

The Analysis of Bank Soundness Level by Using RGEC (Risk Profile, Good Corporate Governance, Earnings and Capital) Method in Three State-Owned Banks in Indonesia in the Period of 2011-2015

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Abstract

This study aims to analyze the bank soundness level of 3 most popular commercial state-owned banks in Indonesia, namely: PT Bank Rakyat Indonesia Tbk, PT Bank Mandiri (Persero) Tbk and PT Bank Negara Indonesia (Persero) Tbk using RGEC Method (*Risk Profile, Good Corporate Governance, Earnings and Capital*). The bank soundness level was measured through some financial ratios such as NPL, IRR, LDR, LAR, ROA, ROE, NIM, OEF and factors of Good Corporate Governance (GCG) on RGEC Method. The type of this research in this study is quantitative descriptive and the data of this research were collected from the annual reports of each bank from the period between 2011 and 2015. The data were analyzed using *MANOVA, ANOVA and Kruskal-Wallis* methods in *SPSS software*. The findings of this research show that there is a significant difference on the Risk profile factors among BRI, Mandiri and BNI. The following factor, namely earning show significant differences as well. However, the capital factor and the GCG factors of those three banks do not indicate any significant difference.

Keywords: Bank Soundness Level, RGEC Method, State-owned Banks

INTRODUCTION

Financial sector shows an important role in economic development and national welfare. Banks function as backbone to the financial sector, which assist the proper utilization of financial resources of a country. According to Budisantoso and Nouritomo (2014), a bank functions as an asset transmutation, an institution that could help transaction activity, and an institution that provides liquidity management activities. In Indonesia, banks play significant roles in domestic affairs as it has a role to encourage people to be more oriented on banking sector. No wonder bank tries hard to persuade people to save their money and use the products and service from banks, such as, checking account and time deposit. In addition, bank also provides guidance to the society in terms of credit decision process. Hereinafter, Indonesian banks also have great contribution in national economy along with national development by accumulating and mobilizing funds from public and distributing the funds to public in need of funds through credit distribution (Dian, 2016)

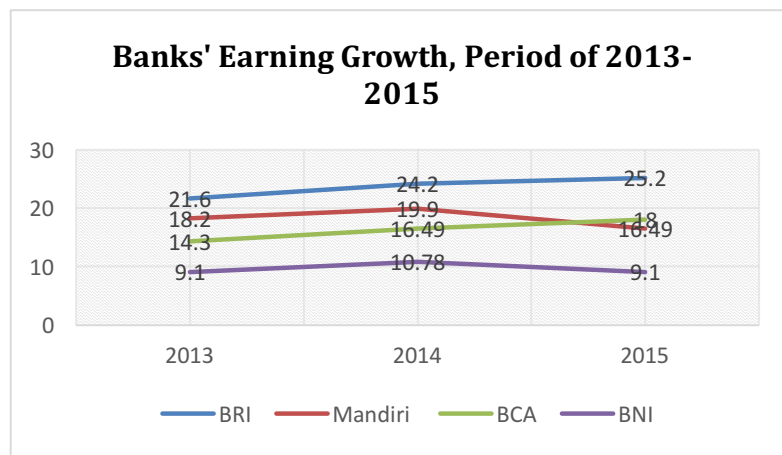
Indonesia banking law was stipulated in Indonesia Bill (Undang-Undang Republik Indonesia /UURI) No. 10 of 1998, which is the amendment of UURI No. 7 of 1992. The definition of a bank is described on article 1 stating that a bank is a business entity that collects funds from public in the form of savings and channels the public funds to the society in the form of credit or other forms in order to improve living standard of people. Furthermore, article 2 UURI No. 10 of 1998 explains that the purpose of Indonesian banking is to support the implementation of national development in order

to improve equity, economic growth, and national stability to improve people welfare. In addition, UURI No. 10 of 1998 explained the types of banks. One of the type of banks in Indonesia is commercial bank.

