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## Factors Affecting Lending to the Three Largest Lenders Bank in Indonesia

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### **Abstract:**

*The role and strategic function of banks in all business sectors can be seen in two important activities, namely collecting money or savings or deposits and distributing money in the form of loans. The purpose of this study is to analyze the effect of CAR, NPL, third-party funds, BI rate, inflation and GDP on general lending and small business loans. The data used are panel data from three banks, namely BRI, Bank Mandiri and BCA in the period 2008-2018. Panel regression model is used in this study. The results of the three models that reflect small business loans and total lending, produce significant NPL variables and negatively affect total and small business loans. CAR has a significant and positive effect, third-party fund has a significant and positive effect, the BI rate has a significant positive effect, inflation has a significant negative effect and GDP has a significant positive effect. The results in the regression model indicate that bank management must pay attention to the movement of variable NPL, third-party funds, and GDP on general lending and the movement of variable NPL, third-party funds, and BI rate on small business loans because it will affect lending to the community. From the regression model shows that these variables, except CAR and Inflation, affect general lending and small business loans.*

**Keywords:** BI rate, CAR, inflation, NPL, third-party funds, panel regression, total loans, small business loans, GDP

### **1. Introduction**

The fluctuation that occurred in the world economy from 2008 to 2009 resulted in an impact on the Asian economy. Overall, lending of Commercial Banks in Indonesia only reached 9.06 percent, this achievement was lower than the target set by BI at 15 percent for credit growth in 2009 (Bank Indonesia, 2009).

The impact of the 2008 financial crisis according to Sudarsono (2009) is the decline in liquidity, soaring of interest rates, decline in commodity prices, the weakening of the rupiah exchange rate and funding sources. The financial crisis that hit Indonesia has indeed caused economic shocks, but Micro, Small and Medium Enterprise (MSME) can still survive because MSME use local inputs and do not have foreign debt.

The ability of banks to manage credit distribution and control factors that can affect credit behavior is one of the main keys to the successful in gaining profits (Xiao, 2016). Through this financing, it is expected to stimulate domestic business activities that trigger the development of national economy.

As a regulation that stipulated by Bank Indonesia through Bank Indonesia Regulation (PBI) Number 17/12/PBI/2015 (Amendment to Bank Indonesia Regulation Number 14/22/PBI/2012) concerning the provision of credit or financing by commercial banks and technical assistance of MSME development, commercial banks are required to provide credit or financing to MSME. MSME are considered to have an important and strategic role in national economic development, employment and distribution of development results. Not all banks distribute business loans proportionally. So it is necessary to find out more about the factors that affect the lending, especially small business loans, so that all banks can distribute small-scale business loans proportionally in accordance with the minimum provisions of Bank Indonesia.

Banks that are engaged in the financial sector certainly rely on money as the main commodity of the bank, so the bank liquidity aspect that seen from the bank capital adequacy ratio is very important. According to Bateni et al. (2014) the purpose of CAR (Capital Adequacy Ratio) is to facilitate financial stability, because the function of banks is closely related to many other parties, so that increased risk in banking activities can also increase the risk of other non-bank economic activities. According to Chege and Bichanga (2017), the importance of bank liquidity concept also makes Non Performing Loans (NPL) must be managed properly by a bank in order to minimize bank risk. In conditions of high NPL, banks must provide large reserves that affect the erosion of bank capital, even though this bank capital affects the increase in lending (Wulandari, 2015).

In this study the Bank Indonesia interest rate (BI Rate), inflation and GDP (Gross Domestic Product) become outside factors of banking sector which have an impact on economic conditions which ultimately has an impact on the lending to the community. According to Khan (2015) inflation is a condition where the level of general prices for goods and services is high. This inflation can trigger liquidity in the market so that there is high demand and trigger changes in the price level. The high interest that set by the bank as a result of inflation affects the low interest of the community to use credit loans both as a source of consumption and business unit funding. One form of Central Bank regulatory intervention that affects the circulation of money is the BI rate, a regulation to determine the highest to lowest loan interest rates which then affects the behavior of banks in providing credit loans. According to Koti and Bixho (2016), the higher the interest rate, then the more funds that will be lent by the bank. According to Samuel and Nurina (2015) GDP includes all economic activities in a country, such as public consumption and business, government, investment, paid construction costs, and foreign trade balance that makes this GDP as a comprehensive measurement of a country economic activity. If national revenue is low, the government may increase the amount of money in circulation with the aim of stimulating the banking and business sector (through increasing interest rates and prices). The increasing demand of the community for lending, will result in financial institutions must be able to manage their assets, in this case the credit funds that have been distributed. Through CAR, third-party funds and NPL, financial institutions as fund lenders can measure their ability for lending. Outside factors of the banking system itself, such as the BI Rate, inflation and GDP will also influence the collection of funds that will become the source of future lending.

