

## CHAPTER IV

### RESULTS AND DISCUSSIONS

#### 4.1 Research Result

##### 4.1.1 Description of the General Data

###### 4.1.1.1 History of BRI

BRI is one of the leading Indonesian commercial banks and the oldest bank in Indonesia tracing back since December, 6th 1895 during the Dutch colonial period when Raden Bei Aria Wirjaatmadja founded a small financial institution with the name of *De Poerwokertosche Hulp en Spaarbank der Inlandsche Hoofden* (Help and Savings Bank for Purwokerto's Aristocrats) in Purwokerto, Central Java. The institution was a mosque-based association, which function was to manage and disburse trusted fund to community in a simple scheme.

Over the years, the institution went through name changes and evolve with the surrounding condition. In 1912, its name changed to *Centrale Kas Voor Volkscredietwezen*, and in 1942 by Japanese ruling it was changed to Syomin Ginko. In the independence era, was replaced by the name of Bank Rakyat Indonesia. Still going through some name changes, finally in 1992 the official name of the institution was PT. Bank Rakyat Indonesia (Persero), and being one of the state-owned enterprises that always consistent with service to small communities by focusing giving credit facilities to small entrepreneurs group.

On November 2003, BRI became a publicly listed with 30% of its share listed in Jakarta Stock Exchange (now Indonesia Stock Exchange/IDX) then became public company with official name PT. Bank Rakyat Indonesia (Persero) Tbk. In April 2014, BRI contracted with Space Systems/Loral and Arianespace to, respectively, build and launch their first satellite, a 3,500 lb (1,600 kg) C- and Ku-band spacecraft dubbed BRI-sat, and on June 18th, 2016 Ariane 5 has successfully launched BRI-sat as the first satellite owned and operated by a bank in the world to link the bank's geographically isolated branches which is hoped to deliver huge savings in operating costs in the future. Furthermore, BRI it is currently one of the largest Indonesian companies in terms of market capitalization.

#### **4.1.1.2 History of BNI**

BNI was established after the Independence of Republic of Indonesia on July 5th 1946 as the first bank formed and owned by the Indonesia Government. It was prepared to be the Central Bank of Indonesia with the task of issuing and handling Indonesian currency. A few months after its establishment, BNI officially distributed the first official currency of Indonesia - ORI or *Oeang Republik Indonesia*. Following the appointment of De Javasche in 1949, BNI was assigned the role of Indonesia's development bank and granted the right to act as a foreign exchange bank with direct access to facilitate foreign transactions. The first BNI overseas branch office opened in Singapore in 1955. BNI has branches primarily in Indonesia, but it can also found in Kuala Lumpur, Singapore, Hong Kong, Tokyo, London and New York. After the financial crisis which happened in 1998, BNI did a rebranding to rebuild and further strengthen their reputation with a new identity launched in 2004. This new identity adds the number "46" in front of the word "BNI". The word "BNI" is to be colored which reflects strength, uniqueness, and robustness. Meanwhile, the number "46" is inside an orange square which positioned diagonally to represent a newer, modern BNI. BNI provides financial services which are supported by its subsidiaries in Shariah banking, financing, the capital market and insurance. On November 1996, BNI became a publicly listed in IDX then became public company with official name PT. Bank Negara Indonesia (Persero) Tbk.

#### **4.1.1.3 History of Mandiri**

Bank Mandiri was established on October, 2th 1998, as part of the bank restructuring program of the Government of Indonesia. Bank Mandiri is the result of the merger made by Indonesian Government from four older government-owned banks that had collapsed in the late of 1990's. Those four banks were Bank Bumi Daya (BBD), Bank Dagang Negara (BDN), Bank Expor Impor (Exim), and Bank Pembangunan Indonesia (Bapindo). The history of these four banks can be traced back to over 140 years, and together they had contributed to the beginning of the Indonesian banking sector. On July 2003, Bank Mandiri became a publicly listed in IDX then became public company with official name PT. Bank Mandiri (Persero) Tbk.

Bank Mandiri is Indonesian's largest financial institution by assets. Bank Mandiri offers business and individuals throughout Indonesia a full set of banking and non-banking products and services, such as institutional, corporate, treasury, commercial and business, consumer finance, and micro and retail banking. By 2015, the bank had 2457 branches spread across three different time zones in the Indonesian archipelago and six branches abroad, about 17.388 Automatic Teller Machines (ATMs), and six principal subsidiaries: Bank Syariah Mandiri in Sharia banking, Mandiri Sekuritas in investment banking, Mandiri Tunas Finance in multi-finance, AXA Mandiri Financial Service in insurances, Bank Sinar Harapan Bali in micro banking, and Mandiri AXA General Insurance (MAGI), a joint-venture between Bank Mandiri and AXA Societe Anonyme, to strengthen Bank Mandiri's penetration into the general insurance business.

Based on method done by surveyor, in 2011 Bank Mandiri got average value 91.23 percent, a first time for a bank got more than 90 percent over 15 years survey. Bank Mandiri got Service Excellence Award for 4 times consecutives and got The Most Consistent Bank for 2 times.

## 4.1.2 Description of the Specific Data

### 4.1.2.1 BRI's Annual Report Periods 2011-2015

BRI's annual report continues to increase from periods 2011-2015 that have been reported by the management. Data or financial statement illustrated in the table below, while BRI's annual reports periods 2011-2015 attached.

**Table 4.1: BRI's Financial Highlights**

<b>FINANCIAL HIGHLIGHTS (in billions of IDR, unless otherwise stated)</b>	<b>YEAR</b>				
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>BALANCE SHEET</b>					
Total asset	469,899	551,337	626,101	801,984	878,426
Loan (gross)	294,515	362,007	448.345	510.697	581.095
Government bonds	8,996	4,316	4,511	4,304	3.816
Equity investment	165	197	223	252	269
Total liabilities	367,612	420,079	546,526	704,278	765.299
Demand deposits	76,779	80,075	79,337	90,052	114.367
Saving deposits	154,133	184,365	210,234	236,395	272.471
Time deposits	153,353	185,726	201,585	295,875	282.157
Capital/equity	49,820	64,882	69,471	97,706	113.127
<b>PROFIT AND LOSS STATEMENT</b>					
Interest income	48,164	49,610	59,461	75,122	85,434
Non-interest income	3,965	6,117	6,400	7,918	10,067
Interest expenses	13,737	13,126	15,354	23,679	27,154
Other operating income	5,776	8,390	8,348	9,299	12,409
Other operating expenses	-17.086	-19.491	-22,381	-26,715	-31.276
Income before tax	18.756	23.86	27,910	30,804	32.494
Net profit in current year	15.088	18.687	21,354	24,227	25.411
Income attributable to equity holders of main company	15.083	18.681	21,344	24,215	25.398
Comprehensive income	15.297	18.661	19,917	24,482	24.872
Comprehensive income attributable to equity holders of main company	15.288	18.652	19,913	24,467	24,861
Net Earnings per share (IDR)	628.91	757.26	865.22	981.59	1.030.43

<b>FINANCIAL RATIO (%)</b>					
<b>CAPITAL</b>					
CAR	14.96%	16.95%	16.99%	18.31%	20.59%
<b>PRODUCTIVE ASSETS</b>					
Earning assets & non-performing assets to total earning assets & non-performing assets	1.79%	1.19%	1.06%	1.09%	1.33%
Allowance for possible losses (CKPN) to earning assets	4.51%	3.43%	2.90%	2.40%	2.37%
Non-performing earning assets	1.85%	1.46%	1.28%	1.26%	1.57%
NPL Gross	2.30%	1.78%	1.55%	1.69%	2.02%
<b>PROFITABILITY</b>					
NIM	9.58%	8.42%	8.55%	8.51%	8.13%
ROA	4.93%	5.15%	5.03%	4.73%	4.19%
Operating expenses to operating income	66.69%	59.93%	60.58%	65.42%	67.96%
ROE	42.49%	38.66%	34.11%	31.19%	29.89%
<b>LIQUIDITY</b>					
LDR	76.20%	79.85%	88.54%	81.68%	86.88%

Source: BRI's Annual Report

#### 4.1.2.2 BNI's Annual Report Periods 2011-2015

BNI's annual report continues to increase from periods 2011-2015 that have been reported by the management. Data or financial statement illustrated in the table below, while BNI's annual reports periods 2011-2015 attached.

