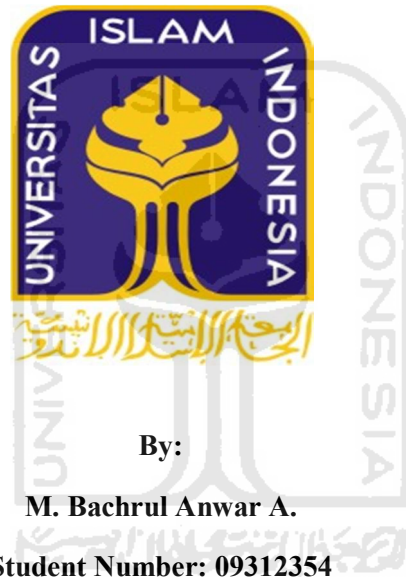


**The Analysis of the Influence of Capital Adequacy Ratio, Non Performing Loan,
Third Party Fund Growth, Inflation Rate, and Exchange Rate toward
Loan to Funding Ratio (A Case study of Commercial Banks
Listed in Indonesia Stock Exchange)**

Presented as a Partial Fulfillment of the Requirements
To Obtain the Bachelor Degree in Accounting Department



**DEPARTMENT OF ACCOUNTING
INTERNATIONAL PROGRAM
FACULTY OF ECONOMICS
UNIVERSITAS ISLAM INDONESIA**

2017

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A BACHELOR DEGREE THESIS

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Defended before the Board of Examiners

On, 18th of January 2017

And Declared Acceptable

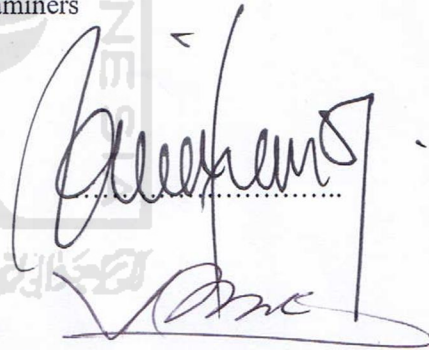
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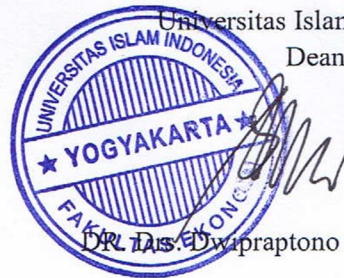


Yogyakarta, 18th of January 2017

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Dean



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DECLARATION OF AUTHENTICITY

Herein I declare the originality of the thesis; I have not presented anyone else's work to obtain my university degree, nor have I presented anyone else's words, ideas or expressions without acknowledgments. All quotations are cited and listed in the bibliography of the thesis.

If in the future this statement is proven to be false, I am willing to accept any sanction complying with the determined regulation or its consequence.

Yogyakarta, 18th of January 2017


M. Bachrul Anwar A



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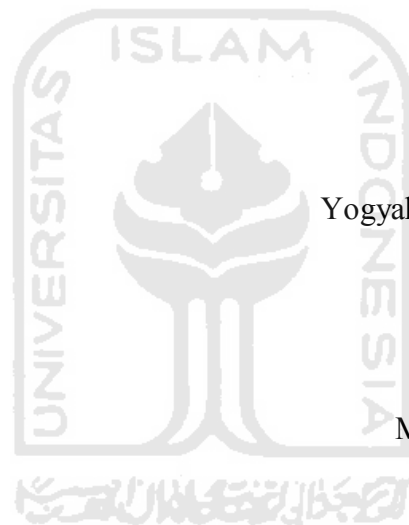
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Yogyakarta, January 13, 2017

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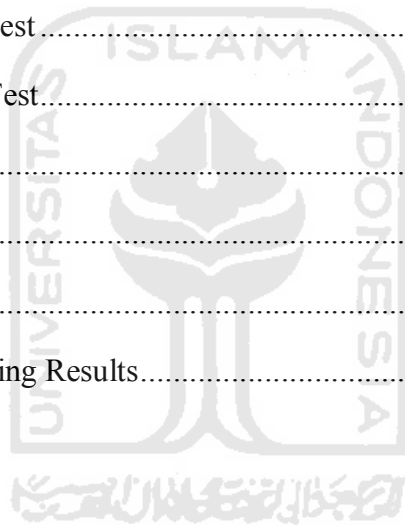
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ABSTRACT

The purpose of this research is to analyze the influence of Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Growth of Third Party Fund, Inflation Rate, and Exchange Rate towards Loan to Funding Ratio (LFR) of Listed Public Banks in Indonesia. The sample of this research consisted of twenty one Commercial Banks, which consisted of four state owned banks and seventeen foreign exchange commercial banks, and selected by using purposive sampling method as the sample determining method. Data are taken from respective bank's Annual Reports and weekly monetary rates which was released by Bank Indonesia for the period of 2011-2015. The analysis methods were multiple regressions with dummy variable and also classical assumption tests such as normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. The result of the research by using F test showed that two of the five independent variables, CAR and growth of third party fund with the significance level of 0.014 and 0.020 had a positive significant influence toward Loan to Funding Ratio while NPL, Inflation Rate, and Exchange Rate had a positive but not significant influence with the significance level of 0.413, 0.297, 0.202 respectively.

Keyword: Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Inflation Rate, Growth of Third Party Fund, Exchange Rate, Loan to Funding Ratio (LFR)

ABSTRAK

Penelitian ini bertujuan untuk meneliti pengaruh Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Pertumbuhan Dana Pihak Ketiga, Inflasi, dan Nilai Tukar terhadap Loan to Funding Ratio (LFR) bank umum yang tercatat di Indonesia. Sampel penelitian terdiri dari 21 bank komersil yang terdiri dari 4 bank umum milik Negara dan 17 bank konvensional dan dipilih menggunakan pemilihan sampel purposif. Data diperoleh dari laporan tahunan bank dan laju moneter mingguan Bank Indonesia dalam periode 2011 sampai 2015. Metode analisa yang digunakan adalah metode regresi berganda dengan variable dummy dan uji asumsi klasik yang meliputi uji normalitas, uji multikolonieritas, uji heteroskedastisitas, dan uji autokorelasi. Hasil penelitian menggunakan F test menunjukkan bahwa 2 dari 5 variable independen, CAR dan pertumbuhan dana pihak ketiga dengan tingkat signifikansi 0.014 dan 0.020, berpengaruh positif signifikan terhadap Loan to Funding Ratio (LFR) sedangkan NPL, Inflasi, dan Nilai Tukar berpengaruh positif tidak signifikan dengan tingkat signifikansi masing masing 0.413, 0.297, dan 0.202.

Kata Kunci: Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), Inflasi, Pertumbuhan Dana Pihak Ketiga, Exchange Rate, Loan To Funding Ratio (LFR)

CHAPTER I

INTRODUCTION

1.1 Study Background

UU No. 10 Year 1998 pertaining to banking stated that Bank is a business entity which collects fund in the form of deposit and distributes it to people in the form of credit and other banking instruments in order to increase the standard of living in society.

Casu, Girardone, and Molyneux (2006) elaborated on Bank description as a financial intermediary whose core activity is to provide loans to borrowers and to collect deposits from savers. In other words, they act as intermediaries between borrowers and savers.

By carrying out the intermediation function, banks collect surplus funds from savers and allocate them to those (both people and companies) with a deficit of funds (borrowers). In doing so, they channel funds from savers to borrowers thereby increasing economic efficiency by promoting a better allocation of resources (Casu, Girardone, and Molyneux, 2006). Aside from its known basic functions, bank also performs additional services such as brokerage services and securitization.

While in hindsight, transaction seemed viable to be done directly without bank's intermediary, the actual risks, costs, and possible conflict of interests between lender and borrower involved are far surpassing the expected profit and deemed unfavorable. Therefore some kind of financial intermediation with strong

financial backing and high credibility is needed to bridge the gap between parties involved. Casu, Girardone, and Molyneux (2006) explained that bank minimizes the cost and risk presents in direct financing between lenders (customers) and borrowers by the assurance of safety and liquidity for their deposits. At the same time bank also intermediates their clashing financial interests, simultaneously provides the former with minimization of risk, cost, and assured liquidity while provides the latter with funds at particular specified date, for a specific period of time, and at the lowest possible cost manageable.

As a highly regulated body whose services are providing financial assurances, bank needs to maintain its combined capital relevant to its risk-weighted assets, such as mortgage and car loan. This is done in order to cushion possible losses and remain solvent.

Malayu (2002) categorized bank funds as follow:

1. Loanable Funds, funds used as credit as well as secondary reserves and securities
2. Unloanable Funds, funds that can only be used as primary reserves
3. Equity Funds, funds that can be allocated to fixed assets – Inventory and its inclusion

These funds are originated from two sources, internal and external fund. Internal fund is permanent funds originated from the bank itself such as capital deposit/stock selling, reserves, retained earnings, etc. while external fund is an

interim fund originated from third party such as deposit, current accounts, and call money.

As stated in UU No.10 Year 1998 pertaining to banking, offering credit is one of the main businesses of the commercial banks. The magnitude of credit being distributed will determine bank's profit (Kasmir, 2004). According to Malayu (2002) the function of credit offering for the society are as a motivator for business and economy, increasing job market for people, accelerating flow of goods and capital, increasing productivity, increasing the enthusiasm of entrepreneurship, as well as enhancing entity's working capital. While the commercial banks exercising their purpose of gaining interest income from credit, utilizing current loan able funds, performing bank's operational activities, fulfilling credit demands, adding entity's working capital, as well as contributing society's income and welfare.

Loan to Funding Ratio (LFR) is a bank's statistical benchmark representing its ability to cover any future fund requirement. According to Sartono (2001), a higher loan to funding ratio implies that bank loaned the majority of its fund or become illiquid. While lower loan to funding ratio is caused by bank's decision to put the majority of its fund to financial instruments such as state bonds, Bank Indonesia Certificates (SBI), and an increase in default credit.

Dendawijaya (2003) explained that capital adequacy ratio is a ratio that shows to what extent bank's assets which have inherent risk such as credits,

equity participation, and bonds are funded by its internal fund in addition to procure funds from external sources such as deposits and loan. Higher capital adequacy ratio value indicates that bank has enough capital to cushion credit risks while maintaining its day to day operation.

In order to support and expand its main operation, it is necessary for bank to amass fund from external parties. Third party fund is employed to increase the overall capital and bank's capacity to grant loan. Dendawijaya (2003) defines third party fund as a fund in the form of customer deposits. Bank can utilize fund from third party to be allocated in accounts which generates income for bank. The growth of third party fund can lead to the increase of credit which in turn will elevate loan to funding ratio.

Dendawijaya (2003) explained that default credits are caused by two factors, banking side and customer side. Default credit can be measured by its collectability which is a percentage of default credit to total credit distributed by bank. A high level of default credit can develop bank aversion to distribute credit and conversely decrease the amount of credit given by bank which in turn will affect loan to funding ratio.

Another Factor that can affect banking activity is inflation. Dornbus & Fischer (1997) explains the impact of inflation among others are disrupting money value/function, increasing the tendency to spend, and decreasing the priority to save money, saving withdrawal and money accumulation, price fixing, wealth

hoarding and non productive investment, unstable and less concentrated goods distribution.

Aside from inflation, according to Sukirno (2004), one of the measuring tools used to value the firmness of an economy is exchange rate. A nation currency can undergo an increase and decrease in value. Sukirno (2004) exhibits two ways of foreign currency valuations which are based on said currency demand and offer as well as government valuation. The increase of foreign exchange rate, in this case USD to IDR, will have an effect on public interest to exchange their money to US dollar by withdrawing their saving and in turn decrease the overall banking supply. This event can lessen bank ability to perform its main activity of distributing loan and decreasing loan to funding ratio.

This thesis is a replication research of Nandadipa in 2010 titled The Analysis of The Effect of Capital Adequacy Ratio, Non Performing Loan, Third Party Fund Growth, Inflation, and Exchange Rate on Loan to Deposit Ratio of Public Bank stands in Indonesia. The differences are in the data taken and length of the research period.

1.2 Problem Formulation

Five independent variables namely Capital Adequacy Ratio, Non Performing Loan, Inflation Rate, Third Party Fund Growth, and Exchange Rate will be used to measure its influence to bank's Loan to Funding Ratio which regulated at the minimum ratio of 78% as per Bank of Indonesia regulation No.

