Vol. 2, No. 06; 2018

ISSN: 2456-7760

# BANK SOUNDNESS ACCORDING TO 'RISK BASED BANK RATING' AND ITS PERFORMANCE IN INDONESIA

## Sutrisno Universitas Islam Indonesia

#### Abstract

In accordance with the Regulation of Bank Indonesia No. 13/1/PBI/2011, the soundness of the bank in Indonesia is assessed using a risk based bank rating consisting of a risk profile, good corporate governance, earnings and capital (RGEC). The purpose of this study is to examine the influence of risk profile, GCG, earnings and capital on bank performance. Bank performance was measured by ROA and risk profile consisting of credit risk measured by non-performing loan (NPL) and liquidity risk measured by loan to deposit ratio (LDR), GCG was measured by the value of self-assessment, earning was measured by operational efficiency ratio (OER) and capital was measured by capital adequacy ratio (CAR). The population in this study was conventional banks listed on the Indonesia Stock Exchange with the four years observation period (2014-2017). The analysis used was multiple regression with the help of SPSS version 21 data programming. The results of the study showed that credit risk (NPL) and capital (CAR) had no influence on bank performance, while liquidity risk (LDR) had a significant and positive influence on bank performance and OER had a significant but negative influence on bank performance. Good corporate governance (GCG) also had a significant and positive influence on bank performance.

**Keywords:** Risk profile, bank performance, non-performing loan, loan to deposit ratio

## **BACKGROUND**

A bank is an institution that has a central role in the country's economy and is expected to play an active role in supporting development activities both in national and regional. This role can be seen from its main function as a financial intermediary between debtors and creditors. Economic actors can use the bank to fulfill their funding needs in order to support their activities so that they can drive the economy. Government banks that are established also aim to participate in advancing the country's economy.

As a financial intermediary, the largest source of banking funds comes from the community. Thus, the public trust in the bank must be maintained. To maintain public trust, the government through the Financial Services Authority (OJK) regulates the soundness of banks. Analysis of the soundness level of commercial banks which is originally based on CAMELS is amended by Bank Indonesia (BI) with the Regulation of Bank Indonesia No. 13/1/PBI/2011 where the bank soundness is measured based on risk which consists of risk profile, good corporate governance, earnings, and capital or often called RGEC.

The risk profile consists of credit risk and liquidity risk. Credit risk is the risk faced if the loansgranted is having problems both interest payments and principal installments. Credit risk is indicated by non-performing loans (NPL) that is the amount of problem loans compared to loans. The amount of NPL shows the amount of the loss as a result of the loans not being paid.

Vol. 2, No. 06; 2018

ISSN: 2456-7760

Purwoko and Sudiyatno (2013) and Hutagalung etal.,(2011) measure the credit policy with non-performing loans (NPL). The research from Frederick (2014) and On gore and Kusa (2013) also measure the same thing. However, the risk of liquidity is the risk faced by banks if the public withdraws their funds at any time. The bank must prepare sufficient funds to anticipate the withdrawals of the community at any time and the credit commitment that has been promised to the customer. To measure liquidity, the loan to deposit ratio (LDR) is used, which is the amount of loans granted compared to the amount of third-party funds. The greater the LDR indicates the higher the loans grantedso that it is increasingthe profits, but has a higher risk. Hutangalung etal. (2011) and Margaretha and Zai (2013) use LDR as a measure of liquidity policy. Gul etal., (2011) and Javaid etal., (2011) also used it.

Bank is a business that is full of risks because if there is a bank that is bankrupt, it is likely to have a systemic impact on other banks. Therefore, bank management is required to use good governance or must implement good corporate governance (GCG). With GCG, it is expected that the public will trust the bank more. It is in line with the finding from of Bhagat and Bolton (2008), Aggarwal (2013) and Ahmed and Hamdan (2015) who find a positive influence between the application of GCG and bank performance.

Earning shows the bank's ability to obtain profits which in this case is measured by its operational efficiency, that is the comparison of the operating costs with operating income (OER).OER is used as a proxy because the lower the OER, the higher the level of profit become. Therefore, the bank is expected to be able to suppress OER as low as possible so that it can improve its performance. Kristianti and Yofin (2016), Margaretha and Zai (2013) find a negative influence between OER and bank performance. Moreover, Hutagalung (2013) and Purwoko and Sudiyanto (2013) also find the same thing in Indonesia.