One of the form of commercial banks is state owned banks. In Indonesia, the state owned banks gain more trust. There are several reasons leading Indonesia community trust towards state owned banks. Alawiyah (2016) also stated that state owned banks are perceived to be more secure and reliable for saving investing funds leading state owned bank to gain more community trust. Secondly, state-owned banks are secured by government, since the operational activity of state-owned bank is very essential and it affects economic conditions. Thirdly, state owned bank has shown that they are capable of faced economic crisis, especially when economic crisis occurred in 2013. The four state-owned banks namely: BRI, BNI, Bank Mandiri and BTN, were adequate enough to overcome the economic pressure on that period. Adequate means that those banks are capable of facing the economic pressure by managing their money in a very effective and productive way. This is shown from the banks' average level of Loan Deposit Ratio (LDR) with the percentage of 86% and the low level of Non-Performing Loan (NPL) that less than 3% (Prayogo, 2013). LDR is the ratio used to measure the total number of bank loans with the funds received by banks (Dendawijaya, 2009), while NPL is the ratio that indicates the ability of bank in managing problem loans out of total loans (Jumingan, 2011).

Even though Indonesian banks faced economic crisis, those four state-owned banks are able to overcome the crisis by channeling funds to the community properly. So that, the local economy is getting better.

Figure 1. demonstrates the top four highest earning of commercial banks in Indonesia, during the period of 2013-2015.



Source: Each bank annual reports

Figure 1 shows the earning growth of commercial bank in Indonesia from period 2013-2015. It is mentioned that three of the four banks with the highest earnings are state-owned banks during three consecutive years. The first bank with the highest earning is Bank Rakyat Indonesia (BRI), followed by Bank Mandiri, then Bank Central Asia (BCA), and the last is Bank Negara Indonesia (BNI). Therefore, it is recognized that community trust towards state-owned banks is high because the majority of the top four banks with the highest earning in Indonesia are state-owned banks. The soundness of a bank can be perceived that the bank could perform its function properly. Therefore, bank with high rating of soundness can be expected to be able to maintain customer's confidence in

the capability of the bank in managing their operation, running its intermediary function, assisting money circulation, and helping the government for actualizing their policies, especially the monetary policy (Permana 2012).

According to Undang-Undang No. 10 of 1998 about banking, bank is obligated to maintain the soundness level in accordance with the provision of the bank capital adequacy, asset and management quality, liquidity, profitability, solvency and the other aspects that are related to the business of the bank and management of business based on prudence principle. Previously, the assessment of bank's soundness level used CAMELS method. The CAMELS stands for *Capital Adequacy, Asset Quality, Management, Earning, Liquidity, and Sensitivity to market risk* (Rostami 2015). However, starting from January 2012, all of the commercial banks in Indonesia had to use the latest guidelines for bank soundness level assessment based on *Peraturan Bank Indonesia (PBI) No.13/1/PBI/2011* concerning with the assessment of commercial bank's soundness level. The new ordinance guidelines known as RGEC Method, which stands for *Risk Profile, Good Corporate Governance, Earnings and Capital*.

In view of the act of Indonesian Banking Regulation No. 10 of 1998 requiring state-owned banks to maintain the bank's soundness, it is important to measure performance and reliability of a bank in order to analyze bank soundness. Indonesian Banking Regulation No. 13/1/PBI/2011 determines the RGEC method as new guideline for measuring the soundness level of Indonesian banking.

Indeed, Ginevičius and Podvieszka (2013: 192), found that performance and reliability of a bank is one of the most critical factors inducing solid economic development. The assessment of commercial banks' soundness and stability is also closely linked with the financial system stability of a country (Miletic, 2009; Ginevičius and Podvieszka, 2013: 192). In addition, Fitrawati et al. (2016: 29), also added that the bank soundness is an important part to maintain the customer trust and determine the economic progress and development in Indonesia. Likewise, Kuncoro and Suhardjono (2011:495), stated that trust and loyalty towards banks are driven by the level of bank soundness. Therefore, it can be assumed that maintaining bank soundness level is critical factor for bank to gain public trust, determine bank's performance and reliability as well as determine the economic progress and development in Indonesia.

Furthermore, bank's performance and reliability are crucial in the competition of banking industry. Alwiyah (2016:115-116) argued that the better and the optimal bank's performance will affect customer and public trust positively towards banks. Consequently, the soundness level of bank plays important role in determining competitive advantage of banks.

In Indonesia the soundness level of bank is measured by using RGEC method determined on the Surat Edaran Bank Indonesia No.13/24/DPNP. Each bank in Indonesia should refer to the RGEC method. Hence, RGEC method is important measure to analyze the soundness level of a bank.

All of the state owned banks in Indonesia have conducted the self-assessment of bank soundness level periodically by using RGEC method. Furthermore, the banks released their soundness level on their annual report. However, they only show the explanation of each factor's performance in general, and not disclosing each indicators and its ranking that building the soundness level.

