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Comparison of Bank Wellness Level with RGEC Method Between State-Owned Bank and Private-Owned Bank

Dian Prawitasari[1*], Ana Kadarningsih[1] and Rizky Sandyningtyas Putri Karno[1]**

[1]*Economic and Business Faculty of Universitas Dian Nuswantoro. Semarang-Indonesia*
**E-mail: dian.prawitasari@dsn.dinus.ac.id*
***E-mail: ana.kadarningsih@dsn.dinus.ac.id*

Abstract: The purpose of this research is to compare the bank wellness level between State-owned Bank and Private-owned Bankfor the period 2010-2014 using RGEC method. RGEC variables are NPL, IRR, LDR, LAR, CR, ROA, NIM, CAR, and NPM.

The samples size of this research is 24 samples that contain of four State-owned Bank and twenty Private-owned Bank. The data used in this research are taken from Annual Statements ofState-owned Bank and Private-owned Bank that have been published for the period 2010-2014 in IDX. The analysis technique used to examine thewellness level comparison of State-owned Bank and Private-owned Bank is Independent Sample T-Test and Mann Whitney Test methods.

The result shows that there is four variabels contain differences and 5 variables contain no differences. Variables in valuating Bank wellness between State-owned Bank and Private-owned Bank that contain differences are LDR, CR, ROA and NIM. While the variables in valuating Banks wellness that does not contain differences are NPL, IRL, LAR, NPM and CAR.

JEL Classification: G30, G32.

Keywords: *RGEC, Bank wellness level, LDR, CR, ROA, NIM.*

INTRODUCTION

An economic crisis in 1990 forced government to establish deregulation. The phenomenon of economic crisis made many banks went to bankrupt because of the high inflation rate, poor macroeconomic conditions in general and inability of bank to mobilize fund. funds properly. Later in the year 2008, the economic crisis made United States companies went to bankrupt such as Lehman Brothers investment bank, the fourth largest in the US, Merryl Linch, Citigroup, and AIG. During the 2008 crisis, not only international financial institutions in the West were crumbling, some East Asian countries also dragged into the crisis suffered such as financial burden (Arisyi F Raz, 2012). In the year 2015, the exchange rate of the dollar against rupiah was unstable. One dollar was equal with 14.050 rupiah (Artharini, 2015). The weakness of rupiah caused highly interest rate. The instability of interest rates gave negatively impact for banking investor.

The deregulation policy made recovery of bank performance that seen from the increasing level of public trust in banks. The bank wellness was very important to be known by stakeholders. The assessment of bank wellness has changed from CAMEL in 1999 become CAMELS. CAMELS method was more directed to measures of internal performance company. During this time CAMELS method is considered to describe bank wellness more effectively. But CAMELS method needs to be updated in accordance with the complexity of banking business and the higher expectations of stakeholders. To enhance the shortage of CAMELS method, Bank Indonesia (BI) ratify RGEC method (Risk Profile, Good Corporate Governance, Earnings, Capital) to assess bank wellness (Putri, 2013).

The types of banks according to the ownership status are State-owned bank and Private-owned bank. State-owned bank is bank that all of its capital from state assets and the establishment by separate law. Private-owned bank is bank that all of its stock owned by Indonesian citizen in the form of limited liability company or other legal entity (Budisantoso, 2013, p. 119). The operational of state-owned banks were similiar with operational of private-owned bank. The operational of those banks collect funds from the public and distribute funds in the form of credit. State-owned bank and private-owned bank should be able to maintain bank liquidity, financial performance and bank wellness for competitive advantage.

The research gap from previous studies such as Ruth (November 2011) state that the assessment of bank wellness with CAMEL analysis has significant differences on CAR, ROA, and RORA between categories of troubled banks and categories of not troubled banks during the 2005-2009 period. Meanwhile Mandasari (2015) which examines the financial performance of State-owned bank with RGEC method states that State-owned bank's financial performance has good financial performance and good bank wellness.

