EVALUATION OF STATE BANK PERFORMANCE BASED ON THE REGULATION OF BANK INDONESIA NUMBER: 13/1/PBI/2011

(A Study on State Bank of Indonesian Government in 2018)

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CHAPTER I

INTRODUCTION

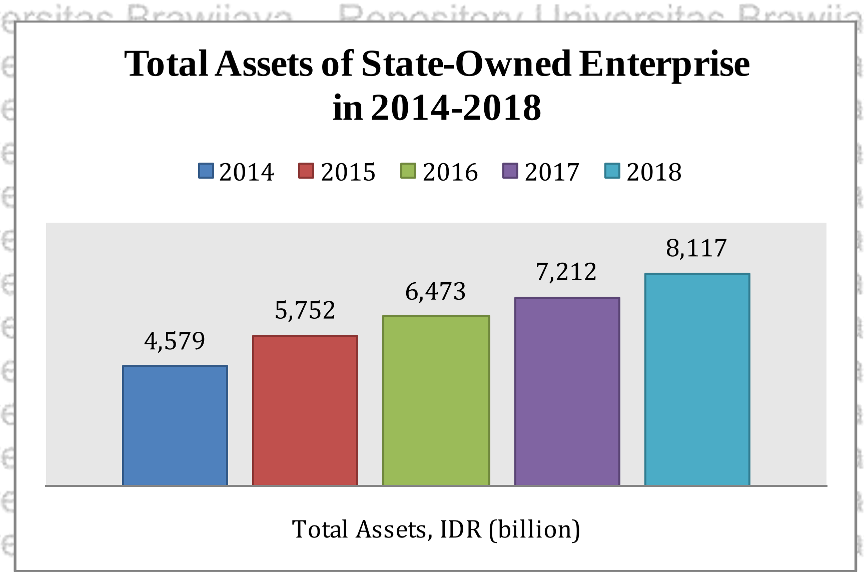
1.1 Background of The Study

The welfare of the people who domiciled in a country becomes the duty and responsibility of that country. Through efforts to prosper the individuals, the country conjointly develops its nation to be able to compete with other countries. The accomplishment of people's welfare can be seen through the applied performance of the government in serving and providing facilities and infrastructures as well as qualified propensity for the people.

As a country withpopulation of 269 million, Indonesian government have big responsibility to provide decent life to every soul domiciled in Indonesia. State-Owned Enterprises (Badan Usaha Milik Negara) owned by the Indonesian government focus on community welfare and country well-being. The institutionshave major purpose of holding government affairs in the fields of a state-owned enterprises in order to assist the President in organizing state government. Therefore, the State-Owned Enterprises of Indonesia are agent of development to carry out its role beneath 113 companies, which divided into 14 different business fields. Based on data from the Ministry of State-Owned Enterprises, thenumber of assets owned was constantly improving from 2014 until 2018. The total amount of assets in 2014 was Rp4.579.887.270 and then increased to 25,6% in 2015 became

Rp5.752.684.846. Additionally, the assets in three years were developed by 12,5%, 11,4% and 12,6% respectively.

Figure 1.1 Total Assets of State-Owned Enterprisein 2014-2018



Source : Ministry of State-Owned Enterprise, 2018

Based on Ministerial Decree of State-Owned Enterprise Number: KEP-100/MBU/2002 concerning the assessment of the health level of state-owned enterprise (SOEs), enterprises are obliged to evaluatethe healthiness level of the company. SOEs in the financial service sectors are state-owned enterprises engaged in the banking industry, insurance, financing services and guarantor services. Kasmir (2012: 29) stated that State-Owned Banks are banks that the deed of incorporation and/oritscapital are owned by the government, so the bank profit is possessed by the government as well. Commercial banks owned by the Indonesian Government and known as State Banks of Indonesian Government are PT Bank Rakyat Indonesia (Persero) Tbk., PT Bank

Mandiri (Persero) Tbk., PT Bank Negara Indonesia (Persero) Tbk., dan PT Bank Tabungan Negara (Persero) Tbk.

Maintaining the soundness level of the bank is an essential aspect for a country.Because when the health level of banks is under standard, it could weaken the entire banking system and create the possibility of the country to be more exposed to financial crises (Park, 2017). To preserve the proficient condition of the bank, the corporate needs to evaluatethe bank's performance through analysing its financial statement. According to Darsono and Ashari (2005: 27), company performance refers to the description of the company's financial position and shows the results of operations over a certain period obtained by analyzing financial statements. The banks healthiness measurement result can be beneficial to establish a business strategy in the future. Meanwhile, for Bank Indonesia, assessing the health level is available as an instrument of policy determination and fulfillment of banking supervision (Darmawi, 2011 on EngelbertTuwo and J. Tumewu, 2018).

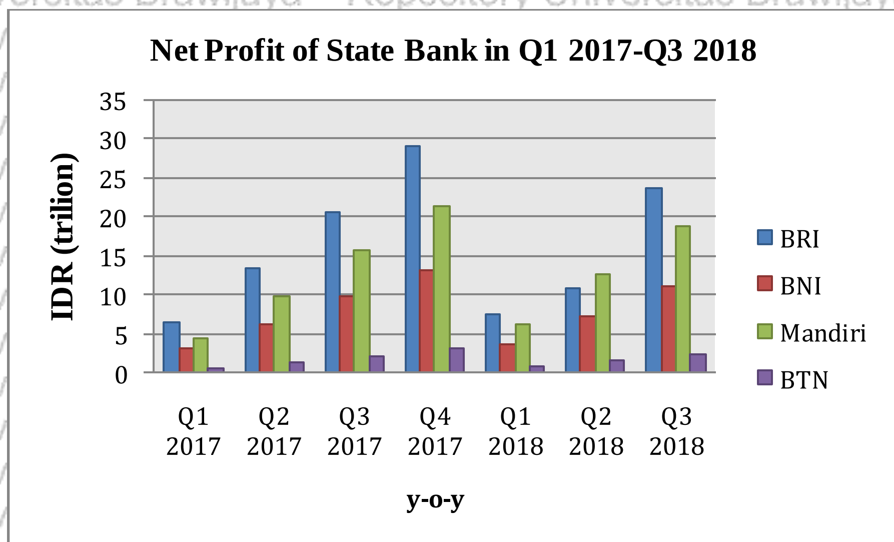
In order to prevent a country from facing economics issues, banks as an intermediary institution and the benchmark of economics needto evaluate the corporate performance periodically. In 2011, Bank Indonesia as a central bank created regulation No.13/1/PBI/2011 about measuring the healthiness level of commercial banks in Indonesia, substitute the prior regulation No.6/10/PBI/2004 which have been credible for seven years. The former regulation contemplates as an ineffective method to measure the entire bank soundness using *CAMELS* method which consists of *Capital*,*Asset quality*,*Management*, *Earnings*, *Liquidity*, and *Sensitivity to market risk*. Therefore, it needed to be improved by assessing the healthiness by *Risk-Based Bank Rating (RBBR)* approach that could be applied in the recent regulation.

The regulation of Bank Indonesia No.13/1/PBI/2011 constrains commercial banks to done self-assessment using risk approach while determining the healthiness level of the bank. The measurement of banking performance using risk approach referred to *Risk-Based Bank Rating* then abbreviated into *RBBR*. The RBBR approach is composed of four indicators as the material for assessing the soundness level of the bank,including*Risk Profile, Good Corporate Governance, Earnings*, and *Capitals* known as RGEC method. The assessment through *Risk Profile* is to determine the implementation of managing risk in the operational management of the bank.While, *Good Corporate Governance*is useful for knowing how capable the management governance of the bank. Subsequently, the *Earnings*is intended to analyze the ability of banks in gathering its profit and *Capitals*is used to illustrate the capital adequacy of the bank.

Enhancing Good Corporate Governance (GCG) is needed in assessment of the soundness of a bank due to consideration of the its weightiness within a bank. Lack of corporate governance is identified as one of the main factors in virtually all known exemplifies of banks' distress within the country (Emmanuel Isaac and Steve Nkemdilim, 2016). Consequently, GCG is capable of boosting up banks' soundness since it has a biginfluence on financial performance moderate through institutional ownership, managerial ownership, independent director, and audit opinion (Utami and Silvia Sutejo, 2018). Measuring the sound level of the bank using RBBR has broad analytical coverage since it examines inherent risk and quality of risk application in bank operation along with the aspect of good corporate governance, which runs in the banking company.

Commercial banks by SOEs in Indonesia more are demanded by the community for saving and investing money because they are considered secure and reliable. Based onLokadata in 2018, BRI obtained Rp23,55 trillion in the third quarter in the year of 2018, it wasclaimed as State-Owned Bank of Indonesian Government Indonesia with the highest profit. The profit of BRI rose 14,64% compared to Q3 in 2017. However, the lowest profit was gathered by BTN with Rp2,24 trillion per third quarter in 2018, yet it has been increased 11,5% year on year.

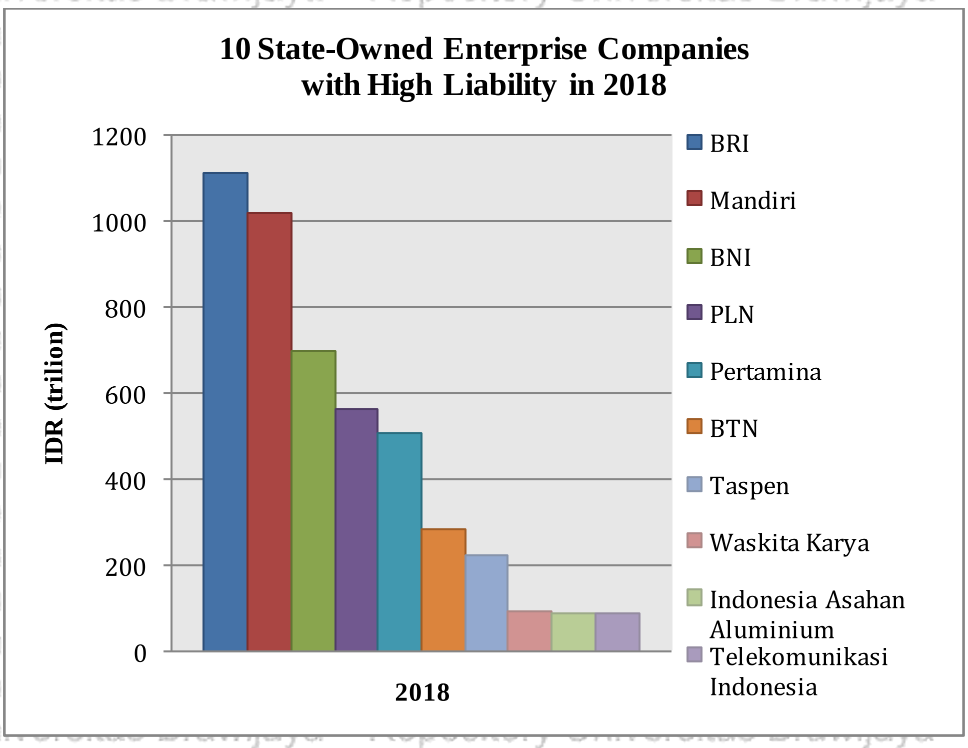
Figure 1.2 Net Profit of State Bank in Indonesia



Source : Data processed, 2018

Despite increase in net profit, the four State banks of Indonesian Governmentalso contribute to gaining significant debt of SOEs in 2018. Based on Ministry of State-Owned Enterprise in 2018, total liability ofSOEs was risen 16,2% into Rp5.604 trillion compared to the prior year, 2017 which produced Rp4.823 trillion of liability.

Figure 1.3 Top 10 of SOE Companies with High Liabilities



Source : Ministry of Stated-Owned Enterprise, 2018

In accordance with liability produced by State-Owned Enterprise in 2018, PT Bank Rakyat Indonesia (Persero) held the highest liability of SOEs with Rp1.111 trillion. Subsequently, PT Bank Mandiri (Persero) followed with Rp1.017 trillion which increased 6,6% from 2017. Furthermore, PT Bank Negara Indonesia (Persero) and PT Bank Tabungan Negara (Persero) likewise to commit in raising the State-

Owned Enterprise liability by adding Rp698 trillion and Rp282 trillion respectively in 2018.

The amount of debt in hand by the four StateBanks of Indonesian Government makes the debts owned by SOEs conjointly increase. SOEs as an agents of development were established to develop the Indonesian economy in a variety of sectors involved, including the banking sector. Commercial banks owned by the Indonesia Government are expected to be contributeto increasing the state revenues and the economic scale of the country. Furthermore, State-Owned Banks are likely to reduce non-performing loans, minimize liquidity risk, improve management governance along with performance upgraded so that the health of banks is maintained.

Research on measuring the health performance of banks has been carried out preceding. Research conducted by Azeharie and Wahjono (2017), entitled "Analysis of Bank Health at Indonesia State-Owned Bank Using RGEC Method at BRI, BNI, and Bank Mandiri for Periods 2011-2015" showed thatthe overall financial performance of BNI, BRI, and Bank Mandiri on *Risk Profile* aspect through analysing of NPL and LDR ratio were measured as healthy. Additionally, *Good Corporate Governance* aspect was measured as very healthy for BNI, BRI, and Bank Mandiri. Furthermore, the *Earnings* aspect which analyzed by NIM and ROA ratio was in healthy conditions followed by the *Capitals* aspect which represented by CAR ratio also measuredas healthy. Then a research entitled "AnalisisKinerjaPerbankanDenganPendekatan RGEC

(Risk Profile, Good Corporate Governnace, Earning, and Capital) UntukMengetahui Tingkat Kesehatan Bank Studipada Bank BUMN dan BPD Periode 2012-2014" conducted by Rahman, Sudjana and ZA (2016). Based on the results, BNI, BRI, Mandiri and Bank Jatim year 2012-2014 overall were very healthy, while BTN and Bank BJB were generally sound. Shown by *Risk Profile*performance measurement,the average was increase in 2012-2014 as reflected by the raising risk of the bank, and *Good Corporate Governance* which was measured by 11 aspects was generally good in the period of 2012-2014. Whereas*Earnings*aspect experienced fluctuation because the average increased in 2013 yet decreased in 2014. Furthermore, the *Capital* aspect slightly declined in 2013 but improved in 2014.

Extensive research has been done to analyzethe health performance of State-Owned Banks of Indonesia yet deficient research takes place at the time whereas the liability of SOEs significantly increases. Furthermore, all of the banks owned by the Indonesian Government are included in ten largest SOEs with high liability which assigns in intensifying more debt of SOEs. Since State-Owned Banks have significant role in the Indonesian economy, those banks are required to be advanced in maintaining and improving its performance in order to share positive influence on the national economy as a whole. Moreover, companies underSOEsthatact as agent of development are required to optimize its performance in order to enlarge the economic growth. Thus, the researcher wasinterested in conducting studyof measuring the healthiness level of State-Owned Banks of Indonesia as the object of research.

Based on the background described above, the researcher would like to conduct a studyentitled: **"Evaluation of State Banks Performance Based on The Regulation of Bank Indonesia Number: 13/1/PBI/2011 (A Study on State Banks of Indonesian Governmentin 2018)."**

1.2 Problems of the Study

According to the background of the study, the issues examinedin this study are:

1. How thesoundness level of PT Bank Mandiri (Persero) Tbkaccording toRisk-based Bank Rating approach with the RGEC method in 2018?
2. Howthesoundness level of PT Bank Rakyat Indonesia (Persero) Tbk according to Risk-based Bank Rating approach with the RGEC method in 2018?
3. How the soundness level of PT Bank Negara Indonesia (Persero) Tbkaccording to Risk-based Bank Rating approach with the RGEC method in 2018?
4. Howthe soundness level of PT Bank Tabungan Negara (Persero) Tbkaccording to Risk-based Bank Rating approach with the RGEC method in 2018?

1.3 Objectives of the Study

Based on the problemsof study that have been described, the objectives of the study are:

1. To determine the soundness level of PT Bank Mandiri (Persero) Tbkin 2018 by using Risk-based Bank Rating approach with RGEC method
2. To determine the soundness level of PT Bank Rakyat Indonesia (Persero)Tbkin 2018 by using Risk-based Bank Rating approach with RGEC method
3. To determine the soundness level of PT Bank Negara Indonesia (Persero) Tbkin 2018 by using Risk-based Bank Rating approach with RGEC method
4. To determine the soundness level of PT Bank Tabungan Negara (Persero) Tbkin 2018 by using Risk-based Bank Rating approach with RGEC method

1.4 Significant of the Study

1.4.1 For Academics

This study is expected to be useful as a reference for further researchers who interested in the banks' healthiness level as well as improvement of paper quality at the university level.

1.4.2 For Students

Thisstudyis expected to be beneficial for the implementation of theories learned during lectures and as a source to gaindepth comprehension about the soundness level of banks.

1.4.3 For Banks

This study is expected to provide reference and information to create policy in order to preserve the bank'ssoundness, even more, develop the management of the bankto increase advanced performance.

1.4.4 For Society

This study is expected to accommodate the reference of healthy banks which are entrusted to savefunds and valuable things for society before financial activities.

CHAPTER II

LITERATURE REVIEW

2.1 Previous Research

Research about measuring the level of bank performance has been done plenty of times. The measuring instrument used to assess the performance level of bank is the Risk-bank Based Rating (RBBR) which in accordance with regulation by the supervisor of Banks in Indonesia, Bank Indonesia. The determination of health level of Banks in Indonesia is appointed in Bank Indonesia Regulation Number: 13/1/PBI/201,it orders to measure the performance of bank rated by RGEC approach (Risk Profile, Corporate Governance, Earnings and Capital).

Octaviani and Saraswati (2018) conducted a research onanalyzing the healthiness level of PT Bank Negara Indonesia (Persero), PT Bank Rakyat Indonesia (Persero) Tbk., PT Bank Mandiri (Persero) Tbk., and PT Bank Tabungan Negara (Persero) Tbk. from 2012-2016 through the RGEC method. The research resultsshow that BNI, BRI, Bank Mandiri, and BTN were very healthy. AuliaRahman, Sudjana and ZA (2016)conducted a research on measuring the performance and health of State-Owned Banks and Bank of Regional Development on 2012 until 2014. It was found that Bank Negara Indonesia (BNI), Bank Rakyat Indonesia (BRI), Bank Mandiri and Bank Jatim were in very sound condition, while Bank Tabungan Negara (BTN) and Bank JabarBanten (BJB) in the same year were categorized as healthy bank.

