THE ANALYSIS OF PRODUCTIVE ASSETS QUALITY ON BANK HEALTH RATING OF COMMERCIAL BANKS IN INDONESIA

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ABSTRACT

The purpose of this study was to analyze the effect of the quality level of the productive assets of the bank. In daily activities functioning bank intermediation institution that is as an institution that gathers and distributes funds from surplus unit to deficit unit. Channeling funds into bank unit deficit is done through a wide range of credit products offered both to credit used to personally or company. The owned credit bank it's assets productive or assets generate but not just credit as the only productive asset owned by the bank there are other productive assets owned by the bank that the bank funds placement with other banks, securities owned, investment capital, acceptance speeches are bills, bills and derivatives, as well as administrative account transactions.

KEYWORDS: Productive Assets Quality, Bank Health Level

1. Background

The Case of Century Bank at the end of 2008is pretty much public attention in Indonesia. Until now the case is still rolling. On 20 November 2008 Century Bank as a merged bank was declared by Bank Indonesia as a failed bank. It was based on data held by Bank Indonesia as of October 31, 2008 stating that the Capital Adequacy Ratio(CAR) of Century Bank was minus up to 3.52%.

In the case of Century Bank, bank's health is viewed from capital adequacy ratio, but whether these aspects can be considered sufficient to measure the health of banks or are there other aspects that may also play a role in influencing the health of banks, according to Bank of Indonesia regulations, scoring system for determining the condition of a bank is stipulated by Bank of Indonesia through the rule of Bank of Indonesia No. 6/23/DPNP/Date May 31, 2004 which was renewed through the rule of Bank of Indonesia No. 13/24 /DPNP Date October 25, 2011 on the Procedures for Assessment for Commercial Banks, where in the attachment of Bank Indonesia the determination of the financial health of banks is seen in six aspects known as analysis of CAMELS(Capital, Asset Quality, Management, Earnings Liquidity, Sensitivity to Market Risk).

In day-to-day activities a bank functions as an _intermediary i_nstitution that raises and channel funds from _surplus_ units to _deficit_ units. Distribution of funds to the bank of _deficit_ units is done through a variety of loan products offered forced it that is used both for personal or company. Credit owned by a bank is productive assets or assets that generate, but credit is not the only productive assets owned by banks. There are other productive assets owned by banks: placement of funds in other banks, securities owned, equity, bill _acceptances_, _derivative_ receivables, as well as balance sheet transactions.

2. Literature Study and Hypotheses Development

2.1 Theory of Productive Assets Quality

Siamat(2004: 135) argues that, the productive assets quality is a state of principal payment or principal installment and loan interest by the customer as well as the level possibility of acceptance of the re-invested in securities or often called as the collectability. Kuncoro

and Suhardjono(2002) suggests that, the quality of earning assets shows asset quality with respect to the credit risk faced by the bank due to credit and investment funds in different portfolios in which each bank fund investment in productive assets is quality assessed by determining whether the level of collectability runs smoothly, substandard, doubtful or even loss.

According to Bank of Indonesia regulation number: 14/15/PBI/2012,"productive asset is the provision of funds from a bank to earn income in the form of loans, securities, inter bank placements, bill acceptances, bills of securities that is repurchased under agreements to resell (*reverse re purchase agreements*), derivative receivables, investments, administrative accounts transactions and other forms of funding that can be equated with that." Siamat (2004: 134) suggest that the productive assets is all the investment of funds in rupiah and foreign exchange intended to earn income in accordance with its function.

According to Bank of Indonesia regulation number: 14/15/PBI/2012,the types of productive assets are:

1. Credit is the provision of cash or equivalent based on agreements between bank lending and other parties who require the borrower to pay off debts after a certain period of time with interest, including:
   a. Overdraft, the negative balance on current account customers which cannot be paid in full at the end of the specified time.
   b. Expropriation bill in order for factoring activities and
   c. Take over or credits purchase from other parties
2. Securities are debt instruments, notes, bonds, credit securities, or any derivative thereof, or other interests or an obligation of the issuer, in the form of commonly traded in the capital market and money market.
3. Placement is a bank investment in other banks in the form of demand deposits, interbank call money, time deposits, certificates of deposit, credit, and other similar funds investment.
4. Equity is a bank investment in the form of shares in banks and companies in other financial sectors as stipulated in the laws and regulations in force, such as leasing companies, venture capital, securities companies, insurance, clearing institutions of settlement and storage, including investment in the form of *mandatory convertible bonds* with stock options(*equity options*)or certain types of transactions that result in the bank has or will have as take in the bank or finance company engaged in other financial sectors.
5. Acceptances are claims a rising as a result of acceptances made to the futures draft.
6. Derivative Claims are claims for the potential benefit of an agreement/contract of derivative transactions(positive difference between the contract value and fair value of derivative transactions on the date of the report), including mark to market profit potential of spot transactions that are still running.
7. Administrative Accounts Transactions are commitments and contingencies include the issuance of guarantees, *letters of credit, standby letters of credit*, undrawn credit facilities or commitments liabilities and other contingents.
8. Certificates of Bank of Indonesia, here in after referred to as SBI, are securities denominated in rupiah issued by Bank of Indonesia in recognition of short-term debt.
9. Government Securities are here in after referred to as SUN are securities in the form of debt instruments denominated in rupiah and foreign currencies issued and guaranteed in payment of interest and principal by the Republic of Indonesia according to the validity period.

In assessing the productive assets, referring to the Bank of Indonesia regulation number: 14/15/PBI/2012,namely:

1. Credit quality assessment is assigned based on the factors of business prospects rating, the debtor's

performance, and the ability to pay that is determined to be:

a. Current

b. In special attention

c. Substandard

d. Doubtful

e. Loss

2. Assessment of the quality of securities

3. Assessment of quality placement

4. Bill assessment on securities purchased under agreement to resell with the underlying asset such as SBI, SUN(government securities), and or other placements in Bank of Indonesia and the government set to have a current quality.

5. Equity Assessment is assessed by:

a. Cost method:

1) Current, if the investee makes a profit and is not on the cumulative loss based on the last fiscal year's financial statements audited.

2) Less current, if the investee suffered cumulative losses of up to 25% (twenty five percent) of the capital of the investee based on last fiscal year's financial statements audited.

3) Doubtful, if the investee had cumulative losses of more than 25% (twenty five percent) up to 50% (fifty percent) of the capital of the investee based on last fiscal year's financial statements audited.

4) Loss, if the investee experienced accumulative loss of more than50% (fifty percent) of the capital of the investee based on last fiscal year's financial statements audited.

b. Quality of capital investment assessed under the equity methodor is measured at fair value is determined current.

6. Assessment of quality of temporary capital

Prasetia(2010) stated that the quality productive asset of a bank is assessed based on its collectability. Determination of the level of

collectability of productive assets in principle is based on:

1. To loans based on the accuracy of the repayment of principal and interest and the borrower's ability in terms of the relevant circumstances.

2. For other productive assets based on the level of likelihood of returned receipt of funds invested in other productive assets and income level.

Therefore, in terms of collectability assessment, productive assets are classified of four components, namely: current, substandard, doubtful, and loss. This is done after the bank makes a judgment on collectability of productive assets in order to obtain uniformity in reporting. According to Denda wijaya(2009:153) assessment of the quality of productive assets can be measured with the formula:

$$KAP = \frac{PPAPYD}{PPAPWD} \times 100\%$$

2.2 Theory of Healthy Bank Rating

There are some definitions of healthy bank suggested by experts. They are as follows:

1. According to Riyadi(2006) definition of healthy bank is an assessment of a condition of banks financial statements at the period of time specified in accordance with the standards of Bank of Indonesia. The decree Board of Directors on Bank of Indonesia's dated 30 April 1997regarding the procedure of health rating assessment of commercial banks, enhanced with SK Board of Directors of Bank of Indonesia 30/277/KEP/DIR dated March 19, 1998onchanges to the Decree of Board of Directors of Bank of Indonesia no. 30/11/KEP/DIR dated 30 April 1997 regarding the assessment procedure of commercial bank health rating which includes factors of capital, management, earnings, productive asset quality and liquidity.

2. According to Bank of Indonesia Regulation Number: 13/1/PBI/2011,the health of banks is the

result of the assessment on the condition of bank conducted to the risk and bank performance.