Based on the problems that have been described, the problem formulation in this study is as follows:

- What is the effect of CAR, NPL, third-party funds, BI rate, inflation and GDP on general lending to the three largest lenders banks?
- What is the effect of CAR, NPL, third-party funds, BI rate, inflation and GDP on the distribution of small business loans to the three largest lenders banks?
- What are the managerial implications for commercial banks related to the lending development?

## 2. Literature Review

Active and profitable bank lending is very important to increase the profitability of a bank. Therefore, the ability of banks to evaluate credit users or borrowers with a safe level of credit risk is very important in order to minimize the failure of credit returns by borrowers. According to Abdou et al. (2016), the evaluated indicators from the record or credit history of borrowers include records of the amount of money ever borrowed, the type of credit they have, the time limit for repayment and how the record on effort of borrowers to pay off the loans. According to Bateni et al. (2014), CAR is useful to ensure that banks are able to absorb a number of losses before banks become insolvent and the consequence is losing funds of depositors. Macroeconomically, CAR can guarantee the efficiency and stability of the state financial system. In Indonesia, CAR provisions are regulated in Bank Indonesia Regulation Number: 3/21/PBI/2001, where banks are required to provide a minimum capital of 8 percent of risk-weighted assets that stated in CAR.

NPL is one of the benchmark of banking financial performance. According to Rajha (2016) NPL can be defined as the sum of borrowed money where the debtor or borrowers do not make payments according to the agreed schedule over a certain period of time in accordance with the applicable provisions.

According to Khan and Sattar (2014), the benchmark interest rate of central bank is the benchmark interest rate from the highest to the lowest that set by the central bank as a form of central bank intervention. The lowest benchmark interest rate set by the central bank aims to help drive the economy by reducing funding costs for borrowers and the highest benchmark interest rate helps government in an economy when inflation is higher than expected.

The link between inflation and business performance in the banking sector is mediated by economic growth. As long as economic growth has decreased due to inflation, then banks prefer to have a larger amount of capital in order to have safer financial situations and conditions. As an illustration, when the inflation rate is high, these conditions can increase market uncertainty and then encourage banks to have a larger amount of capital, which then reduces bank lending activities (Yuksel and Oksari, 2017). According to Mankiw (2006), GDP is the best economic indicator in assessing the economic development of a country, where the calculation of income has the main macro standard of the condition of a country. GDP includes all economic activities in a country, such as public and business consumption, government, investment, paid construction costs, and foreign trade balance which makes this GDP as a comprehensive measurement of economic activity in a country.

## 3. Research Method

The study used quantitative methods by using time series secondary data and several cross sections from Bank Mandiri, BRI and BCA during the period March 2008 to June 2018. Banking financial data in the form of general lending, small business loans, NPL, CAR and third-party funds are obtained from the financial reports of each bank that have been published on the website [ojk.go.id](http://ojk.go.id). Data is a publication report in March 2008 to June 2018. Other variables derived from the external company, namely BI rate, inflation and GDP are obtained from the website [bi.go.id](http://bi.go.id) and [bps.go.id](http://bps.go.id). The analysis used panel data regression with eViews software.

The processing steps that carried out in this study are:

Basic variables descriptive on the dependent and independent variables to see the condition of each variable. Determine the estimation model in panel data regression

- Pooled Method (PLS), the simplest method by combining cross section and time series data as a whole without seeing any time or individual differences.

