toward BPD Bank credit distribution across Indonesia.

4.3 Goodness of Fit Test

Table 3. Goodness of Fit Test
ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	3392.957	7	484.708	73.268	.000 ^b
Residual	807.098	122	6.616		
Total	4200.056	129			

a. Dependent Variable: LENDING

b. Predictors: (Constant), BOPO, LDR, DPK, NPL, CAR, NIM, ROA

From above table it could be revealed that independent variable jointly had significant effect toward dependent variables. It could be seen from F count value of 73.268 with significance (sig.) value of 0.00. As significance (sig.) value far smaller than 0.05 then regression model could be used to predict credit distribution. This demonstrates that independent variable used in this research were clear explanatory on dependent variables and also demonstrates that model was fit to be used or it could be said that DPK, NPL, CAR, LDR, ROA, NIM and BOPO jointly affected credit distribution.

4.4 Discussion

Hypothesis Test of DPK Variable Effect toward BPD Bank Credit Distribution (lending) Across Indonesia

Regression equation result demonstrated that coefficient for this variable had positive and significant value that it could be said that change (increase or decrease) on DPK value would actually affect credit distribution on BPD Bank. This research result affirms previous research result of Febrianto (2013) and Tenrilau (2012) which stated that DPK positively affects banking credit distribution.

Hypothesis Test of NPL Variable Effect toward BPD Bank Credit Distribution (lending) Across Indonesia

Regression equation result demonstrated that coefficient for this variable had positive and insignificant value that it could be said that change (increase or decrease) on NPL value would not actually affect credit distribution on BPB

Bank. Therefore hypothesis 2 in this research was not in accordance with previous research of Arisandi et al., (2015), Giovanni (2014), Pratama (2014) and Arianti et al., (2016) which stated that NPL negatively affect toward credit distribution. But this research is align with research result of Tenrilau (2012) and Febrianto (2013) which stated that NPL does not affect credit distribution.

Hypothesis Test of CAR Variable Effect toward BPD Bank Credit Distribution (lending) Across Indonesia

Based on CAR coefficient, coefficient value obtained had positive mark which means CAR could be used to predict credit distribution, as in this research credit distribution fluctuation possibly caused by sufficient bank capital. The higher CAR ratio owned by bank, the higher possibility for bank to distribute more credit. Therefore it could be concluded that *Capital Adequacy Ratio* (CAR) positively and significantly affected toward credit distribution of Regional Development Bank in Indonesia. This result is in accordance with previous result from Oktaviani (2011) and Arisandi et al., (2015) which stated that CAR has positive effect toward credit distribution.

Hypothesis Test of LDR Variable Effect toward BPD Bank Credit Distribution (lending) Across Indonesia

Based on LDR coefficient, coefficient value obtained had positive mark which means that as LDR increases, then credit distribution of Regional Development Bank in Indonesia increases as well, and vice versa. Therefore, it could be concluded that LDR positively and significantly affected credit distribution of Regional Development Bank across Indonesia. This result affirms Chumaidi (2014), Galih (2011) and Martin et al., (2014) research results which stated that LDR has positive and significant effect toward credit distribution.

Hypothesis Test of ROA Variable Effect toward BPD Bank Credit Distribution (lending) Across Indonesia

Based on ROA coefficient, coefficient value obtained had positive mark which means that as ROA increases, then credit distribution of Regional Development Bank in Indonesia increases as well and vice versa. This indicates that with the increase of ROA obtained by Regional Development Bank in Indonesia used in credit distribution optimization. In addition, such ROA also used for new branch office opening either in province as well outside province or focused on dividend sharing each year for respective Regional Government shareholders. This result is in accordance with previous researches of Ratnawati (2013), Galih (2011) and Chumaidi (2014) which stated that ROA positively effects toward credit distribution.