Bank health rating is the bank condition assessment result on various aspects affecting the condition or performance of a bank through the assessment of capital, asset quality, management, earnings, liquidity, and sensitivity to market risk in accordance with the applicable bank in gregulations. Assessment on bank health rating factors is conducted through quantitative and qualitative assessment after the account of judgment based on the materiality and significance of assessment factors and the influence of other factors. Quantitative assessment is an assessment of the position, development, and projection of financial ratios of banks.

Element of judgment is based on materiality and significance of each component assessed while the qualitative assessment is an assessment of the factors that support the results of the quantitative assessment, implementation, risk management ,and compliance of banks consisting of adherence to the Lending Limit, net open position, and know your customer principle.

Based on Bank of Indonesia Letter no. 13/24/DPNP dated October 25, 2011on the Procedures for Assessment for Commercial Banks health rating, it can be explained that the factors of bank health rating includes six main factors called CAMELS, which consist of:

a. Capital

Assessment of capital factor is done considering that the adequacy of capital is in dispensable to the survival of the daily operations of the bank where the capital is used as a buffer when it is in a loss. Assessment of quantitative and qualitative approaches to capital factors, among others, is done through an assessment of the following components:

1. Adequacy fulfillment of capital adequacy requirements (CAR) of the applicable provisions
2. Composition of capital

3. Forward trend/capital adequacy requirements projection
4. Productive assets as classified are compared to bank capital
5. The ability of banks to maintain capital requirements derived from profits(retained earnings)
6. Plan of bank capital to support business growth
7. Access to sources of capital
8. Share holders financial performance to increase bank capital

b. Asset quality

Assessment of this factor is done because the quality of assets is one of the most important aspects that influence market interest income. Good asset management includes procedures of reliable credit provision and credit control. Assessment of quantitative and qualitative approaches of asset quality factor is done through an assessment of the following components:

1. Assets as classified are compared to total earning assets
2. Debtor of credits core beyond related parties is compared with the total credit
3. Development of earning assets/non-performing assets compared to productive assets
4. The level of adequacy of allowance for uncollectible accounts(PPAP)
5. Adequacy of policies and procedures of productive assets
6. The review system internally to productive assets
7. Documentation of productive assets
8. Handling performance of earning assets

c. Management

Assessment of these factors is done to see the role of directors and commissioners in establishing risk management policies, over see implementation, the quality of management information systems, internal control systems, short term strategy, medium and long, leadership issues including efforts to provide a cadre of leaders. Assessment of

management factors, among others, is done through an assessment of the following components:

1. General management
2. Implementation of a risk management system
3. Bank compliance with applicable provisions bank and commitment to Bank of Indonesia and or other parties

d. Profitability(*Earnings*)

Assessment of the earnings factor is carried out to measure the ability of banks to set a price that is able to cover the entire cost. Profit allows banks to grow, in addition to a large profit generated, the quality and source of profit is also the object of research. Income generated stable and tum

1. *Return on asset* (ROA)
2. *Return on equity* (ROE)
3. *Net interest margin* (NIM)
4. operational costs compared to operating income
5. development of operating profit
6. Composition of portfolio of productive assets and income diversification
7. The application of accounting principles in the recognition of income and expenses
8. Prospects of profit

e. Liquidity

Assessment of the liquidity factors is done considering the bank assets is mostly not liquid with source of funds with shorter durations. Therefore, liquidity is used to measure the capability of the bank to meet its obligations especially short-term and long-term. Assessment of quantitative and qualitative approach of liquidity factors, among others, is done through an assessment of the following components:

1. Liquid assets of less than one month is compared with the liquid liabilities of less than one month
2. 1- *month maturity mismatch ratio*
3. *Loan to deposit ratio* (LDR)
4. Cash flow projection in the next three months
5. dependence on funds between banks and core depositors

6. policy and liquidity management (assets and liabilities management / ALMA)
7. The ability of banks to gain access to the money markets, capital markets, or other sources of funding
8. Stability of third-party funds

f. Sensitivity to market risk

Assessment of quantitative and qualitative approaches to market risk sensitivity factors, among others, is done through an assessment of the following components:

1. Capital or reserves are established to cover fluctuations in interest rates compared with potential losses as a result of fluctuations (adverse movements) in interest rates;
2. capital or reserves established to cover exchange rate fluctuations compared to the potential losses as a result of fluctuations (adverse movements) of exchange rate; and
3. Adequacy of market risk management system implementation.