Comment [tnr1]: Please be consistent whether you want to use the term 'sound' or "healthy.' Or, are those two have different meaning?

Septa Riadi, TunggaAtmadja and ArieWahyuni (2016) conducted a research to assess the healthiness level of one State-Owned Bank of Indonesia by using the RGEC method on 2013 until 2015 with PT Bank Mandiri (Persero) Tbk as the researchobject. The research results show that Bank Mandiri was very healthy in *Risk Profile*, *Earnings* and *Capital* aspect yet only rated as quite healthy in the GCG aspect. Furthermore, CahyaniPutri and GedeSuarjaya (2017) analyzedthe healthiness level of PT Bank Tabungan Negara (Persero) Tbk on the period of 2013 to 2015 using RGEC method. The research results show that BTN was indicatedto be in a quite healthy condition, the NPL ratio showed in less healthy condition along with the LDR ratio.

A research conducted by Sjahfira, Daryanto, and Ananggadipa (2018) determined the performance level of financial condition of Bank Negara Indonesia (BNI), Bank Rakyat Indonesia (BRI), Bank Mandiri, and Bank Central Asia (BCA).The results generatedshow that the financial performance of those banks were categorized as ideal and considered as healthy bank.

MarcellinaAzeharie and Imam Wahjono (2017) conducted a research on the financial performance Stat-Owned Banks namely Bank Negara Indonesia (BNI), Bank Rakyat Indonesia (BRI) and Bank Mandiri on the period of 2011-2015. The research used RGEC method and found that the overall financial performance of the three banks werein healthy condition. Furthermore,Alawiyah (2017) analyzed the soundness level of State-Owned Banks listed in Indonesia Stock

Exchange by using the RGEC method. The research results showthat the *Risk Profile, Good Corporate Governance, Earnings,* and *Capital* aspects were in the level of Composite Rating 1 or known as very sound on the year 2012 until 2014, with scores of 90.00%, 86.67% and 86.67% respectively.

The followings are previous research about analysis of bank performance using RBBR and its indicator:

Table 2.1 Previous Research Using RBBR Approach

No.	Author/Year	Research Title	Purpose of Research	Research Method	Result of Research
1.	Santi Octaviani and Nadya Saraswati (2018)	Analisis Penilaian Tingkat Kesehatan Bank dengan Metode Risk Profile, Good Corporate Governance, Earnings, and Capital	To determine the healthiness level of State-Owned Banks of Indonesia on 2012-2016 using RGEC	Descriptive research with quantitative approach	Generally, all State-Owned Banks of Indonesia were in very healthy condition
2.	Putu Ania Cahyani Putri and A.A. Gede Suarjaya (2017)	Analisis Tingkat Kesehatan Bank dengan Metode RGEC pada PT. Bank Tabungan Negara (Persero) Tbk	To analyze the health of PT. Bank Tabungan Negara (Persero) Tbk on period of 2013-2015 using RGEC method	Descriptive research with quantitative approach	The NPL and LDR ratio found in less healthy condition yet BTN still rated as enough healthy in overall
3.	Ramdansyah (2017)	Analisis Tingkat Kesehatan Bank BUMN dengan menggunakan Metode RGEC	To determine the healthiness level of State-Owned Banks of Indonesia which listed in IDX by using RGEC method on 2013-2016	Descriptive research with quantitative approach	BNI, BRI, BTN, and Bank Mandiri were in very healthy condition despite LDR ratio were indicate as quite ideal

Table 2.1 Continued

4.	Willis Marcellina Azeharie and Sentot Imam Wahjono (2017)	Analysis of Bank Health at Indonesia State-Owned Bank Using RGEC Method at BRI, BNI, and Mandiri for periods 2011-2015	To analyze the financial performance of three state-owned banks in Indonesia for the period of 2011-2015 by using RGEC method	Descriptive research with quantitative approach	Measurement of GCG classified as very healthy while Risk Profile, Earnings and Capital classified as healthy
5.	Kadek Septa Riadi, Anantawikrama Tungga Atmaja, and Made Arie Wahyuni (2016)	Penilaian Tingkat Kesehatan Bank dengan menggunakan Metode RGEC pada PT. Bank Mandiri (Persero) Tbk. on period of 2013-2015	To determine the health level of PT Bank Mandiri (Persero) Tbk on the year of 2013-2015 using RGEC	Descriptive research with quantitative approach	Aspects Risk Profile, Earnings and Capital were in very sound while GCG rated as quite sound
6.	Cut Sjahrifa, Wiwiek Mardawiyah Daryanto and Vanya Kanyaka Ananggadipa (2018)	Measuring the Financial Performance of Indonesian Banking Industry Using Risk-Based Bank Rating	To measure and analyze the financial condition of BNI, BRI, Bank Mandiri, and BCA against the national performance condition under BI Regulation No.13/1/PBI/2011	Descriptive research	BNI, BRI, Bank Mandiri and BCA were categorized in ideal and very healthy
7.	Tessa Aulia Rahman, Nengah Sudjana and Zahroh ZA (2016)	Analisis Kinerja Perbankan dengan Pendekatan RGEC Untuk Mengetahui Tinkat Kesehatan Bank (Studi pada Bank BUMN dan Bank Pembangunan Daerah periode 2012-2014)	To determine the soundness level of Bank State-Owned Banks of Indonesia and Bank of Regional Development on 2012-2014	Descriptive research and quantitative approach	BNI, BRI, Bank Mandiri, and Bank Jatim on the period of 2012-2014 were generally very healthy while BTN and Bank BJB healthy in overall

2.2 The Fundamental Theory

2.2.1 Bank

2.2.1.1 Definition of Bank

Based on Law Decree Number 10 year1998 about the banking industry in Indonesia, it is stated that bank is a business entity that collects fund from the public in the form of saving and then distributes it to society in the form of credit or other in order to improve the living standard of people in Indonesia. According to Zhelyazkova and Kitanov (2015), the bank is the fundamental provider of liquidity and credit to the business both to individual and public sector.

According to Kasmir (2008:2) on EngelbertTuwo and J. Tumewu (2018), bank is a financial institution which runs a business through collecting funds from society in the term of saving and then redistribute it to society, along with another banking service. Based on the theory above, it can be concluded about the definition of the bank, in general, is an institution thatruns and provides financial service for the public.

2.2.1.2 Function of Bank

Budisantoso (2006) on Regar, Areros, and Rogahang (2016) states that bank has a more specific function such as:

1. Agent of Trust

   In the term of an agent of trust, bank implies as an institution which can be trusted by a customer. The basis of intention to deposit money in a bank is the trust given by the customer. Customers believe that the money saved is secure, will not be misused, well managed, and when the due time comes, it is easy to withdraw the money. Furthermore, the bank needs to be confident as a creditor, whereas the money on loan will be paid back on the due date.

2. Agent of Development

Both economic activities (rillsector and monetary sector) are closely related and hardly separated. Rill sector will not optimally operate if the monetary sector is well-managed. The primary activity of the bank is to collect funds from society and then reverse funds to society as well as allow society to invest, distribute, and consume goods and services by utilizing money. The smoothinvestment, distribution, and consumption activity within-country will be able to advance the establishment ofpublic economy.

Comment [tnr2]: What are you trying to say? FYI, rill means 'sungaikecil.' Consider revising and find the suitable vocab.

3. Agent of Services

Bank does not only acquire money from society, but also offers other financial services to the public. The provided service has a close connection with general economic activities of the community, such as transferring funds, safekeeping of valuables, giving guarantees, and bill settlement.

Based on Marta and Widayati (2019), bank has a twofold function, such as intermediary between a surplus party and deficit party as well as financial service. Fromthe explanations above, bank functions as a financial service provider that can be trusted to keep valuables and contribute to promoting the welfare of the country's economy.

2.2.2 Financial Statement

According to Gerald, Ashwinpaul, and Dov (2003), a financial statement is only an approximation of economic reality because of the selective reporting of economic events by the accounting system, compounded by alternative accounting methods and estimates. Furthermore, based on Murhadi (2013), a financial statement is a business language, a financial report which contains information about the financial position of a company that can be shared with the user and understood by the user so interested party could recognize the level of financial health within the company. Stated by Brigham and Houston (2010:84), a financial statement consists of several papers with numbers inside, which essential to consider real assets of the company behind those numbers.

Based on several definitions of the financial statement above, it can be concluded that the financial statement is a report which covers the information of the final result about the whole transaction of a company within a specified period.

2.2.3 The Purpose of Financial Statement

One of the critical goals of establishing a company is to increase the welfare of the owner or stakeholder, even more, to maximize the wealth of stakeholders through enhancement of firm value (Brigham and Houston, 2006). The firm value could be shown under the financial statement of a company which include; balance sheet, income statement, cash flow statement, and capital statement.

Based on *PernyataanStandarAkuntansiKeuangan* (2017), the purpose of a financial statement is to provide information related to financial position, financial performance, and the change in the financial position of a company, whereas beneficial for the user while making an economic decision. Stated by Kasmir (2016:10), generally, the purpose of financial statements is giving financial information of firms or companies in a certain period. In accordance with the purpose of financial statement, it implies the relationship between the purpose and the function of financial statement, whereas the information included are useful for consideration of making a decision related to management within a company or economic decision for investors.

2.2.4 Types of Financial Statement

Types of financial statements of a company are distinguished by the purpose and objectives of usingthe financial statement. Each financial statement has a specific meaning as it reflects the shape of the company financial in detail.According to Kasmir (2016:28), in general, there are five types of financial statement which can be arranged, such as:

1. Balance Sheet

   The balance sheet is a report which showcompanies' financial position in a certain period. The financial position shown implies the amount as well as the types of assets and liabilities of the company.

2. Income Statement

   The income statement is a financial statement that portrays the result of company business in a certain period. Income statement not only contains the total income and source of income for the company, but also containinformation about total cost and types of company cost incurred.

3. Capital Statement

   Capital statement is a report which contains the total and types of capital owned by the company in the currenttime. Even more, the capital statement also explains the capital change and the cause of the company's capital changes.

4. Cash Flow Statement

   Cash flow statement shows the cash inflows and cash outflows of the company. Cash inflows constitute the income or loan from other parties, while cash outflows are the cost incurred by the company. Both cash inflows and cash outflows are arranged in a certain period.

5. Report Notes of Financial Statement

   Report notes of the financial statement is a report made in connection with the financial statement presented. Report notes of the financial statement provides a brief explanation related to the financial statement to give necessary information so that the user will have a clear understanding of the report.

In conclusion, financial statement for report consist of balance sheet, income statement, capital statement and cash flow statement whichshowthe financial position of the company as well as give information to internal parties (employee and management) and external parties (bank, investor, supplier, and others).

2.2.5 Bank Performance Level

According to European Central Bank (2010) on Tomuleasa (2019), bank performance refers to the ability to generate feasible profitability as its essential for maintainingongoing activity for investors to accomplish advantageous returns as well as for supervisors in ensuring a resilient financial framework. Jurevičienė and Skvarciany (2016), mention that raising the level of customer trust in commercial banks, becomesa constitutive element of the performance of banks.

The level of bank performance could be measured through several indicators. The primary indicator is the financial statement of the bank where commercial information related to financial activities within the current period are covered. Commercial information is possible to be accumulated in order to know the financial condition of banks. In former times, the Regulation of Bank Indonesia Number 6/10/PBI/2004 organized the bank health level by used CAMELS approach whereas its consist of *Capital, Asset quality, Management, Earnings, Liquidity and Sensitivity to market risk*. However, the system is no longer used since the amendmentregulationon January 5th, 2011, into Regulation of Bank Indonesia Number 13/1/PBI/2011 about the assessment of commercial banks' soundness by using risk approach (Risk-based Bank Rating) both individually and consolidation. Risk-based Banking Rating approach is composed of *Risk Profile, Good Corporate Governance (GCG), Earning and Capital* or known as RGEC method.

The followings are the clause of measuring the health performance of commercial bank governed by the Regulation of Bank Indonesia Number 13/1/PBI/ 2011 in article 3:

1. Banks are obligated to do a self assessment of Bank Health Level as regulated in Article 2, paragraph (3).
2. Self assessment of Bank Health Level as stated in paragraph (1) done in each semester at least for a final position within June and December.
3. Banks are required to update the self assessment of Bank Health Level on any occasion needed.
4. The results of self-assessment of Bank Health Level, as stated in paragraph (2) and paragraph (3) which has received approval from the Directors must be submitted to the Board of Commissioners.
5. Banks compulsory to deliver the outcome of self-assessment of Bank Health Level as stated on paragraph (4) to Bank Indonesia in the form of :

   a) For individual assessment of Bank Health Level, no later than 31st of July, for appraisal of the banks' soundness at the end of June and 31st of January, for valuation of the banks' soundness at the end of December; and

   b) For consolidated assessment of Bank Health Level, no later than 15th of August, for measurement of the soundness of banks at the end of June and on the 15th of February at the end of December.

Comment [tnr3]: Unclear.

In accordance with the Regulation of Bank Indonesia Number 13/1/PBI/2011 towardthe measurement of Bank Health Level, factors used as indicators for assessing healthiness rating present in article 7 are:

1. Risk Profile

   Appraisal of risk profile factors refers to an assessment of inherent risk and quality of management risk implementation in bank operation which is done through 8 risks, such as:

   a) Credit risk
   b) Market risk
   c) Liquidity risk
   d) Operational risk
   e) Legal risk
   f) Strategic risk
   g) Compliance risk
   h) Reputation risk.

2. Good Corporate Governance

   The assessment of Good Corporate Governance factors refers to the appraisal of execution regarding GCG's principles through bank management.

3. Earnings

   The measurement used is earning factors relative to the assessment of earnings performance, source of earnings, and sustainability earnings of banks.

4. Capital

The appraisal of capital factor relies on assessing capital adequacy and capital management of banks.

The purpose of assessing the health level of banks by using Healthiness Ranking (Risk-based Bank Rating) is to identify the composite rating of bank soundness (*PeringkatKomposit Tingkat Kesehatan Bank*). By determining the ranking of bank health level, it is able to simplify identifying the overall condition of banks. Based on the Regulation of Bank Indonesia Number 13/1/PBI/2011, composite rating of bank soundness is managed by comprehensive analysis as well as structured by the ranking of each factor in accordance with materiality and significance of each factor. Composite ranting of bank soundness is categorized as below :

1. Composite Rating 1 (PK-1)

   It shows thatthe bank in general is in a very healthy condition so it is proficient to face the significance of bad influence caused by the change in business condition as well as other external factors.

2. Composite Rating 2 (PK-2)

   It shows that the bank in general is in a healthy condition so it is capable to overcome the significance of negative influence from changes in business condition and other external factors.

3. Composite Rating 3 (PK-3)

It shows that the bank is quite healthy so it is competent enough to encounter dreadful influence significantly coming from changes of business condition and other external factors.

4. Composite Rating 4 (PK-4)

It shows that the bank is in less healthy condition so the bank is underprivileged to face the negative influence significantly derived from change inthe business condition and other external factors.

5. Composite Rating 5 (PK-5)

It shows that the bank is in an unhealthy condition so the bank is incapable of facing the bad influence from the change in business condition and other external factors.

2.2.6 Risk-Based Bank Rating Method

According to the Regulation of Bank Indonesia Number: 13/1/PBI/2011, RBBR approach agreed to be the indicators for evaluating the bank soundness. RBBR is incorporated by *Risk Profile*, *Good Corporate Governance*, *Earnings*, and *Capital*, orabbreviated as RGEC.

1. Risk Profile

Based on Circular Letter of Bank Indonesia Number: 13/24/DPNP/2011, assessment of risk profile indicator consists of 8 risk factors, namely: credit risk, market risk, liquidity risk, operational risk, legal risk, strategic risk, compliance risk, and reputation risk. This study assessed Risk Profile by using three indicators including credit risk factor using Non-Performing Loan (NPL), market risk factor using Interest Rate

Risk (IRR) and liquidity risk using Loan to Deposit Ratio (LDR). It is because this study used quantitative data only, while the data for operational risk, legal risk, strategic risk, compliance risk and reputation risk could not be gathered.

Followings are the detail explanation of indicators used to evaluate Risk Profile:

a) Non-Performing Loan (NPL)

Non-Performing Loan is used to measure the credit risk factor. According to Ozili (2018), NPL plays an important role as overall, it reflects the credit quality of the loan portfolio for the banking industry in a country. For the majority of central banks, non-performing loans are identified as bank earning assets, whereas they are contingent on their collectability (Daryanto, Utami and Rakhmawati, 2018).

Based on Indonesia Bank Dictionary, Non-Performing Loans (NPL) refers to loans issue which composed by loans classified as below standard, doubtable, and loss. Non-performing loans ratio implies the flexibility of bank management to manage problem loans issued by banks.

Aini (2013) states that Non-performing loans (NPL) reflects as credit risk whereas the smaller NPL indicates the smaller credit risk borne by banks. Non-performing loans become essential ratios in order to acknowledge the profitability of banks, the higher NPL implies greater loss provision and diminished profitability (Sjahfira, Daryanto and Ananggadipa, 2018). It shows the negative relationship between Non-Performing Loan and profitability

Bank Indonesia assigns healthy criteria of NPL to be below 5%. The criteria establishedis consideredas early prevention of loss that might be experienced by banks caused by the failure of the debtor to return the funds. NPL ratio is calculated by using the following formula:

$$NPL = \frac{Non - Performing\ \ Loan}{Total\ \ Credits} x\ 100\%$$

Source: Circular Letter of Bank Indonesia No.13/24/DPNP/2011

Table 2.2 Non-Performing Loan (NPL) Ratio Parameter Criteria

Rank	Criteria	Category
1	$NPL < 2\%$	Very Healthy
2	$2\% \leq NPL < 5\%$	Healthy
3	$5\% \leq NPL < 8\%$	Quite Healthy
4	$8\% \leq NPL < 12\%$	Less Healthy
5	$NPL \geq 12\%$	Unhealthy

Source: Circular Letter of Bank Indonesia No. 6/23/DPNP/2004

b) Interest Rate Risk

Based on Circular Letter of Bank Indonesia No.13/24/DPNP/2011, market risk is a risk on balance position and administrative account caused by changes in market condition. Market risks consist of interest rate risk, exchange risk, equity risk and commodity risk. Interest rate risk, which is part of market risk, can originate from trading book position or banking book position.