The objective of this research is tested bank wellness using RGEC (Risk Profile, Good Corporate Governance, Earnings, Capital) in accordance with Bank Indonesia Regulation Number 13/1/PBI/2011. The object of research are State-owned bank and Private-owned bank which listed on the Indonesia Stock Exchange.

LITERATURE REVIEW

Bank

Budisantoso (2013) state that the bank has the same function as intermediary institutions for collecting funds from the public and distribute funds back to the community in the form of loans and other products. As a Financial Intermediary, Banks have an important role in the financial system :

(a) Transfer of assets (asset transmutation);
(b) Transactions (transsaction);
(c) Liquidation (liquidity);
(d) Efficiency (efficiency).

Types of banks according to ownership status is divided into five that are:

1. State-Owned Banks are banks that all of its capital from state assets and the establishment by separate law;
2. Private-Owned Banks are banks that all of its stock owned by Indonesian citizen in the form of limited liability company or other legal entity;
3. Foreign Private Bank is a bank established in the form of bank branches existing in foreign countries or in the form of a mixture between the tire and the foreign national bank in Indonesia;
4. The Regional Development Bank is a bank whose founder based on provincial regulations and largely owned by district government which separate capital from districts assets;
5. Mixed Bank is bank that partly owned by foreign and national private sector.

Bank Wellness

Kasmir (2008) said bank wellness level is the ability of a bank to conduct banking operational normally and able to run its obligations according to the prevailing banking regulations. Based on Bank Indonesia Circular Letter No. 30/3/UPPB dated 30 April 1997, the implementation of bank rating assessment can be measure with Capital, Asset, Management, Earnings, Liquidity which is abbreviated by the term CAMEL (Minarrohmah, 2014). The bank wellness measurement added by using Sensitivity to Market Risk (market sensitivity) then becomes CAMELS according to Bank Indonesia regulation number 6/10/PBI/2004. To follow economic development in Indonesia, Bank Indonesia regulation changes in assessing the wellness of banks. Bank Indonesia Circular Letter No. 13/24/DNPN in 2011 also explain the risks in assessing the wellness of banks by Risk-Based Bank Rating method (Yessi, 2015). The determination of bank wellness consist four factors: Risk Profile, Good Corporate Governance, Earnings or profitability, and Capital shortened RGEC. The scoring system for determine the bank wellness as follow:

Table 1
Credit Value Classification of Bank Wellness Level

Credit Value	*Predicate*
81-100	Wellness
66-< 81	Fit
51-< 66	Less Wellness
0-< 51	Not wellness

Source: Bank Indonesia Circular Letter Number: 6/23/DPNP dated 31 May 2004.

RGEC Method

RGEC methods as a complement CAMELS method to analyze the wellness of the bank. CAMELS as previous method using RBBR risk approach (Risk Based Bank Rating) as bank wellness assessment, both individually and consolidation. Hanny (2013) said that RGEC method has two dimensions, namely:

(a) inherent risk assessment by calculating the credit risk, market risk, operational risk, liquidity risk, legal risk, strategic risk, compliance risk, and reputation risk. The value of the degree of risk inherent to each type of risk is categorized into the rankings are: 1 (low), 2 (low to moderate), 3 (moderate), 4 (moderate to high), and rating 5 (high);

(b) Assessment of the risk management quality.

Risk Profile

Risk Profile is an assessment of the risks inherent and implementation quality of risk management in bank's operational. The risks that must be assessed consist of Credit Risk (Non-performing loans-NPL), Market Risk or Interest Rate Risk (Sensitivity to Market Risk-IRR), Liquidity Risk with Loan to Deposit Ratio (LDR), Loan to Asset Ratio (LAR) and Cash Ratio (Ali, 2006).

