THE ANALYSIS OF THE DETERMINANTS OF CHANGE
IN NET INCOME ON CONVENTIONAL BANKS IN INDONESIA

Sumani[i]

Management Department,
Faculty of Economics and Business,
University of Jember, Indonesia

Abstract:

The purposes of this research include : (1) to examine the determinants of the NPL to changes in the net income of a conventional bank in Indonesia, (2) to examine the determinants of the IRR to changes in the net profit of conventional banks in Indonesia, (3) to examine the determinants of LDR to changes in net profit of the conventional bank in Indonesia, (4) to examine the determinants of ROA to changes in the net profit of conventional banks in Indonesia, (5) to examine the determinants of NIM to changes in the net profit of conventional banks in Indonesia, (6) to examine the determinants of ROA to changes in the net profit of conventional banks in Indonesia, and (7) to examine the determinants of the CAR to changes in the net profit of conventional banks in Indonesia. The Data used in this research is secondary data. The population in this study were all conventional banks listed in Bank Indonesia period 2011-2017. Using the purposive sampling method as the sampling technique. A total sample of 82 conventional bank. Data analysis method used is multiple linear regression analysis. The results of the test and data analysis performed with SPSS 21 shows that: NPL, IRR, ROA, and NIM is the determinant of the change in net income of the public bank, however, LDR, OER, and CAR is not a determinant of change in net income of the public bank in Indonesia.

JEL: G21, G24, E64

Keywords: change in net income, the determinant of the change in net income, the conventional bank

1. Introduction

Assessment of the performance of a bank can be done by conducting an analysis of the bank's financial statements. Taxation the bank is one of the indicators that can be used

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[i] Correspondence: email sumanisumani69@gmail.com

as the basis of assessment of the financial performance of the bank, which has the goal to provide relevant information on parties both inside and outside the company. The financial performance of the bank is a study of some specific size that can measure the success of a bank in generating profit. Profit is the difference of income and the burden/load, if income exceeds the load then the result is the net profit (Simamora, 2002:25). Net income is operating profit minus taxes, interest expense, cost of research and development costs. Net income presented in the statement of profit and loss by juxtaposing between revenues and costs (Hansen and Mowen, 2001:38).

There are two types of information namely the symmetric information and asymmetric information. Symmetric information is a situation where investors and managers have identical information about the company's prospects. Asymmetric information is a situation where managers have information that is different (better) about the company's prospects than the investors. Signal is an action taken by the company management to provide guidance to investors about how management's point of view seeing the prospects of the company (Brigham and Houston, 2006:38-40). The theory of signal explains why the company has the urge to provide financial statement information to external parties. Encouragement of companies to provide information is due to asymmetric information between companies and outside parties, because companies know more about the company and prospects than outsiders (investors, creditors). The means used to reduce asymmetric information is to provide a signal to the outdoor party. A given signal can be done through the disclosure of reliable financial information, such as financial statements, a report on the activities that have been done by management to realize the wishes of the owners or even can be in the form of promotions as well as other information stating that the company is better than other companies. The informative purpose (signaling) is likely to bring a good impact to the users of the financial statements, where the manager is trying to inform the opportunities that can be achieved by the company in the future (Sari and Zuhrotun, 2006).

Change in earnings is the magnitude of the increase or decrease in profit per year (Herlina and Nur Aini, 2014). Change in earnings that continue to increase or in other words the high changes in earnings may have an impact on the activity of the bank's operations because it is able to strengthen the capital so that the bank is able to improve the performance of the company by increasing the profit. Stakeholders need the information of change in earnings as a consideration of decision-making. Change in earnings can be a signal to determine the information about the opportunity that can be achieved by banking in the future. The ratio of Change in net income of conventional banks in Indonesia period 2011-2015 tend to decrease by each year percentage of 31,00%; 23,65%; 14,95%; 5,11% while the year 2015 the value of the percentage change in net income by -7,28 %. (Indonesian Banking Statistics, 2015)

Banks more specifically can be functioned as: (1) the agent of trust, the basis of the main activities banking is a trust, both in the case of collection of funds and distribution of funds. The community would be willing to entrust their funds in the

bank if it is based on the presence of the element of trust. The community believe that money will not be misused by the bank, the money will be managed properly, the bank will not go bankrupt, and at the moment that has been promised, the deposit can be withdrawn from the bank; (2) the agent of development. The economic activity of the community in the monetary sector and real sector cannot be separated. The two sectors always interact and exert mutual influence. The real sector will not be able to perform well when the monetary sector is not working properly. The activities of the bank in the form of accumulation and distribution of funds is necessary for smooth economic activities in the real sector; (3) the agent of services, the Bank in addition to conducting the collection and distribution of funds, also offer other banking services to the community. Services offered by banks are closely related to the economic activity of society in general. These services may include services such as remittance, custody of valuables, the provision of bank guarantees, and the settlement of bills. (Budisantoso and Nuritomo, 2015:9).