Previously, the researches about bank soundness level only investigated one state owned banks and the result shows that the majority of state-owned banks are very healthy. The research of Utami et al (2013) which have studied in Bank Rakyat Indonesia in the period of 2011-2013, found

that BRI is a very healthy bank. Likewise, the research from Santi (2015) investigated the same topic in Bank Negara Indonesia from 2011 to 2013 and found that BNI is a very healthy bank as well. Moreover, Dariwn (2016) revealed that Bank Mandiri's soundness level in the period of 2012-2014 is very healthy as well. Meanwhile, this research attempt to investigate the soundness level of the three state-owned banks and analyze whether the three state-owned banks show different level of soundness. To sums up, the present research wants to analyze the bank's soundness level of 3 most popular state-owned banks in Indonesia. Thus, this study entitled; "The Analysis of Bank's Soundness Level Using RGEC Method in Three State-owned Banks in Indonesia Period of 2011 to 2015"

RESEARCH METHOD

Types of the research

The aim of this research is to measure and analyze the soundness level of three government owned banks in Indonesia, which has higher profit and popularity using RGEC (*Risk Profile, Good Corporate Governance, Earnings and Capital*) Methods. The type of this research is descriptive quantitative with the case study approach. Case study method enables a researcher to closely examine the data within a specific context (Zainal, 2007:1). Descriptive research is the research that involves analyses and fact-finding exploration. The main intention of this kind of research is to describe a certain condition that interesting for the researcher (Kothari 2004:29-30)

Research Object

The objects of this research are three state-owned banks in Indonesia. Those are PT Bank Mandiri Persero Tbk, PT Bank Rakyat Indonesia (Persero) Tbk, and PT Bank Negara Indonesia (Persero) Tbk from the period of 2011 till 2015. This study included as cross-sectional study as well as longitudinal study. It is included as cross-sectional because data were collected over the period of years. Data were collected from PT Bank Rakyat Indonesia (Persero) Tbk, PT Bank Mandiri Persero Tbk, PT Bank Negara Indonesia (Persero) Tbk between the period of 2011 – 2015 to analyze those three banks' soundness level. Meanwhile, it is also included as longitudinal study because this research aimed to analyze the soundness level of each bank.

Data Analysis Method

This research analyzes the bank soundness level of three most popular state-owned commercial banks in Indonesia by using RGEC method through ten indicators namely; NPL, IRR, LDR, LAR, ROA, ROE, NIM, OER, CAR and GCG factors. The method of this research are MANOVA, ANOVA and Kruskal-Wallis analysis using computer programs SPSS

RESULT

1. Assessment of Bank Soundness Level using RGEC Method

There are four indicators used to measure the risk profile of each bank, namely, NPL, IRR, LDR and LAR. Those indicators will be explained as follow:

Table 1. NPL's Percentages of Each Bank Period of 2011-2015

	Period	BRI	Ranking	Mandiri	Ranking	BNI	Ranking
NPL	2011	2.30%	(2) Satisfactory	2.20%	(2) Satisfactory	3.60%	(2) Satisfactory
	2012	1.78%	(1) Excellent	1.90%	(1) Excellent	2.80%	(2) Satisfactory
	2013	1.55%	(1) Excellent	1.63%	(1) Excellent	2.20%	(2) Satisfactory
	2014	1.69%	(1) Excellent	2.15%	(2) Satisfactory	2.00%	(2) Satisfactory