According toBank for International Settlements (2019), interest rate risk which presents in the banking book (IRRBB) refers to the common or awaited risk against the bank's capital and earnings rising from harmful movements in interest rate which impact the bank's book positions. Exaggerated Interest Rate in Banking Book (IRRBB) could lead to a significant threat to the base ofcurrent capital or future earning assuming that improperly managed.

Thus, this study used Interest-rate Risk (IRR) to measure market risk factors.The ratio is used in order to identify interest rates, circulation of the exchange rate and quantify the sensitivity of both assets and liabilities toward interest rate. Interest rate risk of bank displays the extent to which changes influence its financial position in market interest rates. The change in market rate risk might come from the impact of changing on the value of bank assets, liabilities and off-balance sheet as well as significations of mobilizations in market rates for the future cash flow which might be obtained by a bank (B English, 2002). Interest rate ratio (IRR) is calculated by using the following formula:

$$IRR = \frac{RSA\ (Rate\ \ Sensitive\ \ Assets)}{RSL\ (Rate\ \ Sensitive\ \ Liabilities\ )}x\ 100\%$$

Source: Circular Letter of Bank Indonesia No.13/24/DPNP/2011

Rate Sensitive Assets (RSA) are assets that able to change after its maturity date and after the due date of its re-pricing date, while Rate Sensitive Liabilities (RSL) are liabilities which its yields are able to change after its maturity date, certain date according to an agreement and particular date based on banks' intention. The sensitivity of assets and liabilities to interest rate risk is the cause of interest income being affected. The followings are a list of parameter criteria of Interest Rate Risk (IRR) ratio:

Table 2.3Interest Rate Risk (IRR) Parameter Criteria

Rank	Criteria	Category
1	$IRR > 45\%$	Strong
2	$41\% < IRR \leq 45\%$	Satisfactory
3	$36\% < IRR \leq 40\%$	Fair
4	$31\% < IRR \leq 35\%$	Marginal
5	$< 30\%$	Unsatisfactory

Source : BI Circular Letter No.13/24/DPNP/2011

c) Loan to Deposit Ratio

Based on Kashyap et al. (2002) on van den End (2013), the activity of taking deposits and loans by banks shows the function of changing bank liquidity and experiences similar overhead. Those activities could rise the possibility of facing liquidity if the condition is uncontrollable. Liquidity risk is a risk which occurs when bank unable to meet short-term demand due to the failure to convert a security or high liquid asset into cash without the defeat of capital orloss income within the process.

Comment [tnr4]: We rephrased this sentence. Check again.

The Regulation of Bank Indonesia No.13/24/DPNP/2011 describes liquidity risk as risk caused by the inability of banks to perform the duty which has been reaching its due date from the source of cash flow or from high-quality liquid assets that can be pledged as collateral.

The bank is known as liquid when it has enough cash assets to cover their liquidity needs or less than needed but have other assets that can be redeemed anytime without decreasing its market value as well as have the ability to create new cash assets through debts forms (Mardila and Afriyeni, 2019).

Hence, this study used a Loan to Deposit Ratio (LDR) in order to evaluate the liquidity risk of the bank within the risk profile factor. LDR can adversely affect liquidity risk while it can positively alter bank soundness (Chaniago and Widyantoro, 2017). LDR computes the coverage of loans with solid funding, main deposits from households and non-financial firms (van den End, 2013). According to Kasmir (2008:134), LDR is the ratio used to measure the composition of the amount of credit given divided by the amount of fund and capital used. LDR is measured by using the following formula:

$$LDR = \frac{Total\ Credit}{Total\ Third\ Parties\ Fund} x100\%$$

Source : BI Circular Letter No.13/24/DPNP/2011

Related to the LDR, Bank Indonesia adjusted the regulation of the ideal ratio for LDR within an interval of 78% until 98%. The followings are the list of parameter criteria of LDR:

Table 2.4 Loan to Deposit Ratio (LDR) Parameter Criteria

Rank	Criteria	Category	Additional Information
1	$LDR \leq 75\%$	Not Ideal	Excess of third parties' fund expansion or deficit of crediti expansion
2	$75\% < LDR \leq 85\%$	Ideal	Financial intermediary function well-implemented
3	$85\% < LDR \leq 100\%$	Quite Ideal	Financial intermediary function still well-implemented
4	$100\% < LDR \leq 120\%$	Not Ideal	Quite excess credit expansion
5	$LDR > 120\%$	Not Ideal	Excess of third parties' fund expansion or deficit of credit expansion

Source : BI Circular Letter No.6/23/DPNP/2011

d) Loan to Asset Ratio

Loan to Asset Ratio (LAR) is a ratio used to measure the level of bank liquidity in fulfilling a proposed loan using the entire assets in hand by the Bank (Ramadaniar, Topowijono, and Husaini, 2013). This ratio is gathered by comparing the total credit disbursed towards total assets owned by the bank. The greater value of the LAR ratio shows a negative relationship with bank liquidity. The higher the value of LAR indicates the greater the amount of assets needed to financed extension credit. LAR is calculated through the following formula:

$$LAR = \frac{Total\ Credits}{Total\ Assets} x100\%$$

Source : BI Circular Letter No.13/24/DPNP/2011

Table 2.5 Loan to Asset Ratio (LAR) Parameter Criteria

Rank	Criteria	Category
1	$50\% < LAR \leq 75\%$	Very Good
2	$75\% < LDR \leq 85\%$	Good
3	$85\% < LDR \leq 100\%$	Good Enough
4	$100\% < LDR \leq 120\%$	Not Good
5	$LDR > 120\%$	Not Good

Source : BI Circular Letter No.6/23/DPNP

e) Cash Ratio

Cash Ratio (CR) is a ratio used to measure the capacity of the bank in meeting its demanded liquidity due to withdrawal funds of third parties using liquid assets (Jumingan, 2011:244). The value of the CR shows a positive relationship with bank liquidity. Subsequently, greater CR will imply as controlled utilization of liquid asset which could decrease the chance of bank is experiencing liquidity issues. The calculation using the CR is done by comparing controlled liquid assets over third party funds. Cash Ratio (CR) is calculated using the formula below:

$$CR = \frac{Liquid\ \ Asset\,s\ Controlled}{Third\ Party\ Funds} x100\%$$

Source : BI Circular Letter No.6/23/DPNP/2004

According to Circular Letter of Bank Indonesia No. 6/23/DPNP/2004, controlled liquid assets incorporated by cash and current accounts with banks while third party funds sorted by current account, savings account and time deposit.

Comment [tnr5]: Unclear.

Table 2.6 Cash Ratio (CR) Parameter Criteria

Rank	Criteria	Category
1	$CR \geq 4{,}8\%$	Very Good
2	$4{,}8\% < CR \leq 4{,}05\%$	Good
3	$4{,}05\% < CR \leq 3{,}30\%$	Good Enough
4	$3{,}30\% < CR \leq 2{,}55\%$	Not Good
5	$CR < 2{,}55\%$	Not Good

Source : BI Circular Letter No.13/24/DPNP/2011

2. Good Corporate Governance (GCG)

Corporate governance as illustrated by Mayer (1999) on Emmanuel Isaac and Steve Nkemdilim (2016), is the entity of the processes, structure and information used for controlling and supervising the management of an organization.The Organization for Economic Corporation and Development (1999) defined corporate governance refers to a system on a basis of which companies are assisted and handled. By having a system within corporate, the parties are involved are given specific duties and responsibilities as well as created formulate rules and procedures in order to adopting decision on corporate matters.Stated by Circular Letter of Bank Indonesia No. 13/24/DPNP/2011, the assessment of good corporate governance is the measurement of bank management quality over applied principles by the bank. The implementation of good corporate governance for banks both in a developed and developing country is very important since the high quality of good corporate governance implementation could positively affect bank performance,therefore, the improvement of bank soundness takes place.

The implementation of Good Corporate Governance (GCG) on commercial banks in Indonesia is established in Bank Indonesia Circular Letter No.15/15/DPNP/2013 to improve the performance of banks, obey the applicable regulation and business ethics within banking industry along with protecting the stakeholders' importance. Execution of GCG in Indonesia banking industry must be in accordance with 5 (five) principles as listed below:

a) Transparency

The bank should be open while conveying material and relevance information along with the transparency of deciding for company matters;

b) Accountability

Clarity of function and implementation of accountability among banks' instrument to accomplish effectiveness of bank management;

c) Responsibility

The compatibility between bank management with applicable regulation and the principle of healthy management of bank;

d) Independency

The professional bank management without influence or pressure from any parties;

e) Fairness

Justice and equality in pleasing the right of stakeholders, whereas presented by agreement and applicable regulation.

To ensure the application of five basic principles of GCG, banks are required to do self-assessment periodically covering at least 11 factors of GCG assessment. The 11 (eleven) factors are mentioned below.

a) The fulfilment of duties and responsibilities of the board of Commissioners;
b) The fulfilment of duties and responsibilities of Directors;
c) Completeness and fulfilment of duties of Committee;
d) Handling conflict of interest;
e) The implementation of the compliance function;
f) The implementation of the internal audit function;
g) The implementation of the external audit function;

h) The implementation of risk management including internal control system;

i) Provision of funds to a related party and provision funds of large exposure;

j) The transparency of financial condition and non-financial Bank, report of Good Corporate Governance application and internal report;

k) The strategic plan of Bank;

In regard with the Regulation of Bank Indonesia concerning the Assessment of Bank Health Level through the RBBR approach, the measurement of good corporate governance which relies on the five basic principles, has been assembled into a certain governance system. This governance system composed of three governance aspects, namely: governance structure, governance process and governance outcome. The followings are detailed explanation of the purpose for each governance aspect:

a. Governance Structure

The governance structure has the purpose of assessing adequate structure and infrastructure of bank governance so that the process of implementing GCG principle will accomplish the desired outcome by bank stakeholders. The component of bank structure includesCommissioners, Directors, Committee and Banks' working units. The infrastructure of the bank governance includes policy and procedure of banks, management information system as well as main tasks and function for each structure within the organisation.

b. Governance Process

The governance process aims to assess the effectiveness of the process in applying the GCG principles which supported by the adequate structure and infrastructure of bank governance,therefore, resulting the expected outcomes by the Bank's stakeholders.

c. Governance Outcome

Governance outcome exists to assess the quality of stakeholders' expected outcomes whereas the result of the process in implementing the GCG principles and supported by adequate structure and infrastructure of bank governance.

The self assessment of GCG factors regulated in Bank Indonesia Circular Letter No.15/115/DPNP about The Implementation of GCG for Commercial Bank. Based on BI Circular Letter No.15/15/DPNP, the self assessment of GCG done through Self-assessment Working Paper (KertasKerjaPenilaianSendiri). Belows are steps to value the GCG ratio :

a. collect relevant data and information to assess the adequacy and effectiveness of the implementation of GCG principles, such as data on management, ownership, business group structure, minutes of meetings of the Board of Commissioners, Directors and Committees, and reports including annual reports, special reports of Directors in charge of the Compliance Function, reports relating to the duties of the Internal Audit Work Unit, public accountants' reports especially comments on the reliability of the Bank's internal control system, reports on the results of the Bank's self-assessment (RBBR), business plan reports and their realization, reports from the Board of Commissioners and other reports related to the application of other GCG principles;

b. assessing the adequacy and effectiveness of the implementation of GCG principles carried out in a comprehensive and structured manner on the three aspects of governance, namely governance structure, governance process and governance outcome, with due regard to the principle of significance or materiality; and

c. deduce positive and negative factors from each aspect of governance.

Regarding to the GCG Implementation Self Assessment Working Paper above, the Bank required to makes general conclusions on the results of the self assessment of GCG implementation and determines the GCG Factor Rating by referring to the GCG Factor Ranking Matrix as shown in Table 2.7.

Table 2.7 Criteria of Good Corporate Governance Ratio

Rank	Criteria	Category
1	GCG < 1,50%	Very Good
2	$1{,}50\% \geq and < 2{,}50\%$	Good
3	$2{,}50\% \geq and < 3{,}50\%$	Acceptable
4	$3{,}50\% \geq and < 4{,}50\%$	Poor

5	$4{,}50\% \geq and < 5\%$	Very Poor

Source: Circular Letter of Bank Indonesia No.13/24/DPNP/2011

3. Earnings

Based on the Regulation of Bank Indonesia No. 13/1/PBI/2011, the measurement of earningsfactor comprises the evaluation of earnings performance, source of earnings, earning sustainability and earnings management. The assessment is done with consideration of level, trend, structure, earning stability of the bank, and the comparation of bank performance and peer group performance.

The performance of earnings is the capacity of the bank to generate profits from operational activities along with non-operational activities (Martono, 2013:85). Sustain profitability within a financial institution will indicate healthy condition since the business activities are well-managed and bank commensurate to maintain high performance to generate stable profitability. Thus, this study used ROA (Return on Asset) and NIM (Net Interest Margin) ratio to calculate earnings factor. The followings are the formula to calculate ROA and NIM:

a. Return on Asset (ROA)

Return on Asset is used to determine the capability of bank management in utilizing its total assets to earn overall profit and income. This ratio also implies how profitable a firm seen from its total assets. ROA can positively impact the level of bank soundness because when the return of a bank increase periodically, the performance of the bank will increase as well, therefore,can be considered as a healthy bank. Higher ROA indicates the high performance of the company in advance of its total assets. ROA could be calculated by using the followings formula:

$$ROA = \frac{Net\ Income}{Average\ \ Total\ Assets} x100\%$$

Source : BI Circular Letter No.13/24/DPNP/2011

Based on Bank Indonesia Circular Letter No.13/24/DPNP, the Net Income refers to profit which recorded in current years' annual income statement while Average Total Asset could be generated by totallingboth total asset of the current year and total asset of the previous year and divide itintotwo. Below are the criteria of ROA:

Table 2.8 Criteria of Return On Assets (ROA) Ratio

Rank	Criteria	Category
1	$ROA > 1{,}50\%$	Very Good
2	$1{,}25\% < ROA \leq 1{,}5\%$	Good
3	$0{,}5\% < ROA \leq 1{,}25\%$	Acceptable
4	$0\% < ROA \leq 0{,}5\%$	Poor
5	$ROA \leq 0\%$	Very Poor

Source: Circular Letter of Bank Indonesia No.6/23/DPNP/2011

b. Net Interest Margin (NIM)

The net interest margin (NIM) computed as the distinction between interest income and interest expenses (Almarzoqi and Ben Naceur, 2015). The ratio of NIM is used to measure the ability of the bank to generate net interest income by allocating productive assets owned by the company (Taswan, 2010:561). Regarding Banks'

NIM, banks are categorized as healthy when it has NIM over 2%. The followings are the formula used to calculate the NIM:

$$NIM = \frac{Net\ Interest\ Income}{Average\ Total\ Productive\ Assets} x 100\%$$

Source: BI Circular Letter No.13/24/DPNP/2011

According to Bank Indonesia Circular Letter No.13/24/DPNP/2011, NIM is the result of the computation of interest income diminished by interest expense (annualized). The productive asset which accumulated is the productive asset that produces interest (interest earnings asset).

Table 2.9 Criteria of Net Interest Margin (NIM) Ratio

Rank	Criteria	Category
1	$NIM > 3\%$	Very Good
2	$2\% < NIM \leq 3\%$	Good
3	$1{,}5\% < NIM \leq 2\%$	Acceptable
4	$1\% < NIM \leq 1{,}5\%$	Poor
5	$NIM \leq 1\%$	Very Poor

Source: Circular Letter of Bank Indonesia No.6/23/DPNP/2011

4. Capital

Bank Indonesia Circular Letter No.13/24/DPNP/2011 stated that the measurement of capital factor includes the capital adequacy evaluationmanagement. In terms of assessment, banks aredemanded to follow provisions of Bank Indonesia regarding minimum capital requirement (KewajibanPenyediaan Modal Minimum) for commercial banks. Not only obeying the provisions, but also required to associate the capital adequacy over riskprofileof bank.

Capital adequacy and capital adequacy management act as indicators need to be fulfilled by the bank in term of measuring its capital. The followings are the scope for measuring banks capital for each indicator:

a. Capital adequacy of Bank

The assessment of capital adequacy on bank needs to be done comprehensively and should cover:

- Level, trend and the composition of banks' capital;
- Minimum capital requirement ratio which considers Credit Risk, Market Risk, and Operational Risk;
- Capital adequacy of banks relative to Risk Profile

b. Capital Adequacy Management

The analysis of capital adequacy management includes capital management and capital access capability.

In business, capital plays a role as a demanded factor as well as an essential factor. As a matter of fact, banks as an intermediary between creditors and debtors should have sufficient capital on behalf of performing its operations. Hence, this study used Capital Adequacy Ratio (CAR) to evaluate the capital factor of the bank. CAR is the ratio of banks' capital relative to banks' risk. CAR is the performance ratio that calculates banks' capital adequacy which presents to support assets that incorporate or compose a risk (Dendawijaya, 2005).CAR is measured by the following formula:

$$CAR = \frac{Core\ Capital\ (Tire\ 1) + Supplementary\ Capital\ (Tire\ 2)}{Risk\ Weighted\ Assets} x100\%$$

Source : BI Circular Letter No.13/24/DPNP/2011

Table 2.10 Criteria of Capital Adequacy Ratio (CAR)

Rank	Criteria	Category
1	$12\% < CAR$	Very Good
2	$9\% < CAR \leq 12\%$	Good
3	$8\% \leq CAR \leq 9\%$	Acceptable
4	$9\% \leq CAR < 6\%$	Poor
5	$CAR < 6\%$	Very Poor

Source: Circular Letter of Bank Indonesia No.6/23/DPNP/2011

2.2.7 Definition of State-Owned Entreprises/SOEs (Badan Usaha Milik Negara/BUMN)

State Own Entreprises (SOEs)/*Badan Usaha Milik Negara* (BUMN)greatly contributes in Indonesian economy. SOEsare required to pay attention to national interest. In terms of running its function, SOEs should be in healthy condition and have advance good corporate management to able to assist the performance of the President.