- Fixed Effect Model (FEM), some assumptions that can be used in this method, the slope coefficient and intercept can be either constant or one of them is constant and the other can vary and both vary.
- Random Effect Model (REM), this model combines the errors that generated by cross section and time series data. The REM model is the average value in all intercepts in either the cross section or time series.

### 3.1. Determine the Estimation Method

- Chow test is used in determining the best model between PLS and FEM.
- The Hausman test, if the chow test shows FEM better, then it compares the FEM and REM to determine the most appropriate method.
- Lagrange Multiplier test, if the Hausmann test results show REM as the best method, the Lagrange Multiplier test is the carried out to determine the most appropriate PLS or REM model to be used.
- Significance test using the F test and t test. The F test is used to test the significance of regression model. While t test is used to test the influence of each independent variable to dependent variable.

### 3.2. Model Interpretation

The equation model used in this study is as follows:

The equation model used in this study is presented in the following three equations, while an explanation of the variables and units used is presented in Table 1

#### a. General lending in Bank Mandiri, BRI and BCA

$$YU_{it} = \beta_0 + \beta_1 CAR_{it} + \beta_2 NPLU_{it} + \beta_3 DPK_{it} + \beta_4 BRate_{it} + \beta_5 Inf_{it} + \beta_6 PDB_{it} + \beta_7 YU_{it-1}$$

#### b. Small business loans in Bank Mandiri, BRI and BCA

$$YK_{it} = \beta_0 + \beta_1 CAR_{it} + \beta_2 NPLK_{it} + \beta_3 DPK_{it} + \beta_4 BRate_{it} + \beta_5 Inf_{it} + \beta_6 PDB_{it} + \beta_7 Dummy + \beta_8 YK_{it-1}$$

#### c. Small business loans in Bank Mandiri and BCA

$$YK2_{it} = \beta_0 + \beta_1 CAR2_{it} + \beta_2 NPLK2_{it} + \beta_3 DPK2_{it} + \beta_4 BRate_{it} + \beta_5 Inf_{it} + \beta_6 PDB_{it} + \beta_7 Dummy + \beta_8 YK2_{it-1}$$

Variable	Description	Unit
YU	: Dependent variable of general lending in Bank Mandiri, BRI and BCA	Rp Million
YK	: Dependent variable of small business loans distribution in Bank Mandiri, BRI and BCA	Rp Million
YK2	: Dependent variable of small business loans distribution in Bank Mandiri and BCA	Rp Million
CAR	: Dependent variable of capital adequacy ratio in Bank Mandiri, BRI and BCA	%
CAR2	: Independent variable of capital adequacy ratio in Bank Mandiri and BCA	%
NPLU	: NPL Independent variable in general credit in Bank Mandiri, BRI and BCA	%
NPLK	: NPL Independent variable in small business loans in Bank Mandiri, BRI and BCA	%
NPLK2	: NPL Independent variable in small business loans in Bank Mandiri and BCA	%
DPK	: Third Party Fund Independent variable in Bank Mandiri, BRI and BCA	Rp Million
DPK2	: Third Party Fund Independent variable in Bank Mandiri and BCA	Rp Million
BI Rate	: Independent variable of central bank reference interest rate	%
Inf	: Inflation Independent variable	%
PDB	: Gross Domestic Bruto Independent variable	Rp Million
Dummy	: KUR Policy variable 0 = before policy      1 = after policy	-
YU <sub>it-1</sub>	: Variable lag of general lending in Bank Mandiri, BRI and BCA	Rp Million
YK <sub>it-1</sub>	: Variable lag of small business loans distribution in Bank Mandiri, BRI and BCA	Rp Million
YK2 <sub>it-1</sub>	: Variable lag of small business loans distribution in Bank Mandiri and BCA	Rp Million
e	: Error	-
i	: Individuals	-
t	: Time	Quarterly

Table 1: Descriptive of Independent and Dependent Variable

## 4. Result and Discussion

### 4.1. Differences in General and Small Business Loans

General loans that used in this study is the amount of loans that distributed by banks in the form of consumptive and productive loans with a large, medium and micro scale loans. While small business loans in this study are the distribution of funding for productive business types with total assets of Rp 50 million – Rp 500 million and annual

turnover of Rp 300 million – Rp 2.5 billion. The distribution of small business loans is based on Bank Indonesia Regulation (PBI) Number 17/12/PBI/2015 where commercial banks are required to provide credit or financing to Micro, Small and Medium Enterprises or MSME.