	2015	2.02%	(2) Satisfactory	2.29%	(2) Satisfactory	2.70%	(2) Satisfactory
Average Score		1.87%		2.03%		2.66%	
IRR	2011	99.65%	(1) Excellent	92.93%	(1) Excellent	94.21%	(1) Excellent
	2012	101.36%	(1) Excellent	108.43%	(1) Excellent	96.22%	(1) Excellent
	2013	103.22%	(1) Excellent	106.29%	(1) Excellent	96.22%	(1) Excellent
	2014	100.20%	(1) Excellent	106.48%	(1) Excellent	103.77%	(1) Excellent
	2015	95.70%	(1) Excellent	97.08%	(1) Excellent	102.64%	(1) Excellent
Average Score		100.03%		102.24%		98.61%	
LDR	2011	76.20%	(2)Satisfaction	74.10%	(1)Excellent	70.40%	(1)Excellent
	2012	79.85%	(2)Satisfaction	77.60%	(2)Satisfaction	77.50%	(2)Satisfaction
	2013	88.54%	(2)Satisfaction	82.97%	(2)Satisfaction	85.30%	(3)Fair
	2014	81.68%	(2)Satisfaction	82.02%	(2)Satisfaction	87.80%	(3)Fair
	2015	86.88%	(3)Fair	87.05%	(3)Fair	87.80%	(3)Fair
Average Score		82.63%		80.75%		81.76%	
LAR	2011	62.68%	(1) Excellent	56.96%	(1) Excellent	54.68%	(1) Excellent
	2012	65.66%	(1) Excellent	61.17%	(1) Excellent	60.22%	(1) Excellent
	2013	71.60%	(1) Excellent	64.45%	(1) Excellent	64.88%	(1) Excellent
	2014	63.68%	(1) Excellent	61.98%	(1) Excellent	66.64%	(1) Excellent
	2015	66.15%	(1) Excellent	65.43%	(1) Excellent	41.19%	(1) Excellent
Average Score		65.95%		62.00%		57.52%	

From 2011 to 2015, those three banks showed another fluctuation. However, BRI, Bank Mandiri and BNI are able to maintain the IRR, IDR, IDR and LAR's percentages smaller than 75% which make the three banks fell into category 1 with excellent predicate. By using MANOVA, there will be less biased results by testing all the dependent variables simultaneously and cutting the effects of any inter co-relation among them. Multivariate significance test is to determine the difference of two or more group centroid that can be evaluated with various criteria of statistical test.

The test statistic used in MANOVA are Pillai's Trace test, Wilks' Lambda, Hotelling's Trace, Roy's Largest Root processed with SPSS software. if one of the four statistic test obtained the value that less than 5% ($\alpha = 0.05$), it is show that there is significant difference of the dependent variables. MANOVA testing is used to assess the difference on the risk profile that has 4 indicators and earnings factor that also has four indicators simultaneously.

Table 2. Multivariate ANOVA Testing Result on *Risk Profile* and earnings

Effect		Risk Profile	F	Earnings	F	Hypothes is df	Error df	Sig.
Method	Pillai's Trace	0.711	1.378	1.517	7.848	8.000	20.000	0.265
	Wilks' Lambda	0.363	1.486	0.016	15.551	8.000	18.000	0.230
	Hotelling's Trace	1.555	1.555	28.243	28.243	8.000	16.000	0.215
	Roy's Largest Root	1.412	3.529	27.009	67.521	4.000	10.000	0.048

Multivariate ANOVA testing to compare the three banks: BRI, Mandiri, and BNI on the risk profile indicators namely: 1) NPL ; 2) IRR; 3) LDR; and 4) LAR simultaneously. The table indicated the significance score of Roy's Largest Root amounted to 0,048, Pillai's Trace amounted to 0,265, Wilks' Lambda of 0.230, and Hotelling's Trace at 0.048. The significance value that is smaller than alpha 5%, simultaneously asserts that there is noticeable difference on the 4 indicators of risk profile variable; 1) NPL; 2) IRR; 3) LDR; and 4) LAR of variable risk profile. From the table, it can be obtained significant value of Roy's Largest Root, Pillai's Trce, Wilks' Lambda and Hotteling's Trace with total score 0.000. The significant value which is smaller than alpha 5% (<0.050) states

simultaneously that there is noticeable difference on the indicators 1) ROA; 2) ROE; 3) NIM; and 4) OER of earnings variable.

The univariate testing explained the comparison of variables average score. Firstly, this test described the average score of Risk Profile that have four indicators: NPL, IRR, LDR and LAR. Secondly, it described the average score of Earnings, which have four indicators as well namely: ROA, ROE, NIM, and OER from the three chosen banks; those are BRI, Mandiri and BNI partially or each indicator. The testing results are shown in the table below;

Table 3. MANOVA Partial Testing Result on *Risk Profile*

	Sum of Squares	db	Central Squares	F statistics	Sig.
NPL	1.744	2	0.872	4.779	0.030
IRR	33.478	2	16.739	0.691	0.520
LDR	8.872	2	4.436	0.122	0.886
LAR	177.972	2	88.986	2.089	0.167

In the LDR indicator testing for the three banks, the significance value was 0.886. That result showed that the significant value is higher than alpha 5% ($0.886 > 0.050$). Therefore, it can be said that there is no significance different of the LDR value of BRI, Mandiri, and BNI. This insignificant results obtained it indicates that all of the three banks have good management of their liquidity.