To analyze the performance level of SOEs, a regulation was issued in The Decree of The Minister of State-Owned Enterprises No. KEP-100/MBU/2002 which stated that SOE is a company (Persero) as arranged in PP number 12 in 1998 and also a general company (Perum) as arranged in PP number 13 in 1998. SOEsare categorized in two distinctions as follows:

a. Non-financial Service Company

The SOEs which engaged in infrastructure and non-infrastructure sector. Infrastructure sector is SOEs which provide goods and service in behalf of society matter which comprises of (1) generation, transmission, or distribution of labor; (2) procurement of funds or operational supporting system of freight or passenger transportation services in behalf of sea, air or train; (3) toll road and bridge, dock, port for sea, river and lake, even more, airport and airfield; (4) dams and irrigation. As stated previously, otherthan that, SOEs which operate in the non-infrastructure sector are business which not included within the infrastructure business.

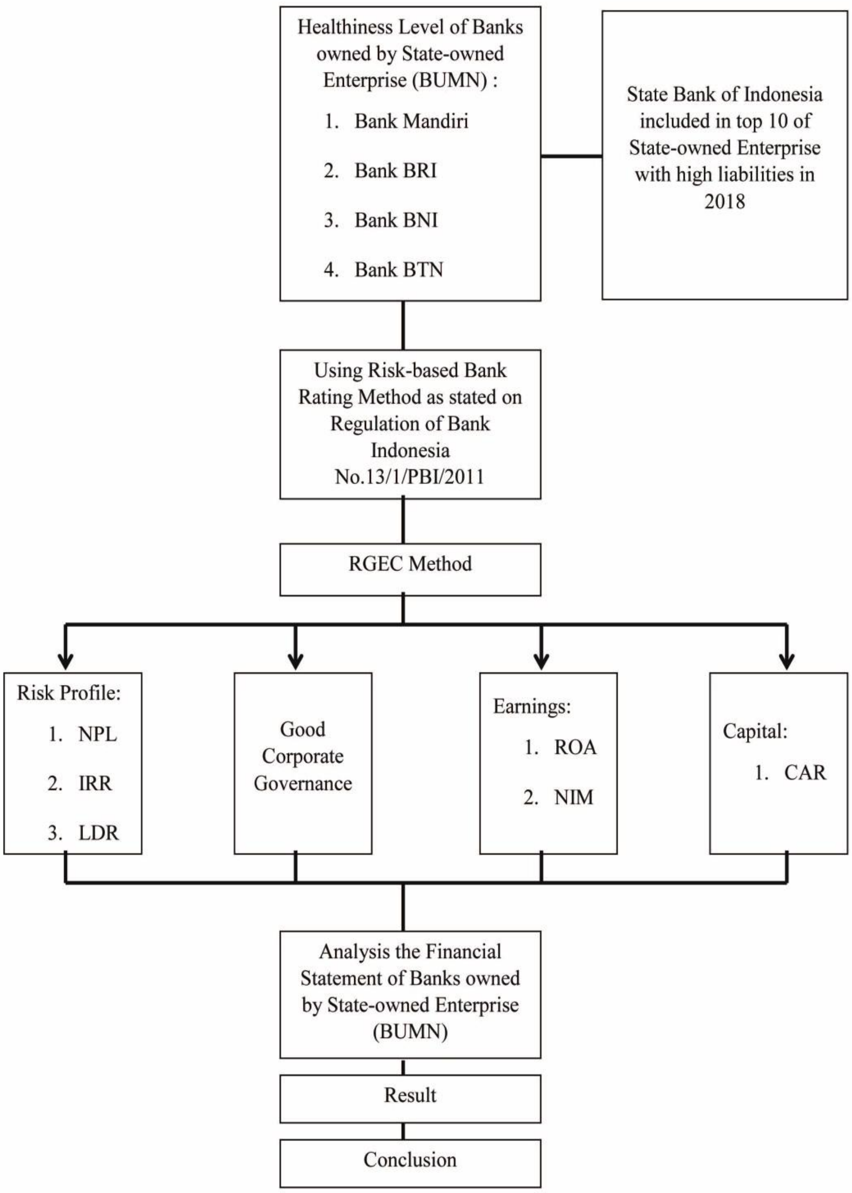
b. Financial Service Company

The SOEs which engaged in the financial business, insurance, financing service and loan service.

Relying on the regulation created to measure the health performance among SOEs companies, this study referred to the Regulation of Bank Indonesia No.13/1/PBI/2011 in order to measure the financial service company of SOEs.

2.3 Research Framework

Figure 2.1 Research Framework



CHAPTER III

RESEARCH METHOD

3.1 Types of Research

The types of research used is descriptive research with a quantitative approach. Based on Darmawan (2013: 37-38) quantitative approach refers to the process of finding knowledge that uses data in the form of numbers as a tool to find necessary information. The descriptive method describes the issues based on existing data then followed by further analysis along with conclusions (Yusuf, 2016: 104).

According to Uman and Bougie (2017), the purpose of descriptive research is to gain data that describes the topic of interest which being studied.Stated by Nana Sudjana (1997: 53), the research method of descriptive with quantitative approach used if the purpose is to describe or explain an event or an events that is happening at the present time in the form of meaningful numbers. Based on the previous definition, descriptive research with the quantitative approach is done by analyzing and describing the data collectedthat is used in providingthe problem solving of interesting study in the forms of numbers. This studyprocessed and analyzed the data in the form of annual financial statements and annual report in 2018 which published by StateBanks of Indonesian Government.

3.2 Population and Sample

According to Sekaran (2006), population refers to a whole group of people, events, or things that interested to be investigated by the researcher. Based on the prior definition of population, the population in this research is State Bank of Indonesian Government. Indonesian Government running the business to develop the economics of Indonesia in various sectors. As in banking sector, Indonesian Government operated banking services differs by the scale and the ownership. State Bank which owned by Indonesian Government are commercial banks which its ownership held by the State.

The sample would not be a presence without population. According to Sekaran (2003), a sample is a piece of population composed by a member selected from the population. Sample in this studyare four State-Owned Banks namely PT Bank Negara Indonesia (Persero) Tbk., PT Bank Rakyat Indonesia (Persero) Tbk., PT Bank Mandiri (Persero) Tbk., and PT Bank Tabungan Negara (Persero) Tbk.

3.3 Locations and Period of Research

The studywas conducted in Indonesia Stock Exchange (IDX). However, the data used in this studywere annual financial statements and annual reports of each State-Owned Bank of Indonesia obtained from the Indonesian Stock Exchange Investment Gallery, Faculty of Economics and Business,Universitas Brawijaya. The gallery is located at JalanM.T. Haryono No. 165, Malang. The period of this studyis in the 2018.

3.4 Types and Sources of Data

Sources of this study are book, journal, previous research and analysis of financial statement which associated with the issues of research. This study used secondary data in the form of annual financial statements and annual reports. According to Uman and Bougie (2016), secondary data are data whichhave been collected before by other person with the different objects from the current study. Secondary data could be gathered from statistical bulletins, government publications, published or unpublished information accessible within the organization or outside the organization.

The secondary data used in this studywere the published annual financial statements and annual reports of PT Bank Mandiri (Persero) Tbk., PT Bank Negara Indonesia (Persero) Tbk., PT Bank Rakyat Indonesia (Persero) Tbk., and PT Bank Tabungan Negara (Persero) Tbk., on the period of 2018. The source of secondary datais the website of IDX (www.idx.co.id), Gallery IDX in Faculty of Economics and Business UniversitasBrawijaya, official website of PT Bank Mandiri (Persero) Tbk (www.bankmandiri.co.id), PT Bank Negara Indonesia (Persero) Tbk (www.bni.co.id), PT Bank Rakyat Indonesia (Persero) Tbk (www.bri.co.id), PT Bank Tabungan Negara (Persero) Tbk (www.btn.co.id).

3.5 Method of Data Collection

The studyused documentation as themethod of data collection. Documentation method is a method used to mark historical data deriving from letters, reports, mementos and also theoretical data from books, literature review and other related materials allied with the issue of this study. The essentials data used in this study are annual financial statements and annual reportsthat ended in 2018 from State-Owned Banks of Indonesia.

3.6 Data Analysis Technique

The technique used to analyze data in this studyis descriptive quantitative. That technique was used to give detail explanation of healthiness level of PT Bank Mandiri (Persero) Tbk., PT Bank Negara Indonesia (Persero) Tbk., PT Bank Rakyat Indonesia (Persero) Tbk., and PT Bank Tabungan Negara (Persero) Tbk., in accordance with the Regulation by Bank Indonesia No.13/1/PBI/2011 about Assessment of the Soundness Level of Commercial Bank using Risk-Based Bank Rating (RBBR) approach with RGEC method. The followings are steps provided to analyze data in this study:

1. Compiling the annual financial report and annual report, which ended in December 2018 from PT Bank Negara Indonesia (Persero) Tbk., PT Bank Rakyat Indonesia (Persero) Tbk., PT Bank Mandiri (Persero) Tbk., and PT Bank Tabungan Negara (Persero) Tbk.
2. Analyzing Risk Profile factor by measuring Credit Risk by calculatingthe Non-Performing Loan (NPL), Market Risk by calculatingthe Interest Rate Risk (IRR), Liquidity Risk by calculatingthe Loan to Deposit Ratio (LDR), Loan to Asset Ratio (LAR) and Cash Ratio (CR).
3. Analyzing Good Corporate Governance factor through three governance system aspectsincludinggovernance structure,

governance process and governance outcome which included in the annual reports.

4. Analyzing Earnings factor through the calculation of Return on Asset (ROA) and Net Interest Margin (NIM).
5. Analyzing Capital factor through the calculation of Capital Adequacy Ratio (CAR).
6. Ranking the result gathered from the measurement of NPL, LDR, LAR, CR, IRR, GCG, ROA, NIM and CAR in accordance with Bank Indonesia Circular Letter No.6/23/DPNP/2011.
7. Determining the composite rating of healthiness level of PT Bank Negara Indonesia (Persero) Tbk., PT Bank Rakyat Indonesia (Persero) Tbk., PT Bank Mandiri (Persero) Tbk., and PT Bank Tabungan Negara (Persero) Tbk., which congruence with the regulation by Bank Indonesia No.13/1/PBI/2011 in Article 9.
8. Drawing conclusion from the measurement of bank health level among theState-Owned Banks of Indonesia in 2018.

3.7 Variable Operational Definition

The operational definition refers to the minimization of abstract concepts so that they are available to be measured, it is able by looking through behavioural dimensions, characteristics, or assets indicated by the concept (Uman and Bougie, 2016). This study involved four different factors to measure the healthiness condition of State-Owned Banks of Indonesian by using Risk-Based Bank Rating. The following are factors along with the ratio used to measuring healthiness indicators of banks:

1. Risk Profile

Banks are required to done assessments for 8 (eight) different risks such as credit risk, market risk, liquidity risk, legal risk, strategic risk, compliance risk and reputation risk. However, this study only conducted measurement to the credit risk, market risk and liquidity risk corresponding to data presented on the financial statements. The followings are ratio used for each three risks in this study:

a. Credit Risk

Credit risk will be measured using the Non-Performing Loan formula. NPL is the comparison between loans that classified as a credit freeze, doubtable and loss towards total credit. The total credit is the whole loan given and distributes in terms of Rupiah and foreign currency. The following are the formula used to calculate Non-Performance Loan:

$$NPL = \frac{Non - Performing\ Loan}{Total\ Credits} x\ 100\%$$

Source: Bank Indonesia Circular Letter No.13/24/DPNP/2011

b. Market Risk

The market risk will be calculated using Interest Rate Risk. IRR is the comparison between an asset that available to change afterward its maturity date and due date of its repricing date divided with liabilities which yields can change after the maturity date, specific date according to an agreement and particular date based on banks' objective. IRR is calculated using the following formula:

$$IRR = \frac{ROA\ (RateSensitiveAssets)}{RSL\ (RateSensitiveLiabilities)} x\ 100\%$$

Source: Bank Indonesia Circular Letter No.13/24/DPNP/2011

c. Liquidity Risk

Liquidity risk is able to be calculated using 3 (three) indicators, namely Loan to Deposit Ratio (LDR), Loan to Asset Ratio (LAR) and Cash Ratio (CR).

a) Loan to Deposit Ratio (LDR)

LDR is the accumulation of aggregate credit that is distributed in the form of all types of credit (Rupiah and foreign currency) divided by the number of funds from third parties (current account, saving and time deposit). The amount of LDR is gathered by using the following formula:

$$LDR = \frac{Total\ Credit}{Total\ Third\ Parties\ Fund} x100\%$$

Source: Bank Indonesia Circular Letter No.13/24/DPNP/2011

b) Loan to Asset Ratio (LAR)

LAR is the value between total loans distributed by bank to total assets owned by the bank. Bank total assets refer to the quantity of assets closely-held by the bank that has the future advantage, like cash, current accounts, securities, credit and so on. The amount of LAR is gathered by using the following formula:

$$LAR = \frac{Total\ Credits}{Total\ Assets} x100\%$$

Source : Bank Indonesia Circular Letter No.13/24/DPNP/2011

c) Cash Ratio (CR)

CR ratio is gathered by accumulating the comparison between liquid assets, which controlled with third party funds. Liquid assets controlled consist of cash, current accounts with Bank Indonesia and current accounts with other banks. CR ratio is calculated using the following formula:

$$CR = \frac{Liquid\ Assets\ Controlled}{Third\ Party\ Funds} x100\%$$

Source : Bank Indonesia Circular Letter N0.13/24/DPNP/2011

2. Good Corporate Governance (GCG)

Commercial Banks responsible for done self-assessment of good corporate governance within banks as regulated on the regulation of Bank Indonesia No.13/1/PBI/2011. The assessment of GCG build upon 11 assessment factor as listed below:

1) The fulfilment of duties and responsibilities of the board of Commissioners;
2) The fulfilment of duties and responsibilities of Directors;
3) Completeness and fulfilment of duties of Committee;
4) Handling conflict of interest;
5) The implementation of the compliance function;
6) The implementation of the internal audit function;
7) The implementation of the external audit function;
8) The implementation of risk management including internal control system;

9) Provision of funds to a related party and provision funds of large exposure;

10) The transparency of financial condition and non-financial Bank, report of Good Corporate Governance application and internal report;

11) The strategic plan of Bank;

3. Earnings

Earnings factor will be calculated using the determined formula in the Circular Letter of Bank Indonesia No.13/24/DPNP/2011.

a) Return On Asset (ROA)

Return on Asset used to identify how capable management bank on gathering the profitability of the bank by dividing net income and average total assets. Net income refers to income before tax while average total assets obtained by sum up the total asset of the current year and total asset of the previous year divided by two. The amount of ROA obtained by calculating this formula:

$$ROA = \frac{Net\ Income}{Average\ Total\ Assets} x100\%$$

Source: Bank Indonesia Circular Letter No.13/24/DPNP/2011

b) Net Interest Margin (NIM)

Net Interest Margin used to measure the capability of the bank to earn net interest income by distributing its productive asset. NIM compares the result of the computation of interest income reduced by interest expense (annualized) with the productive asset which produces interest (interest-earning asset). The amount of NIM calculated using the formula below:

$$NIM = \frac{Net\ Interest\ Income}{Average\ Total\ Productive\ Assets} x100\%$$

Source: Bank Indonesia Circular Letter No.13/24/DPNP/2011

4. Capitals

The measurement of capital factors to determine the sufficiency of banks' capital as well as capital adequacy management of banks so that able to use capital adequacy ratio as regulated on Bank Indonesia Circular Letter No.13/24/DPNP/2011.

a) Capital Adequacy Ratio (CAR)

Capital adequacy ratio calculates the capital owned divided by weighted risk assets. The component included in modal is core capital (equity capital and disclosed reserve) known as Tire 1 and supplementary capital (revaluation reserve, undisclosed reserve, hybrid instrument and subordinated term debt) called Tire 2. Risk-weighted assets are (ATMR) consist of weighted assets based on credit risk, market risk and operational risk. The amount of Capital Adequacy Ratio gathered by using the formula below:

$$CAR = \frac{Core\ Capital(Tire\ 1) + Supplementary\ Capital(Tire 2)}{Risk\ Weighted\ Assets} x100\%$$

Source: Bank Indonesia Circular Letter No.13/24/DPNP/2011

CHAPTER IV

RESULT AND DISCUSSION

4.1 Companies Profile

4.1.1 PT Bank Negara Indonesia (Persero) Tbk

PT Bank Negara Indonesia (Persero) Tbk (BNI) was originally established in Indonesia because the financial organisation below the name "Bank Negara Indonesia" supported by Government Regulation Law No.2 of 1946 on July 5th, 1946. Later on, underthe Law No. 17 of 1968, BNI became "Bank Negara Indonesia 1946", and adjusted its standing as a State-Owned banking company. Subsequently. BNI's role as a bank was mandated to enhance the people's economy and participate in national development as confirmed by Law No. 17 of 1968 concerning Bank Negara Indonesia 1946.

Based on Government Regulation No.19, 1992, April 29, 1992, BNI modified its position to a limited liability company (Persero). The amendment of position to limited liability company was created in Deed No.131 on July 31st, 1992, before MuhaniSalim, SH. and was printed within the State Gazette of the Republic of Indonesia No.73 on September 11th, 1992, Supplement No.1A.

BNI as a State-Owned Enterprise was the primary to become a public company after listing its shares on the Jakarta Stock Exchange along with the Surabaya Stock Exchange in 1996. To strengthen its monetary structure and competitiveness within the national banking industry, BNI conducted a variety of company actions, including being recapitalized by the government in 1999, government share divestment in 2007, and restricted public offering in 2010.

