

# ANALYSIS OF BANK HEALTH AT INDONESIA STATE-OWNED BANK USING RGEC METHOD AT BRI, BNI, AND BANK MANDIRI FOR PERIODS 2011-2015

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## ABSTRACT

The objective of this study is to analyze the financial performance of three state-owned banks in Indonesia (BNI, BRI, and Bank Mandiri) for the period of 2011-2015 by using the approach of RGEC (Risk Profile, Good Corporate Governance, Earnings, Capital) method. The analysis tool which is used is the RGEC Method. This study uses descriptive method with quantitative approach. Population for this study are three state-owned banks in Indonesia that already published their financial statement for the period of year 2011 until 2015. The data collecting method used is the documentation method and literature method. Result of the study shows the overall financial performance of these three state-owned banks for the period of 2011-2015 on Risk Profile aspect which is done by analyzing the Credit Risk which is represented by NPL ratio is assessed as healthy, while from the analysis of Liquidity Risk yang which is represented by LDR ratio is also assessed as healthy. Furthermore from the aspect of Good Corporate Governance (GCG), banks performance is rated as very healthy. Overall financial performance from Earning aspect which is calculated by analyzing the NIM and ROA ratio is also assessed as healthy. Finally, the overall financial performance from Capital aspect which is calculated by analyzing the comparison between the capital ratio towards the Risk Weighted Asset (RWA) which is represented by the CAR ratio is assessed as healthy.

**Keywords** : *Bank Health, RGEC Method, BRI, BNI, Bank Mandiri*

## 1. Introduction

One of the factors that contribute into successful economy development is the banking sector stability. Banking sector mainly comprised of bank activities, which include services such as deposit and loans (Helaz, 2014)<sup>[1]</sup>. In accordance to its main function as collector and distributor of funds, banks will always interact with parties with surplus funds and also parties that lacks or in need of funding. Bank as an intermediation institution holds an important role in mobilization of people's fund to be circulated as one of the main funding source for business world, either for investment or production, in order to support economy development. Banks will also try to utilize those collected funds to earn profit for their own.

Rapid development in banking sector in Indonesia creates a tight competition among them (Setiaputra, 2014)<sup>[2]</sup>. As a result, every bank is demanded to give their best services for their customers through their products that give many

privileges without abandoning the survival of their own. In order to do that, a bank needs to show their best performance, have a sense of competitiveness, and also able to maintain level of healthiness by optimally increasing their services in order to gain public trust. Indonesian banks in doing their business activity, which is fulfilling their main function, still experience numerous basic problems even nowadays. There is still considerable amount of banks that unable to maximally utilize their resources.

In Indonesia, banks commonly categorized into 2 types, state-owned banks and private banks. State-owned banks is a financial institution that are owned in majority (more than 50% share) by a state (government). State-owned banks are concern with government's monetary policy. Marina, Wahjono and Fahmi (2013)<sup>[3]</sup> reviewed that state owned banks hold an important role for national banking. State owned banks are very effective on funds management, shown from the comparison of Total Asset which only amount to 35,29% but still able to contribute net income of

43,97%. Meanwhile for the efficiency of banking resource management, 4 state owned bank in average scored more ratio of asset (ROA) of 2,65% compared with ROA of other banks which is 2,17%. There exist 4 bank which is categorized as state-owned banks, which are BRI, BNI, Bank Mandiri, and BTN.

Authority/Otoritas Jasa Keuangan)<sup>[4]</sup> also stated that from 120 banks which operates in Indonesia, all of these banks still considered to be healthy based on fluctuation of Rupiah Exchange Rate and IDX Composite (IHSG). This banking supervision agency also consider most of these 120 banks belongs to rating II which categorized as “good” and the rest of them still on rating III which is “standard”. Mahmud (2016)<sup>[5]</sup> stated that Indonesia economy condition which currently fluctuating affects the banks are not healthy. The decrease of banks health level is caused by many problems. One of the problem which until now still unable to be solved is the high amount of Non Performing Loans (NPL). One example is bad credits which experienced by almost all banks in Indonesia. Based on OJK release in June 2016, NPL-gross on banking sector stayed in low level, which is 3.11%. This potentially exceed the limit target of OJK which is under 3%.