#### 4.2. Basic Variable Description

In this study there are three research objects, namely Bank Mandiri, BRI and BCA. In addition, the independent variables are NPL, CAR, third-party funds, BI rate, Inflation and GDP, as well as general lending and small business loans become the dependent variable. The data description of these variables is presented in Table 2.

Variable	K_UMUM	NPL_U	KUK	NPL_K	CAR	DPK
	Rp million	%	Rp million	%	%	Rp million
Bank Mandiri						
Mean	19.463	2.822	17.359	3.039	17.529	19.872
Median	19.506	2.243	17.873	2.475	17.010	19.910
Max	20.166	6.506	18.201	6.596	22.629	20.408
Min	18.587	1.280	15.073	1.640	12.320	19.169
Std. Dev.	0.464	1.410	1.087	1.315	2.652	0.371
Obs	42	42	42	42	42	42
BRI						
Mean	18.992	1.904	18.856	2.661	17.525	19.823
Median	19.187	1.406	19.015	2.307	17.245	19.897
Max	19.793	4.789	19.714	4.396	22.959	20.504
Min	17.479	0.661	17.379	1.545	13.180	18.888
Std. Dev.	0.664	1.224	0.643	0.817	3.045	0.485
Obs	42	42	42	42	42	42
BCA						
Mean	19.161	0.834	16.616	0.864	17.564	19.683
Median	19.314	0.639	17.157	0.680	16.795	19.727
Max	19.886	1.854	17.907	1.846	23.646	20.238
Min	18.240	0.332	13.448	0.383	12.880	19.029
Std. Dev.	0.519	0.447	1.549	0.428	3.141	0.357
Obs	42	42	42	42	42	42

Table 2: Descriptive of Research Variables Statistics from Each Bank

Static descriptive that was conducted on the research variables showed that the bank with the highest average general lending is Bank Mandiri, much higher to the other two banks. This is in line with business focus of Bank Mandiri, namely the corporate and commercial banking segments. Large general lending of Bank Mandiri has a correlation with the value of NPL which was quite high. It is recorded that the average NPL of general credit in Bank Mandiri is relatively higher compared to the general credit NPL of BRI and BCA. The distribution of small businesses loans is dominated by BRI. The average value of small business loans distribution of BRI is much bigger than Bank Mandiri and BCA. BRI as the bank with the most branch offices has always focused on service and micro sector credit growth. With a large small business loans portfolio, BRI is quite good in managing NPL for small business loans. The average NPL of small business loans in BRI is still far below the maximum limit that set by Bank Indonesia at 5 percent.

Descriptive results showed that BCA become the bank with the best NPL management. General credit NPL and small business loans are always maintained below 2 percent. The average CAR in Bank Mandiri, BRI and BCA is above the minimum that set by Bank Indonesia. Bank Mandiri and BRI as state-owned banks have higher average third-party funds compared to BCA. This indicates that the community feels more secure in saving funds in state-owned banks, assuming the risk of liquidation is smaller because the bank is owned by the government. Table 3 presents data from the variables used in this study.

	K_UMUM	NPL_U	KUK	NPL_K	CAR	DPK	BI_RATE	INFLASI	PDB
Mean	19.205	1.853	17.610	2.188	17.539	19.793	6.554	5.563	14.547
Median	19.343	1.451	17.779	1.990	17.005	19.827	6.500	4.570	14.565
Max	20.166	6.506	19.714	6.596	23.646	20.504	9.250	12.140	15.120
Min	17.479	0.332	13.448	0.383	12.320	18.888	4.250	2.780	13.930
S.Dev	0.585	1.369	1.478	1.324	2.930	0.413	1.248	2.372	0.316
Obs	126	126	126	126	126	126	126	126	126

Table 3: Descriptive Statistics of Independent and Dependent Variables That Used in the Study

This study also uses external factors including the BI rate, inflation and GDP. The average value of the inflation variable is much greater than the standard deviation. This situation can show the bad things because the condition of the average value is greater than the standard deviation. It can be interpreted that inflation is quite high

The results show that standard deviation of the BI rate is smaller than the average value of the BI rate, indicating that there is a large difference between the minimum and maximum values in the used data. This is still considered reasonable because the time period in this study is quite long, from March 2008 to June 2018.