Furthermore, using the RGEC methods (Risk Profile, Good Corporate Governance, Earning, and Capital) to assess the financial condition of a conventional bank, which is a refinement of the method of assessment of bank health from the CAMELS methods. RGEC methods is based on the risk, used to assess the financial condition of a conventional bank and then of proxies in various ratios. Assessment of the financial condition with RGEC methods is in the form of qualitative and quantitative factors. Qualitative factors consist of risk profile (qualitative) and GCG, while the risk profile (quantitative), profitability, and capital is the quantitative factors in the form of financial ratios and the data listed in the financial statements. A financial ratio that can be measured (quantitative) in the form of financial ratios pursuant to the appendix SE BI No. 13/24/DPNP/2011 Dated October 25, 2011. Indicators of the quantitative factor is the risk profile in terms of financial risk (quantitative), profitability, and capital, namely risk profile, earnings, and capital.

1. Risk profile. Assessment of the business risk of a conventional bank for quantitative credit risk, market risk, and liquidity risk.
a. Credit risk

Credit risk is the risk resulting from the failure of debtors and / or the other party in fulfilling obligation to a conventional bank. According to Bank Indonesia Regulation Number 13/1/PBI/2011, to measure the credit risk of a conventional bank can use indicators Non-Performing Loan (NPL). NPL is the percentage of the amount of nonperforming loans against total loans. The NPL shows the ability of a conventional bank in managing problem loans is given by banks with the criteria for substandard, doubtful, and loss (Siamat, 2005:358). NPL to be achieved by conventional banks that set a maximum of 5%, where the provisions regarding the number of NPL's must be adhered to by all conventional banks. The smaller the value of the NPLS, then the credit risk that is borne of a conventional bank is getting low so as to minimize the losses and increase the profit of a conventional bank.

b. Market risk

Market risk is the risk that arises due to the decrease in the value of an investment due to the change of market conditions. Indicators to assess the market risk faced by a conventional bank can use Interest Rate Risk (IRR). IRR is used to detect the sensitivity of a conventional bank against interest rate movements. The IRR is the ratio which indicates the ability of a conventional bank to manage the risks that adversely affect the income received or expenses issued by a bank as a result of changes in interest rates (Veithzal, et al., 2013:570). IRR is calculated by comparing the interest sensitivity of assets to the interest sensitivity liabilities. The value of IRR greater than 1 indicates that the interest income received is greater than the cost of interest incurred, while the value of IRR less than 1 indicates that interest income is smaller than the cost of the interest incurred. The higher the IRR value, then the losses experienced by conventional banks because of the lower risk incurred so that the bank profit will be increased.

c. Liquidity Risk

Liquidity risk is the risk of a conventional bank because of failure to meet obligations to their depositors. Bank liquidity can be one of the factors the bank related to the more illiquid funds owned by the bank that will lower the risk of bankruptcy. The parameters for assessing the risk of banking liquidity by using Loan to Deposit Ratio (LDR). According to Lukman (2006:114), LDR is the ratio used to assess the ability of the bank to pay back the withdrawal of funds made by depositors to rely on credit as a source of liquidity. The liquidity needs of banks sourced from the 2 (two) needs. The first to meet all withdrawals of funds by customers and the liquidity requirements are mandatory. Second, to meet the needs of liquefaction and the demand for credit from customers, especially of credit approved (Dahlan, 2005:280). Loans disbursed by the bank can offset the bank's obligation to immediately meet the demand of depositors who want to withdraw back the money that has been used by the banks to give credit. The LDR should be achieved by public banks was set within 80%-110%, where the provisions regarding the number of LDR's must be adhered to by all conventional banks. LDR is calculated by comparing the total credit to third party funds. The value of LDR is high can increase the profits of banks because it increases the interest income that has an impact on the magnitude of the rate of profit of the bank. The higher the rational is then the possibility of a bank statement so that the smaller the profit is increasing.

2. Earning. Earning is one of the health assessment conventional banks from the side of profitability. According to the SE BI 13/24/DPNP/2011, Earning is a measure of the ability of banks to increase earnings, or measure the level of business efficiency and profitability achieved by the bank. Assessment indicators of profitability are Return on Assets (ROA), Net Interest Margin (NIM), operating expenses to Operating Income/ Operating Efficiency Ratio (OER).

a. Return on Assets (ROA)

According to Lukman (2009:146) ROA is used to measure the ability of bank management in a profit (profit before tax) generated from the total assets of the bank

concerned. According to Bank Indonesia, ROA is the ratio between profit before tax to average total asset in a period. Total assets are commonly used to measure the ROA of a bank is the sum of the asset-a productive asset, which consists of the placement of the securities, the placement in the form of credit. ROA to be achieved by conventional banks that set a minimum of 1.25%, where the provisions regarding the number of ROA this must be adhered to by all conventional banks. The larger the ROA, the greater the level of profit (profit) that is achieved the bank (positive).

b. Net Interest Margin (NIM)

NIM is an indicator used to measure the ability of performance management of a conventional bank in managing the assets of the productive to produce net interest income (Lukman, 2006:122). Net interest income is the result of interest income reduced by interest expense. Earning assets average earning assets used as securities, demand deposits, government bonds, export bills, derivative receivables, loans, financing receivables, acceptance receivables, investments in shares of stock and commitments and contingencies risk credit (Riyadi, 2006:21). NIM to be achieved by conventional banks that set a minimum of 6%, where the provisions regarding the number of NIM this must be adhered to by all conventional banks. NIM describes the amount of net interest income obtained with the use of productive assets owned by the bank so it can be concluded the greater the value of NIM achieved by the bank the greater the interest income on earning assets so that the profits earned from a bank will increase.