**Table 1. NPL-gross level 2011-2015**

	2015	2014	2013	2012	2011
Bank Mandiri	2.29 %	1.66 %	1.60 %	1.74 %	2.18 %
BRI	2.02 %	1.69 %	1.55 %	1.78 %	2.30 %
BNI	2.70 %	2.00 %	2.20 %	2.80 %	3.60 %

Source: Annual Report BNI, BRI, and Bank Mandiri

The existence of banking problems as described before, indicate that the trust level of public as the source and destination of the funds collected by bank undergo an unstable and ever-changing process. Public trust toward banking is very influenced by the performance level that has been achieved by the banking world itself, and how the effort of banking management to anticipate every change which occurred in their sector be it nationally or globally. Trust can be gained by maintaining the health level of bank. A healthy bank is a bank that able to do its functions well, or in other words, healthy bank is a bank that can hold and maintain public trust, able to do

intermediary function, able to help smooth payment traffic as well be able to be the subject for the government in executing their policy, especially the monetary one (Permana, 2012:2)<sup>[6]</sup> and one of the common way to measure bank’s healthiness is based on their financial statement with the technique is the analysis ratio.

The banking sector performance assessment can be done in several alternative ways, such as by using RGEC method. Bank Indonesia then perfected a method of rating of commercial banks as established in Bank Indonesia Regulation No. 13/1/PBI/2011 on Assessing the Soundness Level of a Bank<sup>[7]</sup> with risk approach that includes an assessment of the four factors, Risk Profile, Good Corporate Governance (GCG), Earning and Capital, which referred as RGEC method. Complete calculation guidelines established in Bank Indonesia Circular Letter No. 13/24/DPNP on October 25, 2011 concerning Rating of Commercial Banks.<sup>[8]</sup>

Problem statement in this research is how to analyze bank health level at Indonesia state-owned bank using RGEC method at BRI, BNI, and Bank Mandiri for periods 2011-2015. This research is expected to help the readers understand using RGEC method to measure bank’s performance in banking sector in order to gain public trust and to help the implementation of banking management for their strategies for solving existing problems to provide benefits in decision-making, and also to provide information for the management of banks in determining policies, especially regarding financial and other policy primarily based on differences in the bank's financial performance using RGEC. For investors, to provide information for investors to make investment decisions. This study can also help the next researcher to make this study as a reference.

## Literature Review

Assessment of the health of banks is an activity undertaken to determine the ability of a bank to normally conduct banking operational activities and fulfilling their obligations. This assessment is meant to determine whether a bank is on healthy, quite healthy, less healthy or unhealthy condition, thus Bank Indonesia as the banking instructor and supervisor may provide direction or suggestion on how the said bank should be run, or even stopping their operational activity. As regulated in Bank Indonesia Regulation No. 13/1/PBI/2011, factors that become the indicator of Bank

Healthiness Rating are: (1) Risk Profile, (2) Good Corporate Governance, (3) Earnings, and (4) Capitals. Each of these factors will be described in more detail as follows:

### Risk Profile

An assessment of the risks is divided into eight parts:

Credit Risk, Market Risk, Liquidity Risk, Operational Risk, Law Risk, Strategic Risk, Compliance Risk, Reputation Risk. For Risk Profile, aspect's that using only Non Performing Loan (NPL) from Credit Risk, Loan to Deposit Ratio (LDR) from Liquidity Risk.