Bank managers are required to manage capital which is measured by a capital adequacy ratio (CAR). Bank Indonesia sets a minimum CAR of 8% in accordance with the regulations of the Bank for International Settlement (BIS). The greater the CAR indicates that the banks are getting healthier so that they are expected to improve their performance. Research conducted by Almazari (2014) and Gul etal., (2011) as well as Lelissa (2014) measures the capital policy bythe capital adequacy ratio (CAR).

# THEORETICAL FRAMEWORK AND HYPOTHESIS Risk profile and performance

The firstmeasurement of bank soundness with the RGEC modelis a risk profile consisting of credit risk and liquidity risk. Credit risk is the risk that the bank will bear if the bank fails to collect the loans granted. Expansive lending will indeed increase the banking profitability, but it can also have an impact on the increasing amount of problem loans. The credit risk must be controlled so that it can reduce the amount of problem loans that are measured by non-performing loans (NPL). Management must be able to maintain the NPL not exceeding the provisions imposed by Bank Indonesia, which is a maximum of 5% because the higher the NPL, it will reduce its level of profitability. Purwoko and Sudiyatno (2013) find that in commercial banks in Indonesia, NPL has a significant and negative influence on bank performance. Moreover, Frederick (2014) also find a negative and significant influence between NPL and

Vol. 2, No. 06; 2018

ISSN: 2456-7760

performance. However, Hutagalung etal., (2011) and Ongore etal., (2013) find no significant influence between NPL and bank performance.

 $H_1$ : Credit risk measured by the NPL has a negative influence on bank performance

The second measurement of the risk profile is the risk of bank liquidity measured by loan to deposit ratio (LDR), that is the ratio between the amount of the loans grantedandthe third-party funds. The government through OJK regulates an ideal LDR between 75%-90%, public funds obtained by the bank shallnot all be granted as loans. Therefore, if the community withdraws the funds, there is still a remainder. The largest income of the bank comes from interest, so if you want high income, you must increase the LDR. However, if the LDR is too high, it will risk theliquidity that isthe funds' withdrawal at any time. The greater the LDR, the greater the loans granted so that it will increase interest income which will ultimately increase profitability. Margaretha and Zai (2013) find that LDR has a positive and significant influence on bank performance. Javaid etal., (2011) Gul etal., (2011), and Almazari (2014) also find a positive influence between LDR and bank performance.

 $H_2$ : Liquidity risk measured by LDR has a positive influence on bank performance

#### Corporate governance and bank performance

Banking business is a trust business because most bank funds come from the community. To be trusted, the bank must be able to properly manage or implement good corporate governance. Governance process includes bank compliance function, handling conflict of interest, application of internal and external audit functions, application of risk management including an internal control system, provision of funds to related parties and big funds and bank's strategic plan. The final aspects of governance output include transparency of financial and non-financial conditions, GCG implementation reports that fulfill the principles of Transparency, Accountability, Responsibility, Independence and Fairness (TARIF). The higher the value of Self-Assessment of GCG will improve the bank performance. Bhagat and Bolton (2008) and Aggarwal (2013) find a positive influence between corporate governance and company performance. Moreover, Ahmed and Hamdan (2015) in Bahrain also identified a positive influence between corporate governance and company performance.

*H*<sub>3</sub>: Corporate Governance has a positive influence on bank performance

#### Earning andbank performance

Earning is the bank's ability to generate profits that can be measured by return on assets (ROA) and net interest margin (NIM). However, this profitability also depends on the amount of costs incurred by the bank. The costs incurred arein the form of interest costs and overhead costs that are indicated by the operating efficiency. Efficiency can be measured by the operational efficiency ratio (OER). The Bank strives to keep operating costs as small as possible so that OER gets smaller because with the smaller OER, it shows that the banks becomemore efficient. The more efficient the bank, it will increase the profit of the bank so that it can improve its performance. Margaretha and Zai (2013)), Purwoko and Sudiyanto (2013) and Hutagalung etal., (2011) find a significant and negative influence between OER and ROA. Moreover, Frederick

Vol. 2, No. 06; 2018

ISSN: 2456-7760

(2014), Obamunyi (2013) as well as and Ongore and Kusa (2013) also find a significant and negative influence between OER and bank performance.