Good Corporate Governance (GCG)

Mandasari (2015) said that good corporate governance is a concept for improving corporate performance through supervision or monitoring management performance and ensure the accountability of management to stakeholders by based on the regulatory framework. Meanwhile, Ali (2006) said that Corporate governance is the system that use for directing and controlling the company business activities. Good Corporate Governance (GCG) is measured by using the ratio of net profit margin (NPM), which is the ratio between net profit and operating income. If the value of NPM high it means that company's ability earn profit effectively. This means that corporate governance is good. Net Profit Margin (NPM) is a ratio that describes the level of bank profits, compared with revenue from operations.

Earning (Profitability)

Margaretha (2009) said that profitability ratio is a tool to analyze or measure the level of business efficiency and bank's profit. Based on Bank Indonesia Circular Letter No. 13/24 / DPNP dated 25 October 2011, factor assessment of earningr measured by several indicators. Assessment of earnings is based on two ratios :

(a) Return on Assets (ROA) or the ratio of profit before tax to average total assets;

(b) Net interest margin (NIM) is the ratio of net interest revenue to average total assets.

Capital

The measurement of capital use CAR (Capital Adequacy Ratio). Kasmir (2008) explains that the CAR describe how much the assets of banks that contain risks (credit, investments, securities, bills to other banks) financed by own capital from outside sources , such as public funds, debt, and others.

METHOD

This research use population from 36 banking companies that listed on the Indonesia Stock Exchange consist of 4 state-owned bank, 25 private-owned bank, 5 foreign banks and 2 regional banking. The sampling was determined by purposive sampling to obtain a representative sample in accordance with specified criteria. The criteria for sample as follows:

1. Banking firms that provide financial statement for the period of 2010-2014.
2. Banking firms that have positive earnings.

Based on those criteria, it can be concluded as follows:

Table 2
Sample Criteria

	Totally of banking	
Criteria	*State-owned bank*	*Private-owned bank*
Banking firms that listed in Indonesia Stock Exchange (IDX)	4	25
Banking firms that provide financial statement for the period of 2010 – 2014	4	23
Banking firms that have positive earnings	4	20
Totally of sample	24 Firms	

This study use quantitative descriptive analysis method that analyze financial statement with RGEC. The research data was analyze by different test to determine the difference between state-owned banks wellness and private-owned banks wellness during 2010-2014. Data analysis tools use T-test method (for normal distribution) and Mann-Whitney (for unnormal distribution).

DISCUSSION

Banking companies that listed in Indonesia Stock Exchange (IDX) for this research are 36 companies, but banking companies with purposive criteria are 24 companies and has 120 samples of observational data.

The smallest Ratio of Net Profit Margin (NPM) is 0.000 and the highest ratio is 7.338. The average of NPM Ratio is 1,4452 with standard deviation of 1.250247. The average of NPM Ratio is greater than standard deviation that indicate a low variance, so the research data have minor deviations.

Normality Test

The test results with the Kolmogorov-Smirnov normality for nine variables show that only ROA is normally distributed variables. Meanwhile variables NPL, IRR, LDR, LAR, CR, NIM, CAR, and NPM is not normally distributed.

The Independent *t*-test

There are two stages of independent *t*-test. First stage analyze assumption whether population variance are same (equal variance assumed) or different (equal variance not assumed) for both sample that seen from the value of levene test. Second stage see value of *t*-test to determine whether there are differences in the average value significantly. The probability of levene value is 0.529 because of probability > 0.05. It means the variance of the data is equal variance assumed. The significant value (2-tailed) in the *t*-test is 0,000 because of the probability < 0.05, it means that there is a difference in ROA between the wellness of state-owned banks and private-owned banks during the period 2010-2014.

Mann-Whitney Test

The result of normality test shown normally distributed data and unnormally distributed data. Mann-Whitney test analyze unnormally distributed data to compare unrelated of two samples have differences or not. The results of the statistical analysis has mean rank result as follows

(a) Mean value of NPL variable between State-owned banks and Private-owned banks are different. NPL mean of State-owned banks are 62.40 and NPL mean of Private-owned banks are 60.12. The NPL value of State-owned banks are greater than NPL value of Private-owned banks. It mean State-owned banks have better management ability to manage nonperforming loan.