**Table 4.2: BNI's Financial Highlights**

<b>FINANCIAL HIGHLIGHTS (in billions of IDR, unless otherwise stated)</b>	<b>YEAR</b>				
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>BALANCE SHEET</b>					
Total asset	299,058	333,303	386.666	416.574	608.596
Loan (gross)	163,533	200,742	250,638	277,622	326.105
Government bonds	36,598	38,561	44.884	43.83	47.222
Equity investment	24	24	40	37	36
Total liabilities	261,215	228,298	338.972	355.562	430.157
Demand deposits	65.929	73,366	88.183	82.743	91.194
Saving deposits	81.413	100,084	111.8	119.779	135.065

Time deposits	83.954	84,212	91.907	111.371	144.161
Capital/equity	37,843	43,525	47.034	61.021	78.438
<b>PROFIT AND LOSS STATEMENT</b>					
Interest income	20,692	22,705	26,705	33,750	36,895
Non-interest income	4,852	5,217	5,467	6,999	7,282
Interest expenses	-7,496	-7,246	-7,392	-10,989	-11,335
Other operating income	6,563	7,255	7.605	8.855	8.872
Other operating expenses	-10,224	-11,805	-13.485	-14.76	-16.51
Income before tax	7,461	8,899	11.278	13.524	11.466
Net profit in current year	5,808	7,048	8,881,963	10.829	9.141
Income attributable to equity holders of main company	5,826	7,046	9.054	10,783	9.067
Comprehensive income	5,991	7,202	6.244	11.915	20.863
Comprehensive income attributable to equity holders of main company	6,008	7,200	6.24	11.868	20.789
Net Earnings per share (IDR)	312	378	486	578	487
<b>FINANCIAL RATIO (%)</b>					
<b>CAPITAL</b>					
CAR	17.6%	16.7%	15.1%	16.2%	19.5%
<b>PRODUCTIVE ASSETS</b>					
Earning assets & non-performing assets to total earning assets & non-performing assets	2.5	2.0	1.5%	1.5%	1.9%
Allowance for possible losses (CKPN) to earning assets	2.5%	1.7%	1.9%	2.6%	3.2%
Non-performing earning assets	2.7%	2.1%	1.5%	1.4%	1.9%
NPL Gross	3.6%	2.8%	2.2%	2.0%	2.7%
<b>PROFITABILITY</b>					
NIM	6.0%	5.9%	6.2%	6.3%	6.4%
ROA	2.9%	2.9%	3.4%	3.5%	2.6%
Operating expenses to operating income	36.6%	35.3%	33.1%	32.4%	25.2%
ROE	20.1%	20.0%	22.5%	23.6%	17.2%
<b>LIQUIDITY</b>					
LDR	70.4%	77.5%	85.3%	87.8%	87.8%

Source: BNI's Annual Report

#### 4.1.2.3 Bank Mandiri's Annual Report Periods 2011-2015

Bank Mandiri's annual report continues to increase from periods 2011-2015 that have been reported by the management. Data or financial statement illustrated in the table below, while Bank Mandiri's annual reports periods 2011-2015 attached.

**Table 4.3: Bank Mandiri's Financial Highlights**

<b>FINANCIAL HIGHLIGHTS (in billions of IDR, unless otherwise stated)</b>	<b>YEAR</b>				
	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>BALANCE SHEET</b>					
Total asset	551,891	635,618	733,099	855.039	910.063
Loan (gross)	314,380	388,830	472,435	529.973	595.457
Government bonds	78,661	79,072	82,227	86.153	103.869
Equity investment	6,498	4,306	4,667	55.49	48.394
Total liabilities	489,237	559,863	644,309	750.195	790.571
Demand deposits	92,616	113,911	123,445	128,067	172,165
Saving deposits	163,779	202,216	236,510	252,444	271,707
Time deposits	165,854	166,786	196,385	255,870	232,513
Capital/equity	75,755	62,654	88,790	104.844	119.491
<b>PROFIT AND LOSS STATEMENT</b>					
Interest income	37,730	42,550	50,208	62,637	71,570
Non-interest income	16,041	17,643	19,828	22,728	25,993
Interest expenses	-26.207	-23.505	-16.399	-15.019	-15.954
Other operating income	11,768	11,897	14,686	14.687	18.378
Other operating expenses	-17,071	-19,804	-21,500	-25.374	-28.754
Income before tax	16,512	20,504	24,061	26.008	26.369
Net profit in current year	12,695	16,043	18,829	20.654	21.152
Income attributable to equity holders of main company	12,246	15,504	18,203	19.871	20.334
Comprehensive income	12,479	16,256	17,996	21.482	20.446
Comprehensive income attributable to equity holders of main company	12,029	15,717	17,369	20.699	19.658
Net Earnings per share (IDR)	529.33	664.46	780.16	851.66	871.50
<b>FINANCIAL RATIO (%)</b>					
<b>CAPITAL</b>					
CAR	15.34%	15.48%	14.93%	16.60%	18.60%

<b>PRODUCTIVE ASSETS</b>					
Earning assets & non-performing assets to total earning assets & non-performing assets	1.43%	1.17%	1.17%	1.15%	1.56%
Allowance for possible losses (CKPN) to earning assets	2.84%	2.77%	2.86%	2.61%	3.10%
Non-performing earning assets	1.59%	1.45%	1.43%	1.42%	1.96%
NPL Gross	2.18%	1.74%	1.60%	1.66%	2.29%
<b>PROFITABILITY</b>					
NIM	5.29%	5.58%	5.68%	5.94%	5.90%
ROA	3.37%	3.55%	3.66%	3.57%	3.15%
Operating expenses to operating income	67.22%	63.93%	62.41%	64.98%	69.67%
ROE	25.57%	27.23%	27.31%	27.31%	23.03%
<b>LIQUIDITY</b>					
LDR	71.65%	77.66%	82.97%	82.02%	87.05%

Source: Bank Mandiri's Annual Report

## 4.2 Banks Healthiness Assessment

Banks healthiness assessment is an assessment toward banks capability on running their operational banking activity normally and fulfilling their obligations. Banks healthiness assessment is plays a crucial role on maintaining public trust, and only banks that actually healthy that may offer their services to the public. Assessment on banks healthiness is done by assessing several factor which indicate the healthiness of a bank. According to the Bank Indonesia Regulation No.13/1/PBI/2011 and Circular Letter Number 13/ 24/ DPNP October 25th, 2011 about Assessment System of Commercial Banks Healthiness, assessment of banks healthiness includes factors as follows:

### 4.2.1 Risk Profile

Financial ratio used in the process of assessing banks healthiness level from risk profile aspect are described as follows:



## 1) Credit Risk

In this study, calculation of credit risk is done using NPL. This financial ratio shows that NPL derived from problematic credit which is credited to a non-bank third party which is categorized as substandard, doubtful and loss then divided with the total credit which is credited to a non-bank third party. Therefore the calculation of NPL ratio is as follows:

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

### Calculation of NPL for BRI

2011:

$$\text{NPL} = \frac{\text{Substandard} + \text{Doubtful} + \text{Loss}}{\text{Total Loan}} \times 100\%$$

$$\text{NPL} = \frac{752.016 + 847.057 + 3.411.035}{285.406.257} \times 100\%$$

$$\text{NPL} = \frac{5.0110.108}{285.406.257} \times 100\%$$

$$\text{NPL} = 1.75\%$$

2012:

$$\text{NPL} = \frac{\text{Substandard} + \text{Doubtful} + \text{Loss}}{\text{Total Loan}} \times 100\%$$

$$\text{NPL} = \frac{816.579 + 832.095 + 3.410.758}{350.758.262} \times 100\%$$

$$\text{NPL} = \frac{5.059.432}{350.758.262} \times 100\%$$

$$\text{NPL} = 1.44\%$$

2013:

$$\text{NPL} = \frac{\text{Substandard} + \text{Doubtful} + \text{Loss}}{\text{Total Loan}} \times 100\%$$

$$\text{NPL} = \frac{930.623 + 949.415 + 3.624.233}{434.316.466} \times 100\%$$

$$\text{NPL} = \frac{5.504.271}{434.316.466} \times 100\%$$

$$\text{NPL} = 1.26\%$$

2014:

$$\text{NPL} = \frac{\text{Substandard} + \text{Doubtful} + \text{Loss}}{\text{Total Loan}} \times 100\%$$

$$\text{NPL} = \frac{1.043.082 + 1.201.996 + 3.974.665}{495.097.288} \times 100\%$$

$$\text{NPL} = \frac{6.219.743}{495.097.288} \times 100\%$$

$$\text{NPL} = 1.25\%$$

2015:

$$\text{NPL} = \frac{\text{Substandard} + \text{Doubtful} + \text{Loss}}{\text{Total Loan}} \times 100\%$$

$$\text{NPL} = \frac{1.160.311 + 1.224.930 + 4.213.597}{564.480.538} \times 100\%$$

$$\text{NPL} = \frac{6.595.838}{564.480.538} \times 100\%$$

$$\text{NPL} = 1.16\%$$

**Table 4.4: Composite Rank Weighting of NPL for BRI**

Period	NPL (%)	Rank	Value
2011	1.75%	1	Very Healthy
2012	1.44%	1	Very Healthy
2013	1.26%	1	Very Healthy
2014	1.25%	1	Very Healthy
2015	1.16%	1	Very Healthy

Source: BRI's Annual Report, 2015

#### Calculation of NPL for BNI

2011:

$$\text{NPL} = \frac{\text{Substandard} + \text{Doubtful} + \text{Loss}}{\text{Total Loan}} \times 100\%$$

$$\text{NPL} = \frac{55.726 + 77.842 + 1.806.516}{156.504.508} \times 100\%$$

$$\text{NPL} = \frac{1.940.084}{156.504.508} \times 100\%$$

$$\text{NPL} = 1.23\%$$

2012:

$$\text{NPL} = \frac{\text{Substandard} + \text{Doubtful} + \text{Loss}}{\text{Total Loan}} \times 100\%$$

$$\text{NPL} = \frac{34.994 + 102.411 + 1.511.650}{193.834.670} \times 100\%$$

$$\text{NPL} = \frac{1.649.055}{193.834.670} \times 100\%$$

$$\text{NPL} = 0.85\%$$

2013:

$$\text{NPL} = \frac{\text{Substandard} + \text{Doubtful} + \text{Loss}}{\text{Total Loan}} \times 100\%$$

$$\text{NPL} = \frac{546.276 + 736.350 + 4.138.417}{243.757.807} \times 100\%$$

$$\text{NPL} = \frac{5.421.043}{243.757.807} \times 100\%$$

$$\text{NPL} = 2.22\%$$

2014:

$$\text{NPL} = \frac{\text{Substandard} + \text{Doubtful} + \text{Loss}}{\text{Total Loan}} \times 100\%$$

$$\text{NPL} = \frac{391.745 + 851.119 + 4.193.876}{270.651.986} \times 100\%$$

$$\text{NPL} = \frac{5.436.740}{270.651.986} \times 100\%$$

$$\text{NPL} = 2\%$$

2015:

$$\text{NPL} = \frac{\text{Substandard} + \text{Doubtful} + \text{Loss}}{\text{Total Loan}} \times 100\%$$

$$\text{NPL} = \frac{2.722.628 + 848.223 + 5.138.759}{314.066.531} \times 100\%$$

$$\text{NPL} = \frac{8.709.610}{314.066.531} \times 100\%$$

$$\text{NPL} = 2.77\%$$

**Table 4.5: Composite Rank Weighting of NPL for BNI**

Period	NPL (%)	Rank	Value
2011	1.23%	1	Very Healthy
2012	0.85%	1	Very Healthy
2013	2.22%	2	Healthy
2014	2.00%	2	Healthy
2015	2.77%	2	Healthy

Source: BNI's Annual Report, 2015

#### Calculation of NPL for Bank Mandiri

2011:

$$\text{NPL} = \frac{\text{Substandard} + \text{Doubtful} + \text{Loss}}{\text{Total Loan}} \times 100\%$$

$$\text{NPL} = \frac{648.392 + 818.118 + 3.756.623}{298.988.258} \times 100\%$$

$$\text{NPL} = \frac{5.223.133}{298.988.258} \times 100\%$$

$$\text{NPL} = 1.74\%$$

2012:

$$\text{NPL} = \frac{\text{Substandard} + \text{Doubtful} + \text{Loss}}{\text{Total Loan}} \times 100\%$$

$$\text{NPL} = \frac{1.143.136 + 766.673 + 4.048.181}{370.570.356} \times 100\%$$

$$\text{NPL} = \frac{5.957.990}{370.570.356} \times 100\%$$

$$\text{NPL} = 1.6\%$$

2013:

$$\text{NPL} = \frac{\text{Substandard} + \text{Doubtful} + \text{Loss}}{\text{Total Loan}} \times 100\%$$

$$\text{NPL} = \frac{1.188.318 + 1.019.278 + 5.252.183}{450.634.798} \times 100\%$$

$$\text{NPL} = \frac{7.459.779}{450.634.798} \times 100\%$$

$$\text{NPL} = 1.65\%$$

2014:

$$\text{NPL} = \frac{\text{Substandard} + \text{Doubtful} + \text{Loss}}{\text{Total Loan}} \times 100\%$$

$$\text{NPL} = \frac{1.603.335 + 2.171.396 + 6.029.254}{505.394.870} \times 100\%$$

$$\text{NPL} = \frac{9.803.985}{505.394.870} \times 100\%$$

$$\text{NPL} = 1.94\%$$

2015:

$$\text{NPL} = \frac{\text{Substandard} + \text{Doubtful} + \text{Loss}}{\text{Total Loan}} \times 100\%$$

$$\text{NPL} = \frac{3.041.673 + 1.902.902 + 8.867.336}{564.394.870} \times 100\%$$

$$\text{NPL} = \frac{13.811.911}{564.394.870} \times 100\%$$

$$\text{NPL} = 2.44\%$$

**Table 4.6: Composite Rank Weighting of NPL for Bank Mandiri**

Period	NPL (%)	Rank	Value
2011	1.74%	1	Very Healthy
2012	1.60%	1	Very Healthy
2013	1.65%	1	Very Healthy
2014	1.94%	1	Very Healthy
2015	2.44%	2	Healthy

Source: Bank Mandiri's Annual Report, 2015

## 2) Liquidity Risk

### a) LDR (Loan to Deposit Ratio)

This financial ratio shows that LDR is used to assess the liquidity of a bank by comparing the amount of total credit given by bank divided with third parties fund, which include loans, but not including sub ordinary loans. Given credit does not include credit to other banks. Third Parties Fund are demand deposits, savings, time deposits, and deposit certificate. Therefore the calculation of LDR ratio is as follows:

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

### Calculation of LDR for BRI

2011:

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

$$\text{LDR} = \frac{285.406.257}{374.713.340} \times 100\%$$

$$\text{NPL} = 76.12\%$$

2012:

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

$$\text{LDR} = \frac{350.758.262}{439.152.119} \times 100\%$$

$$\text{NPL} = 79.87\%$$

2013:

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

$$\text{LDR} = \frac{434.316.466}{490.486.513} \times 100\%$$

$$\text{LDR} = 88.54\%$$

2014:

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



$$\text{LDR} = \frac{495.097.288}{605.610.330} \times 100\%$$

$$\text{LDR} = 81.75\%$$

2015:

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

$$\text{LDR} = \frac{434.316.466}{649.372.612} \times 100\%$$

$$\text{LDR} = 86.88\%$$

**Table 4.7: Composite Rank Weighting of LDR for BRI**

Period	LDR (%)	Rank	Value
2011	76.12%	2	Healthy
2012	79.87%	2	Healthy
2013	88.54%	3	Quite Healthy
2014	81.75%	2	Healthy
2015	86.88%	3	Quite Healthy

Source: BRI's Annual Report, 2015

#### **Calculation of LDR for BNI**

2011:

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

$$\text{LDR} = \frac{156.504.508}{299.519.096} \times 100\%$$

$$\text{LDR} = 52.25\%$$

2012:

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

$$\text{LDR} = \frac{193.834.670}{283.328.167} \times 100\%$$

$$\text{LDR} = 65.41\%$$

2013:

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

$$\text{LDR} = \frac{243.757.807}{329.344.820} \times 100\%$$

$$\text{LDR} = 74.01\%$$

2014:

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

$$\text{LDR} = \frac{270.651.986}{339.391.878} \times 100\%$$

$$\text{LDR} = 79.74\%$$

2015:

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

$$\text{LDR} = \frac{314.066.531}{418.285.865} \times 100\%$$

$$\text{LDR} = 75.08\%$$

**Table 4.8: Composite Rank Weighting of LDR for BNI**

Period	LDR (%)	Rank	Value
2011	52.25%	1	Very Healthy
2012	68.41%	1	Very Healthy
2013	74.01%	1	Very Healthy
2014	79.74%	2	Healthy
2015	75.08%	2	Healthy

Source: BNI's Annual Report, 2015

#### **Calculation of LDR for Bank Mandiri**

2011:

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

$$\text{LDR} = \frac{298.988.258}{384.728.603} \times 100\%$$

$$\text{LDR} = 77.66\%$$

2012:

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

$$\text{LDR} = \frac{370.570.356}{442.837.863} \times 100\%$$

$$\text{LDR} = 83.68\%$$

2013:

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

$$\text{LDR} = \frac{450.634.798}{508.996.256} \times 100\%$$

$$\text{LDR} = 88.53\%$$

2014:

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

$$\text{LDR} = \frac{505.394.870}{583.457.911} \times 100\%$$

$$\text{LDR} = 86.62\%$$

2015:

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

$$\text{LDR} = \frac{564.393.595}{62.332.331} \times 100\%$$

$$\text{LDR} = 90.69\%$$

**Table 4.9: Composite Rank Weighting of LDR for Bank Mandiri**

Period	LDR (%)	Rank	Value
2011	77.66%	2	Healthy
2012	83.68%	2	Healthy
2013	88.53%	3	Quite Healthy

2014	86.62%	3	Quite Healthy
2015	90.69%	3	Quite Healthy

Source: Bank Mandiri's Annual Report, 2015

Banks healthiness level viewed from Risk Profile aspect on BRI, BNI, and Bank Mandiri, for time period of 2011, 2012, 2013, 2014 and 2015 are very healthy although there exist a significant weakness which reflect that banks experience an increase while fulfilling their role in facing the 8 risk profile which explained as follows:

#### 1) Credit Risk

BRI, BNI, and Bank Mandiri are able to face credit risk by anticipating the risk that may arise from debtor failure and other parties on fulfilling their obligations to the bank. Credit risk on general exist on all banks activities which performance depends on counterparty performance, issuer, or borrower performance.

#### 2) Market Risk

On facing market risk, BRI, BNI, and Bank Mandiri are able to put the risk in Healthy position on the balance and administrative account including derivative transaction, which caused from changes in market condition, including the risk of price change option.

#### 3) Liquidity Risk

On facing liquidity risk, BRI, BNI, and Mandiri are able to fulfill their due obligation from source such as cash flow financing, and from high quality liquid assets which is able to be used as collateral, without disturbing banks activities and financial condition.

#### 4) Operational Risk

On facing operational risk, BRI, BNI, and Bank Mandiri are able to handle risk that arises from scarcity and dysfunction of internal human error process, system failure, and external occurrence which influence banks operational activities. These sources of operational risk are caused by factors including human resources, process,

system, and also external occurrence which may be experienced by banks during their business activities.

#### 5) Law Risk

On facing the law risk, BRI, BNI, and Bank Mandiri are able to anticipate risk that may arise from lawsuits and jurisdictional aspect weakness. This risk may also be caused from factors such as the nonexistence of valid law or agreement weaknesses, such as inability on fulfilling agreed contract or non fulfilling collateral.

#### 6) Strategic Risk

On facing the strategic risk, Bank BRI, BNI, and Bank Mandiri are able to anticipate wrong decision making or execution of a strategic decision as well as failure on anticipating changes in business environment to fulfill their role of servicing the customer as well as reaching the company goals.

#### 7) Compliance Risk

On facing the compliance risk, Bank BRI, BNI, and Bank Mandiri are able to anticipate risk that may arise from banks failure to comply or not abiding the law and rules in effect.

#### 8) Reputation Risk

On facing the reputation risk, BRI, BNI, and Bank Mandiri are able to maintain the stakeholder trust level towards the banks from negative perception that may destroy banks reputation.

### **4.2.2 Good Corporate Governance (GCG)**

Assessment on liquid GCG factors is based on banks management on the principles of customer as stated on Bank Indonesia Rule. GCG is based on three main aspects which are Governance Structure, Governance Process, and Governance Outcome. Governance Structure includes the execution of job and obligation of the Commissioner and Direction Board also the completeness and execution of the committee job.

Governance Process includes the implementation of banks compliance function, conflict of interest management, implementation of intern and extern audit function, risk management implementation including internal control system, funds provision toward related parties and huge funds, as well as banks strategic planning system. Governance Outcomes includes the transparency of financial and non financial condition, GCG execution report and internal reports. Healthy implementation of GCG is much needed on banking management with the fact that human resources that run the banking business are the key factor that must have good integrity competency.

**Table 4.10: BRI's GCG**

<b>BRI</b>					
<b>Year</b>	2011	2012	2013	2014	2015
<b>Composite Score</b>	1	1	2	1	1
<b>Predicate</b>	Excellent	Excellent	Good	Excellent	Excellent

Source: BRI's Annual Report

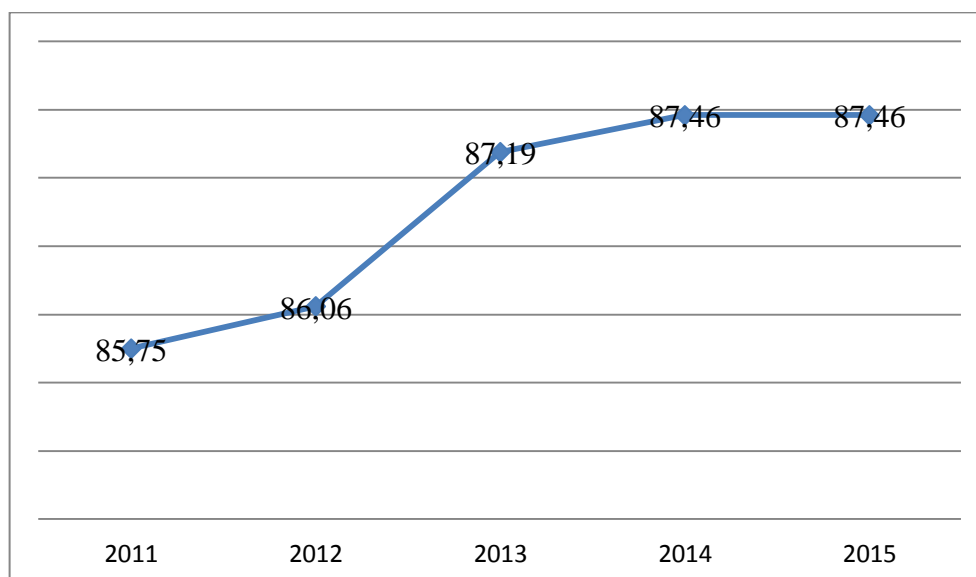
According to the annual report of BRI, BRI obtained score "1" (Excellent) for period 2011, 2012, 2014, and 2015 which in general indicates sound GCG implementation and in compliance with GCG principles. However, in 2013 BRI obtained score "2", reflecting that the bank's management has implemented GCG which in general is "Good". This is reflected in an adequate governance structure in accordance with applicable regulations, but there are still weaknesses in the governance process that affect the governance outcomes, but in general, such weaknesses can be solved by the management's normal action. Currently, the bank is continuously making corrective action to follow up on the findings from Bank Indonesia related to governance process. BRI's assessment result in CGPI 2015 was "Most Trusted" (Indonesian Most Trusted Companies) with score 86.92. A rating that has been consistently achieved by BRI for 3 consecutive years from 2012 to 2014. However, BRI does not show the exactly score of CGPI in 2011, 2012, and 2014.