c. Operating expenses to Operating Income/ Operating Efficiency Ratio (OER)

OER is the indicator used to measure the ability of management of a conventional bank in controlling operating costs against operating income. OER is used to measure the level of efficiency in the conduct of the operations of the bank. OER is the ratio of the comparison between operating costs with operating income. The operational cost is the cost incurred by the bank in order to run the activities of the main business (interest costs, labor costs, marketing costs and other operating costs), operating income is the main income of the bank that the income earned from the placement of funds in the form of credit and other operating revenues (Riyadi, 2006:159). OER to be achieved by conventional banks that set not more than 90%, where the provisions regarding the number of OER this must be adhered to by all conventional banks. The smaller the value of ROA means more efficient operational costs incurred by the bank concerned so that the possibility of bank profits will increase (negative).

3. Capital

Assessment of the capital factor (capital) includes an assessment of the level of capital adequacy and management capital. Indicators assessment of capital using the Capital Adequacy Ratio (CAR). CAR is an indicator of the ability of banks to cover the decline in its assets as a result of bank losses caused by the assets at risk. CAR is the ratio which shows how large the total assets of banks that contain an element of risk (credit, investments, securities, bills of other banks), which also financed from the own capital banks, in addition to obtaining funds from sources outside banks, such as public

funds, loans (debt), and others (Lukman, 2009:121). A function of this ratio is to measure the adequacy of capital held by banks to support assets that contain or produce risk. CAR that must be achieved by conventional banks that set minimum of 8%, where the provisions regarding the number of this CAR must be adhered to by all conventional banks.

This ratio is the division of the capital (primary capital and secondary capital) to total Risk-Weighted Assets (RWA). The components of core capital in principle consists of the paid-up capital and the reserves formed from profit after tax (share premium, reserves a minimum, the Backup destination, retained earnings, profit last year, profit for the year, then net assets of subsidiaries whose financial statements are consolidated net worth). Supplementary capital consists of reserves that are not formed from profit after tax and the loan that nature can be equated with capital (revaluation Reserves of fixed assets, Reserves for uncollectible accounts are classified, the Capital of quasi, a subordinated Loan. RWA is the sum of risk-weighted assets balance sheet assets (assets listed in the balance sheet) and RWA asset administrative (assets of an administrative nature). The calculation of RWA for credit risk, operational risk, and market risk, calculation of RWA based on the credit risk and market risk based on the carrying value of the asset in the balance sheet (after deducting impairment Losses/CPKN). The value of a high CAR indicates the ability of banks to finance assets that contain risk, thereby reducing the cost of funds incurred by the bank. The higher the value of the CAR, then the possibility of bank profits will increase (positive).

Change in earnings is an increase or decrease in profit earned by the company compared with the previous year. Factors that can affect the change in earnings includes the change in the selling price, changes in units sold, changes in operating expenses, and changes in other components in the income statement. Therefore, financial ratio linking the estimates contained in the balance sheet and the income statement, then the increase or decrease of financial ratios can indicate change in earnings. Profit used in this study are profit after tax, so the change in net income can be interpreted as the increase or decrease profit after tax obtained by conventional banks compared with the previous year (Andriyani, 2015).

Important for users of financial statements to determine the change in earnings, in particular the change in net income, because it will determine the magnitude of the rate of return to shareholders or to prospective investors to take the decision whether to make an investment in the company. For the management of the company, changes in earnings can be used as a tool to evaluate the performance of management (Herlina and Nur Aini, 2014).

Based on SE BI Number 13/24/DPNP/2011 Dated October 25, 2011, in general, to analyze and assess the financial condition of banking refers to the method of RGEC (Risk Profile, good corporate governance, Earnings, Capital) based on the risk proxies in a variety of financial ratios of the banking system. Research change and net income by analyzing financial ratios of banks can be carried out with respect to ratio-the ratio of Non-Performing Loan (NPL), Interest Rate Risk (IRR), Loan to Deposit Ratio (LDR),

Return on Assets (ROA), Net Interest Margin (NIM), operating Expenses to Operating Income/ Operating Efficiency Ratio (OER), Capital Adequacy Ratio (CAR).

Several studies have tested the determinants or factors that affect the change in net income and shows different results. The results of the research nu'man (2009), and Andra (2012) stated that the variable NPL partial effect on change in earnings. The results of the research Joko Susanto (2015) also show that the variable NPL is partially significant negative effect on change in earnings. But it is different with the research results of Angbazo (1997), and Lilis (2010) which states that the variable NPL no significant effect on the change in earnings. Nur Aini(2013), also confirms that the NPL has a positive effect but not significant to Change in Earnings. Kusumaningytas (2009) show that the NPL has a negative impact not significant to change in earnings.

The results of the research Aditya (2009) stated that the IRR effect on change in earnings, while the results of the research Angbazo (1997) shows that the IRR does not affect the change in earnings. Furthermore, the results of research nu'man (2009), Lilian (2010), Abdul (2011), and Joko Susanto (2015), states that the variable LDR affect the change in earnings. However, research by Kusumaningytas (2009), Andra (2012), and Nur Aini (2013), show that the LDR does not affect the change in earnings.