(b) Mean value of IRR variable between State-owned banks and Private-owned banks are different. IRR mean of State-owned banks are 73.00 and IRR mean of Private-owned banks are 58.00. The IRR value of State-owned banks are greater than IRR value of Private-owned banks. It mean State-owned banks have the risk of bigger losses if interest rate decline and get huge profits if interest rate rise.

(c) Mean value of LDR variable between State-owned banks and Private-owned banks are different. LDR mean of State-owned banks are 76.15 and LDR mean of Private-owned banks are 57.37. The LDR value of State-owned banks are greater than LDR value of Private-owned banks. It mean that liquidity of State-owned banks are more lower than liquidity of Private-owned banks because of exorbitant amount of public funds for loan allocation.

(d) Mean value of LAR variable between State-owned banks and Private-owned banks are different. LAR mean of State-owned banks are 65.50 and LAR mean of Private-owned banks are 59.50. The LAR value of State-owned banks are greater than LAR value of Private-owned banks. It mean that State-owned banks have more at risk to release their asset for financing of non performing loan.

(e) Mean value of CR variable between State-owned banks and Private-owned banks are different. CR mean of State-owned banks are 78.55 and CR mean of Private-owned banks are 56.89. The CR value of State-owned banks are greater than CR value of Private-owned banks. It mean that State-owned banks have level of liquidty and profitability worse than Private-owned banks.

(f) Mean value of NIM variable between State-owned banks and Private-owned banks are different. NIM mean of State-owned banks are 81.90 and NIM mean of Private-owned banks are 56.22. The NIM value of State-owned banks are greater than NIM value of Private-owned banks. It mean that State-owned banks have more ability to earn net interest income on a large processing assets.

(g) Mean value of CAR variable between State-owned banks and Private-owned banks are different. CAR mean of State-owned banks are 65.55 and CAR mean of Private-owned banks are 59.49. The CAR value of State-owned banks are greater than CAR value of Private-owned banks. It mean that State-owned banks have a capital adequacy better than Private-owned banks to fulfill its obligations.

(h) Mean value of NPM variable between State-owned banks and Private-owned banks are different NPM mean of State-owned banks are 72.90 and NPM mean of Private-owned banks are 58.02.

The NPM value of State-owned banks are greater than NPM value of Private-owned banks. It mean that State-owned banks have more capable marginal to earn profit.

Based on the analysis result, there are several variable to determine bank wellness level of State-owned banks and Private-owned banks including variables that do not have differences. Variables that do not have differences are:

(a) *NPL (Non Performing Loan):* From the test results by using SPSS showed that NPL variable for determining bank wellness of State-owned banka and Private-owned banks are not different. It mean that both of banks can manage non performing loan very well.

(b) *IRR:* From the test results by using SPSS showed that IRR variable for determining bank wellness of State-owned banks and Private-owned banks are not different. It mean that both of banks have bigger risk on declining of interest rate.

(c) *LAR:* From the test results by using SPSS showed that LAR variable for determining bank wellness of State-owned banks and Private-owned banks are not different. It mean that both of banks have more at risk to release their asset for financing of non performing loan.

(d) *CAR:* From the test results by using SPSS showed that the CAR variable for determining bank wellness of State-owned banks and Private-owned banks are not different. It mean that both of banks have capital adequacy to fulfill its obligations.

(e) *NPM:* From the test results by using SPSS showed that NPM variable for determining bank wellness of State-owned banks and Private-owned banks are not different. It mean that both banks have good governance and earn profit effectively.