Based on the results of statistical tests, the lowest GDP value is Rp 13.930 billion and the highest GDP is Rp 15,120 billion. The test results show that GDP has a standard deviation value of Rp 0.316 billion, which means that the trend of GDP data each year during the study period has a deviation rate of that value.

#### 4.3. Determination of Estimation Model

Data processing using panel regression required three model approaches including the Pooled Method (PLS), Fixed Effect Model (FEM) and Random Effect Model (REM) models. The initial stages in the results of processing models is to produce the chow test values (F test, d.f. and probability) for each model in this study (Table 4). These results indicate that there are two suitable and good methods of estimating the effect of independent variables on the dependent variable, namely PLS and FEM, while REM cannot be analyzed due to the limited number of banks, which only uses 3 banks.

Model	Cross-section F Statistic	d.f.	Prob.
General Lending	2,563672	-2.113	0,0815
Small Business Loans Distribution	2,54657	-2.112	0,0829
Small Business Loans Distribution in Bank Mandiri and BCA	3,629781	(1,72)	0,0607

Table 4: Chow Test in the Three Research Model

Source: Data E views 9.0, Processed

#### 4.4. Determinant Factors of General Lending and Small Business Loans

##### 4.4.1. General Lending in the Three Banks

From the results of data processing for general lending in the three banks using the REM method is presented in Table 5. The results of the study show that NPL has a negative and significant effect on general lending. This means that an increase in NPL of 1 percent will reduce general lending by 0.1747 percent, ceteris paribus. The results of this study are in line with Murdiyanto (2012) and Eswanto et al. (2016) NPL has a negative effect on the value of bank lending. NPL is a benchmark for a bank in managing the risk of credit failure. The soaring NPL reached the largest value of 6.50 percent resulting in banks having to provide larger reserves which eventually eroded the bank's capital used for lending.

General lending in Bank Mandiri, BRI and BCA				
Variable	Coefficient	t-Statistic	Prob.	Conclusion
NPL_U	-0.1747**	-6.0486	0.0000	Significant
CAR	-0.0001	-0.0122	0.9903	Not Significant
DPK	0.6432**	3.6949	0.0003	Significant
BI_RATE	0.0036	0.1295	0.8972	Not Significant
INFLASI	-0.0096	-1.0282	0.3060	Not Significant
PDB	0.6353**	2.6468	0.0093	Significant
K_UMUM(-1)	0.8366**	17.2236	0.0000	Significant
C	-2.4582	-0.7192	0.4735	Not Significant
R-squared	0.9546			
Adjusted R-squared	0.9510			
S.E. of regression	0.1273			
Sum squared resid	1.8326			
Log likelihood	84.1679			
F-statistic	264.2680			
Durbin-Watson stat	1.7949			

Table 5: Result of Panel Data Regression Model of General Lending by FEM

(\*\*) Significant in Alpha 5%

Source: Data E views 9.0, Processed

The third-party funds variable has a positive and significant influence on general lending in the three banks. This is in line with the research results of Murdianto (2012) and Amelia (2017) that third-party funds has a positive influence on lending. The increase in third-party funds has to be accompanied by the redistribution of funds that obtained in the form of loans. The more third-party funds increase, the more costs that must be returned to the community in the form of interest.

The GDP variable also shows positive and significant results. This means that the economic value of the products and services produced in Indonesia also affects the value of bank lending. The results study of Cucinelli (2015) and

Ramelda (2017) support the theory, the results suggest that GDP has a significant and positive effect on value of bank credit. The greater the amount of money held by a person or society, with a certain marginal propensity to consume, will increase the amount of expenditure of a person or society, which in turn will increase the value of national income (Widayatsari and Mayes, 2009). Increased public spending opens opportunities for banks to offer credit products. Giving credit will makes it easier for people to meet consumption or investment needs, which value is greater than current spending capabilities

The variable lag in this equation model is used to eliminate autocorrelation in general lending. In addition, from the lag of this variable, the results show that current general credit will affects public lending in the future.