17/11/PBI/2015 regarding the minimum saving account requirements for conventional banks.

Based on the above explanation the problem formulation are as follows:

1. Does Capital Adequacy Ratio influence Loan to Funding Ratio?
2. Does Non Performing Loan influence Loan to Funding Ratio?
3. Does Inflation Rate influence Loan to Funding Ratio?
4. Does Third Party Fund Growth influence Loan to Funding Ratio?
5. Does Exchange Rate influence Loan to Funding Ratio?

1.3 Research Limitations

The research limitations are as follows:

1. This research only includes banks listed in BEI within 5 years limitation between 2011 and 2015.
2. This research only includes specific target groups of listed banks which are State Owned Bank (BUMN) and Private Commercial Bank Foreign Exchange (BUSN).

1.4 Research Objectives

The aims of this research are as follows:

1. Re examine the consistencies of previous replicated research by Nandadipa (2010) using only Listed Banks as the sample.

2. Examining the influence of Capital Adequacy Ratio on Loan to Funding Ratio
3. Examining the influence of Non Performing Loan on Loan to Funding Ratio
4. Examining the influence of Third Party Fund Growth on Loan to Funding Ratio
5. Examining the influence of Inflation on Loan to Funding Ratio
6. Examining the influence of Exchange Rate on Loan to Funding Ratio

1.5 Research Contributions

This research is expected to bring contribution and hopefully some benefits such as:

1. To contribute new evidence for previous related researches regarding the influence of Capital Adequacy Ratio, Non Performing Loan, Inflation Rate, Third Party Fund Growth, and Exchange Rate to Loan to Funding Ratio.
2. To increase knowledge on bank's financial management and anything related to it especially things related to Loan to Funding Ratio.

1.6 Systemic Writing

Chapter I: INTRODUCTION

This chapter describes study background, problem formulation, problem limitations, research objectives, research contributions and systemic writing.

Chapter II: REVIEW OF RELATED LITERATURE

Second chapter contains review of related literature and hypothesis formulation, existing prior studies, hypothesis, as well as research model of the thesis presented.

Chapter III: RESEARCH METHOD

Third chapter provides explanation about research method that includes description about population and sample, types of data, data collecting method, research variables, and data analysis method.

Chapter IV: DATA ANALYSIS AND DISCUSSIONS

Fourth chapter demonstrates the process of testing the hypotheses formulated by the means of data analysis as well as discussions of the results.

Chapter V: CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Fifth chapter discusses about the conclusions, implications, and recommendations based on data analysis and discussions.

CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 Theoretical Review and Framework

2.1.1 Loan to Funding Ratio (LFR)

Loan to funding ratio is a financial ratio used in banking industries to measure up the liquidity aspect of bank performances. The ratio compares between all the credits loaned by bank and funds received by the bank (Dendawijaya, 2003).

Total deposit received will influence how much loan can the bank gives which in turn will affect the said ratio itself (Dendawijaya, 2003). According to Dendawijaya (2003), Funds received by the bank can be categorized as follows:

1. First Party Fund

First Party Fund is originated from shareholders or bank owners such as paid up capital, reserves, and retained earnings.

2. Second Party Fund

Fund originated from outside party such as loan from the other bank or financial institution, loan from foreign bank or financial institution, and loan from central bank.

3. Third Party Fund

Fund originated from both individual and business entity through bank's saving instrument offered. Third Party Fund is amassed in the form of checking accounts, time deposits, and savings.

High ratio implies that bank loaned its entire fund or relatively not liquid. Conversely, low ratio implies that bank is liquid with over abundance of fund capacity which is ready to be loaned. Therefore, this ratio can be a signal whether a loan can be expanded or should be limited. If bank have significantly low ratio, it would have difficulties to cover user's savings with the current credit, which burden the bank with huge savings interest while loan interest received by bank is low. If bank has high loan to funding ratio, bank will risk a high frequency of default loan which at certain point will make bank goes bankrupt (Susilo, 2000).

2.1.1.1 Factors Affecting Loan to Funding Ratio

While accumulating fund, bank should consider the risk in managing the equilibrium between the distribution of credits and third party fund listed as follows (Imam Rusyamsi in Nasiruddin, 2005):

1. Capital Adequacy Risk
2. Credit Risk, and
3. Interest Risk

Fund amassed by bank have different characteristics whether it is long term, cost, and other source of fund (Dendawijaya, 2003):

1. Pool of Funds, in this theory fund amassed by bank is treated as the only fund without considering the nature of each component of fund. This singular fund is probably allocated for many purposes according to the fund utilization strategy.

2. Asset Allocation, in this theory fund is treated according to its nature and characteristics.

To maintain liquidity ratio in order to fulfill its obligation to all parties/users bank applied the following theories (Nasiruddin, 2005):

1. Commercial Loan Theory, bank liquidity will be guaranteed when its productive assets are in the form of liquidating short term credit.
2. Asset Shiftability Theory, liquidity can be maintained when bank's assets can be directly converted into a more liquid assets according to its need like securities.
3. Doctrine of Anticipated Income Theory, liquidity can be maintained whether bank distribute long term credit when the principal and loan interests are well planned and well adapted to debtor's earnings.

2.1.2 Capital Adequacy Ratio (CAR)

Capital Adequacy Ratio is base capital that should be fulfilled by bank. The main factor affecting the amount of bank capital required is the minimum amount determined by a monetary authority which is the authority of Central Bank. This institution has the responsibility to equalize banking system as a whole by arranging clauses including funding requirement, obligatory liquidity, and other clauses with care and forethought (Siamat, 2003).

Other opinion by Siamat (2003), which is the calculation of capital adequacy based on risk-weighted assets. Asset mentioned in the calculation

covers assets listed in Statement of Financial Position or assets with administrative trait as reflected in liabilities which still have the contingent attribute and or a commitment contract provided by bank to third parties. Each asset is assigned with a weighted risk where the value is based on level of risk contained in the respective assets or weighted risk based on type of customer, guarantor or the nature of the collateral (Siamat, 2003). Susilo (2007:23) explained that capital adequacy is an important factor for bank in its business development and accommodating default risk. Bank Indonesia defines capital adequacy ratio as the obligatory minimum capital provision which should always be maintained by every bank as a certain proportion from its total risk-weighted assets.

According to Siamat (2003), the functions of bank's capital are providing protection to the customer, preventing bankruptcy, fulfilling the regulation of minimum capital, increasing customer confidence, covering loss from bank's earning assets. A research by Pramono (2006) regarding the effect of capital (Capital Adequacy Ratio) toward credit distribution shows that capital adequacy ratio has a negative significant effect on Loan to Funding Ratio. Laksana (2006) investigated the effect of Capital Adequacy Ratio towards the credit growth of governmental banks with the result that Capital Adequacy Ratio has a positive significant effect on credit growth.

2.1.2.1 Relationship between Capital Adequacy Ratio and Loan to Funding Ratio

According to Siamat (2003), one of the functions of bank's capital is to fulfill the minimum capital requirement, the extent of capital adequacy is very important for bank to distribute its credit. Capital Adequacy Ratio represents Bank's Tier 1 and Tier 2 capital combined to cushion or absorb risk from bond and loan which varied depending on the valued inherent risk within the bond or loan. A healthy ratio needs to be maintained so that bank can continue its main activities, especially related to allocating funds or provide loans, as intended thus maintaining the Loan to Funding Ratio to not fall below the minimum threshold of 78%.

Therefore, a hypothesis can be concluded as follow:

H1: Capital Adequacy Ratio has a positive effect on Loan to Funding Ratio

2.1.3 Non Performing Loan

According to Dendawijaya (2003), credit default is resulted from these factors:

1. Bank side

Credit analyst does not thoroughly check the originality and authenticity of the documents as well as a miscalculation in predicting the ratios.

2. Customer side

A default credit from Customers side can be categorized as intentional and unintentional.

Dendawijaya (2003) expressed the effect of unnatural Non Performing Loan as follow:

1. Opportunity loss in gaining income from distributed credits which in turn decrease profit and the ability to grant/distribute more credit.
2. Ratio of earning assets quality will increase which portrays a deteriorating financial situation.
3. Bank should increase the allocation for earning assets which is classified according to the applied rules which in turn will decrease the size of bank's capital.
4. Reduce the bank's health according to bank health calculation by using CAMELS analysis.

2.1.3.1 Relationship between Non-Performing Loan and Loan to Funding Ratio

As stated by Dendawijawa (2003), an inappropriately addressed Non Performing Loan can undermine the overall bank's health by decreasing bank's capital to fulfill earning assets reserved according to the abided standard. A loan is non-performing when payments of interest and principal are past due by 90 days or more, or at least 90 days of interest payments have been capitalized, financed or delayed by agreement, or payments are less than 90 days overdue, but there are

other good reasons to doubt that payments will be made in full. The decrease in total capital will impair bank's capabilities of granting credits and gaining income. Hence, a hypothesis can be withdrawn that:

H2: Non-Performing Loan has negative effect on Loan to Funding Ratio.

2.1.4 Third Party Fund Growth (TPF Growth)

Third Party Funds which consist of demand deposit, time deposit, and savings are fund that comes from public. Allocating credit that comes from the amassed fund from the customer's deposit is bank's main activity which supports the economy and increases revenue. According to Siamat (2004), Bank's biggest revenue proportion derives from the interest revenue from credit allocated. Whereas the amount of credits allocated are funded from its own capital, loan from other institution, and third party or customers. Kasmir (2004) also explains that third party fund has the biggest contribution from other funding source making the amount of fund amassed by a bank affected its ability to allocate more credits.

2.1.4.1 Relationship between Third Party Fund Growth and Loan to Funding Ratio

Third party fund is a capital in the form of customer's deposit. Casu, Girardone, and Molyneux (2006) explained that Portfolio theory aims to show that by holding a diversified array of securities, the risk of making a loss on the investment can be reduced. Accordingly, bank will utilize the fund by allocating it

to profit generating accounts such as loan. The increase in Third Party Fund will affect Bank's capacity to provide Loan and therefore Third Party Fund Growth has a direct relationship to increase bank's Deposits / external fund subsequently its capacity to allocate loans. Therefore, a hypothesis can be concluded as follow:

H3: Third Party Fund Growth has positive effect on Loan to Funding Ratio.

2.1.5 Inflation Rate

Generally discussed, Inflation is the increase in price index of goods and services in a certain period. A price index constructed by weighting each price according to the economic importance of the commodity in question (Samuelson & Nordhaus, 2009).

Dornbus & Fischer (1997) explained the effect of inflation as follows:

1. Disrupting money value/function
2. Increasing the tendency to spend
3. Decreasing the priority to save money
4. Saving withdrawal and undeposited money accumulation
5. Price fixing
6. Wealth hoarding and non productive investment, and
7. Unstable and less concentrated goods distribution

2.1.5.1 Relationship between Inflation Rate and Loan to Funding Ratio

According to Dornbus & Fischer (1997) some of the effects of inflation are the reluctance to save money and tendency to withdraw money from banks which lessen the amount of deposit during the high inflation period.

Casu, Girardone, and Molyneux (2006) also argued that despite the recovery after the recent financial collapse and market resiliency to financial shocks, various emerging countries have experienced a rapid growth in household credits and an increase in property prices. Therefore, a hypothesis can be concluded:

H4: Inflation has negative effect on Loan to Funding Ratio.

2.1.6 Exchange Rate

Foreign exchange rate is the price of one currency in terms of another currency. The foreign exchange rate is determined in the foreign exchange market, which is the market where different currencies are traded (Samuelson & Nordhaus, 2009).

As banking markets become more global, the importance of international activities in the form of foreign direct investment and foreign portfolio investments has increased sharply. However, the actual return the bank earns on foreign investment may be altered by changes in exchange rates. A change in the value of a country's currency is relative to the other currencies that affect the foreign exchange rates. Like other prices, exchange rates (that essentially reflect the price of currencies) tend to vary under supply and demand pressure.

Foreign exchange relates to money denominated in the currency of another nation or group of nations. Any firm or individual that exchanges money denominated in the 'home' nation's currency for money denominated in another nation's currency can be said to be acquiring foreign exchange.