According to Bank of Indonesia Regulation Number: 13/1/PBI/2011, banks health ranking is divided into 5 (five) assessment in accordance with the composite assessment, the final ranking results of the bank health rating which are as follows:

1. a very healthy level of health is equivalent to composite rank 1 (PK-1) It reflects that the bank is in excellent condition and is able to overcome the negative effect of economic conditions and the financial industry.
2. equivalent health level is equivalent to composite rank 2 (PK-2) It reflects that the bank is in good condition and able to overcome the negative effect of economic conditions and the financial industry, but the bank still has weaknesses that can be addressed by routine actions.
3. a fairly healthy level of health is equivalent to composite rank 3 (PK-3) It reflects that the bank is in fairly good condition but has weaknesses that can

lead to deteriorated composite ratings if the bank does not take immediate corrective action.

4. an unhealthy level of health is equivalent to composite rank 4 (PK-4) Banks are classified as less well and are very sensitive to the negative effect of economic conditions and the financial industry or the banks have serious financial weakness or combination of several unsatisfactory factors that if there is no effective corrective action taken, it could potentially have difficulty endangering its survival.

5. An unhealthy level of health is equivalent to the composite rank 5 (PK-5) Banks are not well classified and very sensitive to the negative effect of the economy and the financial industry as well as experiencing difficulties.

Table 1. Levels of Bank Health Rating

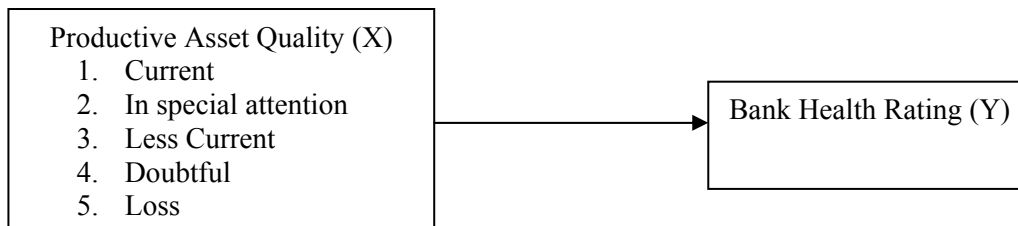| Credit Value	Levels
81 - 100	Healthy
$66 \leq 81$	Healthy Enough
$51 \leq 66$	Less Healthy
$0 \leq 51$	Unhealthy

Source: SK DIR BI No:30/12/KEP/DIR

3. Action Plan

Action Plan is corrective measures with the target over a period of time which must be implemented by the bank if the bank health rating result indicates that one or more factors of rank assessment has4(four) and or rating of 5(five) andorrank3(three),but there are significant issues that need to be addressed so as not to interfere the survival of a bank. Action plan referred to includes:

a. The additional capital(fresh money) from the bank share holders and or other parties if the bank has problems in capital factors such as the tendency of the decreasing of capital adequacy availability that would be under applicable provisions.

b. Handling of problem loans intensively and effectively if the bank is having problems of asset quality factors such as the increasing number of non-performing loans that are expected to significantly influence other factors.

c. Improvement of internal audit function, improvement of separation of duties and the effectiveness increase of corrective actions based on audit findings when the bank experienced management problem such as weak implementation of internal control.

d. Improvement of bank efficiency if the bank is having problems of profitability, so that the profitability is decreasing and affecting other factors significantly.

e. Improvement of access to the money markets, capital markets, or other sources of funding if the bank is experienced liquidity problems such as declining adequate liquidity(*liquidity shortage*) that is expected to affect the short-term cash flow.

f. The additional capital(fresh money) of bank shareholders and or other parties or realignment of the bank's portfolio if the bank is having problems of sensitivity to market risks such as the increase of exposure to interest rate risk on the banking book portfolio(*interest rate risk in the banking book*) and the ability of capital to absorb potential loss is likely to decline.

Reference used as the foundation and guidance in preparation of this research requires a theoretical framework, arguments, and opinions of some experts. Definition of bank health rating according to Bank of Indonesia regulation Number: 13/1/PBI/2011 is the result of an assessment of the various aspects affecting the condition or performance of a bank through quantitative and qualitative assessment of the factors of capital, quality assets, management, earnings, liquidity, and sensitivity to market risk.