Hypothesis Test of NIM Variable Effect toward BPD Bank Credit Distribution (lending) Across Indonesia

Regression equation result yielded positive and significant value for this variable that it could be said that change (increase or decrease) in NIM value affected toward credit distribution. In this matter, NIM had positive value and effect as bank had been optimal in placing productive asset in form of credit. The higher the NIM ratio, then bank would be more effective in obtaining its operational income from asset in form of credit. This result is in accordance with previous researches from Primasari (2015) and Arianti et al., (2016) which stated that NIM positively affect toward credit distribution.

Hypothesis Test of BOPO Variable Effect toward BPD Bank Credit Distribution (lending) Across Indonesia

According to theory if operational cost ratio toward operational income (BOPO) decrease that means that such bank succeed in distributing its expense to generate income. It means that the lower the BOPO then interest income that originate from credit distribution could cover interest granted to depositors. The lower BOPO ratio of certain bank means the more efficient operational expense, making such bank in lesser possibility to be in troubled condition and more credit distributed (Siamat, 2015). Therefore it could said that Operational Expense of Operational Income (BOPO) negatively and significantly affects toward credit distribution of Regional Development Bank in Indonesia. This research result is in accordance with Chumaidi (2014) and Pratama (2014) results which stated that BOPO negatively affect toward credit distribution.

The Most Dominant Variable toward Credit Distribution (lending) of BPD Bank Across Indonesia

Based on regression beta coefficient it could be concluded that DPK variable had higher or more dominant effect toward credit distribution of BPD Bank credit with regression beta coefficient value of (+) 16.337. This is due to fund collected by society (Third Parties Fund) are largest fund sources bank most relies on (Dendawijaya, 2009). Bank activity upon collecting fund from society is re-distributing such fund into society in need, in form of loan or commonly known as credit (Kasmir, 2008). So that hypothesis which said that DPK variable has dominant effect toward credit distribution of Regional Development Bank across Indonesia could be accepted. This result is in accordance with research results of Oka et al., (2015) and Tenrilau (2012).

Conclusion

1. Simultaneous testing using F Test yielding result that Third Parties Fund (DPK), *Non Performing Loan* (NPL), *Capital Adequacy Ratio* (CAR), *Loan to Deposit Ration* (LDR), *Return on Asset* (ROA), *Net Interest Margin* (NIM), and Operational Expense of Operational Income (BOPO) simultaneously affect toward Credit Distribution (lending) on Regional Development Bank Across Indonesia.

2. Partial testing using T-Test showed that Third Parties Fund (DPK) positively and significantly affect, *Non Performing Loan* (NPL) does not affect, *Capital Adequacy Ratio* (CAR) positively and significantly affect, *Loan to Deposit Ratio* (LDR) positively and significantly affect, *Net Interest Margin* (NIM) positively and significantly affect and also Operational Expense of Operational Income (BOPO) negatively and significantly affect toward Credit Distribution (lending) on Regional Development Bank across Indonesia.
3. The most dominant and influential variable toward Credit Distribution of Regional Development Bank across Indonesia is Third Parties Fund (DPK) variable.