#### 1. Non Performing Loan (NPL)

NPL is categorized into three groups, substandard, doubtful, and loss. The higher the level of NPL's, the greater the credit risk carried by the bank. NPL's formula is:

$$\text{NPL} = \frac{\text{Non Performing Loan}}{\text{Total Loan}} \times 100\%$$

#### 2. Loan to Deposit Ratio (LDR)

LDR is a useful instrument to determine bank liquidity, and by extension, it influences the profitability of the banks. The bank profit is based on the interest charged against the deposits; it means the profit is generated through the positive difference between interest of loans and interest on deposits (Rengasamy, 2014)<sup>[9]</sup>. A bank may not be earning to operate their return if the LDR's ratio is too low and if the higher the LDR showed, which means greater use of bank deposits for lending and bank has been capable to run their intermediary function optimally. However, if the LDR's ratio is too high it will make liquidity risk for a bank. LDR's formula:

$$\text{LDR} = \frac{\text{Total Debt}}{\text{Third Parties Fund}} \times 100\%$$

#### 3. Good Corporate Governance (GCG)

Pratiwi (2016)<sup>[10]</sup> stated that Corporate Governance is a set of mechanism that direct and control the company so that the company's operation can be run in accordance with expectations of stakeholders. GCG is as a set of system which govern and control a company to create added value for the stakeholders. This happen because GCG is able to push the creation of a clean, transparent and professional

management work ethic. Implementation of GCG in a company will pique interest of investors, both domestic and foreign. This is very important for company that aspire to develop their business further, such as getting new investment. GCG implementation in the banking industry should be based on five basic principles: Trancparancy, Accountability, Responsibility, Independency, and Fairness.

Assessment of the implementation of GCG based on 5 basic principles that are grouped within a governance system that consists of three aspects of governance, namely governance structure, governance process, and governance outcome. In order to ensure the implementation of five basic principles of it, Bank Indonesia established Bank Indonesia Regulation No. 15/15/DPNP on April 29<sup>th</sup> 2013 regarding The Implementation of Good Corporate Governance for Commercial Banks<sup>[11]</sup>

#### 4. Earnings

Earnings is one of the common way to measure the healthiness of a bank from their earning power. Bank's characteristic from earnings is bank's performance in managing their profit, the stability of components that support core-earning, and the ability of profit in order to increase capital and profit prospect in the future Assessment towards earnings factorsin this research is based on two kinds of ratio, which are:

##### a. Return on Assets (ROA)

ROA is used to measure banks management overall capability on earning incomes. ROA focuses company capability and assets to get earning on their operational activity. According to Dendawijaya (2005)<sup>[12]</sup>, the larger ROA value of a bank, then the larger also the achieved income level for that bank and the better also the bank position from asset viewpoint. Formula for ROA is:

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}} \times 100\%$$

ROA measure the capability of company's assets on earning income from their operational activity. Assets that is used on these measurement is the operational assets. Banks that own relatively large total asset will have better performance because of their relatively bigger total revenue which is caused from the increase of product sale. With the increase in total revenue, company

income will also increase which leads to better financial performance.

b. Net Interest Margin (NIM)

NIM is the ratio of net interest income to the average earning assets (Interest Earning Assets) or net interest profitability. However, it does succinctly summarize the effectiveness of banks' interest bearing assets. (Saksonova, 2014)<sup>[13]</sup>. The larger the NIM in a bank, which means their successfully manage their interest bearing assets. NIM's formula is:

$$NIM = \frac{\text{Investment Returns} - \text{Interest Expenses}}{\text{Average Earning Assets}} \times 100\%$$

## 5. Capital

Jokipii and Milne (2011)<sup>[14]</sup> stated that capital requirements have become one of the key instruments of modern day banking regulation providing both a cushion during adverse economic conditions and a mechanism for preventing excessive risk. Capital is usually defined as the level that is required to cover the bank's losses with a certain probability, which is related to a desired rating.

CAR (Capital Adequacy Ratio) is the ratio that shows how much all of the assets of banks that contain risks (credit, investments, securities, bills to other banks) that also financed from own capital of the bank, in addition to obtaining funds from sources outside banks, such as public funding, debt, and others. In other words, Capital Adequacy Ratio is the ratio of performance to measure the capital adequacy of banks owned by bank to support assets that contain or produce a risk, such credits. (Dendawijaya, 2005). [15]

$$CAR = \frac{\text{Tier 1 Capital} + \text{Tier 2 Capital}}{\text{Risk Weighted Assets}} \times 100\%$$

Bank Indonesia requires each bank to provide a minimum capital at least 8% of Risk Weighted Assets (RWA). RWA is the sum of the assets listed in the balance sheet and RWA administrative assets.

## 2. Research Method

### Type of Research

This research is a quantitative based research with descriptive method, which is done by analyzing and describing financial report data to determine a bank's health category.

### Population and Sample

Population in this research is banking sector in Indonesia and Sample from this research are 3 state-owned bank in Indonesia, BRI, BNI, and Bank Mandiri for their last 5 years annual report (2011-2015) with their financial statement that have been reported and published.

### Data Types and Sources

The data used is secondary data and obtained from the bank's website that will be examined, from Indonesia Stock Exchange website and other media that is allowed. Researcher collected, recorded, and reviewed all required information contained in the annual financial statements of the bank concerned the period 2011-2015 and also calculated the ratios contained in the financial statements of those three banks.

## 3. Discussion

BRI during 2011, 2012, 2014, and 2015 period considered to be very healthy with rank "1", yet obtained rank "2" with "healthy" in 2013. For Risk Profile aspect, the possibility of losses that the bank faced from credit risk (NPL) is considered small during certain time period in the future with very good NPL ratio of 1.75% and keep smaller until 2015 it means the smaller the NPL percentage value, the better the return rate of credit from customer and good ratio, and for liquidity risk (LDR) with 76.12% in 2011 and slightly smaller until 2015 and it means shows that BRI has great capability to repay any withdrawal by deposit customer by utilizing given credit. BRI for GCG's aspect obtained rank "1" for 2011, 2012, 2014, and 2015 period yet obtained "2" in 2013, which is BRI already doing principle of GCG accordance Bank Indonesia regulation. Earning aspect is considered as very healthy with rank "1", because the income earned exceed the target and also support banks capital which represented with NIM, with value always above 5% every year and for ROA more than 1.5% respectively it means BRI has good effectiveness in earning profit by utilizing its own assets. Capital aspect is shown

on rank “1” which means the bank have enough capital which followed with very strong capital management, which is shown by the CAR always increase every period, however, decreased in 2013, yet in 2015 BRI obtained 20.58%. This RGEC ratio value shows the predicate of the banks healthiness level according to the standard set by Bank Indonesia with the final composite rank of 1, which reflects the general bank condition as very healthy, therefore assessed to be capable of facing significantly negative influence from changes in business condition and other factors.

BNI during 2011-2013 period considered to be very healthy with rank “1” as well, yet obtained rank “2” with “healthy” in the last 2 period. For Risk Profile aspect, the possibility of losses that the bank faced from credit risk (NPL) is considered small during certain time period in the future with very good NPL ratio, however decrease more than 2% in 2013 and 2015, it means BNI not capable enough to manage the credit from their customer, and for liquidity risk (LDR) in 2011-2013 BNI has great capability to repay any withdrawal by deposit customer by utilizing given credit, however in 2014 and 2015. BNI’s GCG aspect reached rank “2”. BNI always obtained rank “1” in 2011-2013 yet obtained rank “2” for their 2 last period, it shows BNI already doing principle of GCG accordance Bank Indonesia regulation. Earning aspect is considered as healthy, because the income earned almost exceed the target and also support banks capital which represented with NIM slightly increase every year and ROA ratio considered to be healthy as well because it reached more than 1.5% respectively it means BNI has good effectiveness in earning profit by utilizing their own assets. Capital aspect is shown on rank 1 which means the bank have enough capital which followed with very strong capital management, which is shown by the CAR ratio of 19.48%. This RGEC ratio value shows the predicate of the banks healthiness level according to the standard set by Bank Indonesia with the final composite rank of “1”, which reflects the general bank condition as very healthy, therefore assessed to be capable of facing significantly negative influence from changes in business condition and other factors.

Bank Mandiri during 2013-2015 period considered to be healthy with “rank 2”, but Bank Mandiri obtained “very healthy” with “rank 1” in 2011-2012. For Risk Profile aspect, the

possibility of losses that Bank Mandiri faced from credit risk (NPL) is considered small during certain time period in the future with very good NPL ratio it means the smaller the NPL percentage value, the better the return rate of credit from customer, and for liquidity risk (LDR) in 2011-2013 Bank Mandiri already capable to repay any withdrawal by deposit customer by utilizing given credit, however in 2013-2015 Bank Mandiri’s reached rank “3”. Bank Mandiri for GCG’s aspect obtained rank “2” with predicate “Good” stable for 4 years in a row from 2012-2015 which is Bank Mandiri already doing principle of GCG accordance Bank Indonesia regulation. Earning factor is considered as healthy, because the income earned almost exceed the target and also support banks capital which represented with NIM, with value always above 5% every year and for ROA more than 1.5% respectively it means Bank Mandiri has good effectiveness in earning profit by utilizing its own assets. Capital aspect is shown on rank “1” which means the bank have enough capital which followed with very strong capital management, which is shown by the CAR ratio of 18.60% in 2015. This RGEC ratio value shows the predicate of the banks healthiness level according to the standard set by Bank Indonesia with the final composite rank of “1”, which reflects the general bank condition as very healthy, therefore assessed to be capable of facing significantly negative influence from changes in business condition and other factors.

#### 4. Conclusion

Based on their strengtheness, for Risk Profile aspect, BRI already capable to manage their credit shown from their NPL and BNI has great capability to repay any withdrawal by deposit customer by utilizing given credit shown from their LDR. For GCG aspect, Bank Mandiri already doing principle of GCG accordance Bank Indonesia regulation. For Earning’s aspect (ROA and NIM), BRI capable investing their funds in comparison to the expenses on the same investments and has good effectiveness in earning profit by utilizing their own assets. For Capital’s aspect (CAR), BRI as well have highly capital management, but as a state-owned bank, BRI should to adding sum of credit influx or quality credit which distributed so that doesn’t turn into a bad debt and it will gain credit profit that distributed to the bank which increasingly optimize LDR, and for BNI should to sustain low

NPL, BNI must selective in choosing a customer by proposing a fit and proper test for every client or consolidate funding procedure, and for Bank Mandiri should improve their ROA with reducing asset costs, increase revenues, reducing expenses to keep their ROA as high as possible.

The benefits of this research for stakeholders (e.g., public, customer, investor, creditor, taxation authority, and other related party) is to provide material for consideration of them during decision-making of choosing bank. By choosing a healthy bank, hopefully stakeholders may avoid risks that normally faced by banks. The stakeholders will tend to choose bank which categorized as healthy. Bank which healthiness has increase trend from year to year of course will attract more investor and customer.

### Limitation of Research

Several limitation that the author has faced during this research is on how this study only shows banks health level assessment from the viewpoint of Risk Profile, Earnings, and Capital aspect which uses financial ratio of each aspect respectively as follows: Risk Profile with ratio of NPL and LDR, Earnings with ratio of NIM and ROA, and Capital with ratio of CAR. Then based on the calculation result of each aspect financial ratio, the value is used as the benchmark to determine the composite value which shows the composite rank on banks health level for the three state-owned Bank in Indonesia which are BRI, BNI, and Bank Mandiri for the time period of 2011-2015.

Furthermore, all the calculation is done manually by the author, which resulted in different value compared to the published result from bank. During the process of determining the relationship between composite values from the financial ratio of each aspect, the result are not tested using correlation test or regression test, therefore the result of this study is unable to show the magnitude of the correlation or regression value in detail and the difficulty to access the data or assessment worksheet and how to calculate the final result GCG ratings on external parties and using weighted average adapted from CAMEL to calculate the final result.

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