**Table 4.11: BNI's GCG**

<b>BNI</b>					
<b>Year</b>	2011	2012	2013	2014	2015
<b>Composite Score</b>	1	1	1	2	2
<b>Predicate</b>	Excellent	Excellent	Excellent	Good	Good

Source: BNI's Annual Report

BNI has earned score "1" (Excellent) composite predicate for period 2011-2012 and BNI has decided the implementation score of GCG implementation, BNI obtained score "2" from 2013 to 2015 and the trend is stable. BNI obtained score "2" reflecting that the bank management has conducted the GCG, in general, well. This is reflected from the sufficient governance structure and in accordance to the prevailing regulations, however there still are weaknesses in the governance process which influences the governance outcome, but in general such weaknesses can be resolved with the normal action of the Bank management. Currently the bank is continuing to conduct the corrective action in response to Bank of Indonesian finding. However it still needs improvement in the quality of internal control system implementation.

**Figure 4.11: BNI's CGPI Score in 2011-2015**

Source: BNI's Annual Report

BNI also actively participates in the CGPI held by IICG. BNI participation in such program purposed to evaluate the GCG implementation in BNI. The evaluation



result will be BNI's reference to conduct the improvement to subsequent GCG implementation. In accordance with the result from IICG, for the GCG implementation in BNI with such topic, the GCG implementation in BNI achieved the Most Trusted predicate. For the last 5 year period, the score giving by IICG in BNI participation in CGPI was always rising. This is reflecting that GCG implementation in BNI is getting better from year to year.

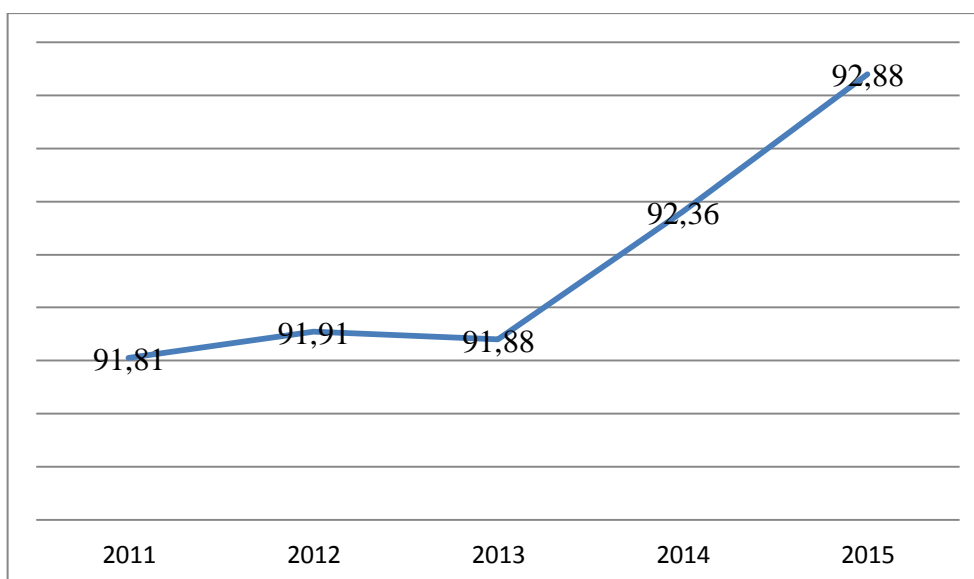
**Table 4.12: Bank Mandiri's GCG**

<b>Bank Mandiri</b>					
<b>Year</b>	2011	2012	2013	2014	2015
<b>Composite Score</b>	1	2	2	2	2
<b>Predicate</b>	Excellent	Good	Good	Good	Good

Source: Bank Mandiri's Annual Report

For the period of 2011, Bank Mandiri was informed that its GCG Composite Score is "1" (Excellent) and Bank Mandiri obtained score "2" from 2012 to 2015 and the trend is stable.

**Figure 4.2: Bank Mandiri's CGPI Score in 2011-2012**



Source: Bank Mandiri's Annual Report

Bank Mandiri also participates in CGPI rating and survey every year. CGPI is a GCG research and rating program for assessment of Corporate Governance quality. Participants of CGPI are public companies (issuers), State Owned Enterprises,

banking and other private companies. Bank Mandiri has been participating in CGPI assessment for 13 consecutive years since 2003. In the 2014/2015 CGPI Bank Mandiri achieved the highest GCG score and has been awarded “The Most Trusted Company” with the highest score among the other companies for 9 years in a row.

#### **4.2.3 Earning**

Earning factor is comprised of 4 assessment components, which are ROA, ROE, NIM, and BOPO. However in this study the author decided to only calculate the ROA and NIM ratio. First ratio is the NIM ratio. Financial information used in the calculation of this ratio are NIM (Investment Returns - Interest Expenses) and Average Earning Assets. Net interest income is the interest income after reduced by the interest expense. While the productive asset to be calculated is the interest bearing asset, which are productive assets classified as Standard and On Special Attention.

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

#### **Calculation of NIM for BRI**

2011:

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

$$\text{NIM} = \frac{47.296.178 - 13.275.304}{406.171.500} \times 100\%$$

$$\text{NIM} = \frac{34.020.874}{406.171.500} \times 100\%$$

$$\text{NIM} = 8.37\%$$

2012:

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

$$\text{NIM} = \frac{48.272.021 - 12.599.060}{465.844.500} \times 100\%$$

$$\text{NIM} = \frac{35.672.961}{465.844.500} \times 100\%$$

$$\text{NIM} = 7.65\%$$

2013:

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

$$\text{NIM} = \frac{57.720.831 - 14.590.223}{533.794.000} \times 100\%$$

$$\text{NIM} = \frac{43.130.608}{533.794.000} \times 100\%$$

$$\text{NIM} = 8.08\%$$

2014:

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

$$\text{NIM} = \frac{73.065.777 - 22.684.979}{648.320.000} \times 100\%$$

$$\text{NIM} = \frac{50.380.798}{648.320.000} \times 100\%$$

$$\text{NIM} = 7.77\%$$

2015:

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

$$\text{NIM} = \frac{83.007.745 - 26.141.100}{755.012.500} \times 100\%$$

$$\text{NIM} = \frac{56.866.645}{755.012.500} \times 100\%$$

$$\text{NIM} = 7.53\%$$

**Table 4.13: Composite Rank Weighting of NIM for BRI:**

Period	NIM (%)	Rank	Value
2011	8.37%	1	Very Healthy
2012	7.65%	1	Very Healthy
2013	8.08%	1	Very Healthy
2014	7.77%	1	Very Healthy
2015	7.53%	1	Very Healthy

Source: BRI's Annual Report, 2015

#### **Calculation of NIM for BNI**

2011:

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

$$\text{NIM} = \frac{20.691.796 - 7.495.982}{273.819.580,5} \times 100\%$$

$$\text{NIM} = \frac{13.195.814}{273.819.580,5} \times 100\%$$

$$\text{NIM} = 4.81\%$$

2012:

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

$$\text{NIM} = \frac{22.704.708 - 7.392.427}{316.180.833,5} \times 100\%$$

$$\text{NIM} = \frac{15.458.991}{316.180.833,5} \times 100\%$$

$$\text{NIM} = 4.88\%$$

2013:

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

$$\text{NIM} = \frac{26.450.708 - 7.392.427}{359.979.160,5} \times 100\%$$

$$\text{NIM} = \frac{19.058.281}{359.979.160,5} \times 100\%$$

$$\text{NIM} = 5.29\%$$

2014

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

$$\text{NIM} = \frac{33.750.031 - 10.988.641}{401.614.261,5} \times 100\%$$

$$\text{NIM} = \frac{22.761.390}{401.614.261,5} \times 100\%$$

$$\text{NIM} = 5.66\%$$

2015:

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

$$\text{NIM} = \frac{36.895.081 - 11.334.885}{462.584.498} \times 100\%$$

$$\text{NIM} = \frac{25.560.196}{462.584.498} \times 100\%$$

$$\text{NIM} = 5.52\%$$

**Table 4.14: Composite Rank Weighting of NIM for BNI**

Period	NIM (%)	Rank	Value
2011	4.81%	2	Healthy
2012	4.88%	2	Healthy
2013	5.29%	1	Very Healthy
2014	5.66%	1	Very Healthy
2015	5.52%	1	Very Healthy

Source: BNI's Annual Report, 2015

#### Calculation of NIM for Bank Mandiri

2011:

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

$$\text{NIM} = \frac{37.730.019 - 15.954.037}{500.833.127,5} \times 100\%$$

$$\text{NIM} = \frac{21.775.982}{500.833.127,5} \times 100\%$$

$$\text{NIM} = 4.34\%$$

2012:

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

$$\text{NIM} = \frac{42.550.442 - 15.019.850}{593.755.206} \times 100\%$$

$$\text{NIM} = \frac{27.530.592}{593.755.206} \times 100\%$$

$$\text{NIM} = 4.63\%$$

2013:

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

$$\text{NIM} = \frac{50.208.842 - 16.399.424}{684.314.235} \times 100\%$$

$$\text{NIM} = \frac{33.809.418}{684.314.235} \times 100\%$$

$$\text{NIM} = 4.94\%$$

2014:

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

$$\text{NIM} = \frac{62.637.942 - 23.505.518}{794.024.717,5} \times 100\%$$

$$\text{NIM} = \frac{39.132.424}{794.024.717,5} \times 100\%$$

$$\text{NIM} = 4.96\%$$

2015:

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

$$\text{NIM} = \frac{71.570.127 - 26.207.000}{882.551.541} \times 100\%$$

$$\text{NIM} = \frac{45.336.127}{882.551.541} \times 100\%$$

$$\text{NIM} = 5.14\%$$

**Table 4.15: Composite Rank Weighting of NIM for Bank Mandiri**

Period	NIM (%)	Rank	Value
2011	4.34%	2	Healthy
2012	4.63%	2	Healthy
2013	4.94%	2	Healthy
2014	4.96%	2	Healthy
2015	5.14%	1	Very Healthy

Source: Bank Mandiri's Annual Report, 2015



Second ratio is ROA ratio. This ratio is calculated to measure the capability of management on earning incomes. Small value of this ratio imply an incapable banks management on managing asset to increase the income and reducing cost. Financial information used in the calculation of this ratio are Income Before Tax and Average Total Assets.

#### **Calculation of ROA for BRI**

2011:

$$ROA = \frac{\text{Income Before Tax}}{\text{Average Total Assets}} \times 100\%$$

$$ROA = \frac{18.755.880}{430.436.320} \times 100\%$$

$$ROA = 4.35\%$$

2012:

$$ROA = \frac{\text{Income Before Tax}}{\text{Average Total Assets}} \times 100\%$$

$$ROA = \frac{23.859.572}{498.454.592} \times 100\%$$

$$ROA = 4.78\%$$

2013:

$$ROA = \frac{\text{Income Before Tax}}{\text{Average Total Assets}} \times 100\%$$

$$ROA = \frac{27.910}{581.355} \times 100\%$$

$$\text{ROA} = 4.80\%$$

2014:

$$\text{ROA} = \frac{\text{Income Before Tax}}{\text{Average Total Assets}} \times 100\%$$

$$\text{ROA} = \frac{30.804}{712.186} \times 100\%$$

$$\text{ROA} = 4.32\%$$

2015:

$$\text{ROA} = \frac{\text{Income Before Tax}}{\text{Average Total Assets}} \times 100\%$$

$$\text{ROA} = \frac{32.494}{840.205} \times 100\%$$

$$\text{ROA} = 3.86\%$$

**Table 4.16: Composite Rank Weighting of ROA for BRI**

Period	ROA (%)	Rank	Value
2011	4.35%	1	Very Healthy
2012	4.78%	1	Very Healthy
2013	4.80%	1	Very Healthy
2014	4.32%	1	Very Healthy
2015	3.86%	1	Very Healthy

Source: BRI's Annual Report, 2015

### Calculation of ROA for BNI

2011:

$$\text{ROA} = \frac{\text{Income Before Tax}}{\text{Average Total Assets}} \times 100\%$$

$$\text{ROA} = \frac{7.461.000}{273.819} \times 100\%$$

$$\text{ROA} = 2.72\%$$

2012:

$$\text{ROA} = \frac{\text{Income Before Tax}}{\text{Average Total Assets}} \times 100\%$$

$$\text{ROA} = \frac{8.899.562}{316.180.833,5} \times 100\%$$

$$\text{ROA} = 2.81\%$$

2013:

$$\text{ROA} = \frac{\text{Income Before Tax}}{\text{Average Total Assets}} \times 100\%$$

$$\text{ROA} = \frac{11.278}{359.984} \times 100\%$$

$$\text{ROA} = 3.13\%$$

2014:

$$\text{ROA} = \frac{\text{Income Before Tax}}{\text{Average Total Assets}} \times 100\%$$

$$\text{ROA} = \frac{13.524}{401.620} \times 100\%$$

$$ROA = 3.36\%$$

2015:

$$ROA = \frac{\text{Income Before Tax}}{\text{Average Total Assets}} \times 100\%$$

$$ROA = \frac{11.466}{512.585} \times 100\%$$

$$ROA = 2.23\%$$

**Table 4.17: Composite Rank Weighting of ROA for BNI**

Period	ROA (%)	Rank	Value
2011	2.72%	1	Very Healthy
2012	2.81%	1	Very Healthy
2013	3.13%	1	Very Healthy
2014	3.36%	1	Very Healthy
2015	2.23%	1	Very Healthy

Source: BNI's Annual Report, 2015

#### **Calculation of ROA for Bank Mandiri**

2011:

$$ROA = \frac{\text{Income Before Tax}}{\text{Average Total Assets}} \times 100\%$$

$$ROA = \frac{16.512}{1.001.665} \times 100\%$$

$$ROA = 1.64\%$$

2012

$$\text{ROA} = \frac{\text{Income Before Tax}}{\text{Average Total Assets}} \times 100\%$$

$$\text{ROA} = \frac{20.504.268}{593.755.206} \times 100\%$$

$$\text{ROA} = 3.45\%$$

2013:

$$\text{ROA} = \frac{\text{Income Before Tax}}{\text{Average Total Assets}} \times 100\%$$

$$\text{ROA} = \frac{24.061}{684.358} \times 100\%$$

$$\text{ROA} = 3.51\%$$

2014:

$$\text{ROA} = \frac{\text{Income Before Tax}}{\text{Average Total Assets}} \times 100\%$$

$$\text{ROA} = \frac{26.008}{794.069} \times 100\%$$

$$\text{ROA} = 3.27\%$$

2015:

$$\text{ROA} = \frac{\text{Income Before Tax}}{\text{Average Total Assets}} \times 100\%$$

$$ROA = \frac{26.369}{882.551} \times 100\%$$

$$ROA = 3.86\%$$

**Table 4.18: Composite Rank Weighting of ROA for Bank Mandiri**

Period	ROA (%)	Rank	Value
2011	1.64%	1	Very Healthy
2012	3.45%	1	Very Healthy
2013	3.51%	1	Very Healthy
2014	3.27%	1	Very Healthy
2015	2.98%	1	Very Healthy

Source: Bank Mandiri's Annual Report, 2015

#### 4.2.4 Capital

Assessment toward Capital factor including assessment toward capital adequacy level and capital management. The ratio used to assess capital is the CAR.