References

- Almilia & Herdiningtyas. *Analisis Rasio CAMEL Terhadap Prediksi Kondisi Bermasalah Pada Lembaga Perbankan Periode 2000-2002*. Jurnal Akutansi dan Keuangan, Vol.7, No.2, November. 2005
- Arianti., dkk. *Pengaruh BOPO, NIM, NPL dan CAR Terhadap Jumlah Penyaluran Kredit Pada Perusahaan Perbankan Yang Go Publik di Bursa Efek Indonesia Periode tahun 2010 -2014*. Journal Of Accounting, Volume 2 No.2 Maret 2016Fakultas Ekonomi Akuntansi Universitas Pandanaran Semarang. 2016
- Arisandi.,et.al. *Pengaruh Kondisi Internal Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR), dan Non Performing Loan (NPL), pada Keputusan Pemberian Kredit di PT Bank Rakyat Indonesia (Persero) Tbk Tahun 2004-2013*. E-Jurnal AKSi Universitas Pendidikan Ganesha Vol 3 No 1 Tahun 2015. 2015
- Chumaidi, Achmad. *Analisis Faktor-Faktor yang Mempengaruhi Penyaluran Kredit UMKM pada PT BRI*. Universitas Hasanudin. 2014
- Dewiyani, Putri. *Pengaruh Net Interest Margin, Non Performing Loan, Capital Adequacy Ratio, Dana Pihak Ketiga dan Jumlah Penempatan Dana pada SBI Terhadap Penyaluran Kredit(Studi Kasus pada Bank Umum yang Terdaftar di BEI Periode 2008-2012)*.Universitas Diponegoro. 2014
- Dendawijaya, Lukman. *Manajemen Perbankan*. Jakarta. Penerbit Ghalia Indonesia. 2003
- Dendawijaya, Lukman. *Manajemen Perbankan*. Edisi Kedua. Jakarta. Penerbit Ghalia Indonesia. 2009
- Endrianto, Wendy. *Analisa Pengaruh Penerapan BASEL dan Good Corporate Governance Terhadap Manajemen Resiko Pada BNI Persero Tbk*.Universitas Indonesia. 2010
- Febrianto, Dwi Fajar. *Analisis Pengaruh Dana Pihak Ketiga, LDR, NPL, CAR, ROA, dan BOPO terhadap Jumlah Penyaluran Kredit (Studi pada Bank Umum yang terdaftar di BEI Tahun 2009-2012)*. Semarang. Universitas Diponegoro. 2013
- Galih, AdhityaTito. *Pengaruh Dana Pihak Ketiga, Capital Adequacy Ratio, Non Performing Loan, Return On Assets dan Loan To Deposit Ratio terhadap jumlah penyaluran kredit pada Bank di Indonesia*. Skripsi Dipublikasikan: Universitas Diponegoro. 2011
- Giovanny, Aditya. *Analisis Pengaruh Dana Pihak Ketiga (DPK),Capital Adequacy Ratio (CAR), Non Performing Loan (NPL), Loan to Deposit(LDR), dan Return On Asset (ROA), terhadap penyaluran kredit Bank Pembangunan Daerah di Indonesia*. Fakultas Ekonomi dan Bisnis. Universitas Sumatera Utara. 2014
- Herijanto, Hendy. *Teori dan Praktek Proses Keputusan Pemberian kredit Perbankan yang Bersandar pada Prinsip Kehati-hatian*. Universitas Padjajaran. Bandung. Diunduh pada tanggal 11 Januari 2016<http://repository.usu.ac.id/bitstream/123456789/43276/7/Cover.pdf>. 2013
- Husnan, Suad. *Manajemen Keuangan: Teori dan Penerapan Buku I*Edisi 4: BPFE Yogyakarta. 1998
- Kasmir. *Manajemen Perbankan*. Jakarta. Penerbit PT Grafindo Persada. 2007
- Kasmir. *Analisa Laporan Keuangan*. Jakarta. Penerbit Rajawali Pers. 2012
- Kuncoro, Mudrajad dan Suhardjono. *Manajemen Perbankan*. Yogyakarta: BPFE. 2002
- Martin., et. al. *Pengaruh Capital Adequacy Ratio (CAR),Loan to Deposit Ratio (LDR), Non Performing Loan (NPL), Return On Asset (ROA), Net InterestMargin(NIM), dan Biaya Operasional Pendapatan Operasional (BOPO) terhadapPemberian Kredit (StudiKasus Pada PD. BPR BKK Pati Kota Periode 2007-2012)*. Diponegoro Journal Of Social and Politic, EjournalS1 Universitas Diponegoro. 2014
- Meydianawathi, Luh Gede. *Analisis Perilaku Penawaran Kredit Perbankan Kepada Sektor UMKM di Indonesia (2002-2006)*. Universitas Udayana Denpasar: Buletin Studi Ekonomi Volume 12 Nomor 2 Tahun 2006. 2006
- Oka., et.al. *Pengaruh Dana Pihak Ketiga, Penilaian 5C Kredit dan Kualitas Kredit Terhadap Keputusan Pemberian Kredit di PT BPD Bali Cabang Singaraja*. Universitas Pendidikan GaneshaSingaraja. 2015
- Oktaviani. *Pengaruh DPK, ROA, CAR, NPL, dan Jumlah SBI Terhadap Penyaluran Kredit Perbankan (Studi Pada Bank Umum Go Public di Indonesia Periode 2008-2011)*.Universitas Diponegoro. 2011
- Peraturan Bank Indonesia No.11/25/BI/2009 Tentang Penerapan Manajemen Resiko bagi Bank Umum. Diakses tanggal 18 November 2015 pada situs world wide web:http://www.bi.go.id/layanan_informasi_public