2.1.6.1 Relationship between Exchange Rate and Loan to Funding Ratio

While bank may obtain profit from setting the exchange rate at its bid and offer level, a research by Sahminan & Edward (2008) exhibited that exchange rate depreciation resulted in a high probability of bank failure through a reduced profit of lending in foreign currency.

A bank may be willing to take advantage of different interest rates or margins in another country, or simply to invest abroad in a currency other than the domestic one. A bank that lends in a certain currency depreciates more quickly and its home currency will be a subject to foreign exchange risk. An increased risk in foreign exchange investment may increase the overall risk of bank's portfolio (Casu, Girardone, & Molyneux, 2006). Therefore, the hypothesis can be concluded as follow:

H5: Exchange rate has negative effect on Loan to Funding Ratio

2.2 Existing Prior Studies

1. Research done by Pramono (2006) about the effect of Capital, Liquidity, and Efficiency toward credit allowance in PT Bank Rakyat Indonesia Tbk. (Persero) with 5 years observation from 2001 to 2005 concluded that CAR, GWM, BOPO simultaneously had negative significant effect on Loan to Funding Ratio.
2. Research entitled Banking's Credit Growth: Intermediation and the Influence of Macro Economy Variables by Haryati (2009) within the period of 2005-2008 used variables such as Excess Liquidity Growth (GEL), Third Party Funds Growth (GDPK), Credit Union Fund - Growth (GPD), Equity Growth (GEk), Bank of Indonesia rate (BI Rate), inflation, and Exchange Rate. In national bank category, GDPK and GPD had a positive significant influence on credit growth while GEK had positive but not significant influence. Meanwhile, the macro economy variables, BI Rate and Exchange Rate had negative significant influence on credit growth whereas Inflation had positive significant influence toward credit growth. In Foreign – Joint-venture bank category, GDPK, GPD, GEk had positive significant influence on credit growth while the macroeconomic variables namely BI Rate, Inflation and Exchange Rate had no significant influence on credit growth.
3. Research done by Maharani & Sugiharto (2007) was entitled The Influence of Inflation, Exchange rate IDR to USD, and Bank Indonesia Certificates Rate (SBI Rate) towards Bank financial Ratios (ROA, ROE,

and LFR) within the period of 2002-2006. The results were variables included (Inflation, Exchange Rate (IDR to USD), and SBI Rate which had no significant influence toward Loan to Funding Ratio.

4. Sudirman (2003) did a research about factors that influence the decrease of Bank's Loan to Funding Ratio (LFR) in Bali between the period of first quarter of 2001 to second quarter of 2002, a case study of conventional bank and people's credit bank (BPR) in Bali province. The results showed that in BPR, Additional Paid in Capital coverage towards credit, Provision for Loan losses (PPAP) toward Mandatory Provision for Loan losses (PPAPWD), Supplementary Capital, and Deposit Rate had negative significant influence toward Bank's loan to funding ratio decrease while Deposits in other banks and Saving account rate variables had positive significant influence toward Bank's loan to funding ratio decrease in Bali.

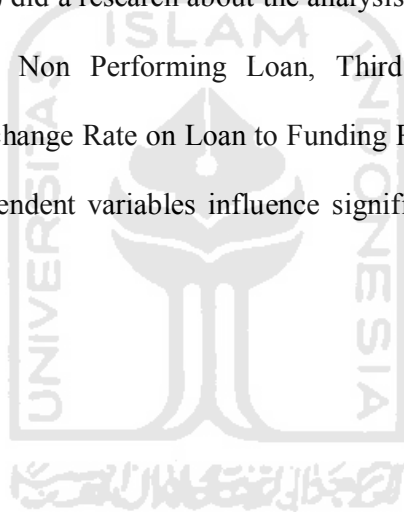
In conventional bank case, variables such as Time deposit rate, Credit rate, deposits in other banks, Bank reinvestment, and deposit rate had positive significant influence toward Bank's LFR decrease while Bank Indonesia Certificates Rate (SBI Rate), previous Third party Fund, PPAP to PPAWD ratio, and Add. Paid in capital coverage variables had negative significant influence toward Loan to Funding Ratio decrease.

5. Research by Mongid (2008) concerning the influence of Monetary policy toward national banking credit within the financial crisis period demonstrated that BI rate had negative significant influence toward credit allowance, DPK Growth, and exchange rates according to 1997 exchange

rate, and change in base money had positive significant influence toward credit allowance.

6. A paper by Haas & Lelyveld (2006) was entitled Foreign Banks and Credit Stability in Central and Eastern Europe. They did a researched about the effect of GDP, Inflation, and Lending Rate in relation to Credit Growth in national and foreign banks within Central and Eastern Europe. The result showed that in national banks, GDP, Inflation, and Lending Rate had negative significant influence toward credit growth as opposed the results in the case of foreign banks where GDP, Inflation, and Lending rate had no significant influence toward credit growth.
7. Kristijadi & Laksana (2006) in their research entitled The Influence of Third Party Fund Growth, Deposit in Other Banks Growth, Bank Indonesia Certificates Rate (SBI Rate), and Capital Adequacy Ratio in State Owned Banks within the period of 2002-2004 showed that Third Party Fund Growth, Deposit in other banks growth, Bank Indonesia Certificates Rate (SBI Rate), and Capital Adequacy Ratio had positive significant influence in relation to Credit Growth.
8. Nasiruddin (2005) in his research showed the effect of Capital Adequacy Ratio, Non Performing Loan, and Prime Lending Rate toward Loan to Funding Ratio in Rural Bank within the Working Area of Indonesia Central Bank, Semarang. The result indicated that Capital Adequacy Ratio had a positive significant effect on Loan to Funding Ratio while Non Performing Loan had negative significant effect on Loan to Funding Ratio.

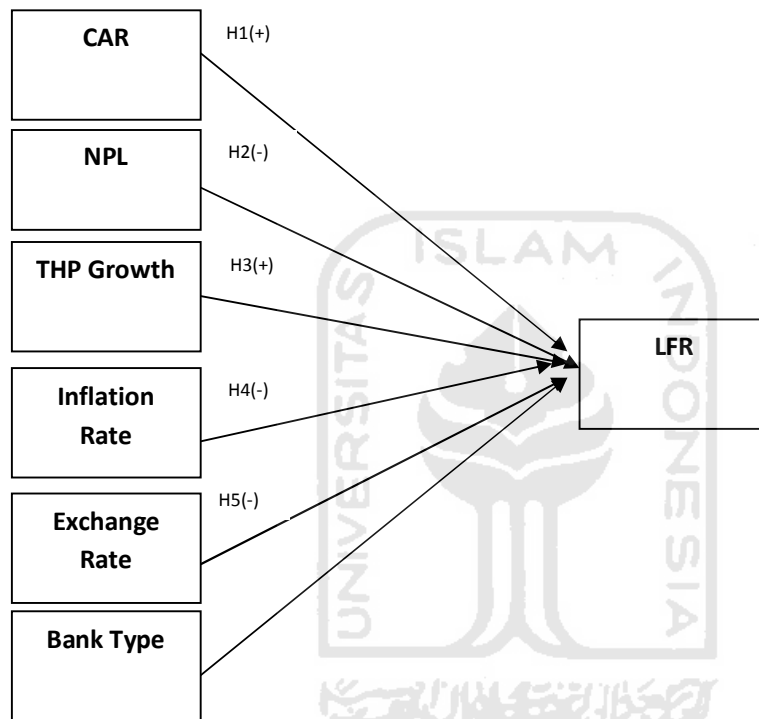
9. Fransisca & Siregar (2008) did a research about the effect of Third Party Fund, Capital Adequacy Ratio, Return on Asset, and Non Performing Loan toward Credit Volume of Go Public Bank within 2005-2007 year period. The result indicated that Third Party Fund and Return on Asset had a positive significant effect toward credit volume. Capital Adequacy Ratio had positive but insignificant effect on credit volume while Non Performing Loan had negative and insignificant effect on credit volume.
10. Nandadipa (2010) did a research about the analysis of the effect of Capital Adequacy Ratio, Non Performing Loan, Third Party Fund Growth, Inflation, and Exchange Rate on Loan to Funding Ratio. It showed that all of the five independent variables influence significantly toward Loan to Funding Ratio.



2.3 Research Model

Based on the hypotheses above, the research model is as follows:

Figure 2.1 Research Model



CHAPTER III

RESEARCH METHOD

3.1 Type of Study

A research required accurate data and proper data collection method. This research was a quantitative research by using secondary data obtained indirectly from the public. Sample selection was based on the purposive sampling method with the purpose of providing sufficient information based on the characteristics of the population represented by the sample.

3.2 Population and Sample

3.2.1 Population

According to Sekaran (2000), the definition of population is the entire group of people, events or things of interest that the researcher wished to investigate. The population of this research is bank in Indonesia. The data collected were from the bank listed in Indonesia Stock Exchange (IDX). The result showed that 38 banking industries were listed in the end of 2015.

3.2.2 Sample

According to Sekaran & Bougie (2009), the definition of sample is a subset of population. It comprises some members selected from the population. In other words, some elements of the population will form the sample. The sampling method used in this research was purposive sampling method. Purposive sampling method is a method by obtaining information from specific target groups (Sekaran, 2000). In this research, the specific target groups were State Owned

Bank and National Private Commercial Bank Foreign Exchange which are still operating within the research period of 2011-2015.

3.3 Type of Data

Data used were secondary data. Secondary data is information or relevant data that obtained from archives, documents, and supported literatures related with the topic of this research (Sekaran & Bougie, 2009). Secondary data can be obtained from any sources which can support the study in this research. The data consisted of listed bank's Annual Report and monetary data available in Indonesian stock exchange (IDX) from 2011-2015.

This research used quantitative data. Latief (2009) explained that an instrument that is used to collect the data should be well developed to ensure and help the researcher regarding the validity and reliability of the data. Thus, this research used data from annual financial report of banks listed in Indonesian Stock Exchange (IDX) from 2011-2015.

3.4 Data Collecting Method

Data collected were taken from respective listed bank website's investor relation section and Bank Indonesia. The data obtained were consisted of annual financial reports taken from Indonesian Stock Exchange (IDX) and monetary data taken from Bank Indonesia.

3.5 Research Variables

3.5.1 Independent Variables

According to Sekaran & Bougie (2009), Independent variable is a variable that influence in either positive or negative way. Independent variables used in this research are:

3.5.1.1 Capital Adequacy Ratio (X1)

Capital Adequacy in this case is presented by Capital Adequacy Ratio (CAR)

$$CAR = \frac{\text{Bank's Capital}}{\text{Risk Weighted Assets}} \times 100\%$$

According to the regulation made by Bank Indonesia in accordance with valuation procedures of bank's health, there is a clause stated that bank's capital consists of its owned capital and complementing capital. While Risk-weighted assets consists of assets in bank's balance of financial position categorized based on its respective risk levels. The calculations are based on the value of each assets posts in bank administrative account multiplied by each weighted risks (Dendawijaya, 2003).

3.5.1.2 Non-Performing Loan (X2)

According to Casu, Girardone, and Molyneux (2006), Non Performing Loan is loan on which debtors have failed to make contractual payments for a pre-determined time. Loan classified as non-performing does not necessarily lead to bad debt. If there is adequate collateral, losses might not occur.

It is regulated at the upper limit of 5% for both NPL (gross) and small medium enterprise NPL (gross) as per Bank of Indonesia regulation No.

17/11/PBI/2015 regarding the minimum checking accounts requirements for conventional banks. Higher percentage of Non Performing Loan can reduce bank's capacity to give loan.

$$NPL = \frac{Bad\ Debt}{Total\ Loan} \times 100\%$$

3.5.1.3 Third Party Fund Growth (X3)

Third Party Fund Growth is measured by comparing the difference between current year estimate to previous year estimates and converting the said difference into percentage. Third Party fund consists of current accounts, saving accounts, and time deposits. Bank showcases its growth as a simple indicator of consumer's trust which is gained and retained throughout the year.

$$Third\ Party\ Funds\ Growth = \frac{TPF(t) - TPF(t - 1)}{TPF(t - 1)} \times 100\%$$

3.5.1.4 Inflation Rate (X4)

Inflation can be generally defined as the increasing rate of general price of products within a period of time (Samuelson & Nordhaus, 2009). As more money required in obtaining goods and services every year, the intrinsic value of money is decreasing which consequently resulting in the decrease of consumer's purchasing power. While inflation may impact economic efficiency, both in microeconomics and macroeconomics scale.