Analysis of Bank Wellness Level

Market risk or Sensitivity to Market is the risk of bank losses due to exchange rate changes. Variable Interest Rate Risk (IRR) was used to analyze the risk assessment of market risk. Based on IRR analysis show all State-owned banks and Private-owned banks in 2010–2014 were very wellness condition. The greater the value of IRR ratio shows the interest earned on the development of assets is greater than the interest to be paid as the cost of funds.

Credit risk is the risk of loss for the bank because the debtor does not repay back its obligations to the bank. Based on NPL analysis and NPL assessment said that some State-owned banks and Private-owned banks are not wellness condition. Such as Bank Tabungan Negara does not wellness in period 2010-2014. NPL ratio lower value indicates a low credit categorized as non-current or jammed. Value ratio decreased from year to year may indicate a good financial viability of banks.

LDR is used to measure the comparison between loan and fund in banks. Based on the LDR analysis and LDR assessment show that some State-owned banks and Private-owned banks are in good condition in period 2010 – 2014. However, there are some banks showed less than good condition. It seen from the calculation of LDR on Bank Tabungan Negara have bad rating in 2010-2014. It mean that Bank Tabungan Negara have less ability of liquidation, because of too large amount of public funds for credit allocation.

LAR (Loan to Asset Ratio) on State-owned banks and Private-owned banks use the same standard as the rating formula of LDR. Based on the results of LAR analysis and LAR assessment show that almost all state-owned banks and private-ownd banks are in excellent state in 2010-2014, which LAR has a value of less than 75%. Value Ratio LAR more than 75% (too large) indicated that the risk of issuing banks more assets to financing non performing loan. When credit is given more, the risk of the credit will be obtained from the greater liquidity and may affect the bank on its assets.

CR ratio is measurement to assess the bank's ability for fulfill its liquidity needs because of funds withdrawal of funds by a third party. Standard of CR is 10-20%. If the bank has CR ratio less than 10%, so the bank is not likuid. It seen that all sState-owned banks have the liquidity status. However, there are some Private-owned banks have a status not likuid. Based on the results of CR calculation and CR assessment , it seen that almost all state-owned banks going to rise and decline in 2010-2014 periodicly.

CR ratio values decreasing indicates bank's ability to pay back the custpomer's funds customers when customers do withdrawal their funds The lower of CR ratio indicates the better liquidity level and profitability of bank.

Bank Tabungan Negara as State-owned banks have lower Net Profit Margin (NPM). But PT Bank Negara Indonesia undertake the development of marginal annually to increase its NPM value. Based on ROA analysis and ROA assessment show that all state-owned banks and private-owned banks have excellent of ROA Rating in 2010-2014. ROA ratio continues to increase indicates that the bank consistently maintained profit gains.

Net Interest Margin (NIM) measure the bank's ability to earn net interest income on a large processing assets. Based on the results of NIM calculations and NIM assessment show that all state-owned banks and private-owned banks have very well rating of NIM during 2010-2014. The greater of NIM also increase the interest income on earning assets managed atnd smaller for error of possibility in the bank.

CAR is a ratio that shows how much all of the assets of banks that consist of risks (credit, investments, securities, bills to other banks) financed by own capital or outside sources of bank, such as public funds, debt , and others. Based on the CAR analysis show that all state-owned banks and private-owned banks have very good rating of CAR during 2010-2014. The higher CAR indicate the bank has adequate capital to fulfill its obligations.

After the hypothesis test using an independent test sample *t*-test and Mann Whitney test with a significance level of 5%, indicating that there are same result of five variables between state-owned banks and private-owned banks for bank wellness level. The five variables are Non-Performing Loans (NPL), Interest Rate Risk (IRR), Loan to Asset Ratio (LAR), Capital Adequacy Ratio (CAR), and Net Profit Margin (NIM). Below is a table of the output data using independent sample t test and Mann-Whitney test:

The liquidity risk and earning of State-owned banks and private-owned banks showed a different result. The different result caused by the difference of credit market share. State-owned banks have a market share of consumers to various regions, meanwhile private-owned banks do not reach rural areas.