#### 4.4.2. Bank Small Businesses Loans Distribution in the Three Banks

The results of data processing for small businesses loans distribution in the three banks showed results that are not much different from general lending. Data processing using the REM method results as follows (Table 6):

Small Business Loans in Bank Mandiri, BRI dan BCA				
Variable	Coefficient	t-Statistic	Prob.	Conclusion
NPL_K	-0.0263**	-6.1167	0.0000	Significant
CAR	0.0028	0.7130	0.4773	Not Significant
DPK	0.5473**	2.2080	0.0293	Significant
INFLASI	0.0024	0.4784	0.6333	Not Significant
BI_RATE	-0.0154**	-2.9672	0.0037	Significant
PDB	0.3168	1.6997	0.0920	Not Significant
DUMMY	1.9904**	3.0666	0.0027	Significant
KUK(-1)	0.8851**	41.1442	0.0000	Significant
C	0.6666	0.2443	0.8075	Not Significant
R-squared	0.9857			
Adjusted R-squared	0.9844			
S.E. of regression	0.1787			
Sum squared resid	3.5747			
Log likelihood	43.0755			
F-statistic	772.7444			
Prob (F-statistic)	0.0000			
Durbin-Watson stat	2.1322			

Table 6: Result of Panel Data Regression Model of Small Business Loans Distribution by FEM

(\*\*) Significant Pada Alpha 5%

Source: Data Eviews 9.0, Processed

Similar to the results of the t test on general lending, NPL also has a significant and negative effect on the distribution of small business loans with a smaller coefficient value compared to general credit NPL. In this study, the increase in NPL has a large effect on the decline in general lending. Increased risk of credit management has a significant impact on the decline in bank earnings so banks must improve their lending strategies in the future.

Third-party funds on small businesses loans distribution in the three banks show similar results to general lending. The coefficient of 0.5473 indicates that there is a 1 percent increase third-party funds will increase the distribution of small business loans by 0.5473 percent. The greater the absorption of third-party funds by banks, the greater the obligation to redistribute the funds to the community.

A significant and negative effect is seen in the results of the BI rate t test. 1 percent increase in the BI rate will reduce the small business loans distribution by 0.0154 percent. In line with the study results of Otalul et al. (2014) and Bucur and Dragomirescu (2014) market benchmark interest rates have a significant negative effect on lending. The increase in market benchmark interest rates also influence banking decision making to set deposit rates and loan interest rates. The strategy in determining credit interest rates also influences the amount of distributed credit, the higher the determination of credit interest rates, the bargaining position of bank in the community will decrease.

The dummy that is used in this study related to the implementation of government policy in KUR. The researcher wanted to see the influence before and after the implementation of the policy on the distribution of small business loans. The results of the policy influence test with a dummy variable indicate that the policy dummy affects the distribution of small business loans by 1.9904 percent, so that the distribution of small business loans after the policy has increased. The autocorrelation that occurs in the model of small business loans equality in all three banks is overcome by lag of variable. In addition, the lag of variables also indicates that current small business loans affect the distribution in the future.

#### 4.4.3. Small Business Loans Distribution in Bank Mandiri and BCA

Data processing of small business loan distribution in Bank Mandiri and BCA resulted in a slightly different conclusion from the distribution of small business loans to the three banks. Data processing of small business loan distribution in Bank Mandiri and BCA shows the following results (Table 7):

Small Business Loans in Bank Mandiri and BCA				
Variable	Coefficient	t-Statistic	Prob.	Conclusion
NPL_K	0.0011	0.0213	0.9831	Not Significant
CAR	-0.0032	-1.7152	0.0906	Not Significant
DPK	0.9921**	16.5500	0.0000	Significant
BI_RATE	-0.0137	-0.7595	0.4500	Not Significant
INFLASI	0.0027	0.4400	0.6612	Not Significant
PDB	0.1661**	2.9211	0.0047	Significant
DUMMY	2.4930**	3.4636	0.0009	Significant
C	-6.9626**	-5.6603	0.0000	Significant
KUK(-1)	0.7469**	33.2875	0.0000	Significant
R-squared	0.98501			
Adjusted R-squared	0.98314			
S.E. of regression	0.17244			
Sum squared resid	2.14101			
Log likelihood	33.1101			
F-statistic	525.8317			
Prob(F-statistic)	0.0000			
Durbin-Watson stat	2.17377			