Finally, on the LAR indicator testing the comparison between BRI, Mandiri and BNI, attained the significant value of 0.167. The result of the significant value indicates that the result is greater than the alpha 5% ($0.167 > 0.050$). Hence it can be said that there is no significant different of the LAR value of BRI, Mandiri, and BNI.

Table 4. MANOVA Partial Test Results on *Earnings*

	Sum of Squares	db	Central Squares	F statistics	Sig.
ROA	8.388	2	4194	38.591	0.000
ROE	483.152	2	241.576	21.819	0.000
NIM	25.399	2	12.700	93.881	0.000
OER	131.037	2	65.519	6.125	0.015

The result of the testing generates that the significant value is smaller than alpha 5% ($0.000 < 0.050$). Therefore, it can be concluded that there is significant difference in the value of ROA of those three banks. ROE, NIM and OER indicator testing between bank BRI, Mandiri, and BNI, attained the significant value of 0.000. It showed that the significant value is smaller than alpha 5% ($0.000 < 0.050$). therefore, it can be assumed that there is significant difference on those three banks' ROE.

Kruskall-Wallis analysis is the analysis used to test the 3 different objects or more, where the desired variable is data category or can be said that *Kruskall-Wallis* is the substitute of One-Way ANOVA where the data tested is not in numbers but category. The analysis of Kruskall-wallis in this research was used to test the difference of GCG on three banks

Table 5. Kruskal-Wallis Test Result on GCG Indicator

Indicator	Chi-square	Signifikansi
GCG	2.240	0.326

It showed on the table above that the significant value of GCG indicator on the three banks is 0.326, which is smaller than 0.05 ($\alpha=5\%$). It means that there is no significant difference on the GCG factor. The insignificant value gained among those three banks in GCG factors suggests that those three banks shows the same level of GCG implementation.

DISCUSSION

a. NPL

Based on the analysis result, it can be concluded that the NPL indicator of BRI, Bank Mandiri and BNI shows a significant difference. Then, through deeper analysis by using the multiple comparison tests, it is found that the difference of NPL between BRI and Bank Mandiri is not significant. Meanwhile, the difference of NPL between BRI and BNI is significance. According to Klein (2013) the role of NPL is essential because it affects the main function of a bank. Bank's main function is as an intermediary which receiving the funds and channeling the funds to customer. Moreover, the large number of NPL will lead to bank to failure (Chimkono et al., 2016), According to Noviard (2015), PT Bank Rakyat Indonesia Tbk achieved the award again as The Best Domestic Bank Award 2015. The assessment of the award is conducted independently by Financial Analyst and Economic Journalist from various international media using NPL as an indicator of its assessments. BRI gained the percentages of 2.3% and categorized in rank 2 with satisfactory predicate according to SE BI 6/23/DPNP. Therefore, besides weakened condition of national banking industry with the increasing percentages of NPL, BRI has a high awareness of its credit risk and is able to maintain its NPL percentages.

b. IRR

IRR is the indicator to measure market risk on the assessment of bank soundness level. The result shows that the IRR indicator among BRI, Bank Mandiri and BNI does not show any significant difference. IRR percentages above 45% is categorized as first rank with excellent criteria. In this case all of the three banks gained the IRR's average percentages far above 45%. Therefore, it indicates that all of the three banks demonstrate a strong performance in order to gain public trust by trying to gained IRR's percentage close or even exceed the predetermined value. The higher the IRR ratio, the lower possibility of a bank to face losses, and profits will automatically increase. According to Masruroh (2016:86) the higher the percentage of IRR will show the interest earned on the development of assets to be greater than the interest to be paid.

