# Government Ownership and Non-Performing Loans: Evidence from Indonesia Banks

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ABSTRACT--Indonesia bank institutions have three form of ownership structure. There are private, government and community development banks. One of the unique banking in Indonesia is that there are community development bank (CDB), which is a government-owned bank districts. This research investigates the effect ownership structure on the nonperforming loans of Indonesia banks. The data used in this research is secondary data with reference to all the Bank in Indonesia for the period 2008-2013. Total population of the study was 124 banks from 2008 up to the period of 2013. Sampling was done by purposive sampling method which gained 45 national private banks, 22 CDB and 4 government banks. The results showed that there are different variables NPL, CAR, LDR and ROA of individual ownership of national private banks, CDB and government bank. ROA and LDR have a significant effect on the NPL. One thing that is very interesting in this study is the ownership dummy CDB positive effect on the NPLs, it indicates that the CDB had a large level of non-performing loans compared to private and government banks.

Key words -- non performing, Loan, banks, government and ownership

#### I. INTRODUCTION

Companies owned by the government may not be managed efficiently because the board of directors and the management does not hold any shares in the company. This led to the company's performance will be affected (Megginson, et al, 1994; Megginson and Netter, 2001). Agency problems in the context of government ownership is more complicated because the government holds shares in the company on behalf of the people or the people. Because the government led by politicians who do not have any ownership in these companies, then they probably will not be watching the actions of the board of directors or management. In addition, the objectives of the politicians who led a government may differ from an individual who has a business.

Shleifer (1998) and La Porta et al. (2002) stated that the government is likely to meet the political goals that might affect the company's financial performance negatively. This view is supported by Paskelian (2006) and Xu and Wang (1999) which states that the company is not efficient because of agency problems arising from the government's political motives. In addition, the state-owned bank may have a lower profit due to finance a project that does not bring financial benefits but brings social benefits.

NPL cause due to mistaken decisions of bank managers to borrowers (Brownbridge, 1998).. NPL is determined by various factors such as macroeconomic, ownership structure, loans to deposits ratio, return on equity, return on assets, capital adequacy ratio, liquidity, bank size and interest rates. These factors are studied by different researchers in various countries (Boudriga et al., 2009; Ahmad, 2013; Tehulu and Olana, 2014).

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The primary motive for this research is the inconsistency of research results that have been carried out in other countries such as in European, Asia and the United States (Saba et al. (2012), Louzis et al. (2010), Badar and Yasmin (2013). This inconsistency of the results of research might be attributable to the method of data analysisnd difference in the economic condition of the countries in which banking sectors operates. but the uniqueness of Indonesian banking system is that there is another government owned banks category, which is called the community development banks (CDB).

Community development banks in Indonesia exist in every district. They are monetary organizations operated on a local basis. In terms of coverage, their coverage is much smaller than the private and the publicly owned banks. CDB categorized as focused bank, ie the bank with regional focus. CDB thus able to create a healthy banking structure in the country and able to meet the needs of the community and to promote the ongoing economic development of Indonesia. What can be the ownership structure to non-performing loans in Indonesia?. These are the questions that the study wishes to answer.

## II. LITERATURE REVIEW

NPLs are principally based on the timeliness for customers to pay the loan principal. The process of granting and managing credit well is expected to eliminate NPLs. Thus, the high NPL is strongly influenced by the ability of the Bank to lending manage, including monitoring actions after lending is disbursed and control measures if there are indications of default.

NPLs generally have an impact on economic growth and reduce economic efficiency. The researches adopted in the developed economies have confirmed that macroeconomic conditions affect credit risk. The causes of NPLs that have been done by several researchers include; economic condition (Brownbridge, 1998 and Al-Smadi and Ahmad, 2009), interest rate (Fofack, 2005; Jimenez and Saurina, 2006; Al-Smadi and Ahmad, 2009), inflation (Farhan *et al.*(2012), Skarica(2013), Klein(2013), Tomak(2013)), credit growth (Keeton, 2003; Boudriga *et al.*, 2009), profitability (Swamy (2012), Selma and Jouini(2013), Bougriga *et al.* (2009)), ownership (Shleifer and Vishny (1986), Hu et al. (2004), Berger et al. (2005), Iannota et al. (2007), Micco et al. (2007), Boudriga et al. (2009), Ahmad (2013), Adjei-Mensah (2014) and Tehulu and Olana (2014);; Misra and Dhal, 2010).