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┌─────────────────────────────────┐                    ┌──────────────────────────┐
│ Productive Asset Quality (X)    │                    │                          │
│    1.  Current                  │───────────────────▶│  Bank Health Rating (Y)  │
│    2.  In special attention     │                    │                          │
│    3.  Less Current             │                    └──────────────────────────┘
│    4.  Doubtful                 │
│    5.  Loss                     │
└─────────────────────────────────┘
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Figure 1. Scheme of Variable Relationship

3.1 Research Methods

Research method is a step and procedures to be taken in the collection of data or empirical information in order to solve the problem.

3.1.1 Types of Research

This study is an associative type of research that is study design prepared to examine the possibility of a causal relationship between variables.

3.1.2 Types and Sources of Data

The type of data collected and used and processed in order of this research is secondary data. The secondary data are obtained through the web in the form of Financial Statements publication.

3.1.3 Data Collection Techniques

Data collection method used in this study is a method of documentation and library research.

3.1.4 Operational Definition of Variables

This study contained the following variables:

1. X_1 is the quality of productive assets which according to Siamat(2004: 135) is a state loan interest or principal payments by the customer as well as the level of acceptance possibility, which is invested in securities or often called as collectability.

2. Y is the health rating as the result of the qualitative assessment seen in six aspects known as CAMELS analysis calculation(*Capital, Asset Quality, Management, Earnings, Liquidity, Sensitivity to*

market risk) through Bank of Indonesia Letter13/24/DPNP dated on October 25, 2011 about the Procedure for Assessment of Commercial Banks health rating.

3.2 Analysis Technique

In this study, data analysis was conducted by using statistical method of program SPSS18.

3.2.1 Classic Assumptions Test

Normality test in regression model used to test whether the residual value resulting from the regression are normally distribute do not in the study is conducted by the graphical method that is to look at the spread of the data on diagonal source on the normal graph of *P-P Plot Of Regression Standardized* residuals as a basis for decision-making. If the points spread around the line and follow the diagonal line, the residual value has been normal.

3.2.2 Multicollinearity test

The aims to test whether there is a correlation between the independent variables in the regression model. According to Ghozali(2001: 63) multi collinearity canals obe seen from the value of *tolerance* and *Variance Inflation Factor*(VIF). Both show which of each independent variable is explained by the other independent variables. *Tolerance* measures the variability of the selected independent variables that cannot be explained by other independent variables. So

a low *tolerance* value equal to the value of high VIF(as VIF=1/tolerance) and indicates the presence of high collinearity. *Cuttof* value commonly used is the tolerance value of above 0.10orequal to VIF value below 10.

1. Simple regression analysis

   It is used to determine causality or causal relationship between one dependent variable with independent variable. The shape of simple linear regression equation is as follows:

   $$Y = a + bX_1 + e$$

   where

   Y   : Banks Health Rating

   X_1 : Quality of Productive Assets

   a   : Constants

   b   : Regression coefficient

2. Assessing the *goodness of fit model*

   a. A variety of regression test or regression of F-test

      The F-test shows whether all the independent variables in the model affect the dependent variables. This situation is shown by the following notation:

      $$HA: b1 \neq b2 \neq ...... \neq bn \neq 0$$

      1) Comparing the F value with the F table. If the F value is greater than F table then Ho is rejected and Ha is accepted.

      2) Comparing the P-value (observed significance levels) is the chance variables compared to different sample significantly in the degree of trust that has been established (actual significance level)

         F-test is read by means of:

         $H_o : \beta = 0$: There is no significant relationship between productive asset quality with the level of health.

      $H_a : \beta = 0$: There is a significant relationship between productive asset quality with the level of health.

      Testing criteria :

      Ho is accepted if F count is < F table

      Ho is rejected when F count is > F table

   b. Coefficients regression test with t-test

      T-test or Significant test of Individual parameter indicates how much influence independent variable individually on the dependent variable is. This situation is shown by the following notation:$HA: b1 \neq 0$

      T-test is read by means of:

      1) Comparing the t_{count} with the t_{table}. When t_{count} is bigger than t_{table} then Ho is rejected and Ha is accepted.

