EFFECT OF BANK SOUNDNESS LEVEL RGEC METHOD ON INDEX OF FINANCIAL INCLUSIVE IN INDONESIA

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Abstract: This study aims to analyze the effect of bank soundness measured by RGEC method on Index of Financial Inclusive (IFI) or weakness of financial service user. The RGEC variables used include NPL, LFR, GCG, ROA, and CAR. Sampling research using purposive sampling method. Data analysis techniques applied using associative methods with the aim to determine the influence or relationship between two or more variables (Sugiyono, 2012). Based on the results of research conducted, it indicated that NPL and GCG variables have no significant effect on IFI value, but these two ratios basically have been in the standard set by Bank Indonesia. Then LFR, ROA and CAR variables show significant influence on IFI value. Of the three influential variables, it is known that ROA is the most influential variable with 65.3% points. The results of this study can be concluded that the Bank Soundness Level through RGEC has an influence on IFI, judging by how much influence in changing the value of IFI.

Keywords: Bank, The Bank Soundness Level, RGEC, IFI.

ASEAN Economic Community (AEC) certainly has an impact on improving industrial competitiveness. Both products and services are starting to compete to maintain and strengthen market competitiveness. This competition is also felt by the financial services industry, especially in the banking sector. Banks in Indonesia also participate to compete to collect funds from the community. Starting from improving the quality of service up to hold programs to attract consumers to entrust the funds owned to the bank. Especially in increasing confidence, Bank Indonesia (BI) as the central bank has also applied the financial standards summarized in the bank’s health assessment summarized in Bank Indonesia Regulation Number 6/10/2004 on Assessment of Bank Soundness Level of Commercial Banks. Assessing the soundness of a bank should be based on 3 criteria ratio, namely the ratio of liquidity, profitability ratio, and solvency ratio. (BI, 2004). As the business of each bank grows, the bank’s health rating is also enhanced and refined from the Capital, Assets, Management, Earnings, Liability, and Sensitivity to market (CAMELS) has become Risk Profile, Good Corporate Governance, Earnings, and Capital (RGEC). This is stated in Bank Indonesia Regulation no. 13/1/PBI/2011 enacted in 2012. The enforcement of health
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Table 1  Number of Third Party Funds in Indonesia Year 2010-2016 (in billion)

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Third-party funds</td>
<td>2,304,875</td>
<td>2,736,415</td>
<td>3,163,519</td>
<td>3,578,208</td>
<td>4,013,817</td>
<td>4,335,269</td>
<td>4,724,800</td>
</tr>
</tbody>
</table>

Source: Bank Indonesia, 2016

standards has proven to affect the level of third party funds during the last six (6) years.

Basically, the result of the increase in the number of third party funds in Table 1 is an unfavorable outcome from the World Bank's financial index research. Based on a World Bank survey in 2014 (Kunt, Klapper, Singer, & Oudheusden, 2015) Indonesia's population with bank accounts is only 36% of the total population of 237,641,326 million people based on the 2010 census. The increase in third party funds in Table 1 still has not proven that the increase of third party funds is also accompanied by an increase in the number of people who start saving. This proves that the low public interest to save. Of course this becomes the task and role for banks in Indonesia to further increase the number of customers, because based on research by Sanjaya and Nursechafia (Sanjaya & Nursechafia, 2016) explained that the role of banks is very important in improving the financial index and economic growth in Indonesia. The linkage between the Bank Soundness Level and IFI lies in the interplaying role of each other. The statement is in accordance with the results of research by Sanjaya and Nursechafia (Sanjaya & Nursechafia, 2016) which explains that the role of the bank in terms of accessibility, availability, and use of financial services has a significant effect on improving financial inclusiveness. The simple interpretation is a bank that entered the category healthy, it can be ensured banking programs, banking services, handling, and anticipation of risk starts from market risk, credit, liquidity, solvency, rentability, adequacy of minimum capital deposits and legal compliance can be ensured has been done well. It is understood by the community as a form of optimal service and customer satisfaction. In part, the scholarly community does not understand Bank Soundness Level through RGEC, but consciously society has to know every bank with quality, service, guarantee, reputation, best giver, and trusted. Therefore, in this research formed a problem formulation that is “Is the Soundness Bank Level assessed by RGEC in Indonesia has an influence on Index of Financial Inclusive?”. Based on the formulation of the problem, the purpose of this study is to analyze the effect of Soundness Level Bank assessed by RGEC in Indonesia has an influence on Index of Financial Inclusive. Empirically the failure rate of business and bankruptcy of banks can be seen through Bank Soundness Level testing (Nurfaizal, 2009). Therefore, Bank Indonesia requires all banks in Indonesia to maintain Bank Soundness Level in accordance with the standards that have been given. Based on the development of the economy, to create a renewable standardization, Bank Indonesia through its assessment announces the enactment of the new Bank Soundness Level stipulated in Bank Indonesia Regulation No.13/1/PBI/2011, stating that banks are required to conduct Bank Soundness Level assessment with using RGEC (Risk Profile, Good Corporate Governance, Earnings, and Capital) methods starting from early 2012. The ratios used for bank performance assessment in accordance with Bank Indonesia Circular Letter No.13/24/DPNP dated October 25, 2011 (BI, 2017), where the ratio used includes Risk Profile (R), Good Corporate Governance (G), Earnings (E), and Capital (C). Each component of the assessment is based on several factors concerning the performance of the bank and the health of the bank. So that this analytical tool can be the said indicator patent health of the bank at this time if see the rule which has been determined by Bank Indonesia (BI). Then the level of use of financial services is assessed from the IFI (Index of Financial Inclusive). Increase in the percentage of IFI indi-
icates that knowledge and use of banking services have increased. Similarly, the decrease or stagnant state indicates no change or influence. Mathematically IFI is judged from the percentage of adult account holders of the total population in Indonesia. With reference, the percentage is just more than 36% of research conditions that have been done by the world bank to the economic inclusiveness of Indonesia in 2014 ago. In the observation of previous research, there are two subcategories research. The first sub is how the previous research referred to the Soundness Level Bank is a factor in advancing the growth of financial performance. While the second sub is a study describing Indonesia’s inclusiveness and its impact on the current utilization of financial services. In health research, the research used as a reference is the RGEC method. RGEC is a Basel II system enforced by BI since 2012 as a new indicator of Bank Soundness Level research. In particular, this method is formed to understand the importance of risk identification in banking activities for the future. Then also the role of good governance is one element of the health of the bank is needed in today’s banking competition (BI, 2017). Therefore research done by (Hendrayana & Yasa, 2015), (Minarohmah, Yaningwati, & Nuzula, 2014), (Pramana & Artini, 2016), (Mandasari, 2015), (Umuyati & Faly, 2015)& (Trisnawati & Puspita, 2014) focuses on the role of risk and good governance as an indicator of the health of the bank in today’s modern era. In the second sub research is a study that discusses the Inclusive of Indonesian economy. This study was conducted by (Sanjaya & Nursechafia, 2016)& (Nasution & Dwilita, 2016). Their research is a research that seeks to illustrate how the current condition of society in utilizing formal financial programs and services in growing the economy. Based on previous research reviews, this study is a recent study and different from previous research. The difference of this research with previous research that lies in the purpose of research. The purpose of this study is to determine the effect of health of the bank on the inclusive financial index, so as not to stop the company performance or healthy and unhealthy classification as in general, but on the wider scope of the financial index in Indonesia. Of course this research can be said as a new research modeling and the first, namely to connect the Soundness Bank Level with the financial index that until now has not done research. This research was conducted to achieve the World Bank research results in 2014 which proved to be still low at 36% and to observe the development of financial inclusivity whether it has developed or not, since Mr. Jokowi as President of the Republic of Indonesia has targeted the index value of 75% in 2019 later on Presidential Regulation No. 82 of 2016 on the National Strategy for Inclusive Finance (OJK, 2017).

METHOD

This research uses a quantitative approach. This quantitative research approach is a study based on statistical and mathematical testing in order to test the predefined hypothesis (Sugiyono, 2012). Then for the type of research used apply associative research modeling. Associative research is a study intended to determine the effect or relationship between two or more variables (Sugiyono, 2012). This study aims to build a useful theory to explain, predict and control a phenomenon that is happening. Of course, this is in accordance with the purpose of this research is to evaluate and find out the influence or relationship between the Bank Soundness Level with inclusive economic problems in Indonesia.

There are 5 variables that used in this research are Non Performing Loan (NPL), Loan to Funding Ratio (LFR), Good Corporate Governance (GCG), Return on Asset (ROA) and Capital Adequacy Ratio (CAR). Secondary data obtained from Bank Indonesia, Indonesia Stock Exchange, Indonesia Capital Market Directory (ICMD), Corporate Financial Report, News Media, Previous Journal of Research, and Theoretical Book. The report data collected for this research is the company’s financial report data in 2016. The data collection of financial statements is in accordance with the research of the world bank (Julianto, 2016) and reports from BI (BI, 2017).

The population used is all banking companies that are under the approval of either the BI or the public bank whose shares are not sold to the public or banks with closed company model (usually the Regional Development Bank - BPD). Sample se-
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Selection using purposive sampling technique with criteria:

(1) Recorded as an award winning Indonesia Banking Award (IBA) 2016.

(2) Has the largest asset value divided into class A (assets above Rp. 100 Trillion), class B (Rp. 20 Trillion-Rp.100 Trillion), and class C (assets below Rp. 20 Trillion).

Methods of data collection using literature study. Technical analysis of the data used is the method of associative analysis to determine the effect with multiple linear regression. The calculation of each component can be done manually with the following formula:

**Formula 1  Risk Profile - Non Performing Loan (NPL)**

\[
\text{NPL} = \frac{\text{Problem Loans}}{\text{Total Credit}} \times 100\%
\]

**Source:** Bank Indonesia regulation No.13/1/PBI/2011

The NPL ratio is the ratio that measures the quality of a bank’s credit. The higher the NPL ratio increases, the greater the risk. Under the terms of Bank Indonesia, NPLs are not allowed to be more than 5%.

**Formula 2  Risk Profile - Loan to Funding Ratio (LFR)**

\[
\text{LFR} = \frac{\text{Amount of Credit Granted}}{\text{Total Third Party Funds}} \times 100\%
\]

**Source:** Bank Indonesia regulation No.13/1/PBI/2011

The ratio of LFR is intended to measure the Loan to Funding Ratio is a risk due to the inability of the bank in meeting the obligations that have matured both from sources of cash flow funding, and from liquid assets that can be used, without disrupting the activity and financial condition of the bank.

Assessment of bank governance:

\[
\text{GCG} = \text{quality} \times \text{rating}
\]

(Contained in the self-assessment of each bank)

**Formula 3  Good Corporate Governance - GCG**

**Source:** Bank Indonesia regulation No.13/1/PBI/2011

The GCG assessment is intended to measure the extent to which banks perform governance optimally. The smaller the composite value the better governance performed by the bank.

**Formula 4  Earnings - Return on Assets (ROA)**

\[
\text{ROA} = \frac{\text{Profit before tax}}{\text{Total Assets}} \times 100\%
\]

**Source:** Bank Indonesia regulation No.13/1/PBI/2011

ROA (Return on Assets) is the ratio used to measure the ability of bank management in obtaining profit before taxes resulting from the average total assets of banks (Pramana & Artini, 2016). The...
greater the ROA generated, the greater the profit gained by banks and the use of assets in the bank the maximum.

Minimum capital adequacy assessment:

\[ \text{CAR} = \frac{\text{Capital core + Complementary Capital}}{\text{Total Assets Weighted by Risk}} \times 100\% \]

**Formula 5 Capital - Capital Adequacy Ratio (CAR)**


Capital Adequacy Ratio (CAR) is a ratio showing how much the total assets or capital adequacy of a bank in anticipating operational activities that have risks (credit, inclusion, securities, bills with other banks). based on Bank Indonesia Regulation No.13/1/PBI/2011 then the minimum standard ratio of CAR is 8%.

Assessment of the level of use of formal bank financial services:

\[ \text{IFI} = \frac{1}{3} \left( \frac{1}{\sqrt{3}} + \frac{d}{\sqrt{3}} \right) \]

**Formula 6 Index of Financial Inclusive (IFI)**

**Source:** (Sanjaya & Nursechafia, 2016)

Information:

d = Accessibility is indicated by formal financial penetration (bank unit services).

d = Availability is indicated by the number of branches of banking.

Test F is a test conducted to determine the effect of two or more independent variables simultaneously to the dependent variable. On the basis of F-Test in table 3 below, it can be seen that df1 = 5 and df2 = 14, so that the value of Ftabel is 2.96. Thus the result of Fhitung is greater than Ftabel (15.951 > 2.96) with a significance value of 0.000 (smaller than alpha = 0.05). This means that simultaneously independent variables (NPL, LFR, GCG, ROA and CAR) have a significant effect on the dependent variable (IFI).

**RESULTS**

**Results of Multiple Linear Regression**

Based on the above description, the researcher has hypothesized that H1 - H5 consisting of GCG ratio has significant influence on IFI value. The multiple linear regression analysis model that is formed is:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \mu \]

Information:

\( Y \) = Inclusive Economic Index
\( \alpha \) = constants
\( \beta_1 - \beta_5 \) = regression coefficient
\( X_1 \) = Non Perfoaming Loan
\( X_2 \) = Loan to Funding Ratio
\( X_3 \) = Good Corporate Governance
\( X_4 \) = Return On Asset
\( X_5 \) = Capital Adequacy Ratio
\( \mu \) = Random Error

Table 3 The Results of F Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.006</td>
<td>5</td>
<td>.001</td>
<td>15.951</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>.001</td>
<td>14</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.007</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: IFI
b. Predictors: (Constant), CAR, GCG, LFR, NPL, ROA

**Source:** SPSS Processed Results (2017)
The value of determination coefficient (R Square) in Table 4 above shows that the independent variable has an influence on the dependent variable of 0.851. These results explain that the NPL (X1), LFR (X2), GCG (X3), ROA (X4), and CAR (X5) variables significantly affect the IFI (Y) value of 85.1%. Then the remaining 14.9% is explained by other factors or components not discussed in this study.

In the test table 5 is known the number of n is 20 and the total independent and dependent variables are six (6), then the value of t table in this study is 2.144 with 5% error degree (α = 0.05). The NPL ratio shows insignificant results where t count < t table (0.636 < 2.144) and sig. (0.535) > 0.05. The LFR ratio shows significant results where t count > t table (2.354 > 2.144) and sig. (0.034) < 0.05. The GCG ratio shows insignificant results where t count < t table (0.436 < 2.144) and sig. (0.670) > 0.05. ROA ratio shows significant result where t arithmetic > t table (2.200 > 2.144) and sig. (0.045) < 0.05. The CAR shows significant results where t count > t table (2.291 > 2.144) and sig. (0.034) < 0.05. The regression equation obtained based on Table 5 is as follows:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \mu \]

**DISCUSSION**

Based on the results of the research, it is known that the ratio of NPL and GCG is a ratio that has no significant effect on IFI value. This is evidenced by significant values greater than 0.05 ie 0.535 (NPL) and 0.670 (GCG). While the ratio of LFR, ROA, and CAR based on the data has met the requirements so that the hypothesis has been accepted. In essence, the NPL ratio is rejected not due to incompatibility or due to its deviant value, but on the basis of provisions regulated by Bank Indonesia through PBI NO. 13/1 / PBI / 2011, which men-
tioned the healthy limit of the bank is 5%. Based on the primary data collection, the NPL value of 20 banks is all in accordance with the prevailing standards, of course, this shows the NPL ratio is very good but for bank operational performance is not financial inclusive. Because the NPL ratio is actually useful for bank security concerning credit security level. In the GCG ratio, the results also show the same result that has no effect. This shows the role of banks in managing the company is still focused on internal activities and after sales service market. This is reinforced based on primary data of research for GCG which is very constant and good value. Therefore it can be concluded in this study GCG is less influential in overcoming financial inclusiveness. Then the LFR, ROA and CAR ratios show the result that states have an influence in increasing the inclusive value of finance in Indonesia. This is very much related to the formula of the three ratios. It is seen from the component of the builder of each ratio that has a role in doing financial literacy to the community. In the ratio of LFR components support the efforts of withdrawal of third party funds from the community and the distribution of literacy to the community. The role of the bank as an intermediation institution is closely related to this ratio. In the ratio of ROA, this component explains the ability of banks in obtaining profit so that this impact on the reputation of course this point can trigger public interest to use banking services. And CAR Ratio also influences because the greater the bank’s capital will be the greater opportunity for banks to educate and literacy banking to the public. Although the results show that NPL and GCG ratios do not help in improving the financial index but based on analysis, the researchers believe that the future of this ratio will contribute to a high reputation if the ratio remains healthy as it is now. It will have an impact on inclusive economic improvement in the future. This analysis is based on Coefficient Determination which shows the role of RGEC in influencing very strong IFI that is 85.1% with R value 92.2% which shows the ratio on RGEC has closeness relation to IFI value. In addition to that on the results of the F test assessment, it is also known that simultaneously the ratio of NPL, LFR, GCG, ROA, and CAR has an influence on IFI value is shown in table 7 seen from sig value <0.05 and F count (15.951)> F table (2.96). This study also contradicts the results of previous studies described above. The difference is in the research objectives that can be said this is the first study to determine the influence of the health of the bank assessed from the ratio on RGEC to IFI.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion
Based on the results of research and discussion of the effective interest rate based on advance rates and credit tenor can be drawn the following conclusions:
1. Risk Profile, through NPL variable shows no significant influence on IFI value.
2. Risk Profile, through LFR variable shows significant influence on IFI value.
3. Good Corporate Governance, through GCG variables shows no significant influence on IFI value.
4. Return on Asset, through ROA variable shows a significant influence on the value of IFI.
5. Capital, through CAR variables indicates a significant influence on the value of IFI.

Suggestion
1. For the next researcher, it is expected to pay attention to the Index of Inclusive Growth (IIG) factor because IFI and IIG are one of the interrelationships of long-term economic development forecasting that its research access has one equal linkage, bank performance, and Bank Soundness Level role.
2. For the Bank Institution, Banks is expected to be able to cooperate with the government in an effort to improve the financial inclusive level in Indonesia. Maintain financial performance and supervise Bank Soundness Level can be improved in establishing bank reputation.
3. For the Government, this research can be used as reference material for the Government to encourage banks in Indonesia to always maintain their health level so that the banking sector
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participates as an institution that contributes in the effort to overcome the problem of Inclusive Economy in Indonesia.

REFERENCES


