

# AZWIRMAN

*by* AZWIRMAN AZWIRMAN

---

**Submission date:** 06-Jun-2024 09:22AM (UTC+0700)

**Submission ID:** 2396562075

**File name:** 12.\_Government\_Ownership\_and\_Non-Performing.pdf (191.88K)

**Word count:** 3418

**Character count:** 18164

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

Hamdi Agustin<sup>1</sup>, Desy Mardianty<sup>2</sup>, Azwirman<sup>3</sup>

**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.

**Keywords--** 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.

36

<sup>1,2,3</sup>Economic faculty, universitas islam riau, Pekanbaru, Riau. Indonesia.  
Email: [hamdiagustin@eco.uir.ac.id](mailto:hamdiagustin@eco.uir.ac.id), [my.interpaper@gmail.com](mailto:my.interpaper@gmail.com)

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).

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 analysis and 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. 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:

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

$NPLS_{it}$	:	Non Performing Loans
$DPRIV_{it}$	:	Dummy variable taking the value 1 for government bank and 0 for otherwise bank.
$DCDB_{it}$	:	Dummy variable taking the value 1 for community development bank and 0 for otherwise bank.
$CAR_{it}$	:	Dummy variable taking the value 1 for foreign exchange bank and 0 for otherwise bank.
$LDR_{it}$	:	Dummy variabel taking the value 1 for total equity less than IDR 100 billion while 0 for otherwise total equity.
$ROA_{it}$	:	Return on assets of bank $i$ in period $t$ ,
$INF_t$	:	Annual Inflation of Indonesia varibale.
$GROWTH_t$	:	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 3 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

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	
Numberobservation	355		355	

Dependent Variable: NPL

\*, \*\* 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 managers 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, managers 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.

## REFERENCES

- [1] Adjei-Mensah, G. (2014). Executive Compensation, Ownership Structure and Loan Quality of Banks in Ghana. A Thesis Submitted to the University of Ghana, University of Ghana <http://ugspace.ug.edu.gh>
- [2] Ahmad, F. (2013). Ownership Structure and Non-Performing Loans: Evidence from Pakistan. *Asian Journal of Finance & Accounting*, 5(2), 268-288.
- [3] Al-Samadi, M.O., & Ahmad, N.H. (2009). Factors affecting banks credit risk: Evidence from Jordan. Malaysia: Collage of Business, University Utara Malaysia.
- [4] Badar, M., & Yasmin, J. A. (2013). Impact of macroeconomic forces on nonperforming loans: an empirical study of commercial banks in Pakistan. *WSEAS TRANSACTIONS on BUSINESS and ECONOMICS*, 1(10), 40-48.
- [5] Berger, A., Clarke, G., Cill, R., Klapper, L., & Udell, G. (2005). Corporate governance and bank performance: a joint analysis of the static, selection, and dynamic effects of domestic, foreign, and state ownership. *Journal of Banking and Finance*, 29, 2179–2221.
- [6] Boudriga, A, Boulila, T. N., & JellouliSana. (2009). Bank specific, business and institutional, environment determinants of nonperforming loans: Evidence from MENA countries. *Journal of Financial Economic Policy*, 1(4), 286-318
- [7] Brownbridge, M. (1998). The causes of financial distress in local banks in Africa and implications for prudential policy. UNCTAD Discussion Papers, United Nations Conference on Trade and Development, 132.
- [8] Farhan, M., Sattar, A., Chaudhry, A. H., & Khalil, F. (2012). Economic determinants of non-performing loans: Perception of Pakistani bankers. *European Journal of Business and Management*, 4, (19), 87-99.
- [9] Fofack, H. (2005). Non-performing loans in Sub-Saharan Africa: Causal analysis and macroeconomic implications. World Bank Policy Research Working Paper No. 3769.
- [10] Hu, J.L., Li, Y., & Chiu, Y.H. (2004). Ownership and nonperforming loans: Evidence from Taiwan's banks.