Samuelson & Nordhaus (2009) showed that most economists agreed on the best climate for a healthy economic growth, contrary to the belief that policy

should aim for absolute stable price or zero inflation, is a predictable and moderate rising in price levels. Inflation indicators are also explained as follows:

1. Consumer Price Index (CPI), which measure the cost of a market basket of consumer goods and services relative to the cost of said bundle during a particular base year.
2. Gross Domestic Product Deflator (GDP Deflator), which measure the average price of components in GDP relative to a base year .

3.5.1.5 Exchange Rate (X5)

The exchange between two currencies will use a foreign exchange rates which calculated based on the supply and demand of each currency. The rate varies daily depending on the retail price from banks and firms specialized in foreign exchange. In this research, the exchange rate used is the exchange rate between Indonesia Rupiah (IDR) and United States Dollar (USD) published in BI rates.

3.5.1.6 Bank Type (X6)

Dummy variable named “Bank Type” was used as a control variable for two categories of commercial banks used in this research. “Bank Type” consisted of state owned bank and private commercial bank foreign exchange with dummy code 1 for the former and 2 for the latter.

3.5.2 Dependent Variable

3.5.2.1 Loan to Funding Ratio (Y)

Loan to Funding Ratio is one of the indicators to quantify bank's liquidity. Loan to Funding Ratio is a ratio between total loans and third party funds or total deposits received.

$$LFR = \frac{\text{Total Loans}}{\text{Total Deposits}} \times 100\%$$

According to Bank of Indonesia, a healthy Loan to Funding Ratio is managed within the respective minimum and maximum level of 72% and 94%. Loan to Funding Ratio indicates bank ability to fulfill withdrawals from depositor using credit as its liquidity source. A high Loan to Funding Ratio implied a lower bank's liquidity. This condition can occur when bank used the majority of the capital to finance loans (Dendawijaya, 2003).

3.6 Data Analysis Method

3.6.1 Classical Assumption Test

According to the purpose of the research, the following data analysis methods were used:

3.6.1.1 Normality test

Normality test aimed to test whether a regression model, independent variable, dependent variable, or both have normal or abnormal distribution. A good regression model is normally distributed or close to it (Ghozali, 2005). The bases are to draw a conclusion whether it fulfills the normality or not as follow:

- If the data spread around and follow the diagonal line, a regression model fulfills the normality
- If the data spread away and follow the diagonal line, the regression model did not fulfill the normality.

To find out whether the data analyzed have a residual value around 0 (normal data), Kolomogrov-Smirnov test was used to test the normality of the data. If the value of $K-S < \text{table value}$ or the value of 2 tailed $p > \alpha$, it can be concluded that the data is normal. If the value of $K-S > \text{table value}$ or value of 2 tailed $p < \alpha$, the data is abnormal.

3.6.1.2 Autocorrelation Test

Autocorrelation test is used to test whether in a linear regression model contains correlation between disturbance error in period t and disturbance error within period $t-1$ (Ghozali, 2005). A good regression model contains no autocorrelation. To diagnose the existence of autocorrelation in a regression model, Durbin-Watson test is conducted (Algifari, 2000).

3.6.1.3 Heteroscedascity Test

According to Ghozali (2005), Heteroscedascity aims to test whether there is a difference in variability from an observation residual to the others within a linear regression model. If the variance and residual from one observation to the others are consistent, it is called homoscedasticity. To detect heteroscedasticity, one needs to observe the graphic plot between linked variable predictive value

(ZPRED) and its residual (SRESID) and check whether there is certain pattern formed by the dots as follows (Ghozali,2005) :

- If the dots forming a certain pattern (wavy pattern dots then narrowing), there is heteroscedasticity.
- If the dots did not form a visible pattern (spreads over and below 0 in Y axis), there is no heteroscedasticity.

3.6.1.4 Multicollinearity Test

According to Sekaran & Bougie (2009), Multicollinearity is a statistical phenomenon in which two or more variables have a high correlation in a regression model. A good regression model contains no high correlation between variables used. A regression model with a symptom of multicollinearity is unable to precisely gauge X resulting in a wrongly portrayed conclusion about the variable researched.

According to Ghozali (2005), multicollinearity can be measured by observing the value of VIF (Variance Inflation Factor) from each variables. If the tolerance value < 0.10 or $VIF > 10$, a multicollinearity occurred and the variable should be discarded.

3.6.2 Multiple Linear Regression Analysis with Dummy Variable

Multiple linear regression analysis is used to find out the influence between independent variable and dependent variable. Variable being analyzed can be qualitative or quantitative variable. Qualitative variable in a regression model is frequently called dummy (Algifari, 2000). Linear Regression is not limited to portray the model or the correlation where the independent variable (X) is interval data or ratio data, but also enable the usage where the independent variable (X) is nominal data or frequently called dummy variable. Ghozali (2005) stated that in a regression model, the quantity of dummy variable used is the total category subtracted by one. Dummy code is commonly administered by using category which is presented as number 1 or 0. In this research, Dummy variable was named “Type of Bank” consisting of state owned bank and private commercial bank foreign exchange with dummy code; state owned bank =1, and private commercial bank foreign exchange =0. By adding the dummy variable, therefore the regression models are as follow:

1. Independent Variables
 - a. Capital Adequacy Ratio (CAR)
 - b. Non Performing Loan (NPL)
 - c. Inflation rate
 - d. Third Party Fund Growth (TPF Growth)
 - e. Exchange Rate
 - f. Type of Bank

2. Dependent Variable

a. Loan to Funding Ratio (LFR)

By using the following regression Model

$$Y = f (X_1, X_2, X_3, X_4, X_5, X_6)$$

To test the model, multiple linear regression analysis is conducted with the following formula:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$$

Where:

| | |
|-------------------------|--|
| α | = Constanta |
| $\beta_1 \dots \beta_5$ | = Regression coefficient $X_1 \dots X_5$ |
| X_1 | = Capital Adequency Ratio (CAR) |
| X_2 | = Non Performing Loan (NPL) |
| X_3 | = Inflation Rate |
| X_4 | = Third Party Fund Growth |
| X_5 | = Exchange Rate (IDR to USD) |
| X_6 | = Bank Type |
| Y | = Loan to Funding Ratio residual or prediction error |

Descriptive analysis and hypothesis testing were done by using SPSS 16.0.

The analytical tools used in the research were as follow:

3.6.2.1 T-test

Statistical Test – t is used to exhibit how far the influence of independent variable individually in explaining the variation of dependent variable (Ghozali, 2005). The steps are as follow:

- a. Determining the formation of H0 and H1

H0: $\beta = 0$, means variable X had no influence over variable Y.

H1: $\beta \neq 0$, means variable X partially had positive or negative influence over variable Y.

- b. Level of significance

With the level of significance which is set at 0.05 (5%), if the value is higher than the level of significance, it is implied that the influence of independent variable to dependent variable is insignificant.

3.6.2.2 Statistical test

$$t = \frac{b - B}{b}$$

Where,

t = calculated t

b-B = regression coefficient parameter

b = standard deviation

If the resulting calculated $t > t$ value (from table), H0 is rejected and there is a positive influence.

If the resulting calculate $t < t$ value (from table), H_0 is accepted and there is no significant influence.

3.6.2.3 F-test

Statistical test – F-test shows whether all independent variables used have simultaneous influence over one dependent variable (Ghozali,2005). F-test is used to know how strong the independent variable (X) can influence the dependent variable (Y). The steps are as follow:

a. Determine the confidence level (α). This research use α at 5% confidence level.

b. Degree of freedom from f table ($\alpha, k, n-k-i$). with:

$$\alpha = 0.05$$

k = number of independent variable

n = sample size

c. Determine the test criteria

H_0 is accepted if the calculated $f < f$ value (from table)

H_1 is rejected if the calculated $f > f$ value (from table)

d. Determining f

$$f = \frac{R^2/k}{(1-R^2)/(n-k-l)}$$

Where:

R^2 = Multiple Coefficient of Determination

n = number of sample

k = number of independent variable

If the calculated $f < f$ value (from table), H_0 is accepted and H_1 is rejected.

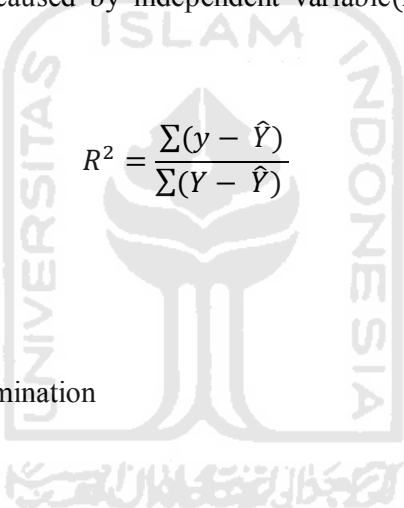
Thus there is no simultaneous influence.

If the calculated $f > f$ value (from table), H_0 is rejected and H_1 is accepted.

Thus, there is simultaneous influence.

3.6.2.3.1 Coefficient of Determination (R^2)

Coefficient of determination is used to identify the change in percentage of dependent variable (Y) caused by independent variable(X). The formula is as follow:


$$R^2 = \frac{\sum(y - \hat{Y})}{\sum(Y - \hat{Y})}$$

Where:

R^2 = Coefficient of determination

y = Regression result

Y = Observation result

CHAPTER IV

DATA ANALYSIS AND DISCUSSIONS

4.1 Data Description

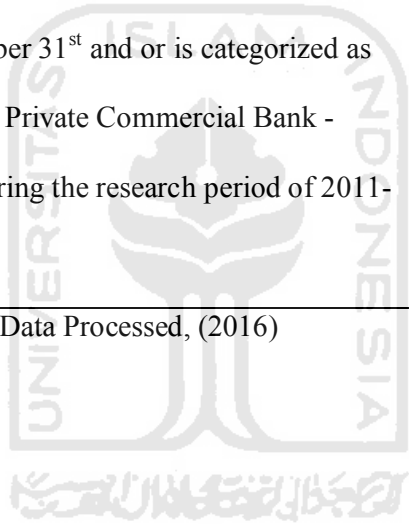
In this research, purposive sampling method was used to process the data. Purposive sampling method is a sampling method where the researchers use their own judgments to select data sample. It is often utilized in very small sample or population within qualitative research, particularly case study or grounded theory. This approach cannot yield statistical interference about the population. Sometimes cases are selected for being unusual, special or particularly related to research question(s) (Morgan, 2008 & Sue, 2008).

There were several criteria used to narrow down the sample. The first criteria is the bank should be listed in Indonesia Stock exchange. The researcher found that there were 38 banks listed in Indonesia Stock Exchange. The second criteria is the banks that were already listed in Indonesian Stock Exchange (BEI) since 2011. The researcher found that 31 banks had met these criteria. The last criteria is that the banking industries listed in Indonesian Stock Exchange had to actively publish their annual financial statement per December 31st and categorized as state owned or commercial bank foreign exchange during the research period of 2011-2015. Out of 31 banks listed in Indonesia Stock Exchange, 21 banks had met these criteria.