Currently, Indonesian Government owns 60% of BNI shares, whereas the public, consist of individuals and institutions, own the remaining 40% domestic and foreign. Nowadays, BNI is the fourth largest commercial bank in Indonesia, supported by total assets, total loans, and total third-party funds. To supply monetary services in an integrated manner, BNI sustains a variety of subsidiaries, specifically Bank BNI Syariah, BNI Multifinance, BNI Sekuritas, BNI Life Insurance, and BNI Remittance.

BNI offers deposits and loan facilities for company, medium, and undersized segments. Multifold of the best goods and services are adapted to the needs of customers from childhood, through adolescence and adulthood, until retirement.

Comment [tnr1]: What do you mean with this word?

BNI's main office is located at JalanJendralSudirman Kav.1, Jakarta. As of June 30th, 2019, BNI has 201 domestic branches, 1,112 sub-branches, and 934 alternative outlets. Additionally, BNI's network conjointly includes five overseas branches settled in Singapore, Hongkong, Tokyo, London. Seoul, and 1 agency in New York.

1. Vision and Mission of Company

a. Vision

To be a leading financial institution in service and performance

b. Mission

1. To provide excellent services and value-added solutions to all customers and the prime business partner.
2. To enhance excellent investment value for our investors.
3. To provide the most suitable work environment as a place of pride for our employees in performance and achievements.
4. To increase the corporate's concern and responsibility to the environment and community.
5. To be the exemplary practices of compliance and good corporate governance.

2. Corporate Value and Culture

BNI created its Corporate Culture known as "Prinsip 46" which embodying a set of behavioural instruction that expected to be obeyed by employees. BNI's Corporate Culture consists of four BNI Workplace Values, namely:

1. Professionalism
2. Integrity
3. Customer Orientation
4. Continuous Improvement

Along with BNI workplace value, BNI's Corporate Culture also composed of 6 BNI Main Behavioural Values, specifically:

1. Improvement of competency and performance
2. Honesty and sincerity
3. Discipline, consistency, and responsibility

4. Provision of excellent services through a synergized partnership
5. Continuous improvement
6. Creativity and innovation

4.1.2 PT Bank Rakyat Indonesia (Persero) Tbk

PT Bank Rakyat Indonesia (Persero) Tbk(BRI) is a corporate that performs in banking financial services, which established and began operating commercially on December 18th, 1968 based on Law No.21 of 1968. In 1992, Bank BRI modified its position to become PT Bank Rakyat Indonesia (Persero) on the premise of Banking Law No.7 of 1992.Furthermore, Bank BRI wastransformed into a Publicly Listed Company on November 10th, 2003, through its share listing onthe Indonesian Stock Exchange beneath the share code of BBRI.

Based on article 3 of the BRI Articles of Association, the scope of BRI's activities is conducting business in the banking sector as well as optimizing the utilization of BRI's resources to provide high-quality and highly competitive services to achieve profits in order to increase the value of the corporate by applying the principles of a Limited Liability Company. The majority of Bank BRI share is owned by the Indonesian Government.

During BRI's initial public offering, the Government by the Minister of State-Owned Enterprises approve to conduct Initial Public Offering (IPO) in the amount of 3,811,765,000 common shares of BRI in the name of series B, subsist of 2,047,060,000 shares inherited by the Republic of Indonesia (divested), and 1,764,705,000 shares of new Series

B, along with more ordering and more rationing options. The IPO comprises of both offering to the international community dan domestic community (Indonesian citizen).

The head office of Bank BRI is located in BRI I Building at JalanJenderalSudirmanKav. 44-46, Jakarta. According to the report ended on June 30th, 2019, BRI has three overseas branches settled in Cayman Islands, Singapore, and Timor Leste, also two overseas Representative Offices located in New York and Hong Kong. Furthermore, to improve its operational and to satisfy its customer needs, Bank BRI is supported by seven subsidiaries, namely PT Bank BRISyariahTbk, PT Bank Rakyat Indonesia AgroniagaTbk, BRI Remittance Co. Ltg. Hong Kong, PT Asuransi BRI Life, PT BRI Multifinance Indonesia, PT DanareksaSekuritas, and PT BRI Ventura Investama.

1. Vision and Mission of Company

a. Vision

Becoming the most valuable bank in South East Asia and home to the best talent.

b. Mission

1) Conducting the best banking activities by prioritizing services for micro, small, and medium business to support economic improvement for the people.

2) Provide service excellence by focusing on customers through productive conventional and digital networks, professional

manpower with performance-driven culture, and reliable and future-ready information technology by implementing operations and risk management of excellence principals.

3) Provide optimum advantages and benefits to the stakeholders by implementing the financial sustainability principle and outstanding Good Corporate Governance.

2. Corporate Value and Culture

a. Integrity

Integrity has meaningof always thinking, saying, and behaving in a commendable manner, maintaining honor, and obeying rules. Behavior that shows the value of integrity is transparent, honest, sincere, and obedient to the rules.

b. Professionalism

Professionalism has meaning of always committed to work completely and accurately with the best capabilities and full responsibility. Behaviors that show the value of professionalism are continuous learners and fairness.

c. Trust

Trust has meaning of always building trust and mutual trust among stakeholders for the progress of the company. Behavior that shows the value of trust is mutual respect and prioritizes the interest of the company and the state.

d. Innovation

Innovation has meaning of always utilizing the ability and expertise to find solutions and new ideas to produce products or policies in response to the challenges of the company's problems. Behavior that shows the value of innovation is visionary and a pioneer of change.

e. Customer Centric

Customer Centric has meaning of always treating the customer as the main partner that is mutually beneficial to grow sustainably. Behavior that shows customer centric value is serving more than customers' expectation with a sincere and collaborative mind.

4.1.3 PT Bank Mandiri (Persero) Tbk

PT Bank Mandiri (Persero) Tbk(Bank Mandiri) was instituted on October 2nd, 1998, as part of the bank restricting program of the Government of Indonesia with the notarial deed fromSutjipto, S.H., No.10, according to Government Regulation No.75 of 1998 on October 1st, 1998. The multinationaldeed was approved by the Minister of Justice of the Republic of Indonesia based on Decree No. C2-16561.HT.01.01.TH.98 onOctober 2nd, 1998, and declared in Supplement No. 6859 in State Gazette of the Republic of Indonesia No.97 on December 4th, 1998.

Bank Mandiri was established through merging PT Bank BumiDaya (Persero) (BBD), PT Bank Dagang Negara (Persero) (BDN), PT Bank Export-Import Indonesia (Persero) (Exim Bank), and PT Bank

Pembangunan Indonesia (Persero) (Bapindo) and stated as the Merging Participating Bank.

Based on Article 3 of Bank Mandiri's Articles of Association, the scope of Bank Mandiri's activities is to conduct business within the banking sector in accordance with the applicable rules. Bank Mandiri began its operation on August 1st, 1999.

Bank Mandiri has submitted a registration statement in connection with an IPO to the Financial Services Authority (OJK), formerly the Capital Market and Financial Institution Supervisory Agency (Bapepam and LK), on June 2nd, 2003, and had been declared effective based on the Letter of the Chairman of Bapepam and LK No. S-1551/PM/2003 on June 27th. Furthermore, the company's name changed from PT Bank Mandiri (Persero) to PT Bank Mandiri (Persero) Tbk.

On July 14th, 2003, Bank Mandiri conducted an IPO of 4,000,000,000 Series B Common Stocks, with a nominal value of Rp500 (full amount) per share sold at the price of Rp675 (full amount) per share. The public offering to the community is a divestment of 20.00% of Bank Mandiri's share owned by the Government.

Bank Mandiri is supported by various subsidiaries, which significantly contribute to income around 12% to the total consolidated net profit of the bank. The subsidiaries are PT Bank SyariahMandiri, Bank Mandiri (Europe) Limited, PT Bank MandiriSekuritas, PT Bank MandiriTaspen, PT Bank Mandiri Tunas Finance, Mandiri International Remittance, PT AXA Mandiri Financial Service, PT

AsuransiJiwaInHealth Indonesia, PT MandiriUtama Finance, and PT Mandiri Capital Indonesia.

Bank Mandiri's head office is located at JalanJenderalGatotSubrotoKavling 36-38 South Jakarta, Indonesia. Subsequently, Bank Mandiri has 2,624 domestic branches around Indonesia and six overseas branches placed in Cayman Island, Singapore, Hong Kong, Dili Timor Leste, and Shanghai (Republic of China).

1. Vision and Mission of Company

a. Vision

Indonesia's best, ASEAN's prominent

b. Mission

1) Oriented towards market needs fulfilment
2) Developing professional human capital
3) Gaining maximum benefit for the stakeholders
4) To have an open management approach
5) To demonstrate concern for the community and environment

2. Corporate Value and Culture

a. Fulfilling Customers' Needs

Explore needs and maintain professional relationships withcustomers, and can provide solutions to meet customer needs appropriately

b. Strong Mandirian

The entire Mandirian must have a pattern learnest think, work smart, agile, adaptive and solutive, and have a high entrepreneurship and resilience.

c. One Heart One Mandiri

All Mandirian must prioritizes the interest of Mandiri above other interest, collaborate, and have empathy and mutual respect.

d. Growing Healthy

All Mandirian must be able to think and act a balanced manner, not just pursuing Key Performance Indicator (KPI) only but also able to control risk, make process improvements, and improve capabilities to build a long-term sustained business.

e. Together Build The Nation

Behavior of Mandirian who can interpret work, as well as contribute and a balanced role as an agent of development.

4.1.4 PT Bank Tabungan Negara (Persero) Tbk

PT Bank Tabungan Negara (Persero) Tbk(Bank) was formerly established as a State-Owned Bank underneath the name "Bank Tabungan Pos" supported in Martial Law No.9 of 1950 February 9th, 1950. Afterwards, the name of the bank was changed to "Bank Tabungan Negara" based on Government Regulation Amendment of Law No.4 of 1963. The Bank started to fully-operate as a state-owned commercial bank on April 29th, 1989.

Comment [tnr2]: Just a proofreader curiosity, why not BTN since it is the actual name?

According to Government Regulation No.24 of 1992, Bank's status was modified into a state-owned limited liability corporation (Persero). Subsequently, the Bank gained the status of a foreign exchange bank as it was declared in the Decision Letter No.275/55/KRP/DIR on September 23rd, 1994 by the Directors of Bank Indonesia.

The Bank has achieved approval from Bank Indonesia to run commercial banking activities in accordance to sharia principles through Letter No.6/1350/DPbSon December 15th, 2004. Additionally, the Bank evoked its sharia principles on February 14th, 2005, by operating its first sharia branch in Jakarta-Harmoni.

Based on Article 3 of the Bank's Article of Association, the scope of the Bank's enterprise includes conducting commercial banking activities in congruence with the prevailing law and regulations, together with the Bank's activities based on sharia principles.

In the context of IPO, the Bank acquired a permit to undertake a Public Offering repose on the House of Representatives of the Republic of Indonesia approval in its chairman Letter No.PW.01/3104/DPRR/V/2009 on May 29, 2009. Later on, declared on Letter N0. S-10523/BL/2009 of the Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) on December 8th, 2009, the Bank submitted the Registration Statement relating to the IPO of 6,353,999,999 common shares Series B of the Republic of Indonesia and 2,360,057,000 new common shares Series B, at par value of Rp500 (full Rupiah) per share to the community. The shares that were offered to the general public were listed and traded on IDX on December 17th, 2009, with the asking price of Rp800 (full Rupiah) per share.

In link to the IPO of the shares, the Bank enforces the Management and Employee Stock Allocation (MESA) program. MESA program is assigned with a maximum of 9.62% of the newly issued shares for registered employees as of September 30th, 2009. The program became convincing on September 17th, 2009, and entire qualified employees available of the program consisting of 226,928,500 Series B shares and a lock up period until six months.

The head office of the Bank is located at Jalan Gajah Mada No.1, in Central Jakarta. The Bank isaccompanied with 100 branch offices (including 24 sharia branch offices), 364 sub-branch offices (including 50 sharia sub-branch offices), 471 cash offices (including 7 sharia cash offices), and 3,013 SOPPs (System on-pine Payment Point/on-line Post Office) as of June 30th, 2019.

1. Vision and Mission of Company

a. Vision

To be the leader and trusted bank in facilitating the property sector and financial service

b. Mission

1) To actively support the property sector from the supply and demand perspective which integrated with the Indonesian property sector

2) To provide excellent service in financing the property sector and family financial demands
3) To increase competitive excellence through product development innovation, services, and digital-based strategic network
4) To prepare and develop qualified and professional Human Capital of high integrity
5) To increase shareholder value by focusing on profitability growth with prudence principle and Good Corporate Governance .
6) To provide care for the public, social, and environment interest with a sustainable approach

2. Corporate Value and Culture

Bank BTN has five values of corporate culture which are used as guidance for every action and behavior of entire Bank BTN employees to reach its vision, including:

a. Synergy

Building synergic teamwork with all stakeholder based on genuine, open relationship, and encourage productive collaboration with all fellow BTN employees and other parties based on mutual trust and respect to achieve common goals

b. Integrity

Consistency between thoughts, words, and actions in accordance with the company regulation, professional code of ethics and the principles of commendable truth

c. Innovation

Constantly developing new ideas and creating value-added improvement for the company

d. Professionalism

Visionary, competent, and continuous self-development with the latest technology to deliver the best performance

e. Strive for Excellence

Show enthusiasm and strong commitment to put quality into everything we do and provide services beyond customer expectations (internal and external) with calculated risks

4.2 Analysis of Bank Health Performance using RGEC Method

4.2.1 Risk Profile

The appraisal of risk profile factor is an assessment towards inherent risk and quality of risk management implementation in the operational of the bank. Related to risk profile factor assessment, this research composed valuation for credit risk as represented by NPL, market risk represented by IRR and liquidity risk represented by LDR, LAR, and CR. The result of risk profileappraisal is followed by the calculation below:

1. Credit Risk

In assessing credit risk, this research used the NPL as indicator. The valuation through NPL wasdone by comparing credit from non-bank third parties who classified as substandard, doubtful, and loss credit towards total loans distributed to non-bank third parties. The calculation byNPL isavailable through formula as shown below:

$$NPL = \frac{Non - Performing \;\; Loan}{Total \;\; Credits} x \; 100\%$$

Source: Bank Indonesia Circular Letter No.13/24/DPNP/2011

Loans are classified as substandard, doubtful, and loss which can be seen through the composition of loans based on collectability in the financial statements. The composition of loans based on collectability obtained by BNI, BRI, Bank Mandiri, and BTN in 2018 is shown on the table below:

Table 4.1 The Composition of Loans Based on Collectability (in million Rupiah)

Collectability	BNI	BRI	Bank Mandiri	BTN
Substandard	2.028.042	1.572.704	3.141.824	569.932
Doubtful	3.009.125	1.777.038	1.197.101	473.366
Loss	5.001.135	6.280.707	10.133.476	5.655.380
Non Performance Loan	**10.038.302**	**9.631.449**	**14.472.401**	**6.698.678**

Source : Data processed from Annual Financial Report of BNI, BRI, Bank Mandiri and BTN in the period of 2018

Total loans extended to non-bank third party inherited by BNI, BRI, Bank Mandiri, and BTN in 2018 is shown as follow:

Table 4.2 Number of Loans in 2018

(in million Rupiah)

	BNI	BRI	Bank Mandiri	BTN
Total Loan	512.778.497	820.010.157	799.557.188	237.757.674

Source : Annual Financial Report of BNI, BRI, Bank Mandiri, and BTN in the period of 2018

Based on information on total non-performance loans and total loans held by all StateBanks,of Indonesian Governmentmeasurement of bank soundness through a risk profile based on credit risk using the NPL ratio at PT Bank Negara Indonesia (Persero) Tbkin 2018 is available through calculations as shown below:

$$NPL\ BNI\ on\ 2018 = \frac{10{,}038{,}302}{512{,}778{,}497}\ x\ 100\%$$

$$= 1.96\%$$

The assessment of risk profile factor based on credit risk by using NPL at PT Bank Rakyat Indonesia (Persero) Tbkin 2018 is shown on calculation below:

$$NPL\ BRI\ on\ 2018 = \frac{9{,}631{,}449}{820{,}010{,}157}\ x\ 100\%$$

$$= 1.17\%$$

The assessment of risk profile factor based on credit risk by using NPL at PT Bank Mandiri (Persero) Tbkin 2018 is shown on calculation below:

$$NPL\ Bank\ Mandiri\ on\ 2018 = \frac{14,472,401}{799,557,188}\ x\ 100\%$$

$$= 1.81\%$$

The assessment of risk profile factor based on credit risk by using NPL at PT Bank Tabungan Negara (Persero) Tbkin 2018 is shown on calculation below:

$$NPL\ BTN\ on\ 2018 = \frac{6,698,678}{237,757,674}\ x\ 100\%$$

$$= 2.82\%$$

The calculation of the NPLat BNI, BRI, Bank Mandiri, and BTN, had gathered an outcome of healthiness level based on credit risk in 2018. The NPL value and category value for each State-Banks of Indonesian Government in 2018 is displayed in the table below:

Table 4.3 The Assessment Summary of NPL Ratio

State Bank	NPL Ratio	Rank	Category
BNI	1,96%	1	Very Healthy
BRI	1,17%	1	Very Healthy
Bank Mandiri	1,81%	1	Very Healthy
BTN	2,82%	2	Healthy

Source : BI Circular Letter No.6/23/DPNP

Based on Table 4.3, the analysis result of the soundness level of banks to credit risk using the NPL shows that BNI, BRI, and Bank Mandiri are included in a fundamentally sound category with an NPL ratio below 2%. Meanwhile, BTN is only classified as healthy with NPL ratio of 2.82%. Supporting the analysis of NPL, StatBank

Comment [tnr3]: Deskripsi yang maudigunakanitu 'healthy' atau 'sound'?

of Indonesian Government encompasses a high-quality credit and has sensible credit management. In 2018, the NPL of BRI was 1.17%, which is the smallest value compared to BNI, Bank Mandiri, and BTN. This ratio indicated that the management bank of BRI has high flexibility in overcoming credit issues. Unfortunately, BTN with NPL value of 2.82% was only included in healthy category which wasneededan optimization on the performance of bank management in order to reduce the problem of bank credit that might be faced.