After calculating the wellness of state-owned banks and private-owned banks using RGEC with 9 (nine) assessment variables can be concluded that state-owned banks and private-owned banks have good wellness during the period 2010-2014. It seen from the results of recapitulation of State-owned banks and Private-owned banks for 5 years.

Table 3
Recapitulation Test Results of Independent Sample t-Test and Mann Whitney Test

Variable	*Result*
Non Performing Loan (NPL)	No difference
Interest Rate Risk (IRR)	No difference
Loan to Deposit Ratio (LDR)	Difference
Loan to Asset Ratio (LAR)	No difference
Cash ratio	Difference
Net Profit Margin (NPM)	No difference
Return on Asset (ROA)	Difference
Net Interest Margin (NIM)	Difference
Capital Adequacy Ratio (CAR)	No Difference

Table 4
Recapitulation of State-owned banks and Private-owned banks with RGEC Method

Year	*Bank Wellness Level of State-owned Banks*	*Bank Wellness Level of Private-owned Banks*
2010	Very Wellness	Very Wellness
2011	Very Wellness	Very Wellness
2012	Very Wellness	Wellness
2013	Very Wellness	Wellness
2014	Very Wellness	Wellness

CONCLUSIONS AND FUTURE RESEARCH

The results show that there were a difference variables assessment to measure bank wellness of state-owned banks and private-owned banks. Those variables are LDR, CR, NIM and ROA. Otherwise, the results also show that there were no difference variables assessment to measure wellness of state-owned banks and private-owned banks. Those variables are NPL, IRR, LAR, CAR, and NPM.

The wellness of state-owned banks and private-owned banks using RGEC with 9 (nine) assessment variables can be concluded that state-owned banks and private-owned banks have good wellness during the period 2010-2014.

Based on the conclusions, suggestions from this research is that people as consumers are more careful in investing their money in a bank, the consumer as investors need to consider the wellness of banks either state-owned banks or private-owned banks. This research can also be used for further research but further research is expected to examine the banks that not show their risk profile rating.

REFERENCES

Ali. (2006), *Perbankan dan Rasio Keuangan.* Jakarta: Refika Aditama.

Arisyi F Raz, T. P. (2012), Krisis Keuangan Global Dan Pertumbuhan Ekonomi. *Analisa Dari Perekonomian Asia Timur. Dalam Buletin Ekonomi Moneter dan Perbankan* , h: 37-56.

Artharini, I. (2015), http://www.bbc.com/indonesia/berita_indonesia/2015/08/150824_indonesia_rupiah_anjlok.

Bank Indonesia. (2004), Peraturan Bank Indonesia. No. 6/10/PBI/2004. Sistem Penilaian Kesehatan Bank Umum.

——————. (2011), Peraturan Bank Indonesia. No. 13/1/PBI/2011. Penilaian Tingkat Kesehatan Bank Umum.

——————. (2004). Surat Edaran. No. 6/23/DPNP. Tanggal 31 Mei 2004. Peringkat Penilaian Tingkat Kesehatan Bank Metode CAMELS.

——————. (2011). Surat Edaran. No. 13/24/DPNP. Tanggal 25 Oktober 2011. Peringkat Penilaian Tingkat Kesehatan Bank Metode RGEC.

Brigham, E. F. (1999), *Manajemen Keuangan Edisi Kedelapan*. Jakarta: Erlangga.

Budisantoso, T. (2013), *Bank dan Lembaga Keuangan Lain*. Yogyakarta: Salemba Empat.

Darmawi, H. (2012), *Manajemen Perbankan*. Jakarta: Bumi Aksara.

Dina. (2012), MetodeKesehatan Bank CAMELS.

http://blog.pasca.gunadarma.ac.id/2012/04/29/metode-kesehatan-bank-camels-old-generation-versus-rgec-new-generation/.