Tehulu and Olana (2014) investigate the bank specific determinants of credit risk of Ethiopian commercial banks. For this reason causal research design was applied in this study since the objective is to assess cause effect relationship. The sample consists of a panel of ten (10) commercial banks that were registered before 2007 from around 19 banks operating in the country. The period 2007-2011 was chosen just to examine the determinants of credit risk using recent data and recently established banks were not considered to avoid new entrant bias. The studies have found the ownership has a impact on credit risk. This finding shows that government banks were more risky than private banks.

Boudriga et al. (2009) developed a comprehensive model to explain differences in NPL levels in 59 countries over the period 2002-2006. The results of research have found that state ownership banks increase the level of problem loans. This can be explained by the fact that state-owned banks are recovering their weaker credit. this

condition led to higher credit risk taking and increased defaults. This result is supported by previous research by Micco et al. (2004) which concludes that NPL tends to be higher for state-owned banks in developing countries.

## III. DATA AND METHODS

This research employs the data from financial statements which consist of 124 commercial banks operated in the Indonesia banking industry. The time period of the study was from 2008 to 2013, the data are taken from banks' annual reports of fiscal year ends on December 31 of each year and the data set consists of 45 private banks, 4 government banks, and 22 community development banks, a total is 71 banks. This studies is using panel data and pooled ordinary least square (OLS). The following model is estimated:

 $NPLs_{it} = \beta_0 + \beta_1 DPRIVt_{it} + \beta_2 CDB_{it} + \beta_3 * CAR_{it} + \beta_4 * LDR_{it} + \beta_5 * ROA_{it} + \beta_6 * INF_{it} + \beta_7 * GROWTH_{it} + e_{it} + e_{it}$ 

NPLs <sub>it</sub>	:	Non Performing Loans
<b>DPRIV</b> <sub>it</sub>	:	Dummy variable taking the value 1 for government bank and 0 for
		otherwise bank.
DCDB <sub>it</sub>	:	Dummy variable taking the value 1 for community development bank
		and 0 for otherwise bank.
CAR <sub>it:</sub>	:	Dummy variable taking the value 1 for foreign exchange bank and 0 for
		otherwise bank.
LDR <sub>it</sub>	:	Dummy variabel taking the value 1 for total equity less than IDR 100
		billion while 0 for otherwise total equity.
ROA <sub>it:</sub>	:	Return on assets of bank <i>i</i> in period <i>t</i> ,
INF t:	:	Annual Inflation of Indonesia varibale.
GROWTH <sub>t:</sub>	:	Annual Economic growth of Indonesia varibale.

#### IV. RESULT AND DISCUSSION

Table 1: Comparisons of mean of variables between different systems of banks

Ratios	Means all bank	Means (%)	p-Value (2
	(%)		tailed)
NPLs	0.7501		j, m, r
Private banks		0.0199	
CDB		2.0908	
Government banks		1.5900	
CAR	6.9706		j, m, p
Private banks		0.3674	
CDB		18.8155	
Government banks		16.1095	

ROA	1.2505		
Private banks		0.0128	j, m, ns
CDB		3.4355	
Government banks		3.1585	
LDR	31.3975		j, m, ns
Private banks		0.9116	
CDB		84.4683	
Government banks		82.4735	

j, k,l, or ns shows that the mean difference of a variable between private and community development banks is significant at either 1%, 5%, 10%, or not significant.

m,n,o, or ns shows that the mean difference of a variable between private and government banks is significant at either 1%, 5%, 10%, or not significant.

p,q,r, or ns shows that the mean difference of a variable between community development and government banks is significant at either 1%, 5%, 10%, or not significant.

Table 2 shows the average ratio of NPLs for all banks under study amounted to 0.7501%. This shows a low enough number that banks avoid from borrowing problems. For each bank ownership, the largest NPLs in the CDB is 2.0908%, but this figure is still below Bank Indonesia's 4%. The lowest NPLs at private banks is 0.0199%, which indicates that private banks are very careful in lending so that the amount of bad loans is very low. The NPLs of the three bank holdings have significant differences, indicating that each of these holdings has different levels of NPLs so that they have different lending risks.