The NPL of BNI, BRI, Bank Mandiri, and BTN are below 5%, which is the standard NPL value decided by Bank Indonesia. Smallvalue of NPL reflects as credit risk faced by the bank, while higher NPL ratio value will indicate greater loss provision and diminished profitability of the bank.

2. Market Risk

Market risk is one of the risks included in assessing risk profile factor. To calculate the market risk, the researcher used IRR as a formula composed by RSA and RSL. The IRR formula is shown below:

$$IRR = \frac{RSA\ (RateSensitiveAssets\ \ )}{RSL\ (RateSensitiveLiabilities\ \ )} x\ 100\%$$

Source: Bank Indonesia Circular Letter No.13/24/DPNP/2011

Calculation using IRR was done by comparing assets which able to change after its maturity date and after the due of its re-pricing date, with liabilities which its yields are able to change after its maturity date or certain date according to an agreement and particular date based on the intention of the bank.

Table 4.4 The Valuation of RSA and RSL in 2018 (million IDR)

Calculation of RSA and RSL	BNI	BRI	Bank Mandiri	BTN
Current account with Bank Indonesia	35.591.243	71.159.442	59.852.761	15.417.862
Current account with other banks	13.137.099	12.677.355	14.835.961	1.588.769
Placements with other banks and Bank Indonesia	39.324.460	87.018.051	22.566.034	26.464.760
Securities	32.362.407	184.284.810	63.133.676	10.860.204
Securities purchased under agreements to resell	-	9.396.553	2.097.629	-
Acceptances receivables	20.475.019	11.643.003	13.888.862	528.148
Loans	512.778.497	820.010.157	799.557.188	215.716.247
Sharia receivables and financing	-	20.178.401	-	22041427
Total RSA	**653.668.725**	**1.216.367.772**	**975.931.111**	**292.617.417**
Deposits from customers	578.774.774	944.268.737	840.913.972	229.828.985
Desposits from other banks	14.232.599	9.131.158	16.927.425	21.804.308
Acceptances liabilities	21.524.329	11.643.003	13.888.862	528.148
Securities sold under agreements to repurchase	44.16.613	37.379.394	16.611.528	935.000
Borrowings	52.024.506	40.457.429	51.653.982	15.499.493
Total RSL	**670.972.821**	**1.042.879.721**	**939.995.769**	**268.595.934**

Table 4.4 Continued

Source : Data processed from Annual Financial Report at BNI, BRI, Bank Mandiri, and BTN in the period of 2018

The measurement of risk profile factor based on market risk by calculating IRR at PT Bank Negara Indonesia (Persero) Tbkin 2018 is shown as follow:

$$IRR\ BNI\ on 2018 = \frac{653,668,725}{670,972,821} x\ 100\%$$

$$= 97.42\%$$

The measurement of risk profile factor based on market risk by calculating IRR at PT Bank Rakyat Indonesia (Persero) Tbkin 2018 is shown as follow:

$$IRR\ BRI\ on\ 2018 = \frac{1,216,367,772}{1,042,879,721} x\ 100\%$$

$$= 11.64\%$$

The measurement of risk profile factor based on market risk by calculating IRR at PT Bank Mandiri (Persero) Tbkin 2018 is shown as follow:

$$IRR\ Bank\ Mandiri\ on\ 2018 = \frac{975,931,111}{939,995,769} x\ 100\%$$

$$= 103.82\%$$

The measurement of risk profile factor based on market risk by calculating IRR at PT Bank Tabungan Negara (Persero) Tbkin 2018 is shown as follow:

$$IRR\ BTN\ on\ 2018 = \frac{292,617,417}{268,595,934} x\ 100\%$$

$$= 108.94\%$$

The result of IRR ratio analysis in calculating market risk for BNI, BRI, Bank Mandiri, and BTN within 2018 is shown in the following table:

Table 4.5 The Assessment Summary of IRR Ratio

State Bank	IRR Ratio	Rank	Category
BNI	97,42%	1	Strong
BRI	116,64%	1	Strong
Bank Mandiri	103,82%	1	Strong
BTN	108,94%	1	Strong

Source : BI Circular Letter No.13/24/DPNP/2011

According to Table 4.5, the results of measuring the healthiness level of State-Owned Bank through market risk by using the IRR shows that BRI has hold the highest value of IRR with 116.64%. The great IRR value of BRI indicates that BRI has a vital risk of falling interest rates as well as has a high possibility of suffering from losses if interest rates decline. Beside BRI, both Bank Mandiri and BTN also have sharp value of IRR on103.82% and 108.94% respectively. This intensified value classified in a strong category of IRR value, which exceeds 45%. Therefore,BRI, Bank Mandiri, and BTN have a significant chance of damage in their business whenever interest rates downfall.

Meanwhile, the level of the IRR for BNI is not as bad as BRI, Bank Mandiri, and BTN. Compared to other State-Owned Banks, BNI reaches the lowest IRR value of 97.42%, which implies the chance of experiencing losses toward depreciation of interest rate is lower,but it earns smaller profit than BRI, Bank Mandiri, and BTN when interest rate growth. This condition is due to interest expenserequired to be paid by BNI is greater than interest income on the assets received, it is shown by the RSA of BNI which is smaller than its RSL amount.

The superior IRR value represents profit earn by bank will be high whenever the interest rates increase, yet when the interest rates falls bank have the chance to face a significant risk of damage.

3. Liquidity Risk

Liquidity risk is the risk arising from the inability of the bank to meet its obligations due to cash flow funding sources, or from high-quality liquid assets that can be pledged, without disrupting the activities and financial condition of the bank. In calculating liquidity risk, this research used LDR, LAR, and CR with the following calculation:

a. Loan to Deposit Ratio (LDR)

LDR is a comparison between total credits distributed by the bank to customer both in Rupiah and foreign currency, with the total amount of funds from third parties which consist of the current account, saving, and time deposit. The value of the LDR isavailable to be calculated through formula as follows:

$$LDR = \frac{Total\ Credit}{Total\ Third\ Parties\ Fund} x\ 100\%$$

Source : BI Circular Letter No.13/24/DPNP/2011

Total funds from third parties is gathered by calculating current account, saving, and time deposit from third parties. Accumulation of third parties fund gathered by BNI, BRI, Bank Mandiri, and BTN in 2018is shown below:

Table 4.6 The Number of Funds from Third Parties

(in million Rupiah)

Third Parties Funds	BNI	BRI	Bank Mandiri	BTN
Current accounts	168.106.953	178.097.981	199.823.756	53.673.188
Wadiah current accounts	-	2.277.850	-	2.781.854
Mudharabah current accounts	1.166.739	293.264	682.242	1.594.272
Saving	196.253.601	379.918.705	307.282.353	38.350.839
Wadiah saving deposits	-	5.601.811	-	766.324
Mudharabah saving deposits	9.802.867	1.659.109	31.318.420	2.760.069
Time deposits	187.811.648	357.413.513	258.902.784	115.462.283
Mudharabah time deposits	15.632.966	19.006.504	42.904.417	14.440.156
Total TPF	**578.774.774**	**944.268.737**	**840.913.972**	**229.828.985**

Table 4.6 Continued

Source : Data processed from Annual Financial Report at BNI, BRI, Bank Mandiri, and BTN in the period of 2018

The assessment of risk profile factor based on liquidity risk by using LDR at PT Bank Negara Indonesia (Persero) Tbkin 2018 is shown below:

$$LDR\ BNI\ in\ 2018 = \frac{512,778,497}{578,774,774} x\ 100\%$$

$$= 88.6\%$$

The assessment of risk profile factor based on liquidity risk by using LDR at PT Bank Rakyat Indonesia (Persero) Tbk in 2018 is shown below:

$$LDR\ BRI\ in\ 2018 = \frac{820{,}010{,}157}{944{,}268{,}737} x\ 100\%$$

$$= 86.8\%$$

The assessment of risk profile factor based on liquidity risk by using LDR at PT Bank Mandiri (Persero) Tbkin 2018 is shown below:

$$LDR\ Bank\ Mandiri\ \ in\ 2018 = \frac{799{,}557{,}188}{840{,}913{,}972} x\ 100\%$$

$$= 95.1\%$$

The assessment of risk profile factor based on liquidity risk by using LDR at PT Bank Tabungan Negara (Persero) Tbkin 2018 is shown below:

$$LDR\ BTN\ in\ 2018 = \frac{237{,}757{,}674}{229{,}828{,}985} x\ 100\%$$

$$= 103.4\%$$

The result of analysis healthiness level of bank based on liquidity risk by using LDRat BNI, BRI, Bank Mandiri, and BTN in 2018 in general categorized as quite ideal. The valuelevel and the category position for LDR ratio for BNI, BRI, Bank Mandiri, and BTN are shown in Table 4.7:

Table 4.7 The Assessment Summary of LDR Ratio

State Bank	LDR Ratio	Rank	Category
BNI	88,6%	3	Quite Ideal
BRI	86,8%	3	Quite Ideal
Bank Mandiri	95,1%	3	Quite Ideal
BTN	103,4%	4	Not Ideal

Source : BI Circular Letter No.6/23/DPNP/2011

As shown in Table 4.7, the outcome of assessment for healthiness level of State-Owned Bank under LDR overall are shown in quite ideal category. BNI gained 88.6%of LDR which is 1.8%higher than BRI with 86.8%. Furthermore, Bank Mandiri with 95.1% LDR ratio also indicated as quite ideal.These banks still run its function well as a financial intermediary who received deposits from third parties and then distribute funds in the form of a credit to society.

On the other hand, BTN is the only State-Owned Bank which is declared in the not ideal category with 103.4% of LDR. This condition is due to the credit given to society exceeds the funds of third parties gathered, as shown in BTN's total credit which is higher than third parties fund gathered in 2018. Bank Indonesia applied the 8% LDR as statutory reserve, so when bank's LDR is more than 92%, it means the 8% is taken from non-third parties fund for credit growth. This condition implies that bank is incapable of repaying third parties' funds and necessary to take fund from non-third parties such as issuing bonds.

The value of LDR needs to be considered as it holds significant factors in preventing any loss possibility in foregoing of a bank.

Higher LDR will be beneficial for a bank as TPF gathered can be used for expanding loan in society and the broader theloan expansion, the more profit will be gained by the bank. However, if the LDR is exorbitant, it will be dangerous since whenever the bank has to provide cash to pay a sudden withdrawal of deposits, the bank will have difficulty in carrying out these obligations.

b. Loan to Asset Ratio (LAR)

The assessment of bank soundness based on liquidity risk using LAR compares the total loans given by banks to the public with assets owned by banks. The value of LAR isavailable to be gathered through the formula below:

$$LAR = \frac{Total\ \ Credits}{Total\ \ Assets} x100\%$$

Source : Bank Indonesia Circular Letter No.13/24/DPNP/2011

Total credit and total asset owned by State Bank in 2018 are shown in Table 4.8 below:

Table 4.8 The Number of Credits and Assets In Hand (in million Rupiah)

Total asset / Total credit in 2018	BNI	BRI	Bank Mandiri	BTN
Total credit	512.778.497	820.010.157	799.557.188	237.757.674
Total asset	808.572.011	1.296.898.292	1.202.252.094	306.436.194

Source : Data processed from Annual Financial Report at BNI, BRI, Bank Mandiri, and BTN in the period of 2018

The assessment of risk profile based on liquidity risk by using LAR at PT Bank Negara Indonesia (Persero) Tbkin 2018 is shown below:

$$LAR\ BNI\ in\ 2018 = \frac{512{,}778{,}497}{808{,}572{,}011} x100\%$$

$$= 63.42\%$$

The assessment of risk profile based on liquidity risk by using LAR at PT Bank Rakyat Indonesia (Persero) Tbkin 2018 is shown below:

$$LAR\ BRI\ in\ 2018 = \frac{820{,}010{,}157}{1{,}296{,}898{,}292} x100\%$$

$$= 63.23\%$$

The assessment of risk profile based on liquidity risk by using LAR at PT Bank Mandiri (Persero) Tbkin 2018 is shown below:

$$LAR\ Bank\ Mandiri\ in\ 2018 = \frac{799{,}557{,}188}{1{,}202{,}252{,}094} x100\%$$

$$= 66.50\%$$

The assessment of risk profile based on liquidity risk by using LAR at PT Bank Tabungan Negara (Persero) Tbkin 2018 is shown below:

$$LAR\ BTN\ in\ 2018 = \frac{237{,}757{,}674}{306{,}436{,}194} x100\%$$

$$= 77.59\%$$

Based on the calculation of LAR at State-Owned Bank, it could be concludedin overall that State-Owned Banks are indicated in very good condition with an interval value of 50% < LAR ≤ 75%. The value of LAR for BNI, BRI, Bank Mandiri, and BTN are categorized in the following table:

Table 4.9 The Assessment Summary of LAR Ratio

State Bank	LAR Ratio	Rank	Category
BNI	63,42%	1	Very Good
BRI	63,23%	1	Very Good
Bank Mandiri	66,50%	1	Very Good
BTN	77,59%	2	Good

Source : BI Circular Letter No.6/23/DPNP/2011

Based on Table 4.9 which shows the result of LAR ratio computation, BTN is the only State-Owned Bank who is classified as good with LAR value of 77.59%. Compared to other banks, BTN has the biggest risk in facing liquidity problem, since the higher the value of LAR, the more lacking for liquidation because the amount of assets needed to finance bad loans is greater. Meanwhile, BNI, BRI, and Bank Mandiriis revealed to be in a convenient condition,they are able to fulfil the obligation of suddenlarge funds withdrawal by using assets owned.

Table 4.8 shows that BRI owned the smallest value of LAR among State-Owned Bankswith 63.23%. It impliesgreater ability in accommodate credit by allocating the total assets owned compared to BNI and Bank Mandiri, which also in very sound category. BNI with LAR value of 63.42% has 0.19% higher risk in facing the possibility of liquidity problem compared to BRI, while BRI has less risk in suffering liquidity problems compared to Bank Mandiri with a value of LAR ratio of 66.50%. Subsequently, the effect of experiencing the liquidity risk by bank will give negative impact to the bank's performance level. However, in general BNI, BRI, Bank Mandiri, and BTN have the capability in managing the credit demanded by the customer.It is shown by the total assets owned by each bank which are higher than the total credit demanded.

c. Cash Ratio (CR)

Cash Ratio (CR) is one of indicator used in order to measure liquidity risk faced by bank. The valuation of CR ratio is done by comparing liquid asset controlled by the bank over third party funds. According to Bank Indonesia Circular Letter No.6/23/DPNP, liquid assets controlled by bank consists of cash and current account with banks. Meanwhile, third party funds composed by current account, saving deposit, and time deposit. Therefore, the formula regarding the calculation of CR is shown as follows:

$$CR = \frac{Liquid\ \ assets\ controlled}{Third\ \ party\ \ funds} x100\%$$

Source : Bank Indonesia Circular Letter N0.13/24/DPNP/2011

The measurement of risk profile factor based on liquidity risk by using CR at BNI, BRI, Bank Mandiri, and BTN in 2018 is shown below:

Table 4.10 The Appraisal of Liquid Assets Controlled (in million Rupiah)

Liquid Assets Controlled	BNI	BRI	Bank Mandiri	BTN
Cash	14.043.846	27.421.625	27.348.914	1.243.615
Current accounts with Bank Indonesia	35.591.243	71.159.442	59.852.761	15.417.862

Table 4.10 Continued

Current accounts with other Banks	13.137.099	12.677.355	14.835.961	1.588.769
Total liquid assets controled	**62.772.188**	**111.258.422**	**102.037.636**	**18.250.246**
Total third party funds	**578.774.774**	**944.268.737**	**840.913.972**	**229.828.985**

Source : Data processed from Annual Financial Report at BNI, BRI, Bank Mandiri, and BTN in the period of 2018

The assessment of risk profile factor based on liquidity risk by using CR at PT Bank Negara Indonesia (Persero) Tbk in 2018 is shown in the calculation below:

$$CR\ BNI\ in\ 2018 = \frac{62,772,188}{578,774,774} x100\%$$

$$= 10.85\%$$

The assessment of risk profile factor based on liquidity risk by using CR at PT Bank Rakyat Indonesia (Persero) Tbkin 2018 is shown in the calculation below:

$$CR\ BRI\ in\ 2018 = \frac{111,258,422}{944,268,737} x100\%$$

$$= 11.78\%$$

The assessment of risk profile factor based on liquidity risk by using CR at PT Bank Mandiri (Persero) Tbk in 2018 is shown in the calculation below:

$$CR\ Bank\ Mandiri\ \ in\ 2018 = \frac{102{,}037{,}636}{840{,}913{,}972} x100\%$$

$$= 12.13\%$$

The assessment of risk profile factor based on liquidity risk by using CR at PT Bank Tabungan Negara (Persero) Tbkin 2018 is shown in calculation below:

$$CR\ BTN\ in\ 2018 = \frac{18{,}250{,}246}{229{,}828{,}985} x100\%$$

$$= 7.94\%$$

The results of analysing the healthiness level of BNI, BRI, Bank Mandiri, and BTN based on liquidity risk by using CR ratio in 2018 areshown in the table below:

Table 4.11 The Assessment Summary of CR Ratio

State Bank	CR Ratio	Rank	Category
BNI	10,85%	1	Very Healthy
BRI	11,78%	1	Very Healthy
Bank Mandiri	12,13%	1	Very Healthy
BTN	7,49%	1	Very Healthy

Source : BI Circular Letter No.13/24/DPNP

According to Table 4.11, Bank Mandiri in 2018 has 12.13% value of CR, which is the highest CR value among State-Owned Banks of Indonesia. Furthermore, the second highest of very healthy CR isachieved by BRI at 11.78%, and then followed by BNI and

BTN with 10.85% and 7.49% respectively. In terms of calculating CR, all State-Owned Banks are categorized as very adequate for fulfilling its obligation along with its short-term debt. CR is used to determine a bank's capacity in carrying out its liquidity after withdrawal from third party fund by utilizing its liquid assets. It can be seen from the liquid asset controlled by BNI, BRI, Bank Mandiri, and BTN which are commensurable. However, if the CR is overcapacity, it means that banks have less efficiency while optimizing the liquid assets in hand.