      2) Comparing the P-value (observed significance levels) is the chance variables compared to different sample significantly in the degree of trust that has been established (actual significance level)

         If   : ⇒a   reject H_0

         and If   : ⇒a   do not reject H_0

      Testing criteria:

      H_o: $\beta = 0$, $H_0$is accepted ($t_{count}< t_{table}$) It means that the independent variables partially have no significant effect on the dependent variables.

      H_a: $\beta \neq 0$, Ha is accepted ($t_{count}> t_{table}$) It means that independent variables partially have a significant effect on the dependent variables.

   c. Regression R line Test (R^2)

      R - square, also known as the coefficient of determination, is commonly used to evaluate fit model. R-square value is an indicator of how well the model fits the data (for example, one that is close between R - square to 1.0 indicates

that we have accounted for almost all of the variability with the variables specified in the model).

4. Results And Discussion

4.1 Descriptive Analysis

The object of this study is the commercial banks operating in Indonesia and listed in Bank of Indonesia in 2012.The sample used in this study is the sample of banking companies in 2012. The sample distribution used is as follows:

Table 2.Sample Distribution

Information	Amount
Number of Banking Companies	108
Companies affected by outliers	3
Number of Companies are becoming samples	105

Based on calculations using SPSS program descriptive statistics result is obtained as follows:

Table 3.Descriptive Statistics

Information	N	Minimum	Maximum	Mean
Health Rating	105	55	96	84,81
KAP Ratio	105	0	208	62,42

From table 3 above it can be seen that:

1. The average of the bank health rating amounted to 85 companies. One that scores the lowest health level is PT Prima Master Bank with a value of 55, while the company that scores the highest health level is Citibank NA

2. The mean ratio of productive asset quality of credit in 2012 was 62.42, and then the average value of the ratio of allowance for losses on productive assets of banks is included in the criteria of less healthy.
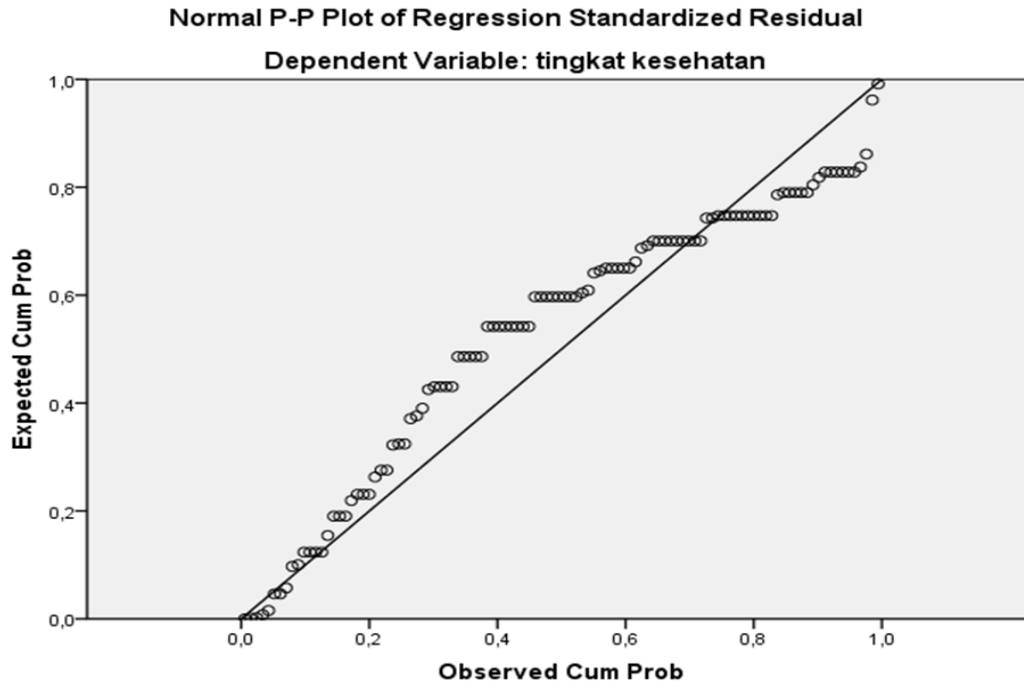
4.2 Classic Assumptions Test

Prior to hypothesis testing using linear regression analysis, there are several assumptions that must be fulfilled in order that the conclusion of the regression is not bias. Among them is the normality test and multicollinearity test.