- The Developing Economies*, 42(3), 405-420.
- [11] Iannotta, G., Nocera, G., & Sironi, A. (2007). Ownership structure, risk and performance in the European banking industry. *Journal of Banking and Finance*, 31(7), 2127-2149.
- [12] Jensen, M., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency cost and ownership structure. *Journal of Financial Economics*, 3, 305-360.
- [13] Jimenez, G., & Saurina, J. (2006). Credit cycles, credit risk and prudential regulation. *International Journal of Central Banking*, 2(5), 65-98.
- [14] Keeton, W. R. (2003). Does faster loan growth lead to higher loan losses. *Economic Review*, 84(2), 57-75.
- [15] Klein, N. (2013). *Nonperforming loan in CESEE: Determinants and Impact on Macroeconomic Performance*, IMF working Papers 13(72)
- [16] La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. R. (2002). Government ownership of banks. *Journal of Finance*, 57, 265-302.
- [17] Laeven, L., & Levine, R. (2009). Bank governance, regulation and risk taking. *Journal of Financial Economics*, 93, 259-275
- [18] Louzis, D.P., Vouldis, A.T., & Metaxas, V.L. (2010). *Macroeconomic and bank specific determinants of non performing loans in Greece: a comparative study of mortgage, business and consumer loan portfolios*. Bank of Greece, Working Paper, no. 118.
- [19] Megginson, W. L., & Netter, J. M. (2001). From state to market: A survey of empirical studies on privatization. *Journal of Economic Literature*, 39(2), 321-389.
- [20] Megginson, W.L., Nash, R. C., & Randenborgh, M. (1994). The financial and operating performance of newly privatized firms: An international empirical analysis. *Journal of Finance*, 49, 403-452..
- [21] Micco, A., Ugo, P., & Monica, Y. (2007). Bank ownership and performance: Does politics matter? *Journal of Banking and Finance*, 31, 219-241.
- [22] Misra, B.M. & Dhal, S. (2010). Pro-cyclical management of banks' non performing loans by the Indian public sector banks. A Research Publication of Bank for International Settlement. Available from <http://www.bis.org/repofficepubl/arpresearch201003.08.pdf> [Accessed October 15, 2010].
- [23] Nichols, D., Wahlen, J., & Wieland, M. (2009). Publicly-traded versus privately-held: implications for conditional conservatism in bank accounting. *Review of Accounting Studies*, 14, 88-122.
- [24] Paskelian, G. O. (2006). *Government Ownership, Firm Value and Choice of SEO Methods-Evidence from Privatized Chinese SOEs*. Dissertation Doctor of Philosophy in Financial Economics, University of New Orleans.
- [25] Saba, I., Kouser R., & Azeem, M. (2012). Determinants of nonperforming loans: case of US banking sector. *International Journal of Banking and Finance*, 44, 479- 88
- [26] Selma. M., Ahlem & Jouini, F. (2013). Micro and macro determinants of nonperforming; Tunisia. *International Journal of Economics and Financial Issues*. 3(4), 852-860.
- [27] Shleifer, A. (1998). State versus private ownership. *Journal of Economic Perspectives*, 12, 133-150.
- [28] Shleifer, A., & Vishny, R.W. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94, 461-488



- [29] <sup>12</sup> Swamy, V. (2012). Impact of Macroeconomic and endogenous factors on nonperforming bank assets. *International Journal of Banking and Finance*, 9(1), 27-47
- [30] <sup>3</sup> Tehulu, T.A., & Olana, D.R. (2014). Bank- Specific Determinants of Credit Risk: Empirical Evidence from Ethiopian Banks. *Research Journal of Finance and Accounting*, 5(7), 80-85
- [31] <sup>16</sup> Tomak, S. (2013). Determinants of Commercial Banks lending Behavior: Evidence From Turkey. *Journal of Empirical Research*, 3(8), 933-943.
- [32] Xu, X. and Wang, Y. (1999). Ownership Structure and Corporate Performance in Chinese Stock Companies. *Chinese Economic Review*, 10, 75-96.