Table 4.1
Sample Selection Procedure

| Criteria | Total Firms |
|--|-------------|
| Banks listed in Indonesia Stock Exchange (BEI). | 38 |
| Out of Second Criteria | 7 |
| Banks listed in Indonesian Stock Exchange since 2011 | 31 |
| Out of Third Criteria | 10 |
| Banks that are actively published their annual financial statement per December 31 st and or is categorized as State Owned Bank or Private Commercial Bank - Foreign Exchange during the research period of 2011-2015 | 21 |

Source: Adapted from Data Processed, (2016)



The following are the list of 21 banks that were used in this research:

Table 4.2
List of Banks

| No. | Code | Company's Name | Annual Report |
|-----|------|--|---------------|
| 1 | AGRO | Bank Rakyat Indonesia Agroniaga Tbk. | 2011-2015 |
| 2 | BBCA | Bank Central Asia Tbk. | 2011-2015 |
| 3 | BBKP | Bank Bukopin Tbk | 2011-2015 |
| 4 | BBNI | Bank Negara Indonesia (Persero) Tbk. | 2011-2015 |
| 5 | BBRI | Bank Rakyat Indonesia (Persero) Tbk. | 2011-2015 |
| 6 | BBTN | Bank Tabungan Negara (Persero) Tbk. | 2011-2015 |
| 7 | BCIC | Bank Jtrust Indonesia Tbk. | 2011-2015 |
| 8 | BKSW | PT Bank QNB Indonesia Tbk. | 2011-2015 |
| 9 | BMRI | Bank Mandiri (Persero) Tbk. | 2011-2015 |
| 10 | BNBA | Bank Bumi Arta Tbk. | 2011-2015 |
| 11 | BNGA | Bank CIMB Niaga Tbk. | 2011-2015 |
| 12 | BNII | Bank international Indonesia Tbk. | 2011-2015 |
| 13 | BNLI | Bank Permata Tbk. | 2011-2015 |
| 14 | BSIM | Bank Sinarmas Tbk. | 2011-2015 |
| 15 | BSWD | Bank of India Indonesia Tbk. | 2011-2015 |
| 16 | INPC | Bank Arta Graha Tbk. | 2011-2015 |
| 17 | MAYA | Bank Mayapada International Tbk. | 2011-2015 |
| 18 | MCOR | Bank Windu Kentjana International Tbk. | 2011-2015 |
| 19 | MEGA | Bank Mega Tbk. | 2011-2015 |
| 20 | PNBN | Bank Pan Indonesia Tbk. | 2011-2015 |
| 21 | SDRA | Bank Windu Kentjana International Tbk. | 2011-2015 |

Source: Data Processed, (2016)

4.2 Research Findings

In this part, the researcher explained about the findings during the research. The results of descriptive statistics are as follows:

Table 4.3
Descriptive Statistics

| Descriptive Statistics | | | | | |
|------------------------|-----|----------|----------|----------------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| CAR | 105 | 9.41 | 45.75 | 16.8167 | 5.07339 |
| NPL | 105 | .21 | 12.28 | 2.3901 | 1.86041 |
| TPF_Growth | 105 | -14.1400 | 123.0800 | 1.975467E 1 | 19.7171270 |
| Inf_Rate | 105 | .04 | .07 | .0589 | .00957 |
| Exc_Rate | 105 | 8823.43 | 13458.93 | 1.0830E4 | 1695.63307 |
| Bank_Type | 105 | .00 | 1.00 | .1429 | .35161 |
| LFR | 105 | 52.39 | 140.72 | 85.5422 | 12.41263 |
| Valid N (listwise) | 105 | | | | |

Source: Data Processed, (2016)

Capital Adequacy Ratio variable had a minimum value of 9.41, maximum value of 45.75, mean of 16.8167 and standard deviation of 5.07339. Standard deviation was below mean value ($5.07339 < 16.8167$). Therefore, the data was well spread.

Non Performing Loan variable has a minimum value of 0.21, maximum value of 12.28, mean of 2.3901, and standard deviation of 1.86041. Standard deviation was below mean value ($1.86041 < 2.3901$). Therefore, the data was well spread.

Third Party Fund Growth variable had a minimum value of -14.14, maximum value of 123.08, mean of 19.7547, and standard deviation of 19.7171. Standard deviation was below mean value ($19.7171 < 19.7547$). Therefore, the data was well spread.

Inflation Rate variable had a minimum value of 0.4, maximum value of 0.7, mean of 0.589, and standard deviation of 0.00957. Standard deviation was below mean value ($0.00957 < 0.589$). Therefore the data was well spread.

Exchange Rate variable had a minimum value of 8823.43, maximum value of 13458.93, mean of 10830.1960, and standard deviation of 1695.63307. Standard deviation was below mean value ($1695.63307 < 10830.1960$). Therefore, the data was well spread.

Loan to Funding Ratio variable had a minimum value of 52.39, maximum value of 140.72, mean of 85.5422, and standard deviation of 12.41263. Standard deviation was below mean value ($12.41263 < 85.5422$). Therefore, the data was well spread.

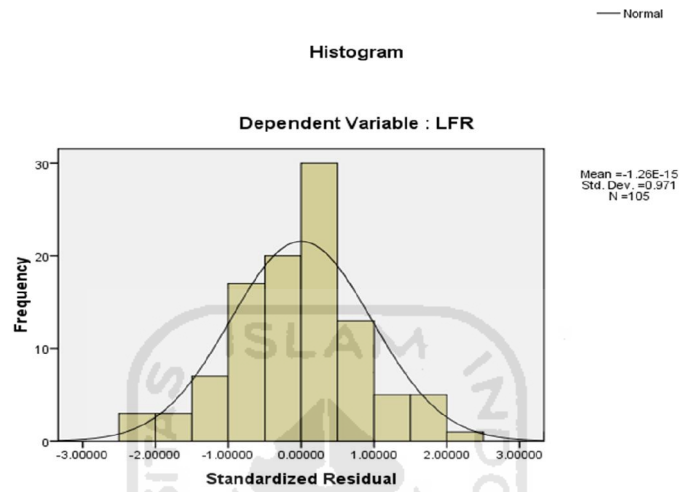
4.3 Classical Assumption Test

4.3.1 Normality Test

Normality test was used to determine whether the residual of a regression model has normal distribution or not.

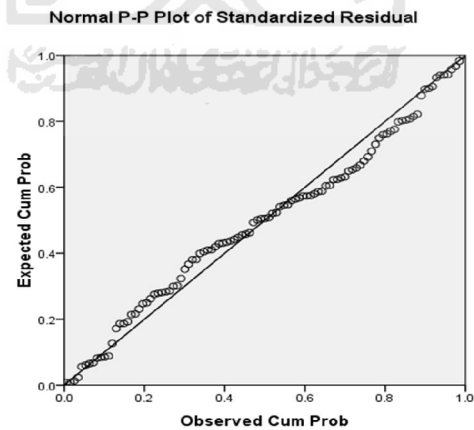
4.3.1.1 Histogram and normal plot graph

Figure 4.1
Histogram



Source : Processed Data, (2016)

Figure 4.2 Normal Plot of LFR



Source: Processed Data, (2016)

Both histogram and normal plot graph demonstrated that the regression model used fulfills normality assumption. In histogram graph, dependent variable Loan to Funding Ratio had distribution pattern which were clustered around the mean. While In normal plot graphic, it showed that the dots spread closely around the diagonal line.

4.3.2 Kolmogorov-Smirnov Test

Table 4.4
One-Sample Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test

| | | Unstandardized Residual |
|--------------------------------|----------------|-------------------------|
| N | | 105 |
| Normal Parameters ^a | Mean | .0000000 |
| | Std. Deviation | 11.29462144 |
| Most Extreme Differences | Absolute | .076 |
| | Positive | .076 |
| | Negative | -.066 |
| Kolmogorov-Smirnov Z | | .774 |
| Asymp. Sig. (2-tailed) | | .587 |

a. Test distribution is Normal.

Source: Processed Data, (2016)

The value of Kolmogorov-smirnov test was 0.774 with significance level of 0.587 which was higher than 0.05. Therefore, H0 was accepted and residual pattern was normally distributed.

4.3.3 Multicollienarity test

According to Sekaran & Bougie (2009), Multicollienarity test is used to determine whether a regression model has independent variables which are correlated. A good regression model should not have correlation between its independent variables. Multicollienarity can be seen from tolerance and variance inflation factor (VIF) value.

Table 4.5
Multicollienarity Test

Coefficients^a

| Model | | Collinearity Statistics | |
|-------|------------|-------------------------|-------|
| | | Tolerance | VIF |
| 1 | CAR | .963 | 1.038 |
| | NPL | .870 | 1.149 |
| | TPF_Growth | .874 | 1.144 |
| | Inf_Rate | .634 | 1.576 |
| | Exc_Rate | .618 | 1.618 |
| | Bank_Type | .977 | 1.024 |

a. Dependent Variable: LFR

Source: Processed Data, (2016)

From the table above it showed that Capital Adequacy Ratio, Non Performing Loan, Inflation rate, Third Party Growth, and Exchange Rate had the tolerance value above 0.10 and VIF value below 10 which means that the regression model had no multicollienarity.

4.3.4 Autocorrelation Test

This research used Durbin-Watson test to detect whether there is autocorrelation or not. This research used 21 total samples in banking companies with 6 independent variables which were tested separately. The calculation of the Durbin-Watson test can be formulated as follow:

Table 4.6
Durbin-Watson Test

| DW | Conclusion |
|-------------|--------------------------|
| <1.550 | Positive Autocorrelation |
| 1.550-1.803 | No Conclusion |
| 1.803-2.197 | No Autocorrelation |
| 2.197-2.450 | No Conclusion |
| >2.450 | Negative Autocorrelation |

Source: Processed Data, (2016)

The result of processing by using SPSS 16.0 produces Durbin-Watson value as follows:

Table 4.7
Autocorrelation Test

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | .415 ^a | .172 | .121 | 11.63524 | 1.880 |

a. Predictors: (Constant), Bank_Type, Exc_Rate, CAR, TPF_Growth, NPL, Inf_Rate

b. Dependent Variable: LFR

Source: Processed Data, (2016)

Based on the auto correlation test result, it is found that the value of Durbin-Watson was equal to 1.880. This value was in between 1.803-2.197 which can be concluded that there was no autocorrelation problem in this regression model.

4.3.4.1 Runs Test

Table 4.8
Runs Test

| Runs Test | |
|-------------------------|-------------------------|
| | Unstandardized Residual |
| Test Value ^a | .15020 |
| Cases < Test Value | 52 |
| Cases >= Test Value | 53 |
| Total Cases | 105 |
| Number of Runs | 48 |
| Z | -1.078 |
| Asymp. Sig. (2-tailed) | .281 |

a. Median

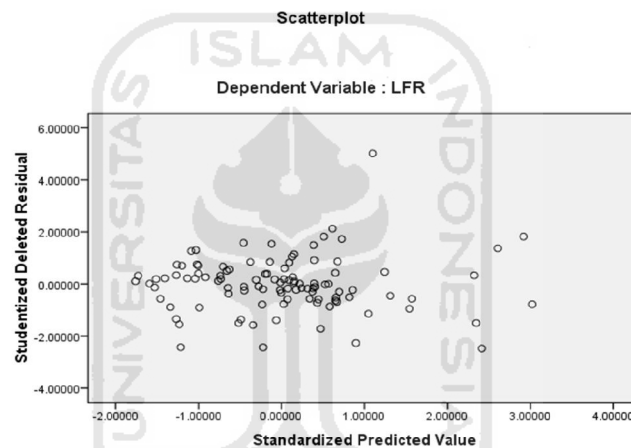
Source: Processed Data, (2016)

According to Table 4.8 showed above, Asymp. Sig. (2-tailed) value was 0.281 which was higher than 0.05 significant level. Therefore, H0 was accepted. It can be concluded that the data used were random and had no autocorrelation.

4.3.5 Heteroscedasticity test

According to Gujarati & Porter (2009), Heteroscedasticity test shows the error the error or residual model that has no constant variance or spread from one observation to the other. The result of the Heteroscedasticity test could be seen as follow:

Figure 4.3



Source: Processed Data, (2016)

From the scatter plot in the figure 4.3, it showed that the plots were spread randomly, either above or under the zero of the vertical axis or Y-axis. Therefore, it can be concluded that there was no heteroscedasticity in the regression.

4.4 Hypothesis testing

4.4.1 F-test

Based on the calculation of multiple regression analysis by using SPSS 16.0, the result of the F-test can be seen in the table as follow:

Table 4.9

F-test

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1 | Regression | 2756.505 | 6 | 459.418 | 3.394 | .004 ^a |
| | Residual | 13267.121 | 98 | 135.379 | | |
| | Total | 16023.626 | 104 | | | |

a. Predictors: (Constant), Bank_Type, Exc_Rate, CAR, TPF_Growth, NPL, Inf_Rate

b. Dependent Variable: LFR

Source: Processed Data, (2016)

It can be seen from the table above that F-value was 3.394 which was more than 3.26 and had a significant level of 0.004 (less than 0.05). It can be concluded that this model was good to be used to describe variables that may affect the dependent variable which was Loan to Funding Ratio.