4.2.1 Normality test

Normality test is used because it is a very important requirement to test the meaningfulness (significance) of regression coefficients. If the regression model is not distributed normally, then the conclusion of the F-test and t-test is still in doubt due to statistical F-test and t-test on regression analysis derived from a normal distribution. In this study, the statistical method test to normal graph method of *P-P Plot of regression* is used.

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: tingkat kesehatan

Graphic 1. P-P Plot Of Regression

Based on the normal graphic image of *P-P Plot of Regression Standardized Residual* above it can be seen that if the points spread around the line and follow the diagonal line, it explains that the proficiency level of the residual value has a normal distribution.

Multicollinearity assumptions test is used to determine the presence or absence of irregularities of classical assumptions. Multicollinearity means that there is a strong connection between some or more independent variables in the regression model. In this study we used the *Variance Inflation Factors* (VIF) as an indicator of the presence or absence of multicollinearity among the independent variables.

4.2.2 Multicollinearity Test

Table 4. The Result of Multicollinearity Test

Coefficients[a]							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	81,219	1,557		52,151	,000		
KAP	,073	,020	,321	3,591	,001	1,000	1,000

a. Dependent Variable: health rating

Based on the analysis above the value of VIF obtained by the independent variables is less than 10 and the value of tolerance is above 0.10. Thus, it can be

concluded that in the regression models there is no multicollinearity problem

4.3 Hypothesis Testing

4.3.1 Simple Linear Regression Analysis

It is used to determine causality or causal relationship between the dependent variable with the independent variable

Table 5. The Result of Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	81,219	1,557		52,151	,000
	KAP	,073	,020	,321	3,591	,001
a. Dependent Variable: health rating						

Coefficients[a]

Based on the results of the regression analysis above, it can be obtained the following regression equation:

$Y = 81,219 + 0,073X_1$

From the analysis result it can be seen that the independent variable of productive assets quality with coefficient of 0.073and from the equation it can be seen

that the variable of productive assets quality has positive influence on the health of banks, which means the higher the ratio of productive asset quality, the better the health level.

4.3.2 F-test

F-test is intended to determine the effect of productive asset quality variable simultaneously against the health rating in 2012

Table 6. Regression Result of F-test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1532,841	1	766,420	10,402	,000[a]
	Residual	7736,076	104	73,677		
	Total	9268,917	105			

a. Predictors: (Constant), kap

b. b. Dependent Variable: health rating

From the calculation results it is obtained the F value is 10,402and the F table is3.9315562with a P value of 0.000. This means that the P value is less than 0.05, which shows that the result of this test rejects H_o and accepts H_1. From the result of the F test it can be

concluded that the variable quality of productive assets has significant impact on the level of health.

4.3.3 T-test

T-test is intended to determine the effect of independent variables partially (quality of productive assets) on the dependent variable(health level).

Table 7. Regression Result of T-test

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	81,219	1,557		52,151	,000
	kap	,073	,020	,321	3,591	,001

a. Dependent Variable: health rating

Fromtable7above it can be seen that t value of 3.591is greater than t table of 1.9832641with a significance level of 0.001. This means that the P value is lessthan0.05, which shows that the result of this test accepts H_1 and rejectsH_0, and from the t test result, it is concluded that there is productive assets quality variables influence partially on the level of health.

4.3.4 Analysis of the coefficient of determination (R^2)

R-Square, also known as the coefficient of determination, is commonly used to evaluate model fit. R-square is 1 minus the ratio of the residual variability. When the variability of the residual values around the regression line relative to the overall variability is small, the prediction of both regression equations is good.

Table 8. Determination Analysis Result

Model Summary					
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension0	1	,678[a]	,460	,433	7,130

a. Predictors: (Constant), KAP

Based ontable8 above it shows the value of R square is 0.460. This means that46percent of the level of health is affected by the independent variable of quality of productive assets while the remaining 54 percent is influenced by other factors outside the model.