H<sub>4</sub>: The efficiency measured by OER has a positive influence on bank performance

## Capital and bank performance

Bank capital is an important element in a company, especially banking, because this capital is an asset to cover losses experienced by banks. Bank capital as measured by the capital adequacy ratio (CAR) by the government is set at a minimum of 8%. The higher the CAR shows the better the bank. Margaretha and Zai (2013) who studied banking in Indonesia find a positive influence between CAR and bank performance. Almazari (2014) and Javaid etal., (2011) also find a positive influence between capital and bank performance.

H<sub>5</sub>: Capital policy measured by CAR has a positive influence on bank performance

#### RESEARCH METHODS

### **Population and Sample**

The population in this study were banks listed on the Indonesia Stock Exchange with a sample of 24conventional banks taken by purposive sampling technique. The observation period was for 4 years with the 2013-2016 period.

#### Research variable

The variables in this study consisted of dependent variable that was bank performance that was measured by ROA and independent variables in the form of RGEC elements which consisted of risk profile (NPL and LDR), good corporate governance (GCG), earnings (OER) and capital (CAR). The measurement of variables is summarized in table 1 below.

No Variabel Notation Pengukuran Return on Asset **ROA** EAT/Total Assets NPL Problem loan/total credit Non Performing Loan 3 Loan to deposit Ratio LDR Total Loan/Third-party fund 4 Capital Adequacy Ratio CAR Equity/risk-weighted averaage Operating Expense OER Operating expenses/Operating Income ratio income 6 Good corporate GCG Self-assessment Governance

Table 1: Variable measurement

Vol. 2, No. 06; 2018

ISSN: 2456-7760

## RESEARCH RESULTS AND DISCUSSION

## **Descriptive Statistics**

The data that had been collected and tabulated was then processed with the SPSS program that produced the following data description:

Table 2: Descriptive Statistics

	N	Minimum	Maximum		Std. Deviation
ROA	96	1.02	5.15	3.0922	1.12408
NPL	96	.31	3.83	1.2103	1.10504
LDR	96	67.93	112.27	89.6711	11.29953
CAR	96	14.33	22.91	17.3444	2.03532
ВОРО	96	57.46	89.91	72.1076	8.67345
GCG	96	1.00	3.00	1.6294	.49425
Valid N (listwise)	96				

Source: Data processed

Profitability measured by ROA showed a minimum value of 1.02% and a maximum of 5.15 with an average of 3.09%, which meant that the banks taken as a sample produced positive profitability. The NPL as a measure of credit risk showed a minimum of 0.31%, a maximum of 3.83% with an average of 1.21%. This showed that the credit risk was still within reasonable limits because according to NPL regulations, it should not be more than 5%.Bank liquidity measured by the LDR showed a minimum value of 67.93% and a maximum of 112.27% with an average of 89.67%. Judging from the average of LDR, the sample bankswere quite good, although there were banks that had too high of LDR.

Bank capital measured by CAR had a minimum value of 14.33% and a maximum of 22.91% with an average of 17.34%. The CAR of the sample bank was above the minimum requirement of 8%, but the sample banks were less efficient in using the capital because they had a CAR that was too big reaching 22.91%. OER as a measure of cost efficiency showed very good value because it had an average value of 72.1%. The average GCG value of 1.63 showed that the GCG process in the sample bank has been very good, although there were still some banks that produced a value of 3.

## Hypothesis Test Results

To test the hypothesis, multiple regression analysis was used and with the help of the SPSS program, it generated the following hypothesis test:

Table 2: Result of Hypothesis Test

Vol. 2, No. 06; 2018

ISSN: 2456-7760

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	10.395	.741		14.024	.000
	NPL	067	.092	066	729	.468
	LDR	.021	.007	.213	3.000	.003
	BOPO	127	.010	979	-13.157	.000
	CAR	.030	.023	.055	1.343	.183
	GCG	.308	.092	.136	3.364	.001

a. Dependent Variable: ROA *Source: Data porcessed* 

Based on the table above, the credit risk (NPL) producedp-value of 0.468 greater than the significance level required of 5%, so it could be concluded that NPLs had no significant influence on the bank performance. The results showed that NPL did not influence the bank performance. This was because the NPL of the sample bank was very small with an average of only 1.2%, it meant that the bank could control it well. Credit risk as measured by this NPL wasthe risk that was most feared by the bank management because the amount of NPL would directly reduce the level of bank's profit. Therefore, the banks were very careful about lending so that the loans grantedrun smoothly. These results were in accordance with the findings of Hutagalung etal., (2011), and Margaretha and Zai (2013) who examined banks in Indonesia. Moreover, the results were also similar Ongore and Kusa (2013) who examined bank in Kenya. It is also in line with the findings of Tabari et.al (2013) and Javaid (2011).