*Table 7: FEM Result of Panel Data Regression Model of Small Business Loans Distribution in Bank Mandiri and BCA with FEM  
(\*\*) Significant Pada Alpha 5%  
Source: Data Eviews 9.0, Processed*

The results that is obtained from the three research models show that the effect of the largest third-party funds is on small business loans that distributed by Bank Mandiri and BCA. The results of the study indicated that banks are very dependent on public funds to distribute their loans, in this case small business loans.

Similar to the study results on general lending, the distribution of small business loans in Bank Mandiri and BCA was also influenced by the value of GDP with a smaller coefficient of 0.1661 percent. The contribution of the small and medium micro business sector to the increase in GDP is very large through the increase in the number of MSME actors. Opportunities for Bank Mandiri and BCA to increase the number of small business loans are increasingly open to meet the needs of the MSME business development.

The value of small business loans distribution after the renewal of the KUR policy by the government is a dummy in this study. The result is that after the implementation of government policies, the KUR of small business loans distribution is growing. The policy dummy affects the distribution of small business loans, which is quite large at 2.493 percent compared to general lending. Changes to the criteria for prospective debtors who are entitled to receive KUR make Bank Mandiri and BCA increasingly easy to expand.

#### 4.5. Managerial Implication

This study shows that the variables that affect general lending and small business loans are NPL, CAR, third-party funds, BI rate, inflation and GDP. This can be used by bank management as a consideration to decide whether to increase or decrease the lending for both small business loans and general lending.

##### 4.5.1. Managerial Implication in General Lending in the Three Banks

The study results showed that NPL had a negative and significant effect on general lending. The larger the non-performing loans portfolio, the greater the risk of lending so that the bank will limit the amount of loans. High non-performing loans can lead to the reluctance of banks to give loan because of the formation of large elimination reserves. This condition can be improved by improving the risk acceptance criteria indicator to get better and qualified debtors. Determination of the average minimum balance in the last six months can be take to reduce the risk of default on debtors. In order to support business processes in the current modern economic era, companies certainly need partnerships with financial institution or banking. If the distribution of the company financial activities in the savings account, then the bank can monitor the development of debtor business and get an early warning signal if the debtor business declines.

Third-party funds have a positive effect on general lending in all three banks. Along with the development of the world economy, people have used banking services to facilitate their business transactions. With the availability of public funds that can be used, Bank Mandiri, BRI and BCA can capture the opportunity for greater lending. The bank can complete its savings products with digital banking such as mobile banking, internet banking, electronic money and e-commerce payment. Increasing third party funds can also be done by increasing collaboration and partnership with startup companies and companies that develop financial service innovations.

GDP give a significant and positive effect on general lending. Increased GDP will increase general lending. One source of government revenue is taxes, if income from taxes rises, the government will use revenue from taxes and will increase GDP. In order to increase the government expenditure, the steps such as tax amnesty need to be increased in order to enlarge the expansion of government expenditure. Increasing GDP is a positive signal for the real sector so that

when purchasing power rises, economic agents try to expand their business by using personal capital or capital support from banks.

#### 4.5.2. Managerial Implication in Small Business Loans Distribution in the Three Banks

Study on small business loans distribution shows that NPL has a negative and significant effect on small business loans distribution. The amount of NPL is one of the factors that causes difficulties for banks to distribute loans. One of the steps to minimize non-performing credit in the small business loans segment by selecting a business sector which is classified into attractive categories according to the guideline portfolio that has been set at each bank. A clustering system in the "attractive" business sector can also be applied.

No doubt that the competition in working on public funds in the market is very tight. Collected funds from the community are classified as cheap and expensive funds. To optimize the achievement of profit, the bank must collect more low-cost funds by carrying out market love activities and cooperation with educational institutions. The banking technology approach can be applied by the three correspondent banks. Among other things, increasing cooperation with rural credit institutions, LKM and others so that the promotion and marketing of low-cost funds can be maximized. The easier the customer accesses banking needs, the more loyal the community will be to save their funds in the bank.