4.4.2 T-test

Based on the calculation of multiple regression analysis by using SPSS 16.0, the result of the T-test can be seen in the table as follow:

Table 4.10**T-test****Coefficients^a**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 51.089 | 9.286 | | 5.502 | .000 |
| | CAR | .574 | .229 | .235 | 2.505 | .014 |
| | NPL | .541 | .657 | .081 | .822 | .413 |
| | TPF_Growth | .146 | .062 | .232 | 2.360 | .020 |
| | Inf_Rate | 156.928 | 149.615 | .121 | 1.049 | .297 |
| | Exc_Rate | .001 | .001 | .150 | 1.284 | .202 |
| | Bank_Type | -3.601 | 3.283 | -.102 | -1.097 | .275 |

a. Dependent Variable: LFR

Source: Processed Data, (2016)

4.5 Results Interpretation

H1: Capital Adequacy Ratio has a positive effect on Loan to Funding Ratio.

Statistical test result showed that regression coefficient of 0.574 with the significant value of 0.14 which was lower than the significant level of 0.05. Therefore, Capital Adequacy Ratio had a positive significant influence on Loan to Funding Ratio. The result did not support finding in previous research done by Nandadipa (2010) in which Capital Adequacy Ratio has a negative significant influence on Loan to Deposit Ratio.

H2: Non Performing Loan has negative effect on Loan to Funding Ratio.

Statistical test showed that regression coefficient of 0.541 with the significant the value of 0.413 was higher than the significant level of 0.05. Therefore, Non Performing Loan had a positive but not statistically significant influence on Loan to Funding Ratio. The result did not support the finding in previous research done by Nandadipa (2010) in which Non Performing Loan has a negative significant influence on Loan to Deposit Ratio.

H3: Third Party Fund Growth has positive significant effect on Loan to Funding Ratio.

Statistical test result showed that regression coefficient of 0.146 with the significant value of 0.042 was lower than the significant level of 0.05. Therefore, Third Party Fund Growth had a positive and statistically significant influence on Loan to Funding Ratio. The result supported to the finding in previous research done by Nandadipa (2010) in which Third Party Fund Growth has a positive significant influence on Loan to Deposit Ratio.

H4: Inflation Rate has negative effect on Loan to Funding Ratio.

Statistical test result showed that regression coefficient of 156.928 with the significant value of 0.297 was higher than the significant level of 0.05. Therefore, Inflation Rate had a positive but not statistically significant influence on Loan to Funding Ratio. The result did not support the finding in previous research done

by Nandadipa (2010) in which Inflation rate has a negative significant influence on Loan to Deposit Ratio.

H5: Exchange Rate has negative effect on Loan to Funding Ratio.

Statistical test result showed that regression coefficient of 0.001 with significant value of 0.202 which was higher than the significant level of 0.05. Therefore, Exchange Rate had a positive but not statistically significant influence on Loan to Funding Ratio. The result did not support the finding in previous research done by Nandadipa (2010) in which Exchange Rate has a negative significant influence on Loan to Deposit Ratio.

4.6 Discussions

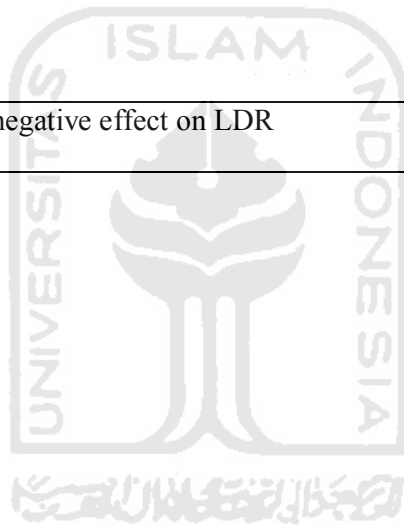
- 1 Capital Adequacy Ratio had positive significant effect on Loan to Funding Ratio, H1 was accepted. This finding supported previous research done by Kristijadi & Laksana (2006) and Nasiruddin (2005) which stated that Capital Adequacy Ratio had positive and significant influence toward Loan to Funding Ratio. Conversely this research did not support previous research done by Pramono (2006) and Nandadipa (2010) which stated that Capital Adequacy Ratio had negative and significant influence toward Loan to Funding Ratio.
- 2 Non Performing Loan had positive but not significant influence on Loan to Funding Ratio, H2 was rejected. This finding did not support previous research done by Nasiruddin (2005) and Fransisca & Siregar (2008) which

stated that Non Performing Loan had negative significant influence on Loan to Funding Ratio and the latter stated that Non Performing Loan had negative but not significant influence on Loan to Funding Ratio.

- 3 Third Party Fund Growth had a positive and significant influence on Loan to Funding Ratio, H4 was accepted. This finding supported previous research done by Haryati (2008) and Kristijadi & Laksana (2006) which also stated that Third Party Fund Growth has a positive and significant influence on Loan to Funding Ratio. The increase of Third Party Fund was proportionally tied with more credit provided to several low risk loan or investment which bank deemed appropriate.
- 4 Inflation Rate had a positive but no significant influence on Loan to Funding Ratio, H3 was rejected. This finding did not support the research done by Haryati (2008) which stated that Inflation Rate had a positive significant influence on Loan to Funding Ratio, Maharani & Sugiharto (2007) which stated that Inflation Rate had a negative but no significant influence on Loan to Funding Ratio, and Haas & Lelyveld (2006) which stated that Inflation Rate had a negative significant influence on Loan to Funding Ratio.
- 5 Exchange Rate had a positive but not statistically significant influence on Loan to Funding Ratio, H5 was rejected. This finding did not support previous research done by Haryati (2009) which stated that Exchange Rate had a negative and significant significant influence on Loan to Funding Ratio and Mongid (2008) which stated that Exchange Rate had a positive significant influence on Loan to Funding Ratio.

Table 4.11
Hyphothesis Testing Results

| | Hypothesis | Results |
|----|--|------------|
| H1 | CAR has a positive effect on LFR | Proven |
| H2 | NPL has negative effect on LFR | Not Proven |
| H3 | Third Party Fund Growth has positive significant effect on LFR | Proven |
| H4 | Inflation Rate has negative effect on LFR | Not Proven |
| H5 | Exchange rate has negative effect on LDR | Not Proven |



CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

5.1 Conclusions

Based on the research result which was analyzed by using multiple regression analysis, F-test, and t-test regarding the influence of Capital Adequacy Ratio, Non performing Loan, Inflation Rate, Third Party Fund Growth, and Exchange Rate toward Loan to Funding Ratio in 21 banks for the period of 2011-2015, the findings showed that Capital Adequacy Ratio and Third Party Fund Growth influenced Loan to Funding Ratio. On the other hand, non-performing loan, inflation rate, and exchange rate did not influence loan to funding ratio. The other conclusions are as follow:

1. Capital Adequacy Ratio was proven to have a positive significant influence on Loan to Funding Ratio.
2. Third Party Fund Growth was proven to have a positive significant influence Loan to Funding Ratio.
3. Some variables such as loan to funding ratio, non-performing loan, inflation rate, and exchange rate were monitored and strictly regulated by Bank Indonesia.
4. Non Performing Loan was not proven to have a negative significant effect on Loan to Funding Ratio.
5. Nonperforming loan was stated in Bank Indonesia regulation No. 17/11/PBI/2015 Clause 11, is targeted at less than 5% in order for listed

bank to push its Loan to Funding Ratio to 94%. Resulting in Non Performing Loan, it had positive but insignificant influence when using listed bank as its sample as opposed to the research done by Nasiruddin (2005) and Fransisca & Siregar (2008) on rural banks and go public banks.

6. Contrary to the hypothesis 4 and 5 which stated that Inflation Rate and Exchange Rate had negative effect on Loan to Funding Ratio, The research found that both Inflation rate and Exchange rate had no negative significant influence. It can be concluded that listed banks were not too affected by both variables while the opposite was also true for researches which had the sample including national banks.

5.2 Implications

The findings about the influence of Capital Adequacy Ratio, Non Performing Loan, Inflation Rate, Third Party Fund Growth, and Exchange Rate toward Loan to Funding Ratio may give several contributions and implications. Based on the research findings and hypothesis testing, only Capital Adequacy Ratio and Third Party Fund Growth had significant influences toward Loan to Funding Ratio.

5.3 Limitations

This research has some limitations, such as:

1. This research only included banks listed in BEI in 5 years from 2011 to 2015.

2. This research only included specific target groups of State Owned Bank (BUMN) and Private Commercial Bank Foreign Exchange (BUSN).
3. This research included dummy variable, bank type, as independent variable. It should not be included.

5.4 Recommendations

Based on the conclusions and limitations above, the recommendations for future research are as follow:

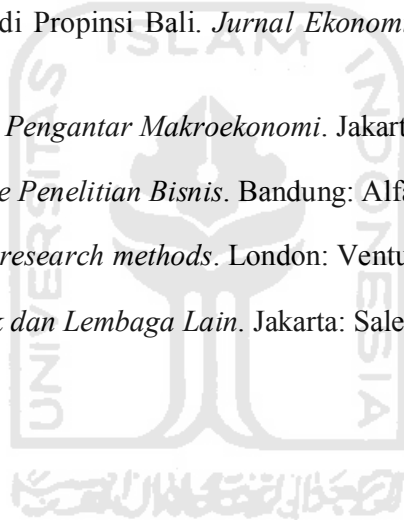
1. The observation period should be extended in the future research so that the result of the research will really reflect the real phenomenon and the result of the research will be better.
2. Future research should be more aware of external factor existence such as economic recession as the external factor that cause significant effects on research findings.
3. Next research should exclude dummy variable

References

- Algifari. (2000). *Analisis Regresi, Teori, Kasus dan Solusi*. Edisi 2. Yogyakarta: BPFE.
- Bank Indonesia Legal Information Division. (2013). Regulation No.15/12/PBI/2013 - Concerning Minimum Capital Adequacy Requirement for Commercial Banks. Jakarta: Banking Research and Regulation Department.
- Bank Indonesia Legal Information Division. (2015). Peraturan Bank Indonesia No. 17/11/PBI/2015 tanggal 25 Juni 2015 tentang Giro Wajib Minimum Bank Umum Dalam Rupiah Dan valuta Asing Bagi Bank Umum Konvensional. Jakarta: Banking Research and Regulation Department.
- Casu, B., Girardone, C., Molyneux, P. (2006). *Introduction to banking*. 1st Edition. England: Pearson Education Limited.
- Dendawijaya, L.. (2001). *Manajemen Perbankan*. Jakarta: Ghalia Indonesia.
- Dornbus, R., Fischer, S. (1997). *Ekonomi Makro*. Jakarta: Rineka Cipta.
- Fransisca, Siregar, H. S. (2008). *Pengaruh Faktor Internal Bank Terhadap Volume Kredit Pada Bank Yang Go Public di Indonesia*. Medan: USU Repository.
- Ghozali, I. (2005). *Aplikasi Analisis Multivariate dengan program SPSS*. 3rd edition. Semarang: Badan Penerbit Universitas Diponegoro.
- Gujarati, D.N., Porter, D.C. (2009). *Basic Econometrics*. 5th edition. New York: McGraw-Hill/Irwin.
- Haas, R and Lelyveld, I. (2006). Foreign Bank and Credit Stability in Central and Eastern Europe. A Panel Data Analysis. *Journal of Banking & Finance*. 30, 1927-1952.
- Haryati, S. (2009). Pertumbuhan Kredit Perbankan Di Indonesia: Intermediasi dan Pengaruh Variabel Makro Ekonomi. *Jurnal Keuangan dan Perbankan*. 13(2), 299-310.
- Kasmir. (2003). *Manajemen Perbankan*. Jakarta: Rajawali Pers.

- Kristijadi, E., Laksana, K. B. (2006). Pengaruh Pertumbuhan DPK, Pertumbuhan Simpanan dari Bank Lain, Tingkat Suku Bunga SBI dan CAR Terhadap Pertumbuhan Kredit Pada Bank-Bank Pemerintah. *Kompak*. 13(1), 249-264.
- Latief, M.A. (2009). *Penelitian kuantitatif dan kualitatif*. Malang : Karya Dosen Fakultas Sastra Universitas Negeri Malang.
- Maharani, I. L., Sugiharto, T. (2007). Kinerja Bank Devisa dan Bank Non Devisa dan Faktor-Faktor Yang Memengaruhinya. *Proceeding PESAT (Psikologi, Ekonomi, Sastra, Arsitek & Sipil)*. 2, 195-201.
- Malayu, S.P.H. (2002). *Dasar-Dasar Perbankan*. Jakarta: Bumi Aksara.
- Maharani, Ika L., Sugiharto, T. (2007). *Kinerja Bank Devisa dan Bank Non Devisa dan Faktor-Faktor Yang Mempengaruhinya*. Proceeding PESAT (Psikologi, Ekonomi, Sastra, Arsitek & Sipil). 2, 195-201.
- Mongid, A. (2008). *The Impact of Monetary Policy On Bank Credit During Economics Crisis : Indonesia Experience*. *Jurnal Keuangan dan Perbankan*. 12(1), 100-110.
- Morgan, L. D. (2008), Sampling, In Lisa M. G, (Ed), *The SAGE encyclopedia of qualitative research methods*. California: Sage Publications Inc.
- Nandadipa, S. (2010). *Analisis Pengaruh CAR, NPL, Inflasi, Pertumbuhan DPK, dan Exchange Rate Terhadap LDR (Studi Kasus Pada Bank Umum di Indonesia Periode 2004-2008)*. Undergraduate thesis Universitas Diponegoro, Semarang.
- Nasiruddin. (2005). Faktor-Faktor Yang Mempengaruhi Loan To Deposit Ratio (LDR) di BPR Wilayah Kerja Kantor Bank Indonesia Semarang (unpublished bachelor degree). Universitas Diponegoro, Semarang.
- Pramono, W. (2006). *Analisis Pengaruh Likuiditas, Modal, dan Efisiensi Bank Terhadap Pemberian Kredit (Studi Kasus Pada PT. Bank Rakyat Indonesia, Tbk)*. (unpublished bachelor degree). Universitas Diponegoro, Semarang.
- Republic of Indonesia. (1998). Undang Undang RI Nomor 10 Tahun 1998 Tentang Perbankan. Jakarta: Sekretariat Negara.
- Sahminan, S., Edwards, K. (2008). Exchange Rate Movements in Indonesia: Determinants, Effects, and Policy Challenges. Jakarta: Bank Indonesia & Reserve Bank of Australia Working Papers.

- Samuelson, P.A., Nordhaus, W.D. (2009). *Economics*. 19th Ed. New York: McGraw-Hill/Irwin.
- Sartono, A. (2001). *Manajemen Keuangan Teori dan Aplikasi*. Yogyakarta: BPFE Publishing.
- Sekaran, U. (2000). *Research methods for business: A skill-building approach*. New York: John Wiley and Sons Inc.
- Sekaran, U. Bougie, R. (2009). *Research methods for business: A skill-building approach*. 5th Ed. New York: John Wiley and Sons Inc.
- Siamat, D. (2003). *Manajemen Bank Umum*. Jakarta: Balai Pustaka.
- Sudirman, I W. (2003). Faktor-Faktor Penghambat Peningkatan Loan to Deposit Ratio Perbankan di Propinsi Bali. *Jurnal Ekonomi dan Bisnis Indonesia*. 18(1), 21-36.
- Sukirno, S. (2004). *Teori Pengantar Makroekonomi*. Jakarta: Raja Grafindo.
- Sugiyono, (1999). *Metode Penelitian Bisnis*. Bandung: Alfabeta.
- Sue, G. (2008). *Business research methods*. London: Ventus Publishing,
- Susilo, Y.S. (2000). *Bank dan Lembaga Lain*. Jakarta: Salemba Empat.



APPENDICES



Appendix 1: List of Samples

| No. | Code | Company's Name | Annual Report |
|-----|------|--|---------------|
| 1 | AGRO | Bank Rakyat Indonesia Agroniaga Tbk. | 2011-2015 |
| 2 | BBCA | Bank Central Asia Tbk. | 2011-2015 |
| 3 | BBKP | Bank Bukopin Tbk | 2011-2015 |
| 4 | BBNI | Bank Negara Indonesia (Persero) Tbk. | 2011-2015 |
| 5 | BBRI | Bank Rakyat Indonesia (Persero) Tbk. | 2011-2015 |
| 6 | BBTN | Bank Tabungan Negara (Persero) Tbk. | 2011-2015 |
| 7 | BCIC | Bank Jtrust Indonesia Tbk. | 2011-2015 |
| 8 | BKSW | PT Bank QNB Indonesia Tbk. | 2011-2015 |
| 9 | BMRI | Bank Mandiri (Persero) Tbk. | 2011-2015 |
| 10 | BNBA | Bank Bumi Arta Tbk. | 2011-2015 |
| 11 | BNGA | Bank CIMB Niaga Tbk. | 2011-2015 |
| 12 | BNII | Bank international Indonesia Tbk. | 2011-2015 |
| 13 | BNLI | Bank Permata Tbk. | 2011-2015 |
| 14 | BSIM | Bank Sinarmas Tbk. | 2011-2015 |
| 15 | BSWD | Bank of India Indonesia Tbk. | 2011-2015 |
| 16 | INPC | Bank Arta Graha Tbk. | 2011-2015 |
| 17 | MAYA | Bank Mayapada International Tbk. | 2011-2015 |
| 18 | MCOR | Bank Windu Kentjana International Tbk. | 2011-2015 |
| 19 | MEGA | Bank Mega Tbk. | 2011-2015 |
| 20 | PNBN | Bank Pan Indonesia Tbk. | 2011-2015 |
| 21 | SDRA | Bank Windu Kentjana International Tbk. | 2011-2015 |

Source: Indonesia Stock Exchange (IDX)

Appendix 2: List of Variables Values

Capital Adequacy Ratio

| No | Kode | CAR | | | | |
|----|------|-------|-------|-------|-------|-------|
| | | 2011 | 2012 | 2013 | 2014 | 2015 |
| 1 | AGRO | 16.39 | 14.8 | 21.6 | 16.09 | 21.02 |
| 2 | BBCA | 12.7 | 14.2 | 15.7 | 16.9 | 18.7 |
| 3 | BBKP | 12.71 | 16.34 | 15.12 | 14.21 | 13.56 |
| 4 | BBNI | 17.6 | 16.7 | 15.1 | 16.22 | 19.5 |
| 5 | BBRI | 14.96 | 16.95 | 16.99 | 18.31 | 20.59 |
| 6 | BBTN | 16.97 | 14.64 | 15.62 | 17.69 | 15.03 |
| 7 | BCIC | 9.41 | 10.09 | 14.03 | 13.48 | 15.49 |
| 8 | BKSW | 45.75 | 27.76 | 18.73 | 15.1 | 16.18 |
| 9 | BMRI | 15.34 | 15.48 | 14.93 | 16.6 | 18.6 |
| 10 | BNBA | 19.96 | 19.18 | 16.99 | 15.07 | 25.57 |
| 11 | BNGA | 13.16 | 15.16 | 15.36 | 15.58 | 16.28 |
| 12 | BNII | 11.83 | 12.83 | 12.74 | 15.76 | 15.17 |
| 13 | BNLI | 14.07 | 15.86 | 14.3 | 13.6 | 15 |
| 14 | BSIM | 13.98 | 18.09 | 21.82 | 18.38 | 14.37 |
| 15 | BSWD | 23.19 | 21.1 | 15.26 | 15.39 | 23.85 |
| 16 | INPC | 12.65 | 16.45 | 17.31 | 15.95 | 15.2 |
| 17 | MAYA | 14.68 | 10.93 | 14.07 | 10.25 | 12.97 |
| 18 | MCOR | 11.67 | 13.86 | 14.68 | 14.15 | 16.39 |
| 19 | MEGA | 11.86 | 16.83 | 15.74 | 15.23 | 22.85 |
| 20 | PNBN | 17.5 | 14.67 | 15.32 | 17.3 | 20.13 |
| 21 | SDRA | 17.37 | 42.52 | 27.91 | 21.71 | 18.82 |

Non-Performing Loan

| No | NPL | | | | |
|----|------|------|-------|-------|------|
| | 2011 | 2012 | 2013 | 2014 | 2015 |
| 1 | 3.55 | 3.71 | 2.27 | 2.02 | 1.9 |
| 2 | 0.5 | 0.4 | 0.4 | 0.6 | 0.7 |
| 3 | 2.88 | 2.66 | 2.26 | 2.78 | 2.83 |
| 4 | 3.6 | 2.84 | 2.17 | 1.96 | 2.7 |
| 5 | 2.3 | 1.78 | 1.55 | 1.69 | 2.02 |
| 6 | 2.75 | 4.09 | 4.05 | 4.01 | 3.42 |
| 7 | 6.24 | 3.9 | 12.28 | 12.24 | 3.71 |
| 8 | 1.56 | 0.73 | 0.23 | 0.31 | 2.59 |
| 9 | 2.18 | 1.74 | 1.6 | 1.66 | 2.29 |
| 10 | 1.07 | 0.63 | 0.21 | 0.25 | 0.78 |
| 11 | 2.64 | 2.29 | 2.23 | 3.9 | 3.74 |
| 12 | 2.14 | 1.7 | 2.11 | 2.23 | 3.67 |
| 13 | 2.04 | 1.37 | 1 | 1.7 | 2.7 |
| 14 | 0.88 | 3.18 | 2.5 | 3 | 3.95 |
| 15 | 1.98 | 1.4 | 1.59 | 1.17 | 8.9 |
| 16 | 2.96 | 0.85 | 1.96 | 1.92 | 2.33 |
| 17 | 2.51 | 3.02 | 1.04 | 1.46 | 2.52 |
| 18 | 2.18 | 1.98 | 1.69 | 2.71 | 1.98 |
| 19 | 0.98 | 2.09 | 2.18 | 2.09 | 2.81 |
| 20 | 3.56 | 1.69 | 2.13 | 2.05 | 2.44 |
| 21 | 1.65 | 0.65 | 0.48 | 2.01 | 2.44 |

Third Party Fund

| No | Kode | DPK | | | | | |
|----|------|---------------|---------------|---------------|---------------|---------------|---------------|
| | | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| 1 | AGRO | 2,386,868,473 | 2,766,325,916 | 3,054,289,337 | 4,120,253,833 | 5,206,253,466 | 6,862,051,180 |
| 2 | BBCA | 277,531 | 323,428 | 370,274 | 409,486 | 447,906 | 473,666 |
| 3 | BBKP | 41,377 | 47,929 | 53,958 | 55,822 | 65,391 | 76,164 |
| 4 | BBNI | 194,375 | 231,296 | 257,661 | 291,890 | 313,893 | 370,420 |
| 5 | BBRI | 333,652 | 384,264 | 450,166 | 504,281 | 622,322 | 668,995 |
| 6 | BBTN | 47,456 | 61,970 | 80,668 | 96,208 | 106,471 | 127,709 |
| 7 | BCIC | 8,900,800 | 11,199,974 | 13,461,508 | 11,558,081 | 11,026,739 | 11,020,779 |
| 8 | BKSW | 2,377,992 | 2,644,465 | 3,633,084 | 7,244,934 | 16,161,710 | 18,509,008 |
| 9 | BMRI | 362,212,154 | 422,250,404 | 482,914,118 | 556,341,661 | 636,382,093 | 676,387,261 |
| 10 | BNBA | 2,159,541 | 2,420,016 | 2,874,841 | 3,367,520 | 4,450,003 | 5,211,686 |
| 11 | BNGA | 117,833,233 | 131,814,304 | 151,015,119 | 163,737,362 | 174,723,234 | 178,533,077 |
| 12 | BNII | 53,621,604 | 65,112,439 | 78,134,782 | 96,593,103 | 104,551,775 | 108,675,214 |
| 13 | BNLI | 59,484,927 | 82,783,287 | 104,914,477 | 133,074,926 | 148,005,560 | 145,460,639 |
| 14 | BSIM | 9,819,214 | 14,853,064 | 12,860,714 | 13,819,061 | 16,946,231 | 22,357,131 |
| 15 | BSWD | 1,216,475 | 1,675,845 | 1,972,256 | 2,740,214 | 3,585,345 | 4,378,123 |
| 16 | INPC | 14,681,980 | 16,296,638 | 17,399,114 | 17,363,406 | 19,573,542 | 21,471,965 |
| 17 | MAYA | 7,796,431 | 10,667,259 | 15,160,620 | 20,657,040 | 32,007,123 | 41,257,417 |
| 18 | MCOR | 3,625,685 | 5,813,692 | 5,598,481 | 6,571,488 | 8,188,680 | 8,359,702 |
| 19 | MEGA | 42,083,800 | 49,138,687 | 50,265,395 | 52,372,000 | 51,022,000 | 49,740,000 |
| 20 | PNBN | 75,280 | 85,749 | 102,695 | 120,257 | 126,105 | 128,316 |
| 21 | SDRA | 2,550,810 | 4,087,990 | 6,226,710 | 6,802,260 | 11,303,958 | 14,346,247 |

Third Party Fund Growth

| No | Kode | Third Party Fund Growth (%) | | | | |
|----|------|-----------------------------|--------|--------|--------|-------|
| | | 2011 | 2012 | 2013 | 2014 | 2015 |
| 1 | AGRO | 15.90 | 10.41 | 34.90 | 26.36 | 31.80 |
| 2 | BBCA | 16.54 | 14.48 | 10.59 | 9.38 | 5.75 |
| 3 | BBKP | 15.83 | 12.58 | 3.45 | 17.14 | 16.47 |
| 4 | BBNI | 18.99 | 11.40 | 13.28 | 7.54 | 18.01 |
| 5 | BBRI | 15.17 | 17.15 | 12.02 | 23.41 | 7.50 |
| 6 | BBTN | 30.58 | 30.17 | 19.26 | 10.67 | 19.95 |
| 7 | BCIC | 25.83 | 20.19 | -14.14 | -4.60 | -0.05 |
| 8 | BKSW | 11.21 | 37.38 | 99.42 | 123.08 | 14.52 |
| 9 | BMRI | 16.58 | 14.37 | 15.21 | 14.39 | 6.29 |
| 10 | BNBA | 12.06 | 18.79 | 17.14 | 32.14 | 17.12 |
| 11 | BNGA | 11.87 | 14.57 | 8.42 | 6.71 | 2.18 |
| 12 | BNII | 21.43 | 20.00 | 23.62 | 8.24 | 3.94 |
| 13 | BNLI | 39.17 | 26.73 | 26.84 | 11.22 | -1.72 |
| 14 | BSIM | 51.27 | -13.41 | 7.45 | 22.63 | 31.93 |
| 15 | BSWD | 37.76 | 17.69 | 38.94 | 30.84 | 22.11 |
| 16 | INPC | 11.00 | 6.77 | -0.21 | 12.73 | 9.70 |
| 17 | MAYA | 36.82 | 42.12 | 36.25 | 54.95 | 28.90 |
| 18 | MCOR | 60.35 | -3.70 | 17.38 | 24.61 | 2.09 |
| 19 | MEGA | 16.76 | 2.29 | 4.19 | -2.58 | -2.51 |
| 20 | PNBN | 13.91 | 19.76 | 17.10 | 4.86 | 1.75 |
| 21 | SDRA | 60.26 | 52.32 | 9.24 | 66.18 | 26.91 |

Inflation Rate

| Date | Inflation Rate (%) | Date | Inflation Rate (%) | Date | Inflation Rate (%) |
|----------|--------------------|----------|--------------------|----------|--------------------|
| Jan 2011 | 7.02% | Sep 2012 | 4.31% | May 2014 | 7.32% |
| Feb 2011 | 6.84% | Oct 2012 | 4.61% | Jun 2014 | 6.70% |
| Mar 2011 | 6.65% | Nov 2012 | 4.32% | Jul 2014 | 4.53% |
| Apr 2011 | 6.16% | Dec 2012 | 4.30% | Aug 2014 | 3.99% |
| May 2011 | 5.98% | Jan 2013 | 4.57% | Sep 2014 | 4.53% |
| Jun 2011 | 5.54% | Feb 2013 | 5.31% | Oct 2014 | 4.83% |
| Jul 2011 | 4.61% | Mar 2013 | 5.90% | Nov 2014 | 6.23% |
| Aug 2011 | 4.79% | Apr 2013 | 5.57% | Dec 2014 | 8.23% |
| Sep 2011 | 4.61% | May 2013 | 5.47% | Jan 2015 | 6.96% |
| Oct 2011 | 4.42% | Jun 2013 | 5.90% | Feb 2015 | 6.29% |
| Nov 2011 | 4.15% | Jul 2013 | 8.61% | Mar 2015 | 6.38% |
| Dec 2011 | 3.79% | Aug 2013 | 8.79% | Apr 2015 | 6.79% |
| Jan 2012 | 3.65% | Sep 2013 | 8.40% | May 2015 | 7.15% |
| Feb 2012 | 3.56% | Oct 2013 | 8.32% | Jun 2015 | 7.26% |
| Mar 2012 | 3.97% | Nov 2013 | 8.37% | Jul 2015 | 7.26% |
| Apr 2012 | 4.50% | Dec 2013 | 8.38% | Aug 2015 | 7.18% |
| May 2012 | 4.45% | Jan 2014 | 8.22% | Sep 2015 | 6.83% |
| Jun 2012 | 4.53% | Feb 2014 | 7.75% | Oct 2015 | 6.25% |
| Jul 2012 | 4.56% | Mar 2014 | 7.32% | Nov 2015 | 4.89% |
| Aug 2012 | 4.58% | Apr 2014 | 6.70% | Dec 2015 | 3.35% |

Exchange Rate

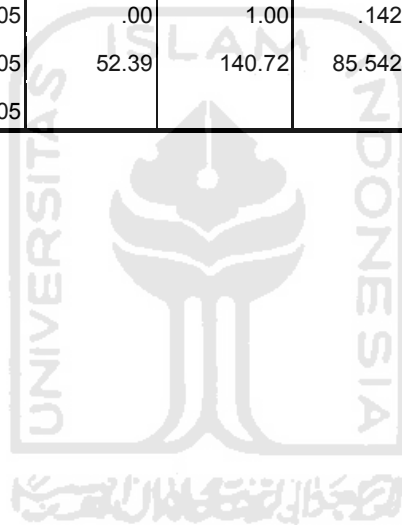
| Date | Exchange Rate (USD-IDR) | Date | Exchange Rate (USD-IDR) | Date | Exchange Rate (USD-IDR) |
|----------|-------------------------|----------|-------------------------|----------|-------------------------|
| Jan 2011 | 9.082,38 | Sep 2012 | 9.614,25 | May 2014 | 11.583,72 |
| Feb 2011 | 8.957,11 | Oct 2012 | 9.645,14 | Jun 2014 | 11.952,10 |
| Mar 2011 | 8.805,48 | Nov 2012 | 9.675,95 | Jul 2014 | 11.747,50 |
| Apr 2011 | 8.694,30 | Dec 2012 | 9.693,94 | Aug 2014 | 11.765,24 |
| May 2011 | 8.598,80 | Jan 2013 | 9.735,57 | Sep 2014 | 11.950,36 |
| Jun 2011 | 8.607,00 | Feb 2013 | 9.735,05 | Oct 2014 | 12.205,57 |
| Jul 2011 | 8.576,19 | Mar 2013 | 9.758,11 | Nov 2014 | 12.219,25 |
| Aug 2011 | 8.574,79 | Apr 2013 | 9.772,95 | Dec 2014 | 12.500,48 |
| Sep 2011 | 8.809,45 | May 2013 | 9.809,91 | Jan 2015 | 12.641,95 |
| Oct 2011 | 8.939,67 | Jun 2013 | 9.931,00 | Feb 2015 | 12.813,53 |
| Nov 2011 | 9.060,23 | Jul 2013 | 10.123,70 | Mar 2015 | 13.132,09 |
| Dec 2011 | 9.133,76 | Aug 2013 | 10.625,28 | Apr 2015 | 13.012,62 |
| Jan 2012 | 9.154,76 | Sep 2013 | 11.402,95 | May 2015 | 13.206,26 |
| Feb 2012 | 9.070,81 | Oct 2013 | 11.423,86 | Jun 2015 | 13.379,95 |
| Mar 2012 | 9.211,29 | Nov 2013 | 11.671,25 | Jul 2015 | 13.441,79 |
| Apr 2012 | 9.221,50 | Dec 2013 | 12.147,55 | Aug 2015 | 13.850,70 |
| May 2012 | 9.336,57 | Jan 2014 | 12.240,55 | Sep 2015 | 14.468,00 |
| Jun 2012 | 9.498,14 | Feb 2014 | 11.994,75 | Oct 2015 | 13.864,76 |
| Jul 2012 | 9.503,59 | Mar 2014 | 11.484,15 | Nov 2015 | 13.740,95 |
| Aug 2012 | 9.547,16 | Apr 2014 | 11.492,95 | Dec 2015 | 13.923,75 |

Kantor Perwakilan
Bank Indonesia
Jakarta

Appendix 3: Descriptive Analysis

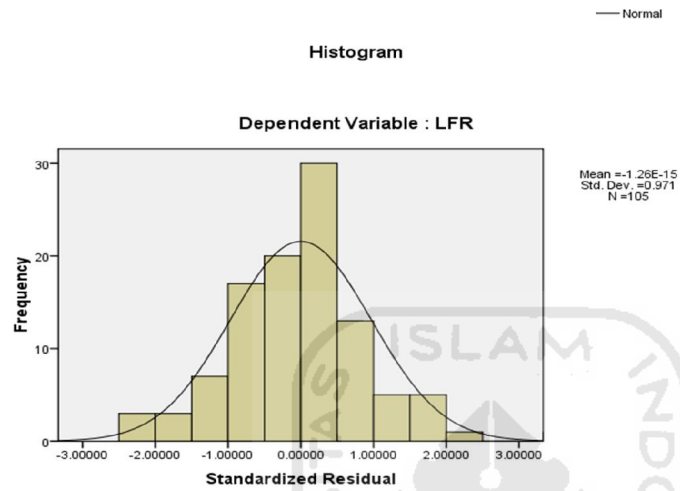
Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|-----|----------|----------|----------------|----------------|
| CAR | 105 | 9.41 | 45.75 | 16.8167 | 5.07339 |
| NPL | 105 | .21 | 12.28 | 2.3901 | 1.86041 |
| TPF_Growth | 105 | -14.1400 | 123.0800 | 1.975467E 1 | 19.7171270 |
| Inf_Rate | 105 | .04 | .07 | .0589 | .00957 |
| Exc_Rate | 105 | 8823.43 | 13458.93 | 1.0830E4 | 1695.63307 |
| Bank_Type | 105 | .00 | 1.00 | .1429 | .35161 |
| LFR | 105 | 52.39 | 140.72 | 85.5422 | 12.41263 |
| Valid N (listwise) | 105 | | | | |

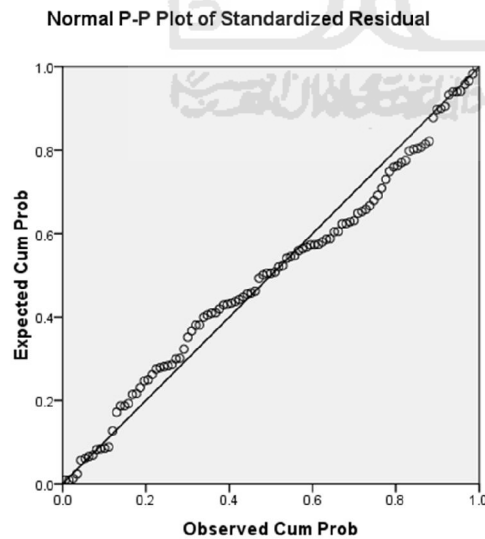


Appendix 4: Classical Assumption Test

Histogram



P-plot



Kolmogorov-Smirnov

One-Sample Kolmogorov-Smirnov Test

| | | Unstandardized Residual |
|--------------------------------|----------------|-------------------------|
| N | | 105 |
| Normal Parameters ^a | Mean | .0000000 |
| | Std. Deviation | 11.29462144 |
| Most Extreme Differences | Absolute | .076 |
| | Positive | .076 |
| | Negative | -.066 |
| Kolmogorov-Smirnov Z | | .774 |
| Asymp. Sig. (2-tailed) | | .587 |

a. Test distribution is Normal.

Multicollienarity Test

Coefficients^a

| Model | | Collinearity Statistics | |
|-------|------------|-------------------------|-------|
| | | Tolerance | VIF |
| 1 | CAR | .963 | 1.038 |
| | NPL | .870 | 1.149 |
| | TPF_Growth | .874 | 1.144 |
| | Inf_Rate | .634 | 1.576 |
| | Exc_Rate | .618 | 1.618 |
| | Bank_Type | .977 | 1.024 |

a. Dependent Variable: LFR

Autocorrelation Test