Liquidity risk measured by the LDR producedp-value of 0.003 smaller than 0.05, it means that LDR had a significant and positive influence on bank performance. The amount of the LDR showed the amount of loans granted, the greater the loans granted by banks, the greater the LDR, if it was not followed by the addition of third-party funds. The amount of loans also showed the amount of bank income because the bank's main income was the interest earned from the loans. If theloan granted was big and the NPL could be controlled, the amount of loanwould increase the profitability so that the bank's performance would improve. This result was in line with the findings of Margaretha and Zai (2013) who found that LDR had a positive and significant influence on bank performance. It was also similar to Javaid etal., (2011) who examined banks in Pakistan. Almazari (2014), Lall (2014) in America, Albera (2012) and Obamuyi (2013) also found the similar results.

The results of hypothesis testing on GCG producedp-value of 0.001 smaller than what was required. Thus, GCG had a significant and positive influence on bank performance. These results indicated that the better governance of a bank made the community to trust the bank. With the community who trusted the banks, the bank's customers would increase and could ultimately improve the bank's performance. The customer wanted a bank that was transparent to its

Vol. 2, No. 06; 2018

ISSN: 2456-7760

management. With self-assessment to the GCG, it was expected that the bankswould be able to assess themselves then to improve themselves. This result was in line with the findings of Bhagat and Bolton (2008) and Aggarwal (2013) who found a positive influence between the application of GCG and bank performance. It was also similar to the finding from Peters and Bagshaw (2014) in Nigeria and Ahmed and Hamdan (2015) who studied companies in Bahrain.

OER as a measure of operational risk producedp-value of 0.000 less than what was required of 0.05 with a negative coefficient, it meant that OER had a significant but negative influence on bank performance. This result meant that the higher OERwould reduce the bank's performance as measured by ROA. Bank managers were demanded by the owners and investors to be able to make a profit because the manager's achievement was measured by the level of profit gained. Indeed, with a small NPL, it showed that the costs derived from the elimination of accounts receivable were so small so that they reduced the operating costs. The operating costs reductionwould increase the company's profits, which in turn would improve the bank performance. Frederick (2014) in Uganda, Tabari etal., (2013) in Malaysia and Obamunyi (2013) who conducted research in Nigeria also found a significant and negative influence between OER and bank performance. Similar results were also found by Kristianti and Yofin (2016), Purwoko and Sudiyatno (2013) and Hutagalung etal., (2011) who conducted studies in Indonesian banking.

Bank capital measured by CAR resultedp-value of 0.183 greater than what was required. Thus, the CAR did not influence the bank performance. CAR showed the amount of capital provided by a bank as a back up if one day experiences a loss. By the financial authority, CAR was determined to be at least 8%. From the banking data, the sample had an average CAR of 17.34% and a minimum of 14.33%. It meant that from the CAR side, all banks were above the provisions. This allowed the CAR to not influence the performance of the bank. The amount of CAR showed that the banks were very careful in managing the risk so that it was far above the provisions. These results supported the findings of Purwoko and Sudiyatno (2013) who conducted research on banks in Indonesia. Gul etal., (2011) and Ndungu etal., (2015) also found a negative but not significant influence on bank performance.

#### **CONCLUSION**

Based on the background, problem formulation, research objectives, hypotheses and results of hypothesis testing, it could be concluded that judging from the risk profile, credit risk measured by NPL did not have a significant influence because the bankcould control this risk, so the NPL was very low. Liquidity risk measured by LDR had a positive and significant influenceso that the bank performance could be improved by increasing the amount of loans granted. OERwas a cost ratiothat had a significant but negative influence, it meant that if the OER of the bank experienced an increase, it would decrease the bank performance. CAR as a measure of bank capital showed an insignificant influence, it meant that the amount of the CAR did not influencethe bank performance, this was because the CAR of the bank has shown a large number so that the capital risk was very small. However, the implementation of GCG in banks showed a positive and significant influence, it meant that banks that implemented good governance would be able to improve their performance.

Vol. 2, No. 06; 2018

ISSN: 2456-7760

This research is certainly far from perfect, but it is expected to be able to give one thought about the bank soundness that is linked to the bank performance. Therefore, it can be further investigated by increasing the number of samples or replacing the variables that are considered less relevant.