The BI rate has a negative significant effect on the small businesses loans distribution. Credit interest is strongly influenced by deposit interest. The bigger or the more expensive the deposit interest is, the bigger the loan interest and vice versa. Large loan interest rates will decline bargaining position of bank. One way to survive with the increased BI rate is to reduce expensive funds and special rates. The banks have a refund obligation in the form of deposit interest to the public raised funds. The lower the deposit interest that paid to the public, the greater the gap pricing between deposit interest and loan interest rates. This condition can maximize bank profits.

In carrying out its business activities, banks certainly cannot be separated from the policies that issued by the bank. One policy that affects the distribution of small business loans is the policy related to the criteria for prospective borrowers that receiving KUR. The change in policy has made banks more flexible in offering credit to prospective debtors who previously could not be worked on. Banks must increase awareness of policy changes that issued by the government or the central bank so that the bank can keep up the moment and not lose the opportunities to increase credit expansion to the new debtors.

#### 4.5.3. Managerial Implication in Small Business Loans Distribution in Bank Mandiri and BCA

The compatibility of the data related to the increase in third-party funds and the distribution of small business loans show significant and positive results. Small business loans that are distributed must be greater than the collected public funds. Addition and improvement of banking infrastructure is an effort to increase the amount of public funds that can be collected. Better and safer interconnection will increase the level of public trust in the bank. In addition, Bank Mandiri and BCA can collect cheap funds from the debtors of small business loans. The number of small business loans debtors bring a profit, so that Bank Mandiri and BCA can give the conditions to debtors to distribute their business activities in a certain number of accounts, thus increasing third party funds from debtors.

The relationship between GDP and MSME sector provides benefits for Bank Mandiri and BCA. Increasing public purchasing power due to the increase in GDP is used by banks to sell credit products that can help people meet their investment needs with a value that greater than their current spending capabilities. Bank Mandiri and BCA can also help increase GDP by fostering micro sector entrepreneurs and opening access to capital and marketing assistance for them. Banks must continue to support the government strategy in improving the national economy. Changes in technology, markets, consumers and the business environment make banks not only compete with other banks, but also with financial technology companies. Bank Mandiri and BCA can collaborate with financial technology company or build their own financial technology. Banks must also be adept in using data analytics to gain awareness about problems and changes that are occurred based on collected raw data.

## **5. Conclusion and Suggestion**

### *5.1. Conclusion*

- General lending is significantly influenced by NPL, third-party funds, GDP and variable lag. The negative NPL coefficient indicates that due to the high NPL, banks must provide greater reserves so that in the end the bank capital is also eroded. Third-party funds positive encourage banks to give general credit, as a source of return of collected public funds. The effect of GDP is significant and positive, indicating that the higher the GDP will increase the general lending funds. Variables lag are used to eliminate autocorrelation that occurred.
- The model of small business loans distribution in the three banks shows NPL, third-party funds, BI rate, dummy and variable lag have a significant effect on the distribution of small businesses loans. Third-party funds have a positive effect and significant in making banks more flexible in allocating funds that collected from the public in the form of small business loans. A high BI rate will cause an increase in bank lending rates in general, and indirectly will affect the public wishes to borrow bank credit. The policy issued by the government also influenced the banking strategy in lending to small businesses. Lag variables indicate that current small business loans affect the distribution of small business loans in the future.



- Results in the regression model indicate that bank management must pay attention to the movements of the NPL, third-party funds, BI rate and GDP variables because it will affect the determination of the loan distribution strategy by the management of each bank.

## 5.2. Suggestion

- This study was conducted on general credit that distributed by Bank Mandiri, BRI and BCA by looking at the influence of NPL, CAR, third-party funds, BI rate, Inflation and GDP. It is suggested in subsequent study to use more variables, especially from the internal side of the bank that can be controlled by management itself, so that the findings can really help management in making a decision on the bank business strategy.
- Further study is expected to be able to focus more on the factors that influence the distribution of small businesses loans and banks that indeed make small business loans as the main segment, so that the obtained results can be more accurate.
- Further study should be able to explore more opportunities that can provide benefits to banks in terms of credit, in order to assist banks in developing future business development strategies.

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