ROA was found to significantly influence the change of profit on research Kusumaningytas (2009) and Lilian (2010), but results of the study, Joko Susanto (2015) ROA found no significant effect on the change in earnings. Furthermore, the results of a research conducted by Abdul (2011), Andra (2012), and Nur Aini (2013), that NIM found partial effect on change in earnings, but the results of the research Kusumaningytas (2009) and Lilian (2010) show that the variables of NIM does not affect the change in earnings.

Research results of Andra's (2010), Abdul (2011), Nuraini (2013), and Joko Susanto (2015) show that ROA significantly influence the change in earnings, whereas in Nu'man (2009) and Lilian (2010) found no significant influence on the change in earnings. Furthermore, the results of research conducted by Kusumaningytas (2009), Nur Aini (2013), and Joko Susanto (2015) gives the result that the CAR significantly influence the change in earnings, but the results of the research by nu'man (2009) and Lilian (2010) gives the result that the CAR found no significant effect on the change in earnings.

The purposes of this study are: (1) to examine the determinants of the NPL to changes in the net income of a conventional bank in Indonesia, (2) to examine the determinants of the IRR to changes in the net profit of conventional banks in Indonesia, (3) to examine the determinants of LDR to changes in net profit of the conventional bank in Indonesia, (4) to examine the determinants of ROA to changes in the net profit of conventional banks in Indonesia, (5) to examine the determinants of NIM to changes in the net profit of conventional banks in Indonesia, (6) to examine the determinants of ROA to changes in the net profit of conventional banks in Indonesia, and (7) to examine the determinants of the CAR to changes in the net profit of conventional banks in Indonesia.

2. Material and Methods

2.1 Research Design
This research is a quantitative research to analyze the determinants of changes in the net profit of conventional banks in Indonesia. Quantitative research is research with quantitative methods because the research data in the form of numbers and statistical analysis (Sugiyono, 2010:12). This research is explanatory research, i.e. research aimed to test the hypothesis in order to strengthen or even deny the hypothesis the results of research that already exists.

2.2 The population and sampling
The population in this study were all conventional banks listed in Bank Indonesia, as many as 138 the bank. Sampling in research is done by using the technique of purposive sampling, with criteria of; (1) conventional Banks that have complete financial statements. During the tahun 2013–2017; (2) conventional Banks that earn a net profit during the year of the study. Based on these criteria, the number of samples in this study was 82 of a conventional banks in Indonesia.

2.3 Operational definition of Variables and Measurement Scale
a) Change in Net Income, is the increase or decrease profit after tax obtained by conventional banks compared with the previous year. Change in net income is calculated by subtracting the net profit for the period now with the net profit of the previous period and then dividing by the earnings in the previous period. The scale of measurement of the variable change in net income using the ratio scale.
b) NPL is the ratio which indicates the ability of bank management in managing the problem loans provided by the bank. NPL is calculated based on the ratio between the number of non-performing loans compared with total loans disbursed. The scale of measurement of the variables NPL using a ratio scale.
c) IRR is the ratio that shows the business risk of the bank as a result of changes in market interest rates that afford the member a negative effect on bank earnings. IRR is calculated by comparing the Interest Sensitivity of Assets to the Interest Sensitivity Liabilities. The scale of measurement of the variable IRR using the ratio scale.
d) LDR is a ratio used to assess the ability of the bank to pay back the withdrawal of funds made by depositors to rely on credit as a source of liquidity. This ratio assesses the liquidity of a bank by dividing the amount of credit granted by the bank to third party funds. The scale of measurement of variables LDR using a ratio scale.
e) ROA is a ratio that measures the ability of banks to earn revenue from the use of the assets productive. ROA is the ratio between profit before tax to average total assets. The scale of measurement of the variables ROA using the ratio scale.

f) NIM is the ratio between net interest income, Interest Income (interest income earned) minus Interest expenses (the cost of bank interest, which become a load), divided by Average Interest Earning Assets (average earning assets). The scale of measurement of the variable NIM using the ratio scale.

g) ROA is the ratio used to assess the bank's management in the use of all factors of production effectively and efficiently. ROA is the ratio of the comparison between operating costs with operating income. The scale of measurement of the variables ROA using the ratio scale.

h) CAR is the ratio which shows how much assets of banks that contain risks (credit, investments, valuable fiber, bills on the other banks) also financed from the funds of the bank's own capital in addition to obtaining funds from sources outside the bank (public funds, loans or debts, and others). The Formula that the bank used as an indicator of the capital ratio is the ratio between the amount of capital by total risk-weighted assets. The scale of measurement of the variable CAR using a ratio scale.

2.4 Data Analysis Method

    a. Change in Profit

(Herlina dan Nur, 2014).