- Peraturan Bank Indonesia Nomor 10/15/PBI/2008 Pasal 2 ayat 1 Tentang Kewajiban Penyediaan Modal Minimum Bagi Bank Umum. Diakses tanggal 10 November 2015 pada situs world wide web:[http://www.bi.go.id/layanan informasi public](http://www.bi.go.id/layanan_informasi_public)
- Peraturan Bank Indonesia Nomor 15/2/PBI/2013 Tentang pengawasan status dan tindak lanjut pengawasan bank umum konvensional. Diakses tanggal 25 Desember 2015 pada situs world wide web:[http://www.bi.go.id/layanan informasi public](http://www.bi.go.id/layanan_informasi_public)
- Peraturan Bank Indonesia Nomor 15/7/PBI/2013 Tentang Perubahan Kedua Atas Peraturan Bank Indonesia Nomor 12/19/PBI/2010 Tentang Giro Wajib Minimum Bank Umum Pada Bank Indonesia dalam Rupiah dan Valuta Asing. Diakses tanggal 25 Maret 2016 pada situs world wide web:[http://www.bi.go.id/layanan informasi public](http://www.bi.go.id/layanan_informasi_public)
- Peraturan Bank Indonesia Nomor 7/2/PBI/2005 Tentang Penilaian Kualitas Aktiva Bank Umum. Diakses tanggal 9 November 2015 pada situs world wide web:[http://www.bi.go.id/layanan informasi public](http://www.bi.go.id/layanan_informasi_public)
- Pratama, Jiwa Eka. *Analisis Rasio NPL, CAR, BOPO dan ROA Terhadap Penyaluran Kredit UKMPada PTBank Rakyat Indonesia (Persero) Tbk*. Universitas Hasanuddin. 2014
- Primasari, Natasha Sekar. *Pengaruh Capital Adequacy Ratio(CAR), Return On Assets (ROA), Dana Pihak Ketiga (DPK), Non Performing Loan (NPL), dan Net Interest Margin (NIM) terhadap Penyaluran Kredit Perbankan*(Studi Pada Bank Umum yang Terdaftar di BEI periode 2009-2013). Universitas Diponegoro. 2015
- Ratnawati, Tri. *Pengaruh Langsung dan Tidak Langsung Faktor Ekstern, Kesempatan Investasi dan Pertumbuhan Asset Terhadap Keputusan Pendanaan pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia (Studi Pada Industri Manufaktur Masa Sebelum dan Saat Krisis)*. Jurnal Akuntansi Keuangan Vol.09 No.02 Nov 2007 Hal.65-75. 2007
- Riyadi, Slamet. *Banking Asset & Liability Management.Edisi ke-2*: Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia. 2004
- Siamat, Dahlan. *Manajemen Lembaga Keuangan*: Jakarta. Penerbit PT. Gramedia Pustaka Utama. 2002
- Siamat, Dahlan. *Manajemen Lembaga Keuangan. "Kebijakan Moneter dan Perbankan"* Edisi 1. Jakarta : Fakultas Ekonomi Universitas Indonesia. 2005
- Suhardjono. *Manajemen Perkreditan Usaha Kecil dan Menengah*. Jakarta: UPP AMP YKPN Ikut Mencerdaskan Bangsa. 2003
- Surat Edaran Bank Indonesia No. 6/23/DPNP tanggal 31 Mei 2004 Tentang Sistem Penilaian Tingkat Kesehatan Bank Umum. Diakses tanggal 20 November 2015 pada situs world wide web:[http://www.bi.go.id/layanan informasi public](http://www.bi.go.id/layanan_informasi_public)