#### REFERENCES

- Abera, A,. 2012. Factors Affecting Profitability: An Empirical Study on Ethiopian Banking Indutri. *Thesis.* Addis Ababa University
- Aggarwal, P., 2013. Impact of Corporate Governance on Corporate Financial Performance. Journal of Business and Management. Vol 13(3). 1-5
- Ahmed, E and Hamdan, A. 2015. The Impact of Corporate Governance on Firm Performance: Evidence from Bahrain Stock Exchange. *European Journal of Business and Innovation Research*. Vol.3(5). 25-48.
- Almazari, A.A., 2014. Impact of Internal Factors on Bank Profitability: Comparative Study between Saudi Arabia and Jordan. *Journal of Applied Finance & Banking*, vol. 4, no. 1
- Bhagat. S., and Bolton, B,. 2008. Corporate Governance and Firm Performance. *Journal of Corporate Finance*. Vol 14. 257-273
- Frederick, N.K., 2014. Factors Affecting Performance of Commercial Banks in Uganda: A Case for Domestic Commercial Banks. *Proceedings of 25th InternationalBusiness Research Conference*. 13 14 January, 2014, Taj Hotel, Cape Town, South Africa
- Ghozali, I,. 2005."AplikasiAnalisis Multivariate dengan Program SPSS". Badan Penerbit. Universitas Diponegoro. Semarang.
- Gul, S., Faiza, I dan Zaman, K., 2011. Factors Affecting Bank Profitability in Pakistan. The Romanian Economic Journal. Vol 14. No. 39. 61-87
- Hutagalung, E.N., Djumahir dan Ratnawati, K,.2011. Analisa Rasio Keuanganterhadap Kinerja Bank Umum di Indonesia (Analysis of Financial Ratio to Performance ob Commercial Banking in Indonesia). JurnalAplikasi Manajemen. Vol 11 No 1. 122-130
- Javaid, S., Jamil, A, Khalid Z dan Gafoor, A,. 2011. Determinants of Bank Profitability in Pakistan: Internal Factor Analysis. Mediterranean Journal Of Social Sciences. Vol. 2, No. 1, 59-78
- Kristianti, R.A and Yovin. 2016. Factors Affecting Bank Performance: Cases of Top 10 Biggest Government and Private Banks in Indonesia in 2004-2013. *Review of Integrative Business and Economics Research*, Vol. 5(4). 371-378
- Lall, P. 2014. Factors affecting U.S. Banking Performance: Evidence From the 2007-2013 Financial Crisis. *International Journal of Economics, Finance and Management*.0L. 3(6). 282-296
- Lelissa, T.B. 2014. The Determinants of Ethiopian Commercial Banks Performance. *European Journal of Business and Management*. Vol.6, No.14. 52-62

Vol. 2, No. 06; 2018

ISSN: 2456-7760

- Margaretha, F dan Zai, M.P. 2013. Faktor-Faktor Yang Mempengaruhi Kinerja Keuangan Perbankan Indonesia (Factors Affecting Banking Financial Performance in Indonesia), *Jurnal Bisnis dan Akuntansi*, Vol 15. No. 2. 133-141
- Ndungu, A.J.N., Okibo, W and Nyang'au, A,. 2015. Factors Affecting Performance Of Banking Agents In Kenya: A Survey Of Kisii County. *International Journal of Economics, Commerce and Management United Kingdom*. Vol. 3(10). 559-614
- Obamuyi, T.M,. 2013. Determinants Of Banks' ProfitabilityIn A Developing Economy: Evidence From Nigeria. *Organizations And Markets In Emerging Economies*. Vol. 4, No. 2. 97-111
- Ongore, V.O dan Kusa G.B,.2013. Determinants of Financial Performance of Commercial Banks in Kenya. *International Journal of Economics and Financial Issues*. Vol. 3, No. 1 237-252
- Peters, G.T dan Bagshaw, K.B., 2014. Corporate Governance Mechanisms and Financial Performance of Listed Firms in Nigeria: A Content Analysis. *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics*. Vol 1(3), 103-129
- Purwoko, D dan Sudiyatno,B,. 2013. Faktor-FaktorYang Mempengaruhi Kinerja Bank: Studi Empirik Pada Industri Perbankan Di Bursa Efek Indonesia (Factors Affecting Bank Performance: Empirical Studi on Banking Industry in Indonesian Stock Exchange). *Jurnal Bisnis dan Ekonomi (JBE)*, Vol. 20, No. 1. 25 39