##### Calculation of CAR for BRI

2011:

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

$$CAR = \frac{36.036.785}{222.977.935} \times 100\%$$

$$CAR = 16.16\%$$

2012:

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

$$\text{CAR} = \frac{49.628.764}{261.885.928} \times 100\%$$

$$\text{CAR} = 18.95\%$$

2013:

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

$$\text{CAR} = \frac{69.472}{408.858} \times 100\%$$

$$\text{CAR} = 16.99\%$$

2014:

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

$$\text{CAR} = \frac{85.706}{468.182} \times 100\%$$

$$\text{CAR} = 18.31\%$$

2015:

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

$$\text{CAR} = \frac{110.580}{537.074} \times 100\%$$

$$\text{CAR} = 20.58\%$$

**Table 4.19: Composite Rank Weighting of CAR for BRI**

Period	CAR (%)	Rank	Value
2011	16.16%	1	Very Healthy
2012	18.95%	1	Very Healthy
2013	16.99%	1	Very Healthy
2014	18.31%	1	Very Healthy
2015	20.58%	1	Very Healthy

Source: BRI's Annual Report, 2015

### Calculation of ROA for BNI

2011:

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

$$\text{CAR} = \frac{32.692}{185.403} \times 100\%$$

$$\text{CAR} = 17.60\%$$

2012:

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

$$\text{CAR} = \frac{39.199}{235.143} \times 100\%$$

$$\text{CAR} = 16.60\%$$

2013:

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



$$\text{CAR} = \frac{43.563}{288.617} \times 100\%$$

$$\text{CAR} = 15.09\%$$

2014:

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

$$\text{CAR} = \frac{50.352}{310.486} \times 100\%$$

$$\text{CAR} = 16.21\%$$

2015:

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

$$\text{CAR} = \frac{73.798}{378.563} \times 100\%$$

$$\text{CAR} = 19.48\%$$

**Table 4.20: Composite Rank Weighting of CAR for BNI**

Period	CAR (%)	Rank	Value
2011	17.60%	1	Very Healthy
2012	16.60%	1	Very Healthy
2013	15.09%	1	Very Healthy
2014	16.21%	1	Very Healthy
2015	19.48%	1	Very Healthy

Source: BNI's Annual Report, 2015

### Calculation of CAR for Bank Mandiri

2011:

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

$$\text{CAR} = \frac{53.326}{352.519} \times 100\%$$

$$\text{CAR} = 15.12\%$$

2012:

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

$$\text{CAR} = \frac{61.948}{400.190} \times 100\%$$

$$\text{CAR} = 15.41\%$$

2013:

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

$$\text{CAR} = \frac{73.345}{491.276} \times 100\%$$

$$\text{CAR} = 14.92\%$$

2014:

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

$$\text{CAR} = \frac{85.479}{514.904} \times 100\%$$

$$\text{CAR} = 16.60\%$$

2015:

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

$$\text{CAR} = \frac{107.388}{577.345} \times 100\%$$

$$\text{CAR} = 18.60\%$$

**Table 4.21 Composite Rank Weighting of CAR for Bank Mandiri**

Period	CAR (%)	Rank	Value
2011	15.12%	1	Very Healthy
2012	15.41%	1	Very Healthy
2013	14.92%	2	Healthy
2014	16.60%	1	Very Healthy
2015	18.60%	1	Very Healthy

Source: Bank Mandiri's Annual Report, 2015

### 4.3 Discussion

**Table 4.22: Risk Profile Aspect**

Bank	Ratio	2015		2014		2013		2012		2011	
		% Ratio	Rank	% Ratio	Rank	% Ratio	Rank	% Ratio	Rank	% Ratio	Rank
BRI	NPL	1,16%	1	1,25%	1	1,26%	1	1,44%	1	1,75%	1
	LDR	86.88%	3	81.75%	2	88.54%	3	79.87%	2	76.12%	2
	Average	2		1,5		2		1,5		1,5	
	Predicate	Healthy		Very Healthy		Healthy		Very Healthy		Very Healthy	
BNI	NPL	2.77%	2	2,00%	2	2.22%	2	0.85%	1	1.23%	1
	LDR	75.08%	2	79.74%	2	74.01%	1	65.41%	1	52.25%	1
	Average	2		2		1,5		1		1	
	Predicate	Healthy		Healthy		Very Healthy		Very Healthy		Very Healthy	
Mandiri	NPL	2.44%	2	1.94%	1	1.65%	1	1.60%	1	1.74%	1
	LDR	90.69%	3	86.62%	3	88.53%	3	83.68%	2	77.66%	2
	Average	2,5		2		2		1,5		1,5	
	Predicate	Healthy		Healthy		Healthy		Very Healthy		Very Healthy	

Source: Author-processed secondary data, 2016

For Risk Profile aspect, the possibility of losses that BRI faced from credit risk (NPL) is considered small during certain time period in the future with very good NPL ratio of 1.75% and keep smaller until 2015 it means the smaller the NPL percentage value, the better the return rate of credit from customer and good ratio, and for liquidity risk (LDR) with 76.12% in 2011 and slightly smaller until 2015 and it means shows that BRI has great capability to repay any withdrawal by deposit customer by utilizing given credit. The possibility of losses that the bank faced from credit risk (NPL) is considered small during certain time period in the future with very good NPL ratio, however decrease more than 2% in 2013 and 2015, it means BNI not capable enough to manage the credit from their

customer, and for liquidity risk (LDR) in 2011-2013 BNI has great capability to repay any withdrawal by deposit customer by utilizing given credit, however in 2014 and 2015 BNI's reached rank "2". The possibility of losses that Bank Mandiri faced from credit risk (NPL) is considered small during certain time period in the future with very good NPL ratio it means the smaller the NPL percentage value, the better the return rate of credit from customer, and for liquidity risk (LDR) in 2011-2013 Bank Mandiri already capable to repay any withdrawal by deposit customer by utilizing given credit, however in 2013-2015 Bank Mandiri's reached rank "3".

**Table 4.23: GCG Aspect**

Bank	Ratio	2015		2014		2013		2012		2011	
		% Ratio	Rank	% Ratio	Rank	% Ratio	Rank	% Ratio	Rank	% Ratio	Rank
BRI	GCG	-	1	-	1	-	2	-	1	-	1
	Predicate	Very Healthy		Very Healthy		Healthy		Very Healthy		Very Healthy	
BNI	GCG	-	2	-	2	-	1	-	1	-	1
	Predicate	Healthy		Healthy		Very Healthy		Very Healthy		Very Healthy	
Mandiri	GCG	-	2	-	2	-	2	-	2	-	1
	Predicate	Healthy		Healthy		Healthy		Healthy		Very Healthy	

Source: Author-processed secondary data, 2016

BRI for GCG's aspect obtained rank "1" for 2011, 2012, 2014, and 2015 period yet obtained "2" in 2013, which is BRI already doing principle of GCG accordance Bank Indonesia regulation. BNI always obtained rank "1" in 2011-2013 yet obtained rank "2" for their 2 last period, it shows BNI already doing principle of GCG accordance Bank Indonesia regulation. Bank Mandiri for GCG's aspect stable obtained rank "2" with predicate "Good" 4 years in a row from 2012-2015 which is Bank Mandiri already doing principle of GCG accordance Bank Indonesia regulation.

**Table 4.24: Earning Aspect**

Bank	Ratio	2015		2014		2013		2012		2011	
		% Ratio	Rank	% Ratio	Rank	% Ratio	Rank	% Ratio	Rank	% Ratio	Rank
BRI	NIM	7.53%	1	7.77%	1	8.08%	1	7.65%	1	8.37%	1
	ROA	3.86%	1	4.32%	1	4.80%	1	4.78%	1	4.35%	1
	Average	1		1		1		1		1	
	Predicate	Very Healthy		Very Healthy		Very Healthy		Very Healthy		Very Healthy	
BNI	NIM	5.52%	1	5.66%	1	5.29%	1	4.88%	2	4.81%	2
	ROA	2.23%	1	3.36%	1	3.13%	1	2.81%	1	2.72%	1
	Average	1		1		1		1,5		1,5	
	Predicate	Very Healthy		Very Healthy		Very Healthy		Very Healthy		Very Healthy	
Mandiri	NIM	5.14%	1	4.96%	2	4.94%	2	4.63%	2	4.34%	2
	ROA	2.98%	1	3.27%	1	3.51%	1	3.45%	1	1.64%	1
	Average	1		1,5		1,5		1,5		1,5	
	Predicate	Very Healthy		Very Healthy		Very Healthy		Very Healthy		Very Healthy	

Source: Author-processed secondary data, 2016

Earning factor for BRI is considered as very healthy with rank “1”, because the income earned exceed the target and also support banks capital which represented with NIM, with value always above 5% every year and for ROA more than 1.5% respectively it means BRI has good effectiveness in earning profit by utilizing its own assets. For BNI’s earning is considered as healthy as well, because the income earned almost exceed the target and also support banks capital which represented with NIM slightly increase every year and ROA ratio considered to be healthy as well because it reached more than 1.5% respectively it means BNI also has good

effectiveness in earning profit by utilizing their own assets. Earning aspect for Bank Mandiri also considered as healthy, because the income earned almost exceed the target and also support banks capital which represented with NIM, with value always above 5% every year and for ROA more than 1.5% respectively it means Bank Mandiri has good effectiveness in earning profit by utilizing its own assets.