The CAR ratio indicates that private banks are higher than CDB and government banks, of the three holdings having significant differences. This shows the CAR ratios of the three bank holdings have different values, but the CAR ratio is still above the minimum Bank Indonesia requirement of 8%. Average ROA ratio of 1.25% where the highest value in the CDB of 3.43% and the lowest private banks 0.0128%. This shows the benefits of government-owned banks whether CDB or government banks have no difference and have better performance than private banks. This may be due to government assistance to banks facing financial difficulties. The highest LDR ratio of the private banks with the average of all banks is 88.39%. This shows private banks are very aggressive in lending from government-owned banks.

 Table 2: Regression without Adjusting and with Robust Standard Errors

 Dependent Variable: NPL

Variable	OLS without standard errors		OLS with robust standard	
			errors	
	Coef.	p-value	Coef.	p-value
Constan	7.605	0.000***	7.605	0.003***

DPRIV	-1.403	0.080*	-1.403	0.035**
DCDB	0.799	0.326	0.799	0.050**
CAR	-0.001	0.760	-0.001	0.501
LDR	-0.009	0.014 **	-0.009	0.014**
ROA	-1.006	0.000***	-1.006	0.001***
INF	-0.146	0.237	-0.146	0.084**
GROWTH	-0.218	0.432	-0.218	0.592
R-squared	0.2406		0.2406	
Adjusted R-squared	0.2252			
Prob > F	0.0000		0.0022	
Number observation	355		355	

\*, \*\* and \*\*\* denote significance at the 10%, 5% and 1% level.

The result of regression method above, shows variable of PRIV, CDB, LDR, ROA and INF have significant effect on NPLs. These results indicate that the three variables play a significant role in determining the level of NPLs in banks in Indonesia by 50.52%.

CDB has a positive effect on NPLs, it indicates that CDB has higher non-performing loan compared to private banks and government banks. This result is consistent with Shleifer and Vishny (1986), Hu et al. (2004), Berger et al. (2005), Iannota et al. (2007), Micco et al. (2007), Nichols et al. (2009), Boudriga et al. (2009), Ahmad (2013), Adjei-Mensah (2014) and Tehulu and Olana (2014) The positive relation confirms that the control of the owners on the mangers is weak, resulting in the asymmetry of information and conflict of interest between owners and managers (Jensen and Meckling, 1976), leading to the decisions that are in benefit to managers. Due to less supervision and control, mangers increase the riskiness of the loan portfolio in order to improve the short term cost efficiency. They lend money to the low quality borrowers, resulting in the growth of future NPLs.

The other main reason for the positive relationship between CDB and NPLs. This shows that CDB has a mandate to make policies in the development of providing loans. This condition will be able to increase NPLs and settlements for weaker credit recovery. This combined effect leads to higher credit risk taking and increased defaults. The results of this study support the results of the research Micco et al. (2007) which concluded that government banks tend to have higher NPLs for developing countries.

ROA has a negative effect on NPLs, this indicates that the low bank profit caused by high level of bad debts so bad credit very influence to bank profit level. Bad credit will increase the cost of the bank so that the level of bank profit will affect. The LDR variable has a positive effect on the NPLs. This indicates that the loan provided by the bank has the potential to stall so that the larger the loan is given the greater the bad credit experienced by the bank. This may be due to the level of customer's honesty that is still lacking to pay for the loan other than that, the state of the business customers who suffered losses so they cannot afford to pay the loan.

Inflation has a negative effect on NPLs. This shows that due the decrease in the volume of loans provided by banks and banks becoming more selective of high quality **borrowers** during periods of high inflation. The finding is similar to that of Al-Smadi and Ahmad (2009).

## V. CONCLUSION

The result of research indicates that there are difference of variable of NPLs, CAR, LDR and ROA for private banks, CDB and government banks. A very interesting thing in this study is that the ownership dummy of CDB has a positive effect on the NPLs, it shows that CDB has a higher non-performing loan level compared to private banks and government bank. This condition are the control of the owners on the mangers is weak, the other main reason for the positive relation between NPLs and CDB owned banks is the lenient credit policies and inefficiency of the credit evolution departments of the banks, Corruption also play important role in the growth of NPLs in the CDB owned banks.

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