“Ownership structure and bank performance”

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OWNERSHIP STRUCTURE AND BANK PERFORMANCE

Abstract

The purpose of this study is to evaluate the performance of banks in Indonesia. Specifically, this study has examined the static effect of ownership structure on bank performance in Indonesia over the period 1995–2006. The sample consists of 74 banks, namely 56 private banks, 15 community development banks (BPD), and three federal banks from 1995 to 2006. The data was analyzed using least-squares regression method, the general least squares method, and the method of random effects. The findings of this study show that the BPD performed better compared to private banks. This indicates that BPDs have better performance rather than private banks which is due to the fact that customers can be able to pay loans, they have special knowledge on that area and the performance of BPD is supervised by local government. In addition, the amount of equity, economic growth, financial crisis, and the financial ratios affect the performance of the bank. However, bank status has no effect on bank performance.

Keywords bank performance, ownership structure, regional development banks, financial crisis, Indonesia

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INTRODUCTION

The performance of a bank is closely related to the role and function of Bank's management. Thus, a bank's competitiveness depends on the ability of management to manage their bank respectively. Beside the role and function of management in resulting performance of a bank, the role of the bank owner also contributes to selection of good management. The owner of a bank as well as the owner of other company and investor always want to get the maximum profit with minimal risk. The owner of a bank wants their management to optimize the existing resources in order to generate maximum profit.

The principal types of banks in the modern industrial world are commercial banks which are typically private banks and government banks. The objectives of these two types of banks are similar as they focus on maintaining higher profitability. These two types of banks can be found in most countries in the world, but the uniqueness of Indonesian banking system consists in the existing another category of banks, which is called the community development banks.

Community development banks in Indonesia exist in every district. They are monetary institutions operated on a local basis. In terms of coverage, their coverage is much smaller than private and government banks.

The commercial banks and the community development banks serve different niche of customers. They also have different ways of carrying out their duties and cater for different markets. Hence, this study will try to identify whether the ownership pattern will affect bank perfor-

mance. The research has shown that private banks are better because their motive of profitability will force them to work hard to ensure that they get the maximum profit as they can. But what about the community development banks? They also give loans or credit to local people and perform other functions of a bank – do they perform better than private banks or the other way round?

The research results by Reaz (2005), Berger et al. (2005), Omran (2007), Micco et al. (2007), Iannotta et al. (2007), Fu and Heffernan (2008), and Cornett et al. (2010) found that the ownership structure of a private bank has positive influence on bank performance. It can be seen from that research that the private bank performs better than government bank. In Indonesia, Hadad et al. (2005) found that bank ownership has no effect on the performance of a private bank, a government bank and a foreign bank. Thus, the research on the performance of private banks and government banks in Indonesia is very reasonable to be examined.

Besides that, in Indonesia, there are two bank statuses, namely foreign exchange bank and non-foreign exchange bank. Foreign exchange bank got a license from Bank of Indonesia (BI) to conduct banking activities in foreign-exchange services such as transfer money to foreign country, foreign-exchange trading, payment of letter credit and another foreign-exchange service. Therefore, the researches which examine the relationship between bank status and bank performance need to be observed.

This research also supports and contributes to the Indonesia Banking Architecture (API), where in 2011 all banks had to have minimum capital of IDR 100 billion. Bank of Indonesia (BI) introduced this regulation in order for the banks to face their crisis time or difficult time as in financial crisis. Because of that, this research will examine the effect of minimum equity requirement on bank performance.

Indonesia also experienced financial and political crises in the mid 1997 to 1999. These crises resulted in decline in most banks' performance. Nowadays, the banks are also experiencing financial difficulties and bankruptcy problems. Therefore, the research papers which examine the effect of financial crisis on bank performance need to be analyzed.

The economic growth is one of the important aspects in the country development because economic growth is consistent with economic activities. Positive economic growth indicates increasing economic activities and negative economic growth indicates decreasing economic activities. However, there is no much research conducted to examine the relationship between economic growth and bank performance. Therefore, the research examining the effect of economic growth on bank performance need to be observed.

This research analyzes various variables that would affect bank performance in Indonesia. The recent issues from this research are the Indonesia banking system has a unique form of ownership, i.e. community development bank, the statutes of Bank Indonesia (BI) on minimum equity requirement as much as IDR 100 billion, and the form of bank status, namely foreign exchange bank and non-foreign exchange bank. In addition, Indonesia has experienced a financial crisis and after that the economic growth tends to increase.

1. LITERATURE REVIEW

1.1. Bank ownership

For the objective of this research, the ownership of bank in Indonesia can be divided into government bank, private bank and community development bank. In Indonesia, private banks are controlled by individual, government banks are controlled by central goverment, and community development banks are controlled by local government. According to Li and Simerly (1998), the ownership structure of a bank affects the level of manager supervision to ensure the bank performance is good. Those who own a majority share will do more monitoring of the management and will force the managers to improve their performance.

The comparing between of the performance like profitability and asset quality of government owned banks with the private owned banks is also the point at issue in the literature. Agency cost in government bureaucracy can cause weakness of management incentive and fault in allocation of resources. According to the discussion of agency cost in agency theory, the managers use less effort compared to divert resources for personal gain such as carrier objective. The political notice from the owner government bank could not be efficient because the politicians have taken the deliberate policy to transfer resources to their supporters (Shleifer & Vishny, 1986; Shleifer, 1998).

Several studies have documented that the government bank has a lower asset, higher cost and lower asset quality rather than private banks (Berger et al., 2004; Berger et al., 2005; and Micco et al., 2004). Additionally, Cornett et al. (2010) showed that the government bank had poorer loan quality, less profitability, held less core capital and had greater credit risk, and higher insolvency risk. La Porta et al. (2003) showed that the local bank which has a large share in non-financial companies tends to lend money to companies associated even though the loans will get high risk.

Fu and Heffernan (2008) examined the bank in China for the years 1985–2002. The results showed that the private bank is more profitable than the government bank because the private bank has an income growth and higher efficiency rather than government bank, despite the private bank has smaller market share than the government bank. Iannotta et al. (2007) examined three forms of bank ownership, they are private banks, joint venture banks and government banks within a sample of 181 banks in 15 European countries over the years 1999–2004. Bank performance is measured by gross profit. The results showed that government banks have smaller income rather than private banks because the government banks have lack of capital, less deposits and less lending, so that, the government bank cannot work optimally. This research result is similar to another research conducted by Jia (2008) who found that the government banks have lower deposits to loans ratio and high debt to total assets ratio compared to joint-venture banks and private banks in China.

1.2. Bank status

The research on the effect of bank status on bank performance in Indonesia was conducted by Febryani and Zulfadin (2003) using the data from 2000 and 2001. The research result showed that there was no difference in performance between foreign exchange and non-foreign exchange banks in terms of ROA, ROE and loan-to-deposit ratio. This is most likely due to a foreign exchange bank cannot take advantage from foreign exchange services. Another factor is the high number of non-performing loans (NPL) held by foreign exchange bank due to the increase in interest rate. Based on statistical test in 2001, there was no difference between foreign exchange bank and non-foreign exchange bank viewed from ROA and ROE. However, the loan-to-deposit ratio showed that there is a significant difference between foreign exchange bank and non-foreign exchange bank. This result is due to Indonesia's economic condition improving and followed by decreasing interest rate in the banks, so it generates positive effect on the bank. This result is similar to research result conducted by Mahasrani and Toto (2007) who found that ROE and ROA of foreign exchange bank are different compared to non-foreign exchange bank for the years 2002–2006.

1.3. Equity minimum requirement

The research with using dummy to equity has never been caried out by researchers but the dummy's equity to asset ratio of bank was condcuted by Neceur and Kandil (2008) in Egypt. The result showed that the equity to asset rasio dummy does not affect ROA and ROE. In addition, the research was conducted by Pasioras and Kosmidou (2007), and Neceur and Kandil (2008) that showed that the total of high equity is better because it can reduce the operating costs of banks and reduce the bankruptcy cost so as to increase bank profit.

1.4. Financial crisis

Reynolds et al. (2000) found that the financial crisis has a negative effect on bank performance in Thailand, Korea, Malaysia and Singapore. Indonesia and the Philippines were not influenced. Cornett et al. (2010) found that the financial crisis has a negative effect on bank performance in Asian countries.

Meanwhile, Chantapong (2005) conducted a study during 1995–2000 in Thailand and found that financial crisis dummy significantly and positively influenced bank performance which is measured by ratio of net margin to total asset, gross profit to total asset and overhead cost to total asset. The variable based on interaction between private banks with crisis dummy did not affect bank performance. This is probably due to multicollinearity.

Dientrich and Wanzenried (2011) conducted a research using the data from 1999 to 2009 in Switzerland. They found that government banks have positive influence on the average of ROA and net profit margin. This indicates that the government banks are more profitable than private banks during the financial crisis because the government banks are considered as a safe place to store deposits rather than private banks.

1.5. Economic growth

The research conducted by Kosmidou (2007) and Lannotta et al. (2007) found that economic growth had positive influence on bank performance in Europe. This indicates that the result was similar with previous study by Bashir (2005), and Kosmidou et al. (2005) who state that economic growth has positive influence on financial institution performance.

Boubakri et al. (2005) found that economic growth has positive influence on bank performance in 16 European countries. The result is consistent with Althanasoglou et al. (2006) who found that economic growth has positive influence on bank performance in Egypt. Micco et al. (2007) observe the interaction between bank ownership and econominc growth. They found that interaction between government bank and economic growth has positive influence on bank performance in a developing country.

2. METHOD OF RESEARCH

The population consists of 124 commercial banks operated in the Indonesia banking industry. The time period of the study was from 1995 to 2006. We use income statement, balance sheet, and ownership information data from 1995 to 2006, the data are taken from banks' annual reports of fiscal year ends on December 31 of each year and the data set consists of 56 private banks, 3 government banks, and 15 community development banks, a total amount is 74 banks. This study uses panel data and employs General Least Square (GLS) and random effect analysis. Fixed effect is not used in the analysis because the number of banks has not changed during the study period and there were three dummy variables. The following model is estimated:

$$\begin{aligned} &Performance\left(ROA\ and\ ROE_{it}\right) = \\ &= \alpha + \beta_1 \cdot DGOVERNMENt_{it} + \beta_2 \cdot DBPD_{it} + \\ &+ \beta_3 \cdot DDEVISA_{it} + \beta_4 \cdot DEQUITY_{it} + \\ &+ \beta_5 \cdot DCRISIS_{it} + \beta_6 \cdot ECONOMIC_{it} + \\ &+ \beta_7 \cdot EQUITY_{it} + \beta_8 \cdot LOAN_{it} + \\ &+ \beta_9 \cdot COST_{it} + \beta_{10} \cdot DEPOSIT_{it} + \\ &+ \beta_{11} \cdot ASSET_{it} + e_{it}, \end{aligned}$$

where i refers to the bank, t refers to the years, ROA and ROE_{it} – return on assets (ROA) and return on equity (ROE); $DGOVERNMENT_{it}$ – dummy variable taking the value 1 for government bank and 0 for other bank; $DBPD_{it}$ – dummy variable taking the value 1 for community development bank and 0 for other bank; $DDEVISA_{it}$ – dummy variable taking the value 1 for foreign exchange bank and 0 for other bank; $DEQUITY_{it}$ – dummy variable taking the value 1 for total equity less than IDR 100 billion while 0 for otherwise total equity; $DCRISIS_{it}$ – dummy variable taking the value 1 for the years 1997, 1998, 1999 and 0 for other years; $ECONOMIC_{it}$ – annual economic growth of Indonesia varibale; $EQUITY_{it}$ – equity to total asset ratio; $LOAN_{it}$ – loan to total asset ratio; $COST_{it}$ – operating cost to total asset ratio; $DEPOSIT_{it}$ – deposit to total loan ratio; $ASSET_{it}$ – logarithm value of total asset.

3. RESULTS AND DISCUSSION

Tables 1 and 2 (the result of regression use of GLS method) show that the community development bank dummy (DBPD) has positive influence on ROA and ROE (dependent variable). This indicates that community development bank (BPD)

Table 1. The results of using the GLS method

Variable	ROA	ROE
Constant	–0.1301 (0.0024)***	–0.3870 (0.0856)*
DGOVERNMENT	–0.0003 (0.9826)	0.0401 (0.5466)
DBPD	0.0197 (0.0008)***	0.0963 (0.0025)***
DDEVISA	0.0039 (0.4584)	–0.0209 (0.4474)
DEQUITY	–0.0021 (0.4919)	–0.0077 (0.6890)
DCRISIS	–0.0118 (0.0191)**	–0.0129 (0.4440)
ECONOMIC	–0.0003 (0.4697)	–0.0034 (0.2331)
EQUITY	0.3541 (0.0000)***	0.2336 (0.0197)**
LOAN	0.0007 (0.6448)	0.0067 (0.4665)
COST	–0.2064 (0.0000)***	0.3493 (0.0000)***
DEPOSIT	0.0005 (0.1753)	0.0063 (0.0033)***
ASSET	0.0040 (0.0086)***	0.0161 (0.0386)**
R-squared	0.4967	0.0882
Adjusted R-squared	0.4904	0.0765
Durbin – Watson	2.0667	2.0328
Total data	888	869

has better performance rather than private bank which is caused by various factors. First, the loan is given only for public servant of local government where the public servant is difficult to be fired. Because of that, the possibility of default payment on loan is low despite an unstable economic situation. Second, the community development banks (BPD) only provide their services in certain area, so that they have special knowledge on that area. This simplifies the community development bank (BPD) to assess loan application from customer and find eligible loan. Third, the performance of community development bank is supervised by local government. The weakness of a bank manager shows the inability of local government to find out a competent manager. Instead it will reflect negatively the ability of local government.

This result is different from Reaz (2005), Beck et al. (2005), Berger et al. (2005), Omran (2007), Micco et al. (2007), Iannotta et al. (2007), Fu and Heffernan (2008), Yu and Neus (2009) and Flamini et al. (2009) who found that private banks have better performance rather than government banks which are controlled by government. This result is also different from Hadad et al. (2003), Fernandez et al. (2005) and Chantapong (2005)

Table 2. The results of using the random effect analysis

Variable	ROA	ROE
Constant	–0.1089 (0.0938)*	0.3387 (0.6816)
DGOVERNMENT	0.0233 (0.1004)	0.3202 (0.0639)*
DBPD	0.0256 (0.0001)***	0.1121 (0.1420)
DDEVISA	0.0052 (0.4095)	0.0001 (0.9986)
DEQUITY	–0.0112 (0.1134)	–0.1411 (0.1047)
DCRISIS	0.0018 (0.7703)	–0.0824 (0.2762)
ECONOMIC	0.0010 (0.0540)*	–0.0067 (0.2818)
EQUITY	0.4544 (0.0000)***	0.6953 (0.0639)*
LOAN	–0.0006 (0.8853)	0.0071 (0.8797)
COST	–0.2381 (0.0000)***	0.8070 (0.0077)***
DEPOSIT	0.0020 (0.0096)***	–0.0004 (0.9670)
ASSET	0.0026 (0.2407)	–0.0110 (0.6960)
R-squared	0.6310	0.0302
Adjusted R-squared	0.6264	0.0177
Durbin – Watson	1.8958	2.0851
Total data	888	869

who found that the ownership structure of a bank has no influence or insignificant influence on bank performance.

ROA is not affected by foreign bank dummy (DDEVISA). The result of the research does not change even if the data is divided into crisis time and outside crisis time. This result showed that foreign exchange banks cannot improve their performance in offering foreign exchange services such as transfer money to abroad, foreign exchange trading and letter of credit. These results are similar to Febriyani and Zulfadin (2003), Lestari and Sugiharto (2007), Kirana (2009), and Hosniah and Prihartoro (2010).

The financial crisis dummy variables (DCRISIS) have a significant negative effect on the rate of five percent on ROA. This result indicates that financial crisis could reduce the bank performance of 1.18 percent. The financial crisis will give effect to the borrower. Individuals may lose their jobs while the company will suffer a loss. This will increase the amount of bad debts and reduce bank profitability. The financial crisis had led to the banks in Indonesia are having financial difficulties and declining profits. The financial crisis also led to the change in composition of private and government banks. The government has acted to liquidate 16 banks in 1997, 38 banks in 1999, and suspended the operation of 7 banks in April 1998. At the same time, the public trust in the banking system has declined, especially after the government revoked the operating licenses of 16 banks in November 1997. These results are consistent with Reynold et al. (2000), Davydenko (2010), Sufian and Habibullah (2010), and Sufian (2010).

Economic growth variable (ECONOMIC) does not affect ROA in method of random effect. This indicates that the higher the economic growth, the higher the bank performance because the economic activity is using banks as a place to taking loan. In the growing economics, the companies have ability to pay their loan. This result is similar to Demirguc-Kunt and Huizinga (2000), Bashir (2003), Fernandez et al. (2005), Boubakri et al. (2005), Wong et al. (2007), Iannotta et al. (2007), Althanasoglou et al. (2008), Flamini et al. (2009), Mashharawi and Al-Zu'bi (2009), Davydenko (2010), Ali et al. (2011), Gul et al. (2011), Mirzaei et al. (2011), Said and Tumin (2011), Trujillo-Ponce (2011) and Sufian and Habibullah (2012).

Total equity to total asset ratio (EQUITY) has a positive influence on ROA. This indicates that the bank which has greater equity ratio is more ready and prepared to face the changes in economic condition. The large of capital bank can reduce the bankruptcy cost and bank can provide a loan in lower cost. In addition, the large of capital bank can take the opportunity when the economic condition is good, for instance, the bank can increase the total amount of loans and increase their profitability because in good economic condition, most likely customers have ability to pay their debt. This research is consistent with research by Demirguc-Kunt and Huizinga (2000), Pasioras and Kosmidou (2007), Iannotta et al. (2007), Athanasoglou et al. (2008), Sufian (2010), Davydenko (2010), Sastrosuwito and Suzuki (2012), Ramadan (2011) and Sufian and Habibullah (2012).

Operating cost to total asset ratio (COST) has negative influence and significance at one percent level on ROA. This result showed that operating cost plays an important role in determining the bank performance or ROA. The banks which cannot control their operating costs will have a lower rate of profit. This result is similar to that by Beck et al. (2005), Althanasoglou et al. (2008), Mashharawi and Al-Zu'bi (2009), Davydenko (2010) and Mirzaei et al. (2011).

Deposit to loan ratio (DEPOSIT) has positive influence and significance at one percent level on ROA. This is contrary to prediction because loan interest rate is greater than deposit interest rate.

Total assets (ASSET) have positive influence and significance at one percent level on ROA. This indicates that the larger bank has better performance and lower costs because of economic scale. In addition, the larger bank can divide a source of income by taking advantage from several types of investment opportunities. For instance, a large bank could take a riskier project or give a loan for a large company. The research result indicates that the size of a company has a positive effect on performance. This result is similar to research result conducted by Mamatzakis and Remoundos (2003),

Bashir (2003), Hassan and Bashir (2005), Kosak and Cok (2008), Alexiou and Sofoklis (2009), Mashharawi and Al-Zu'bi (2009), Flamini et al. (2009), Naceur and Goaied (2008), Barry et al. (2011), Mirzaei et al. (2011) and Riewsathirathorn et al. (2011).

CONCLUSION

This study has examined the static effect of ownership structure on bank performance in Indonesia over the period 1995–2006. The result of this research revealed that the BPD performed better compared to private banks. This indicates that BPDs have better performance rather than private banks which is caused by the fact that customers can be able to pay loans, they have special knowledge on that area and the performance of BPD is supervised by local government. In addition, the amount of equity, economic growth, financial crisis, and the financial ratios affect the performance of the bank. However, bank status has no effect on bank performance.

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