- Surat Edaran Bank Indonesia No. 7/3/DPNP tanggal 31 Januari 2005 Tentang Penilaian Kualitas Aktiva Bank Umum. Diakses tanggal 1 November 2015 pada situs world wide web:[http://www.bi.go.id/layanan informasi public](http://www.bi.go.id/layanan_informasi_public)
- Surat Edaran No.13/30/DPNP Tanggal 16 Desember 2011 Perihal Perubahan Ketiga atas Surat Edaran Bank Indonesia Nomor 3/30/DPNP tanggal 14 Desember 2001 perihal Laporan Keuangan Publikasi Triwulanan dan Bulanan Bank Umum serta Laporan Tertentu yang Disampaikan kepada Bank Indonesia Diakses tanggal 1 November 2015 pada situs world wide web:[http://www.bi.go.id/layanan informasi public](http://www.bi.go.id/layanan_informasi_public)
- Tenrilau. *Analisis Pengaruh Dana Pihak Ketiga (DPK), Capital Adequacy Ratio (CAR), dan Non Performing Loan (NPL) terhadap Penyaluran Kredit Perbankan (Studi pada Bank Persero di Indonesia Periode 2003 – 2010)*. Universitas Hasanuddin. 2012
- Triandaru, Sigit dan Budi Santoso,Totok. *Bank dan Lembaga Keuangan Lain*, Edisi Kedua. Jakarta. Penerbit Salemba Empat. 2006
- Undang-undang Nomor 7 tahun 1992 Pasal 3 Tentang Perbankan (Fungsi Utama Bank). Diakses tanggal 20 November 2015 pada situs world wide web:[http://www.bi.go.id/layanan informasi public](http://www.bi.go.id/layanan_informasi_public)
- Undang-Undang Perbankan Nomor 10 Tahun 1998 tentang Perbankan. Diakses tanggal 2 November 2015 pada situs world wide web:[http://www.bi.go.id/layanan informasi public](http://www.bi.go.id/layanan_informasi_public)
- Warjiyo. *Bank dan Lembaga Keuangan Lainnya*.Edisi Kedua. Jakarta: Penerbit Salemba Empat. 2005
- Website World Wide Web Asosiasi Bank Pembangunan Daerah (Asbanda) dalam www.Asbanda.co.id
- Wijayanti, Dewi Ratih. *Analisis Pengaruh Kinerja Keuangan Bank Terhadap Penyaluran Kredit (Studi Kasus Bank Perkreditan Rakyat Jawa Timur)*. Universitas Brawijaya. 2015
- Yulhasnita. *Pengaruh Capital Adequacy Ratio (CAR), Return on Assets(ROA), Return on Equity (ROE), Beban Operasional Terhadap Pendapatan Operasional (BOPO), dan Loan to Deposits Ratio (LDR) Terhadap Penyaluran Kredit pada Perusahaan Perbankan Yang Terdaftar diBEI*:<http://repository.unri.ac.id/bitstream/123456789/1799/1/JURNAL%YULHASNITA.pdf> . 2013

Biographies

Sugeng Riadi is Doctoral student at Mercubuana University. He had bachelor degree from University of Bengkulu, majoring in Accounting (Management Accounting), and master degree from Mercubuana University, majoring in Accounting (Financial Accounting). Last, he worked at a Regional Development Bank in Jakarta Branch, as senior staff of reporting, accounting and also account officer. He research interest include finance, accounting, earnings management, banking, sustainability and corporate social responsibility disclosure.