In line with the result gathered in Table 4.10, State-Owned Banks of Indonesia are generally in advance condition since the ratio of CR are above 5% (the limit of CR standard value regulated by Bank Indonesia). The outcome of calculation leads to the assumption that BNI, BRI, Bank Mandiri, and BTN are able to pay off short-term obligation by using liquid instruments and able to repay the funds deposited by customers once withdrawn. The excellent capability to meet obligation required owned by State-Owned Banks will lead to high demand of their service since society assumes that State-Owned Banks are the trusted one in financial sector for saving money in the short and the long term.

4.2.2 Good Corporate Governance

The appraisal towards GCG factor, in order to evaluate the performance level of commercial banks, is regulated in the Regulation of Bank Indonesia No.13/1/PBI/2011. In line with the regulation by Bank

Indonesia, Circular Letter of Bank Indonesia No. 13/24/DPNP/2011 stated that the measurement of GCG factor is an appraisal over management quality of bank in implementing GCG principles.

Banks are required to do self-assessment on the implementation of GCG principles periodically, which cover at least 11 factors of implementation assessment for GCG. The weight of each factor of GCG assessment is declared within Bank Indonesia Circular Letter No.9/12/DPNP. The percentage of weight which issued by Bank Indonesia related to GCG valuation factors is shown in the following table:

Table 4.12 The Weight of GCG Factor Assessment

No	GCG Factor	Weight
1.	Implementation of duties and responsibilities of the Board of Commisioners	10%
2.	Implementation of duties and responsibilities of the Board of Directors	20%
3.	Completeness and execution of committee duties	10%
4.	Handling of conflict of interest	10%
5.	Implementation of the compliance function	5%
6.	Implementation of the internal audit function	5%
7.	Implementation of the external audit function	5%
8.	Implementation of risk management including internal control system	7,5%
9.	Provision of funds to related parties and large exposure	7,5%

10.	Transparancy of Bank's financial condition and non-financial, internatl governance and reporting reports	15%
11.	Strategic plan of Bank	5%

Source : BI Circular Letter No.9/12/DPNP

However, the information about the percentage of weight assessment GCG factors is not published by BNI, BRI, Bank Mandiri, and BTN inside the Annual Report in 2018. Subsequently, only final score for GCG assessment were published followed by an analysis of 3 (three) aspect of the governance system. Thus, the final score of GCG factor gained by BNI, BRI, Bank Mandiri, and BTN in 2018 is shown in the table below:

Table 4.13 The Final Score of GCG Factor

State Bank	GCG Score	Category
BNI	2	Good
BRI	2	Good
Bank Mandiri	1	Very Good
BTN	2	Good

Source : BI Circular Letter No.13/24/DPNP

Based on Circular Letter of Bank Indonesia No.15/15/DPNP/2013 about the implementation of GCG for commercial banks, the analysis of GCG implementation relies on 5 (five) basic principles that are sorted in one governance system. This governance system consists of governance structure, governance process, and governance outcome. As shown in Table 4.13, State-Owned Banks of Indonesia are generally classified in good condition with a composite value of 2 (two). This value reflects the management of the corporatewhichhas enforced smart governance in general. Not only has implemented good governance, but also this value reflected in an adequate fulfilment of the principles of governance. During this matter, there are weaknesses within the application of the governance principles, normally these weaknesses are less significant and might be resolved by normal actions by the management of the bank.

BNI in 2018 had a composite value of GCG assessment of 2 whereas categorized as health. In the aspect of governance structure, BNI has had completed required governance structure and infrastructure in order to support governance implementation in every work aspect and operational of the bank. Meanwhile, in governance process aspect, BNI carried out every activity and operation of the bank well, but there were still some implementations that were not in line because of human error and misunderstanding about the current system and policies by the work unit. For governance outcome aspect, BNI experienced an increase in CGPI and ACGS score compared to the previous year and significant decrease of fines imposed for violations by BNI's internal compared to December 2017.

Placed in the same composite value of 2 (two), governance structure which implemented by BRI has been properly applicated as it is completed by the main organ and supporting organ of the corporate. Moreover, the governance process of BRI was also well-implemented since all work units within the company fulfilled the duties and responsibilities given. During the time, the governance outcome of BRI also satisfactorily implemented as the disclosure and information transparency process along with the report that created properly with no violation of BPMK.

After BNI and BRI, BTN also reached the good category of GCG score. In the form of governance structure, BTN performed excellent composition in line of company structure and infrastructure as well as improvement of governance structure in order to follow the dynamics of business needs. Besides, some of the intern controlled need to be upgraded in the governance process of BTN because the audit found in bank operations. However, in this stage, BTN has succeeded in providing transparency financial and non-financial condition to supervisor as well as stakeholders in accordance with applicable regulations.

Among all State-Owned Banks, Bank Mandiri is the only Bank which is classified in beyond healthy category. According to Table 4.12, Bank Mandiri has achieved a composite value of 1 (one) for GCG assessment. The value reflected that Bank Mandiri has management that advances in implementing GCG as proved by the well-received of independent Commissioners in the Company's Board of Commissioner. It is not only having excellent aspect of governance structure but also has good move in the governance process. In order to prevent failure in the governance process, Bank Mandiri makes an improvement by creating whistleblowing system (WBS), which called Letter to CEO (LTC) as tools of reporting fraud or indication of fraud. Moreover, the governance outcome of Bank Mandiri in 2018 was marvellous as received an award as The Most Trusted Companies in Indonesia Good Corporate Governance Award 2018 with scored 93.86 known as the highest score among part companies involved.

Based on the analysis of GCG score result, State-Owned Banks are in a splendid condition which indicated as highly trusted banks. GCG is an essential factor within corporate because every work units is required to fully comprehend over assignments and obligations which given so that bank's operation run effortlessly.

4.2.3 Earning

Bank's earning power is one of the benchmarks used in analyzing the soundness of a bank. The ability of bank to optimize the performance in managing the business, source of earnings, and earnings management with the purpose to obtain profitability will give positive impact in the soundness of banks. Therefore, in order to analyze the healthiness level of State-Owned Banks through earnings factor, this research used two ratios Return on Asset (ROA) and Net Interest Margin (NIM) as both regulated in Circular Letter of Bank Indonesia No.13/24/DPNP/2011. The result of measuring the healthiness level of bank on earnings factor shown in the calculation of ROA and NIM as follows:

a. Return on Asset

The appraisal of healthiness level of bank through earnings factor by using ROA aimstomeasure the success of bank management in generating profits. The value of ROA is available to be calculated through the formula as shown below:

$$ROA = \frac{Net\ Income}{Average\ \ Total\ \ Assets} x100\%$$

Source: Bank Indonesia Circular Letter No.13/24/DPNP/2011

Based on Circular Letter of Bank Indonesia No.13/24/DPNP/2011, ROA is gathered by dividing the net income with the average total assets. Net income is income before tax which recorded in the statement of profit or loss. Meanwhile, the average total asset is the result of both total asset in the current year and total asset in the previous year divided by two. Therefore, the valuation of soundness level of bank by using ROA at BNI, BRI, Bank Mandiri, and BTN in 2018 can be shown as follows:

Table 4.14 The Valuation of Average Total Asset (in million Rupiah)

Total asset	BNI	BRI	Bank Mandiri	BTN
Total asset in 2017	709.330.084	1.127.447.489	1.124.700.847	261.365.267
Total asset in 2018	808.572.011	1.296.898.292	1.202.252.094	306.436.194
Average total asset in 2018	**758.951.048**	**1.212.172.891**	**1.163.476.471**	**283.900.731**
Net Income	**19.820.715**	**41.753.694**	**33.943.369**	**3.610.275**

Source : Data processed from Annual Financial Report at BNI, BRI, Bank Mandiri, and BTN in the period of 2018

The measurement of healthiness level of banks on earnings factor by using ROA at PT Bank Negara Indonesia (Persero) Tbkin 2018 is shown below:

$$ROA\ BNI\ in\ 2018 = \frac{19{,}820{,}715}{758{,}951{,}048} x100\%$$

$$= 2.61\%$$

The measurement of healthiness level of Banks on earnings factor by using ROA at PT Bank Rakyat Indonesia (Persero) Tbkin 2018 is shown below:

$$ROA\ BRI\ in\ 2018 = \frac{41{,}753{,}694}{1{,}212{,}172{,}891} x100\%$$

$$= 3.44\%$$

The measurement of healthiness level of Banks on earnings factor by using ROA at PT Bank Mandiri (Persero) Tbkin 2018 is shown below:

$$ROA\ Bank\ Mandiri\ in\ 2018 = \frac{33{,}943{,}369}{1{,}163{,}476{,}471} x100\%$$

$$= 2.92\%$$

The measurement of healthiness level of Banks on earnings factor by using ROA at PT Bank Tabungan Negara (Persero) Tbkin 2018 is shown below:

$$ROA\ BTN\ in\ 2018 = \frac{3{,}610{,}275}{283{,}900{,}731} x100\%$$

$$= 1.27\%$$

Based on the result of calculating the ROA, the value obtained for BNI, BRI, Bank Mandiri, and BTN are categorized as below:

Table 4.15 The Assessment Summary of ROA Ratio

State Bank	ROA Ratio	Rank	Category
BNI	2,61%	1	Very Good
BRI	3,44%	1	Very Good
Bank Mandiri	2,92%	1	Very Good
BTN	1,27%	2	Good

Source : BI Circular Letter No.6/23/DPNP/2011

As shown in Table 4.15, the highest ROA value among State-Owned Banks in 2018 reached 3.44%which is held by BRI with category very healthy. In accordance with excellent category of BRI, BNI also has a positive value of ROA at level of 2.61% which is less 0.31% than ROA value of Bank Mandiri at 2.92%. It shows that BRI, BNI, and Bank Mandiri are capable of utilizing their owned asset in order to maximize their earning profit as well as have good effectiveness in management earning.

Overall, the State-Owned Bankshave no significant trouble in dealing with earning power except the BTN. Unfortunately, the value of ROA ratio owned by BTN was under 2%, which is the limit standard of ROA value regulated by Bank Indonesia. ROA of BTN only reached 1.27% which is 0.02% higher from the acceptable category, so it is classified as fine. As shown in the table, BTN has significant differences in income before tax earned compared to other State-Owned Banks. This condition is due to the least operating profit and interest income resulting from the optimization of assets owned by BTN. However, still, BTN generates positive ROA value so it can be interpreted that the management of BTN still runs well in optimizing the total assets owned for the company's operation which lead to ability in providing great profit to the bank.

b. Net Interest Margin (NIM)

Net Interest Margin (NIM) is used to determine the interest income received from the allocation of productive assets owned by banks. NIM resulted from the division of net interest income with the average of total productive assets. The formula for calculation of NIM is shown below:

$$NIM = \frac{Net\ Interest\ Income}{Averafe\ Total\ Productive\ Assets} x100\%$$

Source : BI Circular Letter No.13/24/DPNP/2011

As stated in Bank Indonesia Circular Letter No.13/24/DPNP/2011, the productive assets calculated in NIM are productive assets which generate interest. Hence, below is the table of productive assets owned by BNI, BRI, Bank Mandiri, and BTN in 2018:

Table 4.16 Average Total Productive Asset of PT Bank Negara Indonesia (Persero) Tbk in 2018

Productive Assets	BNI (in million Rupiah)	
	December 31, 2018	December 31, 2017
Placement with other banks	19.168.288	31912434
Derivative receivables	605.248	216.884
Securities	132.536.153	123.646.632
Acceptance receivables	20.475.019	18.271.023

Loans	484.392.200	417.716.848
Inclusion	785.007	785.823
Commitment obligation	135.455.483	127.610.758
Contigent liability	61.767.468	59.468.396
Total productive assets	**855.184.866**	**77.962.8798**

Table 4.16 Continued

Average total productive assets		**817.406.832**

Source : Data processed from Annual Financial Report of PT Bank Negara Indonesia (Persero) Tbk on 2018

Table 4.17 Average Total Productive Asset of PT Bank Rakyat Indonesia (Persero) Tbk in 2018

Productive Assets	BRI (in million Rupiah)	
	December 31, 2018	December 31, 2017
Placement with other banks	28.583.614	15.477.253
Derivative receivables	485.810	162.912
Securities	222.629.327	218.922.816
Acceptance receivables	11.643.003	5.693.425
Loans	820.028.537	718.992.665
Inclusion	460.146	83.149

Commitment obligation	162.020.432	136.887.706
Contigent liability	44.886.051	34.020.280
Total productive assets	**1.290.736.920**	**1.130.250.306**
Average total productive assets		**1.210.493.613**

Source : Data processed from Annual Financial Report at PT Bank Rakyat Indonesia (Persero) Tbk on 2018

Table 4.18 Average Total Productive Asset of PT Bank Mandiri (Persero) Tbk in 2018

Productive Assets	Bank Mandiri (in million Rupiah)	
	December 31, 2018	December 31, 2017
Placement with other banks	26.538.823	32.547.351
Derivative receivables	1.835.344	818.999
Securities	179.866.012	165.060.942
Acceptance receivables	13.888.862	12.544.494
Loans	799.557.188	712.037.865
Inclusion	452.093	346.236
Commitment obligation	448.231.534	298.454.720
Contigent liability	96.062.540	92.569.898
Total productive assets	**1.566.432.396**	**1.314.380.505**
Average total productive assets		**1.440.406.451**

Source : Data processed from Annual Financial Report at PT Bank Mandiri (Persero) Tbk on 2018

Table 4.19 Average Total Productive Asset of PT Bank Tabungan Negara (Persero) Tbk in 2018

Productive Assets	BTN (in million Rupiah)	
	December 31, 2018	December 31, 2017
Placement with other banks	1.833.327	1.217.103
Derivative receivables	167	0
Securities	15.020.881	15.252.139
Acceptance receivables	528.148	8.081
Loans	215.716.247	181.002.783
Inclusion	270	270
Commitment obligation	21.908.920	18.753.171
Contigent liability	3.793.965	3.001.188
Total productive assets	**258.801.925**	**219.234.735**
Average total productive assets		**239.018.330**

Table 4.19 Continued

Source : Data processed from Annual Financial Report at PT Bank Tabungan Negara (Persero) Tbk on 2018

The assessment of bank soundness level on earnings factor by using the NIM at PT Bank Negara Indonesia (Persero) Tbk in 2018 is shown in the calculation below:

$$NIM\ BNI\ in\ 2018 = \frac{35{,}446{,}315}{817{,}406{,}832} x100\%$$

$$= 4.34\%$$

The assessment of Bank soundness level on earnings factor by using the NIM at PT Bank Rakyat Indonesia (Persero) Tbk in 2018 is shown in the calculation below:

$$NIM\ BRI\ in\ 2018 = \frac{77{,}665{,}772}{1{,}210{,}493{,}613} x 100\%$$

$$= 6.42\%$$

The assessment of Bank soundness level on earnings factor by using the NIM at PT Bank Mandiri (Persero) Tbk in 2018 is shown in the calculation below:

$$NIM\ Bank\ Mandiri\ \ in\ 2018 = \frac{54{,}622{,}632}{1{,}440{,}406{,}451} x 100\%$$

$$= 3.79\%$$

The assessment of Bank soundness level on earnings factor by using the NIM at PT Bank Tabungan Negara (Persero) Tbk in 2018 is shown in the calculation below:

$$NIM\ BTN\ in\ 2018 = \frac{1008{,}917}{239{,}018{,}330} x 100\%$$

$$= 4.22\%$$

Table 4.20 The Assessment Summary of NIM Ratio

State Bank	NIM Ratio	Rank	Category
BNI	4,34%	1	Very Good
BRI	6,42%	1	Very Good
Bank Mandiri	3,79%	1	Very Good
BTN	4,22%	1	Very Good

Source : BI Circular Letter No.6/23/DPNP/2011

Based on the result of NIM calculation for State-Owned Banks of Indonesia as shown in Table 4.20, the average NIM of BNI, BRI, Bank Mandiri, and BTN is 3.75%. State-Owned Banks NIM values are above 3%,which is under the category of excellent and very healthy, moreover, BRI achieves the highest value of 6.42%. Not as good as BRI but still in very well condition, BNI followed with 4.34%,which is 0.12% higher than BTN. Furthermore, the last State-Owned Bank, Bank Mandiri,isalso classified as a splendid bank with NIM of 3.79%, whichis 0.79% higher than thestandard healthy condition issued by Bank Indonesia for NIM.

Advanced category for BRI, BNI, BTN, and Bank Mandiriis caused by the significant net interest income gained towards productive asset owned by thebanks. This condition shows that State-Owned Banks have magnificent ability to manage the productive assets owned that leads to large amount of interest income. The greater the level of NIM means the larger the interest income on earning assets would be managed by the bank; hence the bank has a low chance to urge in the problem of business continuity. Moreover, a high level of earnings level represents the sustainability of a bank's business in generating profits.

4.2.4 Capital

Capital is an essential factor for establishing corporate, thus as an intermediary institution, banks are considered to have enough capital to operate properly so they will able to collect money from society and distribute it to whoever need it. In measuring the healthiness level of a bank, the capital factor becomes important. Therefore, this research used Capital Adequacy Ratio (CAR) as an indicator. The assessment using CAR isavailable through the formula below:

$$CAR = \frac{Core\ Capital\ (Tire\ 1) + Supplementary\ \ Capital\ (Tire\ 2)}{Risk\ \ Weighted\ \ Assets} x100\%$$

Source: Bank Indonesia Circular Letter No.13/24/DPNP/2011

Based on Bank Indonesia Circular Letter No. 13/24/DPNP/2011, the calculation for CAR is obtained by dividing capital owned with risk weighted assets. Capital of bank consists of Core Capital and Supplementary Capital, while Risk Weighted Assets consist of weighted assets which considered through credit risk, market risk, and operational risk.