**Table 4.25: Capital Aspect**

Bank	Ratio	2015		2014		2013		2012		2011	
		% Ratio	Rank	% Ratio	Rank	% Ratio	Rank	% Ratio	Rank	% Ratio	Rank
BRI	CAR	20.58%	1	18.31%	1	16.99%	1	18.95%	1	16.16%	1
	Predicate	Very Healthy		Very Healthy		Very Healthy		Very Healthy		Very Healthy	
BNI	CAR	19.48%	1	16.21%	1	15.09%	1	16.60%	1	17.60%	1
	Predicate	Very Healthy		Very Healthy		Very Healthy		Very Healthy		Very Healthy	
Mandiri	CAR	18.60%	1	16.60%	1	14.92%	2	15.41%	1	15.12%	1
	Predicate	Very Healthy		Very Healthy		Healthy		Very Healthy		Very Healthy	

Source: Author-processed secondary data, 2016

BRI's capital aspect is shown on rank "1" which means the bank have enough capital which followed with very strong capital management, which is shown by the CAR always increase every period, however, decreased in 2013, yet in 2015 BRI obtained 20.58%. BNI's capital aspect is shown on rank 1 which means the bank have enough capital which followed with very strong capital management, which is shown by the CAR ratio of 19.48%. Bank Mandiri's capital aspect is shown on rank "1" as well, which means Bank Mandiri have enough capital which followed with very strong capital management, which is shown by the CAR ratio of 18.60% in 2015.

**Table 4.26: Summary of RGE C Calculation**

Bank	Component Factor	2015			2014			2013			2012			2011		
		Rank	Weight	Score	Rank	Weight	Score	Rank	Weight	Score	Rank	Weight	Score	Rank	Weight	Score
BRI	Risk Profile	2	40,0%	0,8	1,5	40,0%	0,6	2	40,0%	0,8	1,5	40,0%	0,6	1,5	40,0%	0,6
	Governance	1	25,0%	0,25	1	25,0%	0,25	2	25,0%	0,5	1	25,0%	0,25	1	25,0%	0,25
	Earning	1	10,0%	0,1	1	10,0%	0,1	1	10,0%	0,1	1	10,0%	0,1	1	10,0%	0,1
	Capital	1	25,0%	0,25	1	25,0%	0,25	1	25,0%	0,25	1	25,0%	0,25	1	25,0%	0,25
	<b>Composite Rank</b>	<b>Total</b>		1,4	<b>Total</b>		1,2	<b>Total</b>		1,65	<b>Total</b>		1,2	<b>Total</b>		1,2
	<b>Predicate</b>	<b>Very Healthy</b>			<b>Very Healthy</b>			<b>Healthy</b>			<b>Very Healthy</b>			<b>Very Healthy</b>		
BNI	Risk Profile	2	40,0%	0,8	2	40,0%	0,8	1,5	40,0%	0,6	1	40,0%	0,4	1	40,0%	0,4
	Governance	2	25,0%	0,5	2	25,0%	0,5	1	25,0%	0,25	1	25,0%	0,25	1	25,0%	0,25
	Earning	1	10,0%	0,1	1	10,0%	0,1	1	10,0%	0,1	1,5	10,0%	0,15	1,5	10,0%	0,15
	Capital	1	25,0%	0,25	1	25,0%	0,25	1	25,0%	0,25	1	25,0%	0,25	1	25,0%	0,25
	<b>Composite Rank</b>	<b>Total</b>		1,65	<b>Total</b>		1,65	<b>Total</b>		1,2	<b>Total</b>		1,05	<b>Total</b>		1,05
	<b>Predicate</b>	<b>Healthy</b>			<b>Healthy</b>			<b>Very Healthy</b>			<b>Very Healthy</b>			<b>Very Healthy</b>		
Mandiri	Risk Profile	2,5	40,0%	1	2	40,0%	0,8	2	40,0%	0,8	1,5	40,0%	0,6	1,5	40,0%	0,6
	Governance	2	25,0%	0,5	2	25,0%	0,5	2	25,0%	0,5	2	25,0%	0,5	1	25,0%	0,25
	Earning	1	10,0%	0,1	1,5	10,0%	0,15	1,5	10,0%	0,15	1,5	10,0%	0,15	1,5	10,0%	0,15
	Capital	1	25,0%	0,25	1	25,0%	0,25	2	25,0%	0,5	1	25,0%	0,25	1	25,0%	0,25
	<b>Composite Rank</b>	<b>Total</b>		1,85	<b>Total</b>		1,7	<b>Total</b>		1,95	<b>Total</b>		1,5	<b>Total</b>		1,25
	<b>Predicate</b>	<b>Healthy</b>			<b>Healthy</b>			<b>Healthy</b>			<b>Very Healthy</b>			<b>Very Healthy</b>		

Source: Author-processed secondary data, 2016



BRI during 2011, 2012, 2014, and 2015 period considered to be very healthy with rank “1”, yet obtained rank “2” with “healthy” in 2013. For Risk Profile aspect, the possibility of losses that the bank faced from credit risk (NPL) is considered small during certain time period in the future with very good NPL ratio of 1.75% and keep smaller until 2015 it means the smaller the NPL percentage value, the better the return rate of credit from customer and good ratio, and for liquidity risk (LDR) with 76.12% in 2011 and slightly smaller until 2015 and it means shows that BRI has great capability to repay any withdrawal by deposit customer by utilizing given credit. BRI for GCG’s aspect obtained rank “1” for 2011, 2012, 2014, and 2015 period yet obtained “2” in 2013, which is BRI already doing principle of GCG accordance Bank Indonesia regulation. Earning aspect is considered as very healthy with rank “1”, because the income earned exceed the target and also support banks capital which represented with NIM, with value always above 5% every year and for ROA more than 1.5% respectively it means BRI has good effectiveness in earning profit by utilizing its own assets. Capital aspect is shown on rank “1” which means the bank have enough capital which followed with very strong capital management, which is shown by the CAR always increase every period, however, decreased in 2013, yet in 2015 BRI obtained 20.58%. This RGEC ratio value shows the predicate of the banks healthiness level according to the standard set by Bank Indonesia with the final composite rank of 1, which reflects the general bank condition as very healthy, therefore assessed to be capable of facing significantly negative influence from changes in business condition and other factors.

BNI during 2011-2013 period considered to be very healthy with rank “1” as well, yet obtained rank “2” with “healthy” in the last 2 period. For Risk Profile aspect, the possibility of losses that the bank faced from credit risk (NPL) is considered small during certain time period in the future with very good NPL ratio, however decrease more than 2% in 2013 and 2015, it means BNI not capable enough to manage the credit from their customer, and for liquidity risk (LDR) in 2011-2013 BNI has great capability to repay any withdrawal by deposit customer by utilizing given credit, however in 2014 and 2015. BNI’s GCG aspect reached rank “2”. BNI always obtained rank “1” in 2011-2013 yet obtained rank “2” for their 2 last period, it shows BNI already doing principle of GCG accordance Bank Indonesia regulation. Earning aspect is considered as healthy, because the income earned almost exceed

the target and also support banks capital which represented with NIM slightly increase every year and ROA ratio considered to be healthy as well because it reached more than 1.5% respectively it means BNI has good effectiveness in earning profit by utilizing their own assets. Capital aspect is shown on rank 1 which means the bank have enough capital which followed with very strong capital management, which is shown by the CAR ratio of 19.48%. This RGEC ratio value shows the predicate of the banks healthiness level according to the standard set by Bank Indonesia with the final composite rank of “1”, which reflects the general bank condition as very healthy, therefore assessed to be capable of facing significantly negative influence from changes in business condition and other factors.

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