c. LDR

One of the two indicators to measure bank soundness level through liquidity risk is Loan to Deposit Ratio (LDR). According to Rengasamy (2014:2) loan deposit ratio (LDR) is a useful instrument to determine bank liquidity, and by extension, it influences the profitability of the banks. Based on the analysis that had been done, By obtaining the average percentage of LDR less than 85% it suggests that BRI, Bank Mandiri and BNI fell into category two with satisfactory predicate, which is in accordance to SE BI 6/23/DPNP. A high percentage of LDR means that the bank is issuing the credit out more of its deposits and the bank generates more income. The problem that may rises is failure in repayment of loan. Consequently, in such a case the banks will not be able to repay the deposit money to their customer, and too high ratio puts the bank at high risk. However, bank should put a high concern towards its LDR's percentage, because if the LDR percentage is too high, it can cause the liquidity risk for bank, and the bank may find difficulties to withdraw cash from deposits (Masruroh 2016:87). Hence, it can be concluded that BRI, Bank Mandiri and BNI shows that the level of liquidity of a bank can be managed and maintained properly at a fair level.

d. LAR

The other indicator to measure bank soundness level in liquidity risk is using LAR. LAR is ratio used to measure the liquidity of a bank that shows the ability of banks to meet credit demand

with the total assets owned (Martono, 2004:82). Based on the analysis results, there is no significant difference on the value of LAR indicator among BRI, Bank Mandiri and BNI. Banks need to maintain its LAR's percentage as low as possible. Because, the high percentage of LAR suggests that the banks used extra assets to finance the loans. Thus it will cause setback for the banks. With more credits are given to the customer, the risk for the bank will be greater as well and it could affect the liquidity of the banks.

e. ROA

The ROA between BRI and Bank Mandiri as well as BNI shows significant difference. In line with the statement from Stancu (2007:705) stating that ROA is important, it is a useful ratio to indicate how well a bank manager at manage the assets for generating bank's income. During the period of 2011-2015 BRI, Mandiri and BNI show good percentages of ROA by obtaining the percentages above 2 %. According to SE BI 6/23/DPNP, bank with the ROA percentages above 2 % is categorized in the first rank with the excellence predicate.

f. ROE

The role of ROE is crucial ratio to measure company's earnings performance. Thus, one can determine if a bank is profit-burner and profit-maker as well as the management of profit-earnings efficiency (Kijewska, 2016:285). Based on the multiple comparison test, the significant difference of ROE between BRI and Mandiri is positive; additionally, the significance between BRI and BNI is also positive. Moreover, the significant difference of Mandiri and BNI shows negative result.

g. NIM

The NIM indicators analysis shows that there is significant difference between BRI, Bank Mandiri and BNI. NIM is the indication of the effective use of earning assets and a reasonable combination of interest-bearing liabilities (Brissimis et al., 2008: Nkegbe and Ustraz, 2015:42). The higher ratio of NIM, the better the performance of the bank. Moreover, a lower NIM implies banks are less profitable which also means lower dividend payouts for shareholders (Indonesia-Investment, 2016).

h. OER

The OER indicator analysis demonstrated a significant difference among BRI, Bank Mandiri and BNI. The result of the multiple comparison test showed that BRI and Bank Mandiri does not show any significant difference. However, the result of the multiple comparison tests between BRI and BNI shows significant difference and the comparison between Bank Mandiri and BNI also did show significant difference. OER is the indication to measure bank's efficiency in controlling operation, the lower the ratio gained the better bank's efficiency in managing its operation (Dendawijaya, 2009:120; Falaasifah, 2014; 24). As stated on Laporan Tahunan Perbankan 2015 by OJK (2016:12), the OER ratio of state-owned banks in Indonesia showed the lowest percentage compared to the other conventional-commercial banks.

CONCLUSION

This study was conducted to analyze the bank soundness level of three state-owned commercial banks in Indonesia namely BRI, Bank Mandiri and BNI. Compare to any other commercial banks, BRI, Bank Mandiri and BNI have superior performance as well as popularity. In the period of 2013-2015, those three banks included as the top four banks with the highest earnings in Indonesia. Not only earned the highest earning, but those three banks also gained a high level of soundness. According to the soundness level assessment using RGEC method, BRI, Bank Mandiri

and BNI fell into the composite rating 1 of bank soundness during the period of 2011-2015. It means that the banks are generally in a very healthy condition and have excellent performance. Among the four indicators of risk profile namely NPL, IRR, LDR and LAR, only NPL indicator that shows significant difference.

The GCG factors of BRI, Bank Mandiri and BNI do not show any significant difference. All of the three banks always in the first or second position which indicates that the banks concern about its implementation of GCG because GCG is critical aspect in banking industry. The Earnings factors of BRI, Bank Mandiri and BNI shows significant difference. All of the four indicators of earnings namely ROA, ROE, NIM and OER have significant difference.

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