Keterangan:

ΔY_{it} = Change in net profit of the conventional bank in the period t

Y_{it} = The profit of bank i in period t

Y_{it-1} = The profit of bank i in period t-1

    b. Non-Performing Loan (NPL)

$$NPL = \frac{troubled\ credit}{total\ credit} x100\%$$

Source: SE BI 13/24/DPNP/2011

    c. Interest Rate Risk (IRR)

$$IRR = \frac{Interest\ Sensitivity\ Asset}{Interest\ Sensitivity\ Liabilities} x100\%$$

Source: SE BI 13/24/DPNP/2011

    d. Loan to Deposit Ratio (LDR)

$$LDR = \frac{Total\ Credit}{Third\ Party\ Fund} x100\%$$

Source: SE BI 13/24/DPNP/2011

    e. Return on Asset (ROA)

$$ROA = \frac{Earning\ before\ Tax}{Average\ Total\ Asset} x100\%$$

Source: SE BI 13/24/DPNP/2011

f. Net Interest Margin (NIM)

$$NIM = \frac{Net\ Interest\ Income}{Average\ Earning\ Assets} x 100\%$$

Source: SE BI 13/24/DPNP/2011

g. Operating Expenses to Operating Income/ Operating Efficiency Ratio (OER)

$$OER = \frac{Operating\ Expenses}{Operating\ Income} x 100\%$$

Source: SE BI 13/24/DPNP/2011

h. Capital Adequacy Ratio (CAR)

$$CAR = \frac{Own\ Capital}{Risk - Weighted\ Asset} x 100\%$$

Source: SE BI 13/24/DPNP/2011

2.5 Normality Test of Data
Normality test of data is used to determine whether the data used in the study has a normal distribution or not. Normality test of data is done by Kolmogorov Smirnov test because the study sample is more than 50. Significant level (α) used in this study is 5%. If p-value > α then H_0 is accepted (normal distribution of data). (Ghozali, 2006:114)

If there is an outliner among the data of the study and not a normal distribution, then data reparation using the method of dressing with intent is performed. The Data had normal distribution was tested with Kolmogorov-Smirnov test (if the amount of data more than 50). Z-Scores are used if the data remained not normally distributed. The Data that has been transformed in the form of a Z-Score assumed normal distribution.

2.6 Multiple Linear Regression Analysis
The regression equation in this study is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + e\acute{\imath}$$

Descriptions:
Y $\quad\quad\quad\quad\quad$ = Change in Net Income;
a $\quad\quad\quad\quad\quad$ = Constant
$b_1, b_2, b_3, b_4, b_5, b_6, b_7$ = regression coefficient
X_1 = NPL; X_2 = IRR; X_3 = LDR; X_4 = ROA; X_5 = NIM; X_6 = ROA; X_7 = CAR;
e$\acute{\imath}$ $\quad\quad\quad\quad\quad$ = the Level of error that may occur

2.7 The Classical Assumption Test
Multiple linear regression Model can be called as a good model if it meets the criteria of BLUE (Best Linear Unbiased Estimator). BLUE can be achieved when it meets the classical assumptions. Here is a variety of the classical assumption test that assumption BLUE met:

a. Multicollinearity Test

Multicollinearity means the existence of a linear relationship that is "perfect" or certainly among some or all of the variables from regression (Ghozali, 2006:91). To detect the presence of multicollinearity can be done by looking at the Variant Inflation Factor (VIF) and tolerance. If the value of VIF < 10 or the value of tolerance > 0.10 to, then it does not occur multicollinearity. Actions taken to address the occurrence of multicollinearity is the issue a variable that has a VIF > 10 as long as not lead to specification error or not do anything if the R2 is high and the F-count is significant.

b. Autocorrelation Test

Autocorrelation test is done to test whether in the regression model occurs the correlation between the confounding error in period t with the error in period t-1 (previous). A good regression Model is free from autocorrelation. Autocorrelations in this study was detected by using the test of Durbin Watson (DW). If there is autocorrelation the improvement made by using the method of Run test.

c. Heteroscedasticity Test

Heteroscedasticity test aims to test whether the regression model dissimilarity variants and the residual of one observation to another observation. if a variant of the residual one observer to the other observer remains then called homoscedasticity and if different variants are called heteroscedasticity. A good regression Model is no heteroscedasticity or variants such homoscedasticity. How to test the presence or absence of heteroscedasticity can be performed with the Glejser test, i.e. doing regression test the absolute value of the residuals against the independent variables. The level of significance (α) used is 5%. (Gujarati, 2006:187). if the value of significance (p-value) $> \alpha$, then such a regression does not happen heteroscedasticity. Repair is performed if heteroscedasticity is to use Weighted Least Square (WLS) which is a model of multiple linear regression where all the variables are the weights weighted.

d. Normality Test of Residuals

Normality test models done to see if the data is distributed normally or not. The Kolmogorov-Smirnov test is necessary to perform a normality test because of the number of research sample is more than 50. If p-value $> \alpha$ then H_0 is accepted (the data residuals normally distributed). If the data residuals are not normally distributed, then it can be done the transformation of data into natural logarithms (Ln).

2.8 Hypothesis Test

This study uses the hypothesis test t as the partial hypothesis test, while for the see how big the contribution of independent variables to the dependent variable used the coefficient of determination. If p-value > 0.05 then H_0 is accepted and H_a is rejected, however, if the p-value < 0.05, then H_0 is rejected and H_a accepted.

2.9 The Coefficient of Determination (R^2)

Testing is done to determine how much the independent variable has a contribution on the dependent variable. The value of determination coefficient is between 0-1. If the

value of the determination coefficient closer to 0 means that the ability of the independent variables in explaining the variation in the dependent variable is very limited. If the value of the coefficient of determination close to 1 means that the independent variables provide almost all the information needed to predict the dependent variable. (Gujarati, 2000:98)

3. Results and Discussion

3.1 Results
3.1.1 Normality Test of Data
Using the Kolmogorov-Smirnov Test for the normality test of data. Results of the test by using the Kolmogorov-Smirnov test showed that of the eight variables tested, five variables namely NPL, IRR, LDR, ROA, and NIM has a p-value greater than α = 5%, so H_0 is accepted (normal distribution of data), while the three other variables, namely the change of profit, ROA, and the CAR has a p-value smaller than α of 5%, so H_0 is rejected (data not normally distributed) so need to do a repair with the how to data transformation into the form of Z-score so that it becomes Z-score change in earnings, Z-score ROA, and Z-score CAR. After transformation of the data in the form of Z-score, all data is normally distributed and can be continued by performing a multiple linear regression analysis.

3.1.2 Multiple Linear Regression Analysis
The results of the multiple linear regression analysis as follows:

$$Y = 0{,}843 - 0{,}112X_1 - 0{,}189X_2 + 0{,}024X_3 + 0{,}127X_4 + 0{,}129X_5 - 0{,}013X_6 + 0{,}110X_7 + et$$

Based on the equations of multiple regression show that the variables X_1 (NPL), X_2 (IRR) and X_6 (ROA) is correlated to the negative/opposite of Y variable (change in net income), while the variable X_3 (LDR), X_4 (ROA), X_5 (NIM), and X_7 (CAR) correlate positive/clockwise direction of Y variable (change in net income).

3.1.3 The Classical Assumption Test
a. Multicollinearity Test
This test aims to test the correlation between the independent variables in a regression model judging from the value of tolerance and VIF. If the value of the tolerance> 0.10 or the VIF value<10, then it does not occur multicollinearity. Based on the Results of the test of multicollinearity show that all the independent variables in this study have a value of tolerance> 0.10 or the VIF value<10, so it can be stated that in the regression model does not occur multicollinearity.
b. Autocorrelation Test
Autocorrelation test aims to test whether in a linear regression model is no correlation between the confounding error in period now with the previous period. How to detect

the presence or absence of symptoms of autocorrelation is to use the Durbin-Watson test. If the results of the testing cannot be concluded then test the Run Test. The results of the Durbin-Watson test are displayed in Table 1.

Table 1: Result of Durbin-Watson Test

N	Model 1	Result
	Value of DW	1,470
	dL	1,80828
	dU	1,86765
	4-dU	2,13235
	4-dL	2,19172
	Conclusion	Hesitate

Source: data processed.

Based on Table 1. that the value of DW is equal to 1,470, means included in the area of hesitation so that needs to be done Run-Test to determine whether there is autocorrelation or not. After a Run-Test, the results of the significance are equal to 0,142 greater than the significance level of 5%, which means that there is no autocorrelation in the regression model.

c. Heteroscedasticity Test

This test aims to test the inequality of variance from residual of one observation to the observation of the other in a regression model. One way to determine the presence of heteroscedasticity is by using Glejser Test used in this study. The results of the Glejser Test that the p-value is greater than significance level of 5%, so Ho is accepted, which means that in the multiple linear regression model does not occur heteroscedasticity.

d. Normality Test of Residuals

Test normality of residuals aims to test the presence of confounding variables in the regression model or residual normal distribution. One way is to use the Kolmogorov-Smirnov test. The results of the Kolmogorov-Smirnov test are presented in Table 2.

Table 2: The Results of Normality Test of Residual

N	Unstandardized Residual	Result
321	Mean	0,0000
	Std.Deviation	35,956
	Kolmogorov-Smirnov Z	7,633
	Asymp. Sig. (2-tailed)	0,000

Source: data processed.

Based on the results in table 2 above shows that the data is not normally distributed. This is indicated by the value of the Kolmogorov-Smirnov at 7,633 and significance at 0.000 which is smaller than 0.05. This means that the data residual is not normally distributed, because the value of significance is less than 0.05. If the data the residual distribution is not normal then do the data transformation using natural logarithms

(Ln). The results of testing the normality of residuals with a transformation of the data natural logarithms indicated by the value of Kolmogorov–Smirnov amounted to 1,617 and is significant at 0,068 greater of than 0.05. This means that the data residual already normally distributed.

3.1.4 Hypothesis Test

Hypothesis test in this study using the t test. The t test is used to test whether the partial of each independent variable, namely NPL, IRR, LDR, ROA, NIM, OER, and the CAR there is a significant influence on the change in earnings. The results of the t test are presented in Table 3.

Table 3: t Test Results

N	Independent Variable	Coefficient	p-value
	NPL	-0.122	0.0165
	IRR	-0.189	0.0010
	LDR	0.024	0.3315
410	ROA	0.127	0.0380
	NIM	0.129	0.0205
	OER	-0.013	0.4125
	CAR	0.110	0.0460

Source: data processed

Based on the data in Table 3, the p-value of independent variables NPL, IRR, ROA, and NIM is smaller than the value of significance of 5%, which means H0 is rejected, in other words the variable NPL, IRR, ROA, NIM, and the CAR is a determinant of significant change in net profit of the conventional bank in Indonesia for the period 2013-2017. The independent variables LDR and OER has a p-value is greater than significant level of 5%, which means H0 is accepted, in other word variables LDR and OER is not a determinant of change in net profit of the conventional bank in Indonesia for the period 2013-2017.

3.1.5 The Coefficient of Determination (R^2)

Analysis the coefficient of determination is done to determine how much the independent variables in the model have contributed to the dependent variable. Based on the processing data that has been done, the value of R^2 is 0,060, which means the change in net income is only affected by 6% by the variables in the study while 94% is influenced by other things that are not included in the research.

3.2 Discussion

3.2.1 NPL determinants of change in net income

Based on the results of testing data on known variables NPL has a coefficient of -0,112 with a significance value 0,0165 smaller than the limit of significance of 0.05, then H0ditolak, meaning that the variable NPL is the determinant of the change of net profit of the conventional bank. The hypothesis stated that the NPL is the determinant of the

significant negative change in earnings received. The value of the coefficient of -0,112 means any increase in NPL by 1% will decrease the change in earnings amounted to 0,112%. NPLS and a significant negative effect means that an increase or decrease in the ability of a bank in managing problem loans effect on the rate of change of a conventional bank in the future.

The coefficient of NPL is negative indicates that the larger the NPL, the change in net income obtained will be smaller. The increase in NPLS will affect the change in net income, because the higher the NPL will be more worse credit quality banks that caused the credit crunch increasingly large, and therefore the bank should bear the loss in its operations so that the effect on change of net profit of the conventional bank. In other words that when the NPL is high then the level of retained earnings the bank is also high so it will lead to income down and also have an impact to the decrease of change in earnings. NPLS are low indicating the financial performance of the bank the better. This research is consistent with the results of research by Nu'man (2009) and Joko Susanto (2015) which proves that the NPL a significant negative effect on change in earnings, but it is not consistent with the research by Angbazo (1997) and Lilian (2010) prove that the NPL does not affect the change in earnings.

3.2.2 IRR determinant change in net income

The results showed that the variables of the IRR have a value of regression coefficient of -0,189 with a significance of 0.001, significance value is smaller than 0.05, So it can be concluded that the IRR is the determinant of the change in earnings of a conventional bank. The hypothesis which states that the IRR is the determinant of a positive significant change in earnings was rejected, because although the results are significant, IRR negative effect on change in earnings.

A negative sign on the coefficient of the variable IRR demonstrate that the increase in the value of the IRR, not followed by a rise in the value of the change in earnings. This happens because of competition the interest rates that increasingly fierce in the world of banking in Indonesia, which makes conventional banks tend to offer interest credit which is almost the same, with the adjustment of interest rates issued by Bank Indonesia. As a result of a conventional bank cannot take the policy to increase the interest credit is above average because the debtor will switch to a conventional bank with interest lower credit, so that interest income derived from loans of small that cause changes in earnings declined. This research is consistent with the results of the research by Kusumaningytas (2009) which proves that the IRR significant positive effect on change in earnings, but it is not consistent with the research results of Angbazo (1997) who prove that the IRR does not affect the change in earnings.

3.2.3 LDR determinant of change in net income

The results of the research show the value of the coefficient of 0,024 with the significance of 0,3315, the value of significant is greater than 0.05, So it can be concluded that the LDR is not the determinant of change in earnings of a conventional bank. The

hypothesis which states that the LDR is the determinant of a positive significant change in earnings was rejected. This research is consistent with the results of the research Kusumaningytas (2009), Andra (2012), and Aini (2013) which prove that the LDR does not affect the change in earnings, but it is not consistent with the results of research Nu'man (2009) and Lilian (2010) which proved that the LDR influence significantly influence the change in earnings.

Not the significance of LDR to changes in earnings because the income of conventional bank is not only derived from interest income on loans granted, but also resulting from commission-based income. Banks have started to move from just a focus on getting the income derived from lending to fee-based income, due to the fact at this time the customer need of ease in transactions, insurance, and investment. Thus, the loan interest income is not the only source of income of the bank, so that the LDR does not have much effect on the change in earnings of a conventional bank.

3.2.3 ROA determinant of change in net income

The results showed that the variable ROA has a value of regression coefficient of 0.127 with a significance of 0.038, which significance value is smaller than 0.05, so it can be concluded that the ROA is the determinant of the change in earnings of a conventional bank. The hypothesis that states that the ROA is the determinant of a positive significant change in earnings received. ROA has positive and significant effect meaning that an increase or decrease in the ability of a bank to manage the assets productive for the income-generating effect on the rate of change of a conventional bank in the future. The value of the coefficient of 0.127 means that each increase in ROA of 1% will raise the change in earnings of 0.127%.

There is positive influence between ROA with the change in earnings shows that any increase in the value of ROA in general will lead to increased profits for conventional banks conventionally, it means increasing the company's ability to generate profit will ensure that the change in earnings of a conventional bank will increase because ROA is a ratio that indicates how effectively a bank is operating so as to produce a profit/income to a conventional bank. This research is consistent with the results of the study the results of the research Kusumaningytas (2009) and Lilian (2010) which proved that the ROA significant positive effect on change in earnings, but it is not consistent with the research of Susanto (2015) proved that the ROA does not affect the change in earnings.

3.2.4 NIM determinant of change in net income

The results showed that the variable NIM has the value of regression coefficient for 0,129 with the significance of 0,0205, the value of significance is smaller than 0.05, So it can be concluded that NIM was a determinant of change in earnings of a conventional bank. The hypothesis which states that NIM is the determinant of a positive significant change in earnings received. The value of the coefficient for 0,129 means any increase in NIM by 1% will raise the change in earnings for 0,129%

The results of this study show that the ability of management of a conventional bank in managing earning assets to generate net interest income even greater. The greater NIM showed more effective in managing the bank's assets productive, so the greater the interest income earned and the effect on the increase in change in earnings or in other words, the greater the NIM, the greater the change in net profit of the conventional bank so that NIM has a positive effect on change in earnings.

This research is consistent with research results of Angbazo (1997), Abdul (2011), Andra (2012), and Nur Aini (2013) which proves that NIM significant positive effect on change in earnings. but it is not consistent with the results of research nu'man (2009), Aditya (2009), and Lilis (2010) which proved that the NIM does not affect the change in earnings.

3.2.5 OER determinant of change in net income
The results showed that the variable OER has a value of regression coefficient of -0,013 with the significance of 0,4125, the value of significance is greater than 0.05, So it can be concluded that OER is not a determinant of change in earnings of a conventional bank. The hypothesis that states that the OER is the determinant of the significant negative change in earnings is rejected. This research is consistent with the results of the study Nu'man (2009), Lilian (2010), which proves that the OER does not affect the change in earnings, but it is not consistent with the results of research, Andra (2012), Aini (2013), and Susanto (2015) proved that the OER significant negative effect on change in earnings.

OER did not significantly influence the change in earnings. This condition occurs because of the increased operating costs of banks which are not accompanied with operating income that is large. This is indicated by the low value of the credit, thereby lowering interest income. Low credit caused by the conventional banks that prefer to invest their funds on investment with lower risk than the credit, i.e. the SBI, so that earned income is also lower compared to the interest income obtained from loans. When a bank is not able to obtain greater earnings as a result of investing in investments with a lower risk of making the income received is only able to cover the cost of operating existing and does not have much effect on the change in earnings.

3.2.6 CAR the determinant of the change in net income
The results showed that the variable CAR has a value of regression coefficient of 0,110 with the significance of 0,046, so it can be concluded that the CAR is the determinant of the change in earnings of a conventional bank. The hypothesis that states that the CAR is the determinant of a positive significant change in earnings received. The results of this study are consistent with the results of research Kusumaningtyas (2009), Aini (2013), and Susanto (2015) which proves that the CAR significant positive effect on change in profit, but not consistent with research Nu'man (2009) and Lilian (2010) which proved that the CAR does not affect the change in earnings.

Bank Indonesia regulation that requires CAR a minimum of 8% result in the conventional bank always strives to keep the CAR held in accordance with the provisions, so that banks invest their funds carefully and more emphasis on the survival of a conventional bank. This is indicated by the lack of lending by a conventional bank and prefer to buy SBI with a smaller risk, so that the value of RWA low and the value of the CAR remain at large. In the end the value of the CAR this great influence to the changes of income of a conventional bank.

4. Recommendations

4.1 Conventional Bank
Conventional banks in Indonesia need to revisit the value of NIM, which is under the minimum limit set by Bank Indonesia amounted to 6%. NIM indicates the size of the performance of a conventional bank in managing the assets of the productive to produce net interest income. The greater the value of NIM that is achieved then the greater the net interest income so that the change in earnings increased. The value of NIM from year to year need to be improved to match the standards of Bank Indonesia.

4.2 Potential Investors and creditors
This study can provide information for potential investors and creditors, that the variable NPL, IRR, ROA, and NIM is the determinant of the change of net profit of the conventional bank in Indonesia for the period 2013-2017.

4.3 Further Research
Further research can use the variables that are associated with the management because, however, the funding policy related to management policies as well as consider other factors outside the financial statements, such as inflation, interest rates, and the size effect.

5. Conclusion

The purpose of this study is to analyze the changes in net profit of the conventional bank in Indonesia in the period of 2011-2015. Based on the results of data analysis have been outlined in previous chapters, some conclusions can be drawn below:
  a) NPL determinants of significant negative changes net profit of the conventional bank.
  b) The IRR is the determinant of the significant negative changes net profit of the conventional bank.
  c) LDR is not a determinant of significantly to changes in the conventional bank's net profit.
  d) ROA determinants positive significant to changes in net profit of the conventional bank.

e) NIM determinants positive significant impact on changes in net profit of the conventional bank.

f) ROA is not a determinant to changes in net profit of the conventional bank.

g) CAR the determinant of a positive impact on change in net profit of the conventional bank.

About the Author(s)

Author was born on 14th January, 1969 in Trenggalek Districts, East Java Province, Indonesia. Since taking undergraduate education at Widya Gama University, Author has been interested in the field of financial management. That's why Author also took the finance concentration at the master and doctoral level at Airlangga University. Author has obtained the doctoral degree since 2002.

Currently, Author is one of the lecturers in Department of Management, Faculty of Economics and Business, University of Jember, East Java. Author has research interest in the field of finance and banking associated with the bank's health, corporate social responsibility (CSR) of the bank, and so forth.

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