Table 4.21 Total Capital Owned (in million Rupiah)

Capital	BNI	BRI	Bank Mandiri	BTN
Core Capital	102.411.938	172.358.004	171.457.236	20.460.086
Supplementary Capital	6.487.602	10.029.307	10.350.983	2.868.360
Capital	**108.899.540**	**182.387.311**	**181.808.219**	**23.328.446**

Source : Data processed from Annual Financial Report at BNI, BRI, Bank Mandiri, and BTN in the year of 2018

Table 4.22 Total Risk Weighted Assets Owned (in million Rupiah)

Risk weighted assets (ATMR)	BNI	BRI	Bank Mandiri	BTN
ATMR of Credit	511.541.518	690.764.915	747.053.655	109.507.283

Risk				
ATMR of Market Risk	3.273.949	11.229.322	6.810.839	1.007.249
ATMR of Operational Risk	71.631.769	152.229.031	134.848.982	17.623.217

Table 4.22 Continued

Total Risk Wighted Assets	**586.447.236**	**854.223.268**	**888.713.476**	**128.137.749**

Source : Data processed from Annual Financial Report at BNI, BRI, Bank Mandiri, and BTN in the year of 2018

The measurement of healthiness level of Banks on capital factor by using CAR at PT Bank Negara Indonesia (Persero) Tbkin 2018 is shown below:

$$CAR\ BNI\ in\ 2018 = \frac{108,899,540}{586,447,236} x100\%$$

$$= 18.57\%$$

The measurement of healthiness level of Banks on capital factor by using CAR at PT Bank Rakyat Indonesia (Persero) Tbkin 2018 is shown below:

$$CAR\ BRI\ in\ 2018 = \frac{182,387,311}{854,223,268} x100\%$$

$$= 21.35\%$$

The measurement of healthiness level of Banks on capital factor by using CAR at PT Bank Mandiri (Persero) Tbkin 2018 is shown below:

$$CAR\ Bank\ Mandiri\ in\ 2018 = \frac{181,808,219}{888,713,476} x100\%$$

$$= 20.46\%$$

The measurement of healthiness level of Banks on capital factor by using CAR at PT Bank Tabungan Negara (Persero) Tbkin 2018 is shown below:

$$CAR\ BTN\ in\ 2018 = \frac{23,328,446}{128,137,749} x 100\%$$

$$= 18.21\%$$

Table 4.23 The Assessment Summary of CAR Ratio

State Bank	CAR Ratio	Rank	Category
BNI	18,57%	1	Very Good
BRI	21,35%	1	Very Good
Bank Mandiri	20,46%	1	Very Good
BTN	18,21%	1	Very Good

Source : BI Circular Letter No.6/23/DPNP/2011

According to Table 4.23, the level of CAR ratio of State-Owned Banks in 2018 was convenient since all of them reach the value of CAR above 12%, with an average at 15.72%. It means the average minimum capital provided by State-Owned Banks management is 15.27% in order to anticipate credit risk, market risk, and operational risk which might experience by State-Owned Bank.

The value of CAR of BRI reached 21.35% which classified as excellent.It indicates that BRI has an adequate capital to fulfil the obligations in hand, either to fund its business activities or to cover the risk in the future which will cause damage in the business continuity. In conjunction with BRI, Bank Mandiri follows as a very good bank with

CAR at 20.46%. Furthermore, BNI has 0.36% higher CAR compared to BTN, which has CAR at 18.21%. The great value of CAR gained by BNI, BRI, Bank Mandiri, and BTN is in high trend, which states that these banks have good capital and advanced capital control management comes from the company's operating profit. The greater ratio of CAR means that bank has less chance to experience a shortage of capital.

4.3 Discussion

The result of evaluating the State-Owned Banks of Indonesia soundness level in 2018 by using Risk-Based Bank Rating (RBBR) approach with RGEC method as regulated in the Regulation of Bank Indonesia No.13/1/PBI/2011 obtained a composite ranking of health level for each State-Owned Bank as shown in the tables below:

Table 4.24 The Composite Rating of PT Bank Negara Indonesia (Persero) Tbk

No.	Factors	Result	Rank				
			1	2	3	4	5
1.	**Risk Profile**						
	NPL	1,96%	√				
	IRR	97,42%	√				
	LDR	88,6%			√		
	LAR	63,42%	√				
	CR	10,85%	√				
2.	**Good Corporate Governance**	2		√			
3.	**Earning**						

No.	Factors	Result	1	2	3	4	5
	ROA	2,61%	√				
	NIM	4,34%	√				
4.	**Capital**						
	CAR	18,57%	√				

Table 4.24 Continued

	Composite Value	**45**	**35**	**4**	**3**		
	Composite Rating	**93,3%**	**Very Sound**				

Source : Data processed, 2020

Table 4.25 The Composite Rating of PT Bank Rakyat Indonesia (Persero) Tbk

No.	Factors	Result	Rank				
			1	2	3	4	5
1.	**Risk Profile**						
	NPL	1,17%	√				
	IRR	116,6%	√				
	LDR	86,8%			√		
	LAR	63,23%	√				
	CR	11,78%	√				
2.	**Good Corporate Governance**	2		√			
3.	**Earning**						
	ROA	3,44%	√				
	NIM	6,42%	√				

4.	**Capital**						
	CAR	21,35%	√				
	Composite Value	**45**	**35**	**4**	**3**		
	Composite Rating	**93,3%**	**Very Sound**				

Source : Data processed, 2020

Table 4.26 The Composite Rating of PT Bank Mandiri (Persero) Tbk

No.	Factors	Result	Rank				
			1	2	3	4	5
1.	**Risk Profile**						
	NPL	1,81%	√				
	IRR	103,8%	√				
	LDR	95,1%			√		
	LAR	66,50%	√				
	CR	12,13%	√				
2.	**Good Corporate Governance**	1	√				
3.	**Earning**						
	ROA	2,92%	√				
	NIM	3,79%	√				
4.	**Capital**						
	CAR	20,46%	√				
	Composite Value	**45**	**40**		**3**		

	Composite Rating	**95,6%**	**Very Sound**					

Source : Data processed, 2020

Table 4.27 The Composite Rating of PT Bank Tabungan Negara (Persero) Tbk

Table 4.27 Continued

No.	Factors	Result	Rank				
			1	2	3	4	5
1.	**Risk Profile**						
	NPL	2,82%		√			
	IRR	108,9%	√				
	LDR	103,4%				√	
	LAR	77,59%		√			
	CR	7,49%	√				
2.	**Good Corporate Governance**	2	√				
3.	**Earning**						
	ROA	1,27%		√			
	NIM	4,22%	√				
4.	**Capital**						
	CAR	18,21%	√				
	Composite Value	**45**	**25**	**12**		**2**	
	Composite Rating	**86,7%**	**Very Sound**				

Source : Data processed, 2020

Afterwards, the composite value gained from the result of comparing the total value of composite towards ideal total composite value then multiplied by 100%. Based on Table 4.24, PT Bank Negara Indonesia (Persero) Tbk in 2018 obtained composite value of 35 + 4 + 3 = 42,therefore, its composite rating is 93.3%. PT Bank Rakyat Indonesia (Persero) Tbk in 2018 obtained composite value of 35 + 4 + 3 = 42,therefore, itscomposite rating is 93.3% as shown in Table 4.25. Slightly higher than PT Bank Negara Indonesia (Persero) Tbk and PT Bank Rakyat Indonesia (Persero) Tbk, PT Bank Mandiri (Persero) Tbkobtained its composite value of 40 + 3 = 43, therefore, its composite rating is 95.6%. Lastly, PT Bank Tabungan Negara (Persero) Tbk in 2018 produce composite rating of 86.7% from its composite value of 25 + 12 + 2 = 39. According to the assessment of soundness level of PT Bank Negara Indonesia (Persero) Tbk, PT Bank Rakyat Indonesia (Persero) Tbk, PT Bank Mandiri (Persero) Tbk, and PT Bank Tabungan Negara (Persero) Tbk in 2018 by using RBBR approach with RGEC method, the produced Composite Rating of Bank Soundness Level can be presented as follows:

Table 4.28 The Composite Rating of Bank Soundness Level

State Bank	Result	Composite Rating
BNI	93,3%	1
BRI	93,3%	1
Bank Mandiri	95,6%	1
BTN	86,7%	1

Source : BI Regulation No.13/1/PBI/2011

According to Table 4.28, PT Bank Negara Indonesia (Persero) Tbk, PT Bank Rakyat Indonesia (Persero) Tbk, PT Bank Mandiri (Persero) Tbk, and PT Bank Tabungan Negara (Persero) Tbk are classified as very sound banks with Composite Rating 1 (CR-1). This value of the composite rating, Composite Rating 1 (CR-1), implies that the banksare in very sound condition, so they are proficient to face high significance of negative influence due to changing in business environment as well as other external factors.

In term of measuring the healthiness level of State Banks through Risk Profile factors which represented by NPL, IRR, LDR, LAR, and CR during 2018,it is found that in general State-Owned Banks are identified as extensively sound. Although the LDR ratio is displayed in a fairly ideal condition as a whole, the LAR and CR ratio is shown in very good condition. This condition means that banks are in a convenient condition to repay the obligation and short-term debt as well as money deposited by utilizing assets controlled. It shows that all State-Owned Banks are competent in implementing the risk management in advanced along with sustaining the performance level to prevent the chance for experiencing resistance in the financial business.

In the Good Corporate Governance factor, State-Owned Banks are generally well-performed in governance structure, governance process and governance outcome in 2018. It is proven by composite rating gained for BNI, BRI, and BTN in the value of 2 while Bank Mandiri was the only one who gets the value of composite rating at 1. In general, State-

Owned Banks are completed with a very adequate structure and infrastructure, and even more work units inside corporate had fulfilled their duties and responsibilities which followed by transparency report of financial and non-financial condition that delivered to stakeholders. The measurement of GCG factor shows that State-Owned Banks have satisfactory management which can be seen from the successful implementation of GCG principles effectively.

Earnings factor which was evaluated through ROA and NIM at BNI, BRI, Bank Mandiri, and BTN in 2018 shows a very good condition as a whole. Even though there are significant differences of ROA among State-Owned Banks as indicated by ROA of BTN which only settled at good condition. It was caused by the least operational profit and interest income ensuing from the optimisation of assets closely-held by BTN. However, BNI, BRI, Bank Mandiri, and BTN are gaining positive profit which implies that those banks are having an innate capacity in optimizing assets held in order to get business profits. By evaluating earnings factors, the State-Owned Banksare considered to have been able to maintain the performance of earnings source and earnings sustainability so that bank operation can run smoothly in increasing earnings of corporate.

Capital factor at BNI, BRI, Bank Mandiri, and BTN in 2018 had been assessed through CAR, which were resulted at value above 12%. At this level, State-Owned Banks already perform the management of capital that exceeded expectation. The calculation of CAR ratio had produced positive result and made BNI, BRI, Bank Mandiri, and BTN to be classified as banks beyond healthy level. According to the measurement of CAR, State-Owned Banks are considered being very capable of managing the capital in hand so that the specified capital adequacy level can be achieved and avoid shortage in business survival.

4.4 Research Implications

The evaluation of the soundness level of banks conducted in this research is guided by Bank Indonesia Regulation No.13/1/PBI/2011. In this regulation, the approach used is Risk-Based Bank Rating (RBBR), which incorporates Risk Profile, Good Corporate Governance, Earnings, and Capital. Assessment of Risk Profile factor is an assessment of inherent risk and the quality of the application of risk management within the operational activities of Banks. In assessing this factor, this research calculates credit risk using NPL, market risk using IRR and liquidity risk using LDR, LAR, and CR. The assessment of Good Corporate Governance (GCG) factors is an assessment of the quality of bank management while implementing GCG principles that are based on transparency, accountability, responsibility, and independency. Those five basic principles sorted into a governance system which consist of governance structure, governance process, and governance outcome. The assessment of Earning factor is the evaluation of earnings performance, source of earnings as well as the sustainability of earnings in earnings management. In order to evaluate this factor, this research used NIM and ROA. The measurement of Capital factor refers to the evaluation of capital adequacy and capital adequacy management. To evaluate capital factor, this research used CAR as an indicator of measurement.

In 2018, State-Owned Banks of Indonesia which includes PT Bank Negara Indonesia (Persero) Tbk, PT Bank Rakyat Indonesia (Persero) Tbk, PT Bank Mandiri (Persero) Tbk, and PT Bank Tabungan Negara (Persero) Tbk were reported as State-Owned Enterprise with great liabilities. BRI and Bank Mandiri had liabilities above 1 billion Rupiah, which lead to BRI in the top position of SOEs with high liabilities. Additionally, BNI also had huge debts with Rp698,198,222 million in the same period. Still, BTN who also belong in State-Owned Banks of Indonesia owned large debts among others SOEswith Rp282,595,746 million.

In accordance with the calculation of indicators in measuring the healthiness level of bank through RGEC method, found that the result of some ratios were having significance distinction. As shown, in evaluation through NPL ratio, BTN was catagorized as healthy while evaluation through CAR ratio categorized as very healthy. This condition due to the measurement of healthiness level differs by component of measurement. NPL ratio calculated by components of credit while CAR calculated by capitals. BTN might have problem while dealing with liquidity issue yet the management of bank still operated perfectly as earnings aspects and capital aspect tend to experience positive result.

Based on the measurement of soundness level of banks by using RGEC method, Risk Profile factor has an assessment towards liquidity risk which used to determine the capacity of banks in fulfilling the obligation that matures from sources of funds owned or high-quality liquid assets that can be pledged as collateral. The evaluation over liquidity risk produces ratio, which shows whether bank is sufficiently liquid in paying off long-term and short-term debt without disrupting the activities and financial condition of the Bank.

The result gathered from the valuation of LDR is BNI, BRI, and Bank Mandiri was categorized in quite ideal in liquidating bank using TPF. Unfortunately, BTN was not in ideal condition since the amount of credit distributed exceed the TPF, so the bank will take non-third-party funds for cover growth in credit. While, the LAR of BNI, BRI, Bank Mandiri, and BTN showed excellent ability to liquidate bank as a whole by using total assets owned in meets the obligation of unexpectedly withdrawal of funds. Related to LAR, in 2018, BNI, BRI, Bank Mandiri, and BTN had the value of CR ratio above 5% which indicates that those banks are capable to repay the funds deposited by customers once withdrawn.

Based on the measurement through LDR ratio shown in Table 4.7, BTN was the only one which categorized as not ideal whereas imply that bank facing difficulties in meets its obligation of repaying the funds from third party. However, BTN will be able to liquidate the bank without distressing the economic condition of the bank by utilizing high-quality liquid assets that are controlled. This shown by CR value owned by BTN was above the limit standard of CR value regulated by Bank Indonesia.

Furthermore, the value of CAR owned by BTN was above 12% as this also can be used to financed the credit growth since the capital of BTN was sufficient for both next bank's operational and overcome the possibility of facing liquidity issue.

After calculating the liquidity risk using the LDR, LAR, and CR, the result shows that BNI, BRI, Bank Mandiri and BTN are not having significant issues in paying the debts in hand since the assets owned and liquid assets controlled are capable for financing huge credit amount as well as repaying third party funds. Moreover, capital owned by BNI, BRI, Bank Mandiri, and BTN are exceeded the standard regulated. It reflected from the value of CAR of those banks which are above 12%. This high level of capital adequacy indicates that the bank is in a position to beat all risk, so it will not interfere with the bank's business continuity.

BNI, BRI, Bank Mandiri, and BTN were in excellent condition since the Composite Rating of each bank shown in advance category. Through Risk Profile factor, these bank shown the risks were probably occur during the operational of bank but if banks have completed by good corporate governance the sustainability of bank's business can be achieved as proved by good source of earnings as well as earnings management and capitals condition of bank. In overall, Risk Profile and Good Corporate Governnace factors are cause of performance of bank while Earnings and Capitals factor reflect as effect from the caused. So, all the factors in measuring the healthiness level of bank through RGEC method are connected.

CHAPTER V

CONCLUSIONS AND SUGGESTIONS

5.1 Conclusions

This research can be concluded as follow:

1. Based on the evaluation of healthiness level using RGEC method at PT Bank Negara Indonesia (Persero) Tbk., it was found that Risk Profile, Earnings, and Capital factors are classified as very healthy. However, the GCG factor only reached the category of healthy. Overall, its soundness level is in very healthy condition with Composite Rating 1 (CR-1).
2. Based on the evaluation of healthiness level using RGEC method at PT Bank Rakyat Indonesia (Persero) Tbk., it was found that Risk Profile, Earnings, and Capital factors are classified as very healthy. However, the GCG factor only reached the category of healthy. Overall, its soundness level is in very healthy condition with Composite Rating 1 (CR-1).
3. Based on the evaluation of healthiness level using RGEC method at PT Bank Mandiri (Persero) Tbk., it was found that Risk Profile, GCG, Earnings, and Capital are classified as very healthy. Therefore, its soundness level is in very healthy condition with Composite Rating 1 (CR-1).
4. Based on the evaluation of healthiness level using RGEC method at PT Bank Tabungan Negara (Persero) Tbk., it was found that

Earnings and Capital factors are classified as very healthy. Meanwhile, Risk Profile and GCG factors only classified as healthy. However, after it was done, the measurement of RGEC method as a whole then discovered that this bank is in very healthy condition with Composite Rating 1 (CR-1).

5.2 Suggestions

There are some suggestions which likely to be proposed according to the conclusions drawn.

1. It is recommended for PT Bank Negara Indonesia (Persero) Tbk., PT Bank Rakyat Indonesia (Persero) Tbk., and PT Bank Tabungan Negara (Persero) Tbk. to improve the implementation of GCG since it can increase the service quality of banks, whereas work units inside corporate fully understand their duties and responsibilities. It will lead the banks to be sustained in business.
2. It is recommended for PT Bank Tabungan Negara (Persero) Tbk to be able to maintain a balance between the disbursed loans and the funds collected in the near future.