5 Conclusions And Recommendations
5.1 Conclusion

Based on the results of research and discussion on the analysis of the influence of Productive Assets Quality(KAP) on the health of banks to commercial banks in Indonesia with multiple hypotheses testing that

are done as well as from the regression equation, it can be seen that the coefficient is positive so that it can be interpreted that the influence exerted by the variable quality of the productive assets of the bank health is strong and the quality of productive assets has real effect and significant on the health of banks. The influence on the quality of productive assets of the bank is not so dependent on the quality of productive assets because there are other factors that have larger influence on the factors of capital, management, earnings, and liquidity.

5.2 Suggestions

Based on the analysis and the research that is done, then some suggestions that can be given are:

1. Given the potential if losses over the placement of funds in productive assets and seen the results of the study on the contribution of the productive asset quality to the bank health, it would have required integrated attention and supervision so that potential losses can be prevented through the analysis of the quality of productive assets through collectability level.

2. Application of the principle of prudence(*prudential banking principle*)

   It is necessary, especially in the credit sector. It is because the credit sector is a productive asset that is most vulnerable to risk of loss. It requires attention and good supervision and a thorough review of the management system for granting credit through proper and effective procedures.

3. Treatment of problem loans intensively through proper and effective procedures.

References

Advensia, Ayu, Murniati, Sihombing, Purnamasari, dan Warastuti. 2013. Tools of Hypothesis Testing. Unika soegijapranata. Semarang-Indonesia.

Amalia, Suhaida 2012. Analysis of The Financial Performance Using The CAMEL, case study on PT. Bank Bukopin Tbk. 2009-2011. University of Hasanudin. Makasar-Indonesia.

Dendawijaya, Lukman. 2009. Banking Management. 3th edition. Publisher Ghalia Indonesia. Jakarta.

Ikatan Akuntansi Indonesia. 2004. Financial Accounting Standards. Salemba Empat. Jakarta-Indonesia.

Imam, Ghozali. 2005. Application of Multivariate Analysis with SPSS Program, 3th edition. Publisher University of Diponegoro. Semarang-Indonesia.

Kuncoro and Suhardjono. 2002. Banking Management (Theory and Application). 1st Edition. Publisher BPFE. Yogyakarta-Indonesia.

Luthfiani, Chindy Anggraeni. The Influeance of Productive Assets and Nonperforming Loans to Profitability on PT.Bank Negara Indonesia (Persero) Tbk. University of Computer Indonesia.

Peraturan Bank Indonesia No:14/15/PBI/2012 on Commercial Bank Assets Quality Assessment.

Peraturan Bank Indonesia No:11/2/PBI/2009 of The Third Amendment to PBI No: 7/2/PBI/2005 on Commercial Bank Asset Quality Assessment.

Ponttie, Prasnanugraha. Analysis of The Influence of Financial Ratios on The Performance of Commercial Banks in Indonesia, Universitas Diponegoro, Semarang-Indonesia.

Prasetia, Handrias. 2010. Analysis of The Influence of The Quality of Productive Assets to The Level of Bank Health on Rural banks in North Sumatera. University of North Sumatera.

Santoso, Singgih. 2001. The Professional of Statistical Data Processing. PT Alex Media Komputindo. Jakarta-Indonesia.

Sari, Lili Nur Indah. The Analysis of Bank Health Rating on PT.Bank Tabungan Negara (Persero) Tbk. University of Mulawarman - Indonesia.

Siamat, Dahlan. 2004. Management of Financial Institutions. Jakarta: Fakullty of Economicin Indonesia University.

Sugiyono. 2012. Administrative Research Methods. Edition 20. Alfabeta. Bandung-Indonesia.

Sugiyono. 2008. Quantitative Research Methods, Qualitative Research and Development. Alfabeta Publisher. Bandung-Indonesia.

Taswan, 2006. Banking Management, Concepts, Techniques And Applications Of Banking Risk Assessment. 1st edition. UPP STIM YKPN. Yogyakarta-Indonesia.

The Circular Bank of Indonesia No.30/2/UPPB 30 April 1997 about Procedures of General Bank Rating.

The Circular Bank of Indonesia No.6/23/DPNP/2004 about Procedures of the General Bank Health Rating.

The Circular Bank of Indonesia No.13/24/DPNP, 25 Oktober 2011 about The General Bank Health Rating

Website www.bi.go.id on Publication of Financial Reporting (in Indonesia).

Website www.id.wikipedia.org/