19%

SIMILARITY INDEX

13%

INTERNET SOURCES

11%

PUBLICATIONS

10%

STUDENT PAPERS

---

### PRIMARY SOURCES

---

- |   |   |    |
|---|---|----|
| 1 | <a href="http://rebs.feaa.uaic.ro">rebs.feaa.uaic.ro</a><br>Internet Source   | 1% |
| 2 | Thanh Pham Thien Nguyen, Son Hong Nghiem, Eduardo Roca, Parmendra Sharma. "Bank reforms and efficiency in Vietnamese banks: evidence based on SFA and DEA", <i>Applied Economics</i> , 2016<br>Publication                          | 1% |
| 3 | Submitted to Abu Dhabi University<br>Student Paper  | 1% |
| 4 | Suryanto, Suryanto. "Non Performing Loans on Regional Development Bank in Indonesia and Factors that Influence", <i>Mediterranean Journal of Social Sciences</i> , 2015.<br>Publication   | 1% |
| 5 | Monica Keneley, Margaret McKenzie. "The privatisation experience in the Australian banking and insurance sectors: an explanation of the change in ownership structures", <i>Accounting, Business &amp; Financial History</i> , 2008 | 1% |

---

6	<a href="http://ekonferencije.com">ekonferencije.com</a> Internet Source	1 %
7	<a href="http://ojs.tripaledu.com">ojs.tripaledu.com</a> Internet Source	1 %
8	<a href="http://www.iosrjournals.org">www.iosrjournals.org</a> Internet Source	1 %
9	<a href="http://iaeme.com">iaeme.com</a> Internet Source	1 %
10	<a href="http://www.sciedu.ca">www.sciedu.ca</a> Internet Source	1 %
11	Submitted to Edith Cowan University Student Paper	1 %
12	<a href="http://journal.ipb.ac.id">journal.ipb.ac.id</a> Internet Source	1 %
13	<a href="http://maco.jfn.ac.lk">maco.jfn.ac.lk</a> Internet Source	1 %
14	Submitted to University of Portsmouth Student Paper	1 %
15	<a href="http://definitionofessaywriting814.blogspot.com">definitionofessaywriting814.blogspot.com</a> Internet Source	1 %
16	Submitted to EPOKA University Student Paper	1 %

---

17	Kaifeng Yang. "State-Owned Enterprise Reform in Post-Mao China", International Journal of Public Administration, 2007 Publication	1 %
18	e-journal.potensi-utama.ac.id Internet Source	1 %
19	www.ensani.ir Internet Source	1 %
20	Daniel Pérez, Vicente Salas-Fumás, Jesús Saurina. "Earnings and Capital Management in Alternative Loan Loss Provision Regulatory Regimes", European Accounting Review, 2011 Publication	1 %
21	Submitted to North West University Student Paper	1 %
22	eprints.unite.edu.mk Internet Source	1 %
23	www.princeton.edu Internet Source	1 %
24	Diego Romero-Ávila. "Liberalization of capital controls and interest rates restrictions in the EU-15: did it affect economic growth?", Applied Financial Economics, 2009 Publication	<1 %
25	Submitted to University of Sri Jayewardenepura Nugegoda Sri Lanka	<1 %

26

Submitted to Griffith College Dublin

Student Paper

<1 %

---

27

Kenneth Gibb, Christian Nygaard. "Transfers, Contracts and Regulation: A New Institutional Economics Perspective on the Changing Provision of Social Housing in Britain", *Housing Studies*, 2006

Publication

<1 %

---

28

[afribary.com](http://afribary.com)

Internet Source

<1 %

---

29

[ugspace.ug.edu.gh:8080](http://ugspace.ug.edu.gh:8080)

Internet Source

<1 %

---

30

Submitted to Staffordshire University

Student Paper

<1 %

---

31

[www.aijcrnet.com](http://www.aijcrnet.com)

Internet Source

<1 %

---

32

[www.doria.fi](http://www.doria.fi)

Internet Source

<1 %

---

33

[id.123dok.com](http://id.123dok.com)

Internet Source

<1 %

---

34

[vdocuments.mx](http://vdocuments.mx)

Internet Source

<1 %

---

35

Awatef Louhichi, Salma Louati, Younes Boujelbene. "The regulations–risk taking

<1 %

nexus under competitive pressure: What about the Islamic banking system?", Research in International Business and Finance, 2020

Publication

---

36

Sri Wahyuni, Fauzul Etfita, Febrina Dafit, Asnawi Asnawi. "Unboxing the primary English teacher's TPACK profile: instrumental design and validation", Journal of Education and Learning (EduLearn), 2024

Publication

---

<1 %

---

Exclude quotes Off

Exclude matches Off

Exclude bibliography Off