Ghozali, P. I. (2011), *Aplikasi Analisis Multivariate dengan Program IBM SPSS 19 Edisi Kelima*. Semarang: Badan Penerbit Universitas Diponegoro.

Hanny. (2013), AnalisisTingkat Kesehatan Bank RGEC. *http://kim-hanny.blogspot.co.id/2013/05/penilaian-kesehatan-bank-rgec.html*.

Hasibuan, H. M. (2009), *Dasar-dasar Perbankan cetakan kedelapan*. Jakarta: Bumi Aksara.

Helfert, E. A. (1993), *Analisis Laporan Keuangan Cetakan Ketujuh*. Jakarta: Erlangga.

Imam, G. (2006), *Statistik Non-parametrik*. Semarang: Badan Penerbit Universitas Diponegoro.

Irmayanto, J.D. (2009), *Bank dan Lembaga Keuangan*. Jakarta: Universitas Trisakti.

Jumingan. (2011), *Analisis Laporan Keuangan*. Jakarta: PT Bumi Aksara.

Kasmir. (2008), Jakarta: PT. Raja Grafindo.

————. (2009), *Bank dan Lembaga Keuangan Lainnya*. Jakarta: Rajawali Pers.

Kieso, D. E. (2007), *Akutansi Intermediate edisi 12*. Jakarta: Erlangga.

Kuncoro, M. d. (2004), *Manajemen Perbankan Teori dan Aplikasi edisi Pertama*. Yogyakarta: BPFE.

————. M. (2009), *Metode Riset Untuk Bisnis dan Ekonomi*. Jakarta: Erlangga.

Kusumawardani, A. (2014), Analisis Perbandingan Tingkat Kesehatan Bank dengan Metode CAMELS dan RGEC. *Jurnal Ekonomi Bisnis* Vol. 19 No. 3.

Mandasari, J. (2015), Analisis kinerja Keuangan Dengan Pendekatan Metode RGEC pada Bank BUMN periode 2012-2013. *eJournal Ilmu Administrasi Bisnis* ISSN 2355-5408 , 363-374.

Margaretha, F. (2009), *Manajemen Keuangan Bagi Industri*. Jakarta: Grasindo.

Minarrohmah, K.D. (2014), Analisis Tingkat Kesehatan Bank dengan Metode RGEC pada Bank BCA 2010-2012. *Jurnal Administrasi Bisnis* Vol. 17 No. 1.

Permana, B. A. (2012), Analisis Tingkat Kesehatan Bank Berdasarkan Metode CAMELS dan RGEC. *Skripsi Universitas Negeri Surabaya*.

Praditasari, K. W. (2012), Analisis Pengaruh Tingkat Kesehatan Bank.

Putri, I. D. (2013), Analisis Perbedaan Tingkat Kesehatan Bank Berdasarkan RGEC pada Perusahaan Perbankan Besar dan Kecil. *E-Jurnal Akutansi Universitas Udayana* ISSN: 2302-8556, 483-496.

Riyanto, P. D. (1995), *Dasar Pembelanjaan Perusahaan Edisi 4*. Yogyakarta: BPFE-YOGYAKARTA.

Ruth, M.D. (2011), Analisis rasio CAMELS Bank-bank Umum Swasta Nasional periode 2005-2009. *Pekbis Jurnal,* Vol. 3, No. 3 , 569-578.

Statistik, Badan Pusat. *Bank dan Kantor Bank*. http://www.bps.go.id/linkTabelStatis/view/id/1869.

Sudjana, P. M. (2005), *Metoda Statistika.* Bandung: Tarsito.

Taswan. (2010), *Manajemen Perbankan.* Yogyakarta: UPP STIM YKPN Yogyakarta.

Yessi, N. P. (2015), Analisis Tingkat Kesehatan Bank Metode RGEC Bank Sinar Harapan Bali 2010-2012. *Jurnal Administrasi Bisnis* Vol. 1 No. 1.