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# ASSESSING OF BANK SOUNDNESS BY RISK PROFILE, EARNINGS AND CAPITAL; REGIONAL DEVELOPMENT BANK CASE STUDY IN INDONESIA

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**Abstract— As part of the Indonesian banking sector, regional development banks (RDB, known as BPD in Indonesian) have played an important ongoing role in Indonesian economy. This role is channeled through its strong existence in almost each provincial level of Indonesia. This paper aims to investigate the soundness of regional development banks during the period from 2013 through to 2017. Soundness was measured by assessing the risk profile, earning or profitability and capital adequacy of the banks using a composite rank based on BI standard. The results imply that, overall, the RDBs are collectively in a very good condition.**

**Key words— Bank, Regional Development Bank, Risk Profile, Earning, Capital**

## I. INTRODUCTION

The most importance goal of a nation's development is to improve people's quality of life through the national development. The banking sector plays a crucial role in national development, particularly in most emerging economies (Mishkin and Eakins 2006). This is no exception for Indonesia. The role of banks in the private sector allows for the people to exercise their economic activities in terms of investment, consumption and distribution. There is no doubt that the banking business, in intermediating the funds from depositors to borrowers, contributes to the increase of the economic variables which in turn boost economic growth (Levine 1997).

As the bank relies on the public trust in relation to performing its activities, the soundness of the bank must therefore be at its best. Maintaining the trust means maintaining the soundness, which includes continually improving the management standards. Banks with good management must be able to maintain the trust of their fund depositors. In maintaining customer trust, the health of the bank must also be maintained. One of the bank's health maintenance checks is carried out while maintaining liquidity. This is so then the bank can fulfill its obligations and maintain its performance so then the bank can ensure the trust of the community. Public trust in the bank will be realized if the bank is able to improve its performance optimally.

The assessment of the bank's soundness is an important factor because the bank is a financial institution that manages funds from the public. The ability of a bank to carry out its banking operations normally relates to it being able to fulfill all of its obligations properly in a manner that complies with the respected regulations. The results of the bank health assessments can be used by the banks as one of the means of determining future business strategies. For the bank regulator (in Indonesian, this is *Bank Indonesia*), among others, it is used as a means of establishing and implementing a bank supervision strategy.

Banking must always be assessed for its soundness in order to remain excellent in terms of serving its customers. An unhealthy bank is not only risking the banking sector itself but also its stakeholders. In order to assess a bank's health, there are various aspects of the evaluation. The aim is to determine whether a bank is in a very healthy, healthy, fairly healthy or unhealthy condition.

The method of assessing the bank's health is always changing. Changes in the method of the bank health assessment are made according to current developments. The development of the methodology for evaluating the bank's conditions is always dynamic. This is as the system for evaluating bank soundness must reflect both the current and future conditions of the bank. For this reason, the bank's health assessment has continually improved.

In the case of Indonesia, the assessment aspect is generally seen in terms of the soundness of the banks regulated by *Bank Indonesia (BI)*. The BI's regulation of bank soundness is stated in Law BI (Bank Indonesia) number 13/1 / PBI / 2011 article 2 paragraph (2) concerning the Rating of Soundness of Commercial Banks, stipulating that it is also required to assess the soundness of the banks individually using a risk-based bank rating, with the coverage of the risk profile (risk profile), good corporate governance (GCG), earnings (profitability) and capital. With the enactment of this Banking Regulation, Bank Indonesia Regulation Number 6/10 / PBI / 2004 concerning the Rating System for Commercial Banks was revoked and declared not valid as of January 2012 (Bank Indonesia Regulation Number 13/1 / PBI / 2011 Article 19a). The purpose of the assessment is to determine the real condition of the bank, and whether the bank is healthy or unhealthy. If the condition revealed is an unhealthy condition, then the bank needs to take immediate action. This health assessment can determine the condition of the bank's performance.

The soundness of the bank will affect customer loyalty. The soundness of the bank can be seen from the bank's performance, as well as the RGEC analysis (Risk Profile, Good Corporate Governance, Earning and Capital). The risk profile is an assessment of the bank's risk related to the quality of the risk management implementation in terms of the bank's operations focused eight risks, namely credit risk, market risk, liquidity risk, operational risk, legal risk, strategic risk, compliance risk and reputation risk. Theories dictate that if these risks are negative, then the bank will tend to be more vulnerable to financial distress. Platt and Platt (2002) defined financial distress as the condition where the company's finances are in an unhealthy or crisis situation.

In this study, we have only focused on two risks; credit risk, which will proxy for a non-performing loan (NPL) and liquidity risk, which will proxy for the loan to deposit ratio (LDR), good corporate governance (GRG), earning and capital. The GRG will be measured based on the valuation aspect by BI, whilst earning will be measured by return on assets (ROA) and net interest margin (NIM). Capital has been represented by the capital adequacy ratio (CAR).

Banking guidance and the supervision carried out by Bank Indonesia emphasizes that banking institutions in Indonesia are obliged to follow the set rules and policies. Bank Indonesia, as the central bank, oversees the bank's operational activities in terms of the bank's financial position which is published and reported to Bank Indonesia. An unhealthy bank conditions will disrupt public trust and the bank's main functions will not work properly. The financial statements of banking institutions can describe the financial condition and description of the management's performance in question. The analysis of the financial statements can be seen from the financial ratios by comparing one financial statement to another. The financial ratio shows the financial growth in the banking companies. Financial ratio analysis can reflect how well a bank is performing.

Regional Development Banks (RDB or BPD), which are a part of the national banking industry, must also show optimal efficiency performance in order to fully support regional development financing. BPD is a bank owned by the respective regional government. Data shows that until the end of December 2016, the total assets of RDB were IDR 529.19 trillion and this grew by 8.92% compared to the position in December 2015, where it reached IDR 485.86 trillion. That placed RDB on the fifth rank nationally. In term of third party fund, RDB throughout Indonesia reached IDR 372.60 trillion in December 2016, which is an increase of 5.87% compared to the position in December 2015, where it reached IDR 351.96 trillion (2018). Some empirical studies show RDB rank third in Indonesian banking sector for public funding (Hadad et al. 2008b, a). Much of the role of the BPD is focused on accelerating development and economic movements in the region. In addition, the BPD must also deal with other groups of commercial banks that are increasingly aggressive in carrying out their intermediary functions in the region. Therefore, in order to strengthen its function as an intermediary, BPD must also improve the efficiency performance of its operations.

This study aims to measure the soundness of regional development banks in Indonesia using *Risk Profile, Earnings* and *Capital* during the period of 2013 - 2017.

## II. LITERATURE REVIEW

### *A. Bank Performance and Risk Profile, Earning and Capital*

As stated in BI Regulation No. 13/1/ PBI/2011, a risk profile is the assessment of the inherent risk and

quality of the implementation of risk management in a bank's operations. The assessment is conducted on the eight different types of risk, namely credit risk market risk, liquidity risk, operational risk, legal risk, strategic risk, compliance risk and reputation risk.

Credit risk is defined as the risk of the inability of the debtor or counter-party to repay the loan to the bank. This type of risk is the biggest risk in the Indonesian banking system. The credit provided by a bank carries risks, so in its implementation, the bank must pay attention to sound crediting principles (Indonesian Banking Law, Indonesia 1992)

TABLE 1. THE CRITERIA OF RISK PROFILE CRITERIA

| Rank | Status | Risk Profile Criteria | | Earning Criteria | | Capital Criteria |
|---|---|---|---|---|---|---|
| | | NPL *) | LDR **) | ROA *) | NIM **) | CAR *) |
| 1 | Very good | NPL < 2% | LDR ≤ 75% | ROA > 1,5% | NIM > 3% | CAR > 12% |
| 2 | Good | 2% ≤ NPL < 5% | 75% < LDR ≤ 85% | 1,25% < ROA ≤1,5% | 2% < NIM ≤ 3% | 9%≤ CAR <12% |
| 3 | Enough | 5% ≤ NPL < 8% | 85% < LDR ≤ 100% | 0,5% < ROA ≤ 1,25% | 1,5% < NIM ≤ 2% | 8% ≤ CAR < 9% |
| 4 | Less | 8% ≤ NPL < 12% | 100% < LDR ≤ 120% | 0 < ROA ≤ 0,5% | 1 < NIM ≤ 1,5% | 6% < CAR < 8% |
| 5 | Very unsound | NPL ≥ 12% | LDR > 120% | ROA ≤ 0% | NIM ≤ 1% | CAR ≤ 6% |

Source:*) Bank Indonesia Letter No.13/ 24/ DPNP, 2011; **) Bank Indonesia Letter No.6/ 23/ DPNP, 2004

Market risk is a loss on the balance sheet and administrative account positions including derivative transactions due to overall changes in the market conditions. This risk can be sourced from the trading book or banking book. Market risk from trading books (traded market risk) is the risk of a loss in investment value due to trading activities (making purchases and sales of financial instruments continuously) in the market with the aim of making a profit. This arises as a result of the actions of banks that deliberately make a risky position in the hope of profiting from the position of risk that has been taken (high risk high return). Unlike the traded market risk, the risk in the banking book is a natural consequence due to the nature of the bank's business carried out with its customers. Generally, banks have a short-term fund structure because loans are generally longer term than deposits from customers. Liquidity risk is a risk due to the inability of banks to fulfill the maturing obligations from cash flow funding sources and or from high-quality liquid assets that can be pledged without disturbing the activities and financial condition of the bank. Liquidity is very important to maintain the business continuity of the bank. Therefore, banks must have good bank liquidity risk management.

Operational risk is a risk that is due to insufficiency or the non-functioning of internal processes, human errors, system failures and/or external events that affect the bank's operations. In accordance with the definition of operational risk as above, the categories of the causes of operational risk have been divided into four types, namely people, internal process, system and external events. Legal risk is the risk arising from lawsuits and/or weaknesses in the juridical aspect. This risk arises, among others, due to the absence of supporting legislation or weaknesses in engagement, such as not fulfilling the requirements for the validity of contracts or where there is collateral that is inadequate. In accordance with Basel II, the definition of operational risk includes legal risk (but does not include strategic risk and reputation risk). Legal risk can occur in all aspects of transactions in the bank, including contracts with customers and other parties. This can affect other risks, including compliance risk, market risk, reputation risk and liquidity risk.

Strategic risk is a risk due to the inaccuracy of the bank in terms of making decisions and/or implementing a strategic decision and failing to anticipate changes in the business environment. Strategic risk is classified as a business risk (business risk) that is different from financial risks such as market risks or credit risks. The bank's failure to manage strategic risk can have a significant impact on changes in the other risk profiles. For example, banks that implement a TPF growth strategy by providing high interest rates have a significant impact on changes in the liquidity risk profile and interest rate risk as a result.

Compliance risk is a risk arising from a bank not complying with or not implementing the applicable laws and regulations. In practice, compliance risk is attached to the bank's risks related to legislation and other applicable provisions. Reputational risk is a risk that is due to a decrease in the level of trust of the stakeholders that comes from the negative perceptions of the bank. In Basel II, reputation risk is grouped with other risks as covered in the Basel 2 Pillars. The usefulness of this aspect is also to measure the level of business efficiency and profitability achieved by the bank concerned. A healthy bank is a bank that is measured by profitability which continues to increase above the standard set. Banks that always experience losses in their operations will find that the losses consume their capital. Banks that are in such a condition are not healthy.

The first assessment was the capital aspect of the banks. In this aspect, the assessed capital is owned by the bank which is based on the bank's minimum capital provider obligations. The assessment is based on the CAR (Capital Adequacy Ratio) that has been determined by the Bank of Indonesia. The comparison of CAR ratios is the capital ratio to (RWA) Assets. A lack of capital is an important factor and it is one of the general symptoms experienced by banks in developing countries. The lack of capital can come from two things; the first is because the capital is small in number and the second is that the quality of the capital is bad. Thus, the bank supervisors must be sure that the bank has sufficient capital, both in terms of quantity and quality. In addition, both the shareholders and bank administrators must be truly responsible for the invested capital.

The definition of capital adequacy was not only calculated from the nominal amount but also from the capital adequacy ratio, which is often referred to as the Capital Adequacy Ratio (CAR). This ratio is a comparison between the amount of capital and risk-weighted assets (RWA). At present and in accordance with the applicable provisions, the CAR of a bank should be at least 8%. Banks that have CARs below 8% must immediately get attention.

*B. Method*

The soundness of the bank was assessed using the risk profile, earning and capital adequacy approach. The soundness is the result of an assessment of the condition of the regional development banks in Indonesia to determine if they are carrying out their functions properly. In accordance with Bank Indonesia Regulation No. 13/1 / PBI / 2011 and Circular letter of BI No. 13/24/DPNP dated October 25th, 2011.

The procedure of the analysis was as follows;

1. We classified each of the variables (NPL, LDR, ROA, NIM, and CAR) based on the rank as stated in Table1.
2. We established a composite rating to obtain the value of soundness using the following rules; if the variable is in rank 1, then it was multiplied by 4. Rank 2 was multiplied by 4, rank 3 was multiplied by 2 and rank 5 was multiplied by 1.

The score of the composite was then calculated as follows:

$$Composite\ rank\ (CR) = \frac{Composite\ Score}{Total\ Composite\ value}\ x\ 100\% \quad (1)$$

TABLE 2. COMPOSITE RANK

| Rank | Weight | Soundness criteria |
|---|---|---|
| Composite rank (CR)1 | 86 – 100 | Very Sound |
| Composite rank (CR) 2 | 71 – 85 | Good |
| Composite rank (CR) 3 | 61 – 70 | Enough |
| Composite rank (CR) 4 | 41 – 60 | Less |
| Composite rank (CR) 5 | < 40 | Very unsound |

Source: Circular letter BI No 13/ 24/ DPNP, 25 October 2011

3. We drew conclusions based on the soundness of the bank in accordance with the bank's health calculation standards as determined by BI.

TABLE 3. VARIABLE DESCRIPTIONS

| No | Risk Profile | Proxy | Description |
|---|---|---|---|
| 1 | Credit Risk | NPL | The percentage of the number of troubled loans faced by the regional development banks. |
| 2 | Liquidity risk | LDR | The percentage of loans to funds collected used to measure the ability of regional development banks to pay their short-term obligations. |
| 3 | Earning risk | ROA | The percentage earning before tax related to the total assets to measure the ability of regional development banks to generate profits using their assets. |
| | | NIM | The percentage of interest earning related to productive assets, to illustrate the level of net interest income earned by using productive assets owned by the regional development banks. |
| 4 | Capital Risk | CAR | The percentage of capital paid to the weighted assets based on risk in order to calculate the capital health of regional development banks. |

TABLE 4. LIST OF SAMPLE BANKS

| No. | Bank's Name | No | Bank's Name |
|---|---|---|---|
| 1 | Bank Aceh | 14 | BPD Maluku |
| 2 | BPD Bali | 15 | BPD Nusa Tenggara Timur |
| 3 | BPD Bengkulu | 16 | BPD Nusa Tenggara Barat |
| 4 | Bank DKI | 17 | BPD Papua |
| 5 | BPD Jambi | 18 | BPD Riau |
| 6 | BPD Jawa Barat dan Banten | 19 | BPD Sulawesi Tenggara |
| 7 | BPD Jawa Tengah | 20 | BPD Sulawesi Selatan dan Sulawesi Barat |
| 8 | BPD JawaTimur | 21 | BPD Sulawesi Tengah |
| 9 | BPD Kalimantan Timur | 22 | BPD Sulawesi Utara |
| 10 | BPD Kalimantan Tengah | 23 | BPD Sumatera Selatan dan Bangka Belitung |
| 11 | BPD Kalimantan | 24 | BPD Sumatera Utara |

| | | | |
|---|---|---|---|
| | Barat | | |
| 12 | BPD Kalimantan Selatan | 25 | BPD Yogyakarta |
| 13 | BPD Lampung | | |

The sample banks used in this study were all regional development banks registered at the Indonesian central bank (BI) during the period of 2013 to 2017. The sample banks are as depicted in the table below. This study used the quantitative data from the financial reports of individual BPDs published by the Indonesian Financial Services Authority (known as OJK).

## III. RESULT AND DISCUSSION

The result of the analysis is presented in Table 5. The Table presents the individual bank's ratio of NPL, LDR, ROA NIM and CAR including its respected rank.

TABLE 5. THE LEVEL OF RISK PROFILE, PROFITABILITY AND THE CAPITAL OF THE BPDS DURING 2013 - 2017

| No | Bank Name | Risk Profile | | | | Profitability | | | | Capital | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NPL (%) | Rank | LDR (%) | Rank | ROA (%) | Rank | NIM (%) | Rank | CAR (%) | Rank |
| 1 | Bank Aceh | 2.93 | 2 | 88.91 | 3 | 3.21 | 1 | 7.41 | 1 | 18.60 | 1 |
| 2 | BPD Bali | 0.73 | 1 | 88.99 | 3 | 3.81 | 1 | 7.49 | 1 | 18.48 | 1 |
| 3 | BPD Bengkulu | 0.41 | 1 | 90.18 | 3 | 3.43 | 1 | 8.63 | 1 | 18.86 | 1 |
| 4 | Bank DKI | 4.21 | 2 | 85.09 | 3 | 2.07 | 1 | 6.26 | 1 | 15.71 | 1 |
| 5 | BPD Jambi | 0.54 | 1 | 93.16 | 3 | 3.31 | 1 | 7.99 | 1 | 26.30 | 1 |
| 6 | BPD Jawa Barat dan Banten | 2.51 | 2 | 77.98 | 2 | 2.34 | 1 | 6.88 | 1 | 17.05 | 1 |
| 7 | BPK Jawa Tengah | 0.95 | 1 | 83.77 | 2 | 2.77 | 1 | 7.98 | 1 | 14.81 | 1 |
| 8 | BPD Jawa Timur | 2.99 | 2 | 83.62 | 2 | 3.66 | 1 | 6.98 | 1 | 22.04 | 1 |
| 9 | BPD Kalimantan Barat | 0.34 | 1 | 84.26 | 2 | 3.26 | 1 | 9.33 | 1 | 18.64 | 1 |
| 10 | BPD Kalimantan Selatan | 2.63 | 2 | 79.29 | 2 | 2.26 | 1 | 6.12 | 1 | 19.36 | 1 |
| 11 | BPD Kalimantan Tengah | 0.75 | 1 | 80.85 | 2 | 3.85 | 1 | 8.40 | 1 | 25.51 | 1 |
| 12 | BPD Kalimantan Timur | 2.54 | 2 | 77.98 | 2 | 2.62 | 1 | 6.05 | 1 | 21.03 | 1 |
| 13 | BPD Lampung | 0.91 | 1 | 96.63 | 3 | 2.99 | 1 | 6.52 | 1 | 20.17 | 1 |
| 14 | BPD Maluku | 2.51 | 2 | 85.85 | 2 | 3.06 | 1 | 10.17 | 1 | 16.09 | 1 |
| 15 | BPD Nusa Tenggara Barat | 1.73 | 1 | 103.21 | 4 | 5.09 | 1 | 10.56 | 1 | 17.79 | 1 |
| 16 | BPD Nusa Tenggara Timur | 1.51 | 1 | 92.11 | 3 | 3.79 | 1 | 9.44 | 1 | 19.26 | 1 |
| 17 | BPD Papua | 4.01 | 2 | 73.44 | 1 | 2.43 | 1 | 7.20 | 1 | 21.02 | 1 |
| 18 | BPD Riau | 3.05 | 2 | 82.03 | 2 | 3.85 | 1 | 8.40 | 1 | 19.58 | 1 |
| 19 | BPD Sulawesi Tengah | 3.59 | 2 | 102.81 | 4 | 3.08 | 1 | 8.67 | 1 | 24.81 | 1 |
| 20 | BPD Sulawesi Tenggara | 3.02 | 2 | 95.90 | 3 | 5.35 | 1 | 10.55 | 1 | 25.56 | 1 |
| 21 | BPD Sulawesi Selatan dan Sulawesi Barat | 1.06 | 1 | 110.93 | 4 | 4.21 | 1 | 10.16 | 1 | 34.18 | 1 |
| 22 | BPD Sulawesi Utara | 0.97 | 1 | 101.81 | 4 | 2.44 | 1 | 9.44 | 1 | 15.36 | 1 |
| 23 | BPD Sumatera Selatan dan Bangka Belitung | 5.75 | 3 | 85.31 | 2 | 2.11 | 1 | 7.34 | 1 | 15.35 | 1 |
| 24 | BPD Sumatera Utara | 3.93 | 2 | 95.95 | 3 | 2.91 | 1 | 8.48 | 1 | 14.23 | 1 |
| 25 | BPD Yogyakarta | 1.03 | 1 | 77.12 | 2 | 2.76 | 1 | 8.34 | 1 | 16.00 | 1 |

Source: Author's calculation

The result indicates that most of the Regional Development Banks (RDB) are in the very sound category. There were 16 (sixteen) RDB categorized as healthy with varied LDR and NPLs. For instance, the RDB of Central Java, West Kalimantan, Central Kalimantan and Yogyakarta have their NPL at a rating of 1 but with an LDR 2 rating. The RDBs of Bali, Bengkulu, Jambi, Bank Lampung and East Nusa Tenggara are shown to have an NPL with a rating of 1 but an LDR of 3. For the fairly healthy category, 9 RDBs were depicted as having various ratings for both the LDR and NPLs. For example, the RDB of West Nusa Tenggara, South, West Sulawesi and North Sulawesi has an NPL rating of 1 and an LDR of 4, while the RDB of Aceh, DKI Jakarta, Southeast Sulawesi and North Sumatra have an NPL rating of 2 and an LDR of 3.

Based on NPL, the lowest value was obtained by RDB West Kalimantan with a weight of 0.34, while the highest value was obtained by South Sumatra and Bangka Belitung with a ratio of 5.75. The higher NPL indicates that the bank tends to have a problem in terms of managing and selecting prospective borrowers. On the other hand, the lowest value of LDR was depicted in Papua's RDB with a ratio of 73.44. The highest ratio was obtained by the South and West Sulawesi Regional Development Banks of 110.93. The ability to generate profits for the bank will increase as the credit increases.

From the standpoint of earning, almost all of the RDBs in the period of 2013 - 2017 are shown to be in the very healthy category with a similar ROA and NIM rating, which was 1. Based on the value of ROA, the lowest value was DKI Jakarta's RDB (2.07) while the highest score was obtained by the Southeast Sulawesi' RDB with a ratio of 5.35. The higher the percentage of ROA, the better the ability of the bank to generate a profit. If considering the NIM value, the lowest score was obtained by East Kalimantan with a score of 6.05, while the highest value was gained by West Nusa Tenggara with a score of 10.56. The higher the percentage of NIM, the higher the level of the net interest income of the bank.

When analyzing the bank's soundness based on the capital factor during 2013 - 2017, the result shows a similar pattern within the RDBs as the other category. Almost all RDBs are in the very sound category with a rating equal to 1. Capital in this study is represented by the capital adequacy ratio (CAR). Unlike the two previous ratios, the lowest value was obtained by the RDB of North Sumatra with a score of 14.23 while the highest value was obtained from the Regional Development Banks of South and Sulawesi with a score of 34.18. The bigger the percentage, the better the ability of the capital to cover the possibility of credit failure.

**Table 6. Composite Score of the Banks (RDB)**

| No | Bank Name | Risk Profile | | Earnings | | Capital | Composite Score | Note |
|---|---|---|---|---|---|---|---|---|
| | | NPL | LDR | ROA | NIM | CAR | | |
| 1 | Bank Aceh | 2 | 3 | 1 | 1 | 1 | 88 | Very Sound |
| 2 | BPD Bali | 1 | 3 | 1 | 1 | 1 | 92 | Very Sound |
| 3 | BPD Bengkulu | 1 | 3 | 1 | 1 | 1 | 92 | Very Sound |
| 4 | Bank DKI | 2 | 3 | 1 | 1 | 1 | 88 | Very Sound |
| 5 | BPD Jambi | 1 | 3 | 1 | 1 | 1 | 92 | Very Sound |
| 6 | BPD Jawa Barat dan Banten | 2 | 2 | 1 | 1 | 1 | 92 | Very Sound |
| 7 | BPD Jawatengah | 1 | 2 | 1 | 1 | 1 | 96 | Very Sound |
| 8 | BPD JawaTimur | 2 | 2 | 1 | 1 | 1 | 92 | Very Sound |
| 9 | BPD Kalimantan Barat | 1 | 2 | 1 | 1 | 1 | 96 | Very Sound |
| 10 | BPD Kalimantan Selatan | 2 | 2 | 1 | 1 | 1 | 92 | Very Sound |
| 11 | BPD Kalimantan Tengah | 1 | 2 | 1 | 1 | 1 | 96 | Very Sound |
| 12 | BPD Kalimantan Timur | 2 | 2 | 1 | 1 | 1 | 92 | Very Sound |
| 13 | BPD Lampung | 1 | 3 | 1 | 1 | 1 | 92 | Very Sound |
| 14 | BPD Maluku | 2 | 2 | 1 | 1 | 1 | 92 | Very Sound |
| 15 | BPD Nusa Tenggara Barat | 1 | 4 | 1 | 1 | 1 | 88 | Very Sound |
| 16 | BPD Nusa Tenggara Timur | 1 | 3 | 1 | 1 | 1 | 92 | Very Sound |
| 17 | BPD Papua | 2 | 1 | 1 | 1 | 1 | 96 | Very Sound |
| 18 | Bank Pembangunan Daerah Riau | 2 | 2 | 1 | 1 | 1 | 92 | Very Sound |
| 19 | BPD Sulawesi Tengah | 2 | 4 | 1 | 1 | 1 | 84 | Sound |
| 20 | BPD Sulawesi Tenggara | 2 | 3 | 1 | 1 | 1 | 88 | Very Sound |
| 21 | BPD Sulawesi Selatan dan Sulawesi Barat | 1 | 4 | 1 | 1 | 1 | 88 | Very Sound |
| 22 | BPD Sulawesi Utara | 1 | 4 | 1 | 1 | 1 | 88 | Very Sound |
| 23 | BPD Sumatera Selatan dan Bangka Belitung | 3 | 2 | 1 | 1 | 1 | 88 | Very Sound |
| 24 | BPD Sumatera Utara | 2 | 3 | 1 | 1 | 1 | 88 | Very Sound |
| 25 | BPD Yogyakarta | 1 | 2 | 1 | 1 | 1 | 96 | Very Sound |

Source: Author's calculation

Table 6 shows the composite score following the procedure explained earlier. The table indicates that there are twenty-four (24) Regional Development Banks that fall into the very healthy category with the composite score varying from 84 to 96. The RDB of Central Java, West Kalimantan, Central Kalimantan, Papua and Yogyakarta were indicated to have a composite value of 96, while the RDBs of Bali, Bengkulu, Jambi, West Java and Banten, East Java, South Kalimantan, East Kalimantan, Lampung, Maluku, East Nusa Tenggara and Riau had composite values by 92.

## IV. CONCLUSION

Based on the results and discussion, it can be concluded that the soundness of the RDBs in Indonesia based on the risk profile factor during 2013 - 2017 were in the healthy category, in which 16 Regional Development Banks (BPDs) were in the healthy category while 9 others were in the fairly healthy category.

Meanwhile, from the earnings factor in 2013 – 2017, it shows that all (25) Regional Development Bank (BPDs) are in a very healthy category. Moreover, the soundness of the bank based on capital in 2013 – 2017 shows that all (25) Regional Development Banks (BPDs) are also in the very healthy category.

In conclusion, bank soundness based on the risk profile, earnings and capital factors in 2013 - 2017 shows that the Regional Development Banks (BPD) in Indonesia are in a very healthy category, where 24 Regional Development Banks (BPDs) fall into the very healthy category while 1 Regional Development Bank (BPD) was in the healthy category.

Some of the limitations of this research was that the researcher only described how to calculate the soundness of the bank within the scope of risk profile, earnings and capital that used the financial ratios of each aspect as follows: risk profile with the ratio of Net Performing Loans (Loan) and Loan to Deposit Ratio (LDR), earnings with a ratio of Return on Assets (ROA) and Net Interest Margin (NIM) and capital with a Capital Adequacy Ratio (CAR) ratio. Based on the results of the calculation of the financial ratio value of each aspect, the results are used as a benchmark to determine the composite value which will show the ranking of the health composite in the Regional Development Bank in Indonesia for 2013 - 2017. Based on the description previously explained, it can be concluded that this research is a descriptive study and therefore it does not test the hypothesis.

## REFERENCES

[1] Bank Indonesia. 2004a. Peraturan Bank Indonesia Nomor 6/10/PBI/2004 Tentang Sistem Penilaian Tingkat Kesehatan Bank Umum. edited by Bank Indonesia (BI). Jakarta.

[2] Bank Indonesia. 2004b. Surat Edaran BI No.6/ 23 /DPNP Perihal Sistem Penilaian Tingkat Jesehatan Bank Umum. edited by Bank Indonesia. Jakarta.

[3] Bank Indonesia. 2011a. Peraturan Bank Indonesia Nomor: 13/ 1 /PBI/2011 Tentang Penilaian Tingkat Kesehatan Bank Umum. Jakarta: Bank Indonesia.

[4] Bank Indonesia. 2011b. Surat Edaran Bank Indonesia Nomor. 13/ 24/ DPNP/ 2011 tentang Penilaian Tingkat Kesehatan Bank Umum. Jakarta: Bank Indonesia.

[5] Hadad, Muliaman D., Maximilian J. B. Hall, Karligash A. Kenjegalieva, Wimboh Santoso, Ricky Satria, and Richard Simper. 2008a. "Efficiency and Malmquist indices of productivity change in Indonesian banking" Discussion *Paper Series; Department of Economics, Loughborough University, UK* WP 2008-08.

[6] Hadad, Muliaman D., Maximilian J. B. Hall, Karligash A. Kenjegalieva, Wimboh Santoso, Ricky Satria, and Richard Simper. 2008b. "Efficiency in Indonesian banking: Recent evidence." *Discussion Paper Series; Department of Economics, Loughborough University, UK* 2008 - 13.

[7] Indonesia, Undang -Undang Republik. 1992. TentangPerbankan. Edited by Indonesia. Jakarta.

[8] Levine, Ross. 1997. "Financial development and economic growth: Views and agenda." *Journal of Economic Literature* 35 (2):688-726.

[9] Mishkin, Fredric S., and Stanley Eakins. 2006. *Financial Markets and Institutions*. Chicago: Pearson Education.

[10] Platt, Harlan, and Marjorie Platt. 2002. "Predicting corporate financial distress: Reflections on choice-based sample bias." *Journal of Economics and Finance* 26 (2):198 - 199. Doi: DOI: 10.1007/BF02755985.

[11] www.beritasatu.com. 2018. 2016, Aset BPD Seluruh Indonesia Capai Rp 529, 19 Triliun, acces on 25 June 2018. In *Berita Satu*, edited by Imam Suhartadi. Jakarta.