Determinants of Bank Performance in Indonesia: evidence Rural Banks in Pekanbaru City

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Abstract

The purpose of study to find out how big the financial ratios related to Non Performing Loan (NPL), Operating Expense to Operating Income (OEOI), Loan to Deposit Ratio (LDR), and Capital Adequacy Ratio (CAR) in terms of affecting profitability that occurred in Rural Banks in Pekanbaru City. The population in this study using Rural Banks in Pekanbaru City since 2012 until 2015. The number of Rural Banks in Pekanbaru City as many as 19 RB. Of the total population is taken a sample by using purposive sampling method based on certain criteria. From the sampling criteria can be obtained the number of Rural Banks that meet the criteria of 13 RB. The result of study that operational risks proxied through BOPO variables have a negative and significant impact on Return On Assets (ROA), is due to high operational costs of BR is still not working efficiently, thus lowering ROA. liquidity risk proxied through LDR variable has a positive and significant impact on profitability BR. This indicates that any increase in LDR will be followed by

increased profitability, where as the amount of credit disbursed increases, the income from

such credit will increase so that the bank's ability to earn profit is also increasing.

Keywords: bank performance, Rural Banks and Return On Assets

1.Introduction

These two types of banks can be found in most countries in the world. There are private owned banks and government owned banks, but the uniqueness of Indonesian banking system is that there is another owned banks category, which is called the rural banks (bank perkereditan rakyat, BPR). One form of microfinance institutions (MFIs) for

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poverty reduction is a Rural Bank or hereinafter referred to as RB. RB as one of the banking institutions has an important role in supporting the economy of Indonesia. One role of RB is difficult to help people who have access to bank lending public funds so that people do not need to borrow money from moneylenders.

RB also participate in supporting the development of Small and Medium Enterprises (SMEs) in Indonesia, which became one of the largest business sectors in Indonesia, is assisting the government in job creation. RB role here is to help the development of SMEs through lending capital raised from public funds; RB should improve their business performance. With good financial performance, the public confidence in the RB as financial institutions collector and distributor of funds will also be higher. RB in Indonesia exist in every district. RB has two systems, namely Islamic banking and conventional banking. Hence this study will try to identify whether the bank system pattern will affect the bank performance. Why the rural bank performance at Pekanbaru? These are the questions that the study wishes to answer.

The development of Rural Banks in Pekanbaru City is very fast nowadays, because of the increase of bank units. BR is one of the business entities that provide banking services to micro, small and medium enterprises. Increasingly, the increasing credit units, time deposits, savings deposits, and withdrawals of funds in the bank, thus raising a risk faced by rural banks, the risks that may occur are credit risk, operational risk, and liquidity risk, these risks will cause losses to the bank if not managed properly.

Based on these developments, people and investors can measure financial performance through the financial statements of Rural Banks. The financial performance of a company is often measured by how the ability of a company to generate profits. From a management point of view, the ratio of Retrun On Assets (ROA) is seen as a useful measure because it indicates how well the management utilizes the total resources owned by the company to generate profits. Profitability ratios used are Return On Assets (ROA) which is the ratio of net profit before tax to total assets. The greater the ROA, the greater the profitability which means the better the company's performance, the performance of rural banks experienced fluctuations (not fixed) income or profit every year. The following data Ratio Profitability Rural Bank In Pekanbaru City.

Research on the influence of financial ratios on previous profitability has been done by several other studies. From the results of this study seen the difference in the influence of financial ratios to the level of profit gain. RB looks still cannot maximize profitability, it is seen from ROA ratio obtained is still below the minimum limit set by the bank Indonesia is 1.5%. Return On Asset at Rural Banks is currently experiencing fluctuations from year to year, this is due to the unstable growth in profit at the Rural Bank. The decline in earnings in Rural Banks is due to high credit failure, and the bank's operational expenses are too large and inefficient.

Therefore, this study aims to find out how big the financial ratios related to Non Performing Loan (NPL), Operating Expense to Operating Income (OEOI), Loan to Deposite Ratio (LDR), and Capital Adequacy Ratio (CAR) in terms of affecting profitability that occurred in Rural Banks in Pekanbaru City.

2. Review of Literature

2.1. Financial Intermediary Theory

The main function of the bank is as a financial intermediary where the bank will sell a financial claiming product on the bank such as savings account and current account. At the same time, banks will also purchase financial products such as mortgages, business loans and personal loans. With this activity the financial transfers occur from units with surplus funds to units with insufficient funds through financial intermediaries. Financial intermediaries have advantages over individual or non-financial companies due to three factors. First, financial institutions or intermediaries can reduce transaction costs such as search costs, information costs and contract costs. The cost of information exists because there is one party who does not know exactly about the information related to the other party.

There are two situations of asymmetric information in financial markets ie adverse selection, which occurs before a transaction occurs, and the moral hazard, which arises after a transaction (Allen & Santomero, 1998). Adverse selection occurs when the surplus unit has no accurate information regarding unit deficit. Therefore, the lack of information about the deficit unit will expose the surplus unit to greater risk if the surplus unit lend to a deficit unit. Financial institutions through experience can reduce the adverse selection problem.

Moral hazard refers to the misuse of the loan obtained by the deficit unit where the deficit unit will use the loan for a more risky and different purpose than the stated purpose

of the loan application. Financial institutions can mitigate moral hazard problems through loan contracts and oversight over the operations of deficit units.

The advantage of the second financial institution is that financial institutions can enjoy economies of scale as financial institutions have the ability to handle large and large-scale transactions. Therefore, financial institutions can reduce the fixed cost for each unit of output. Thirdly, since financial institutions have the advantage of evaluating a decent loan deal, it ensures that the loan issued will have a lower risk. Furthermore, financial institutions will manage a large amount of loans. Thus, financial institutions can diversify their portfolio and thus reduce the risk of such financial institutions. This is different from those of non-financial intermediaries or companies who do not have the skills in assessing a loan and do not have a large capital to diversify their portfolio.

2.2. Agency Theory

In the area of study of the influence of ownership on bank performance, the most frequently used theory is agency theory. Agency theory describes the relationship between the owner as a principal and manager as an agent. The relationship is very important because it affects the performance of a bank. Thus the competitiveness of a bank depends largely on the ability of managers to manage their respective banks. In addition to the magnitude of the role of managers in managing the bank in order to perform well, the role of the bankers is also vital for monitoring and ensuring that managers are working hard to advance the bank under its management.

Therefore, in the relationship between the bank owner and the manager usually there will be a performance contract where the bank owners are aligning the interests of the manager with the interests of the bank's owner. Performance contracts are formed so that rewards received by managers are closely linked to bank performance. The contractual relationship between the owner and the manager is in line with agency theory (Jensen & Meckling, 1976). Jensen and Meckling (1976) reveal that the difference in importance between owners and managers that creates an agency conflict occurs because the manager does not hold company shares or has insufficient ownership.

The concept of agency as disclosed by Jensen and Meckling (1976) can be seen in the results of the study of Berger and Bonnaccorsi (2006), Basu et al. (2007) and Sulivan and Spong (2007) which indicate that bank owners are handing over to the manager as an agent to manage the bank. This is because the owner has difficulty managing the company directly because of the following factors. First, the size of a growing bank will be difficult to manage. Second, the need for specialized expertise to manage large banks and generally the owners have no such expertise. Third, bank ownership is determined by the number of shareholders. If the number of shareholders is too high and each person holds a small number of shares then this situation does not allow all owners to manage the activities of banks effectively.

The manager can be seen as an agent by the bank owner who appoints them and is authorized and responsible for making the best decisions in the interest of shareholders.

One way to measure success and efficiency of managers is to look at the profitability of the

bank. Performance can be measured through bank's ability to secure a stable profit while at the same time maintaining shareholder wealth increase in the company.

Berger and Bonnaccorsi (2006) point out that managers may ignore the interests of shareholders, instead paying attention to their interests such as job continuity, luxury lifestyle, professional membership, personal vehicle facilities, all of which are borne by the company. Shleifer and Vishny (1997) stipulate to address agency issues, shareholders have incentives to monitor managers so as to minimize the problem of principal-agents. However, the level of incentives depends on shareholder ownership. If the owner holds a small number of shares, the owner will not have the incentive to monitor the manager's behavior. This is because the profit earned by the owner is less than the cost of supervision. Therefore, it is expected that private banks, most of which are owned by a family, will have a better performance compared to government-owned banks.

For a bank that is largely owned by the family, conflicts between bank owners and managers are rare. Arifin (2003) notes that when a majority of the shares are owned by the family, it reduces the agency's problems compared to companies owned by many shareholders. In Indonesia, 90 percent of the company's shares are owned and operated by a family. This situation is not much different from other countries such as Spain (La Porta et al., 1999). Arifin (2003) states that the advantages of a family owned and operated company are family members will manage the company and this will reduce agency problems. However, because a family is also a manager of the company, the agency problem will arise between the family, as a majority shareholder and a minority shareholder. In addition, according to Allen et al. (2011) bank capital also affects the

performance of a bank. Due to the large capital of private banks in Indonesia issued by individuals or families, they have higher incentives to monitor loans issued due to bank performance and their wealth will be affected by repayments

and management do not hold any shares in the company. This causes the company's performance to be affected (Megginson, et al, 1994; Megginson & Netter, 2001). The agency problem in the context of government ownership is more complicated as the government holds shares in the company on behalf of the public or the people. Since governments are led by politicians who have no ownership in these companies, they may not monitor the actions of the board of directors or management. In addition, the objective of a politician who leads a government may differ from an individual who owns a business. Shleifer (1998) and La Porta et al. (2002) states that governments tend to meet political goals that may negatively affect the financial performance of the company. This view is supported by Paskelian (2006) and Xu and Wang (1999) stating that the company becomes inefficient due to an agency problem arising from government political motives. In addition, government-owned banks may have lower profits because they finance a project that does not bring financial gain but brings social benefits.

The study Berger and Bonaccorsi (2006), Mashharawi and Al-zu'bi (2009), Barry et al. (2011), Hoffmann (2011), Gul et al. (2011) and Trujillo-Ponce (2011) found that the ratio of equity have negative influence on ROE. This suggests that the cost of the agency consistent with the theory that the increased use of debt to increase ROE. Meanwhile Mashharawi and Al-Zu'bi (2009), Alexiou and Sofoklis (2009), Sufian (2010), Davydenko

(2010), Sufian and Majid (2010), Barry et al. (2011), Javaid et al. (2011), Ramadan (2011), Riewsathirathorn et al. (2011) and Sufian and Habibullah (2012) found that the ratio of equity have a positive influence on ROA. This shows the high equity ratio to increase banks' ability to overcome the loss of assets, including loans, increase the income of the bankruptcy cost reduction, higher gain if do offer some product expansion in profitable bank. High equity can reduce the amount of outside capital requirement which is higher than the cost of equity capital to be able to reduce bank profits.

Sufian (2011) and Trujillo-Ponce (2011) found that the ratio of loans to assets have positive influence on ROA and ROE. While Mamatzakis and Remoundos (2003), Staikouras and Wood (2005), Fernandez et al. (2005), Trivieri (2007), Mashharawi and Alzu'bi (2009) and Gul et al. (2011) found that the ratio of loans have a positive influence on the ROA. Demirguc-Kunt and Huizinga (2000) Kosmidou et al. (2007), Garcia-Herrero et al. (2009) and Javaid et al. (2011) found that the ratio of loans to assets have an influence on ROA.

The findings Beck et al. (2005), Mashharawi and Al-zu'bi (2009) and Mirzaei et al. (2011) found that the ratio of operating costs to total assets has a negative influence on ROA and ROE. Meanwhile Kosmidou et al. (2007) showed that the ratio of operating costs to total assets has no influence on ROA.

3. Data and Methods

The population in this study using Rural Banks in Pekanbaru City since 2012 until 2015. The number of Rural Banks in Pekanbaru City as many as 19 RB. Of the total population is taken a sample by using purposive sampling method based on certain criteria. From the sampling criteria can be obtained the number of Rural Banks that meet the criteria of 13 RB. Multiple linear regression equation as follows:

$$Y = \alpha + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + \varepsilon$$

Y = ROA

X1 = Credit Risk (NPL)

X2 = Operational Risk (OEOI)

X3 = Liquidity Risk (LDR)

 X_4 = Capital Adequacy Ratio (CAR)

 $\varepsilon = Residual$

4.Result and Discussion

Table 1
The result Regression
Dependent Variable: ROA

	Unstandardized Coefficients		Standardized Coefficients		
M - 1-1	D	Std.	D-4-	4	Q:-
Model	В	Error	Beta	t	Sig.
1 (Constant)	13.216	.932		14.180	.000
NPL	.002	.041	.004	.050	.961
OEOI	138	.011	978	-12.101	.000
LDR	.015	.005	.202	3.253	.002
CAR	016	.019	068	838	.406

Based on the results if statistical data can be seen that the credit risk proxied through NPL has a positive but not significant effect on profitability of BR. This indicates that the RB has other income that can overcome the losses of NPLs.

Based on the results of processed statistical data can be seen that operational risks proxied through *OEOI* variables have a negative and significant impact on ROA, is due to high operational costs of BR is still not working efficiently, thus lowering ROA. The results of this study in consistent with previous research is Beck et al. (2005), Mashharawi and Al-zu'bi (2009) and Mirzaei et al. (2011) Luh and Ni Luh (2013).

Based on the results of processed statistical data can be seen that liquidity risk proxied through LDR variable has a positive and significant impact on profitability BR. This indicates that any increase in LDR will be followed by increased profitability, where as the amount of credit disbursed increases, the income from such credit will increase so that the bank's ability to earn profit is also increasing. The results of this study are consistent with previous research of Sufian (2011) and Trujillo-Ponce (2011) found that the ratio of loans to assets have a positive influence on ROA and ROE. While Mamatzakis and Remoundos (2003), Staikouras and Wood (2005), Fernandez et al. (2005), Trivieri (2007), Mashharawi and Al-zu'bi (2009) and Gul et al. (2011) and Si Luh and I Gusti (2014).

Based on the results of research, CAR has negative and insignificant effect on Return On Assets (ROA). This is caused by the increase in own capital cannot increase credit. The results of this study are inconsistent with previous research such as Mashharawi and Al-Zu'bi (2009), Alexiou and Sofoklis (2009), Sufian (2010), Davydenko (2010), Sufian and Majid (2010), Barry et al. (2011), Javaid et al. (2011), Ramadan (2011), Riewsathirathorn et al. (2011), Sufian and Habibullah (2012) and Si Luh and I Gusti (2014) found that the ratio of equity have a positive influence on ROA.

Conclusion

In this study, we examine the Rural Banks in Pekanbaru City performance of community development banks in Indonesia from 2012 to 2015. Our study uncovers interesting results. We find that the the result of study that Based on the results if statistical data can be seen that the credit risk proxied through NPL has a positive but not significant effect on profitability of BR. Operational risks proxied through OEOI variables have a negative and significant impact on Return On Assets (ROA), is due to high operational costs of BR is still not working efficiently, thus lowering ROA. liquidity risk proxied through LDR variable has a positive and significant impact on profitability BR. This indicates that any increase in LDR will be followed by increased profitability, where as the amount of credit disbursed increases, the income from such credit will increase so that the bank's ability to earn profit is also increasing. CAR has negative and insignificant effect on Return On Assets (ROA). This is caused by the increase in own capital cannot increase credit.

DAFTAR PUSTAKA

- Alexius, C., & Sofoklis, V. (2009). Determinant of bank profitability: Evidence from the Greek banking sector. *Economic Annals, LIV*(182), 93-118.
- Allen, F., & Santomero, A. M. (1998). The theory of financial intermediation. *Journal of Banking and Finance*, 21(11), 1461-1485.
- Allen, Franklin, Carletti, E., & Marquez, R. (2011). Credit market competition and capital regulation. *Review of Financial Studies*, *24*, 983-1018.
- Arifin, Z. (2003). Efektifitas Mekanisme Bonding Dividen dan Hutang untuk Mengurangi Masalah Agensi Pada Perusahaan di Bursa Efek Jakarta. *Jurnal Siasat Bisnis*, 1(8), 19-31.
- Barry, T. A., Lepetit, L., & Tarazi, A. (2011). Ownership structure and risk in publicly held and privately owned banks. *Journal of Banking and Finance*, *35*, 1327-1340.
- Basu, S., Hwang, L. S., Mitsudome, T., & Weintrop, J. (2007). Corporate governance, top executive compensation and firm performance in Japan. *Pacific-Basin Finance Journal*, 15, 56-79.
- Berger, A N., & Bonaccorsi. E. P. (2006). Capital structure and firm performace: A new approach to testing agency theory and an application to the banking industry. *Journal of Banking and Finance*, 29, 1065-1102.
- Davydenko, A. (2010). Determinants of bank profitability in Ukraina. *Undergraduate Economic Review*, 7(1), 1-30.

- Demirgüç-Kunt, A., & Huizinga, H. (2000). Determinants of commercial bank interest margins and profitability: Some international evidence. *World Bank Economic Review*, 13(2), 379-408.
- García-Herrero A., Gavilá S., & Santabárbara, D. (2009). What explains the low profitability of Chinese banks?. *Journal of Banking and Finance*, *33*(11), 2080-2092.
- Gul, S., Irshad, F., & Zaman, K. (2011). Factors Affecting bank profitability in Pakistan. *The Romanian Economic Journal*, 39, 61-87.
- Hoffmann, P. S. (2011). Determinants of the profitability of the US banking industry, International. *Journal of Business and social science*, 2(22), 255-269.
- Javaid, S., Anwar, J., Zaman, K., & Gafoor, A. (2011). Determinants of bank profitability in Pakistan: Internal factor analysis. *Mediterranean Journal of Social Sciences*, 2(1), 59-78.
- Javaid, S., Anwar, J., Zaman, K., & Gafoor, A. (2011). Determinants of bank profitability in Pakistan: Internal factor analysis. *Mediterranean Journal of Social Sciences*, 2(1), 59-78.
- Jensen, M., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency cost and ownership Structure. *Journal of Financial Economics*, *3*, 305-360.
- Kosmidou, K., pasiouras, F., & Tsaklanganos. A. (2007). Domestic and Multinational determinants of Foreign bank profits: The case of Greek banks operating abroad.

 *Journal of Multinational Financial Management, 17, 1-15.

- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. R. (2002). Government ownership of banks. *Journal Finance*, *57*, 265-302.
- La porta, R., Loperz-de-silanes, F., & Shleifer, A. R. (1999). Corporate Ownership Around The World. *Journal of finance*, *54*, 471-517.
- Mamatzakis, E. C., & Remoundos, P. C. (2003). Determinants of Greek commercial banks profitability 1989-2000. *SPOUDAI*, *53*(1), 84-94.
- Mashharawi, F.Y., & Al-Zu'bi, K. (2009). The determinants of bank's profitability: Evidence from the Jordanian banking sector (1992-2006). *Jordan Journal of Business Administration*, 5(3), 403-414.
- 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.
- 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.
- 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.
- Ramadan, I. Z. (2011). Bank specific determinants of Islamic banks profitability: An empirical of the Jordanian market. *International Journal of Academic Research*, *3*(6), 73-80.

- Riewsathirathorn, P., Jumroenvong, S., & Jiraporn, P. (2011). The impact of ownership concentration on bank performance and risk-taking: Evidence from East Asia.

 Retrieved March 8, 2011 from https://docs.google.com/viewer? a=v&q= cache: FKCwgmi4x0AJ:www.bus.tu.ac.th/uploadPR/web.
- Shleifer, A. (1998). State versus private ownership. *Journal of Economic Perspectives*, 12, 133-150.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *Journal of Finance*, 52, 737-783.
- Staikouras, C., & Wood, G. (2005). The determinants of bank profitability in Europe.

 International Business & Economics Research Journal, 6(3), 56-68.
- Sufian, F. (2010). Developments in the profitability of the Thailand banking sector: panel evidence from the post Asian crisis period. *International Journal Economics and Accounting*, I(1/2), 161-179.
- Sufian, F., & Habibullah, M. S. (2010). Assessing the impact of financial crisis on bank performance empirical evidence from Indonesia. *ASEAN Economic Bulletin*, 27(3), 245-62.
- Sufian, F., & Majid, M. Z. A. (2010). The nexus between economic freedom and Islamic bank performance: Empirical evidence from MENA banking sectors. 8th *International Conference in Islamic Economics and Finance (1-18)*. Qatar: Qatar Faculty of Islamic Studies.

- Sullivan, R. J., & Spong, K. R. (2007). Manager wealth concentration, ownership structure and risk in commercial banks. *Journal of Financial Intermediation*, *16*, 229-248.
- Trivieri, F. (2007). Does cross-ownership affect competition? Evidence from the Italian banking industry. *International Financial Markets, Institutions and Money, 17*, 79-101.
- Trujillo-Ponce, A. (2011). Why are (or were) Spanish banks so profitable. *European Financial Management Association 2011 Annual Conference*. Sevilla: Pablo de Olavide University.
- Xu, X. and Wang, Y. (1999). Ownership Structure and Corporate Performance in Chinese Stock Companies. *Chinese Economic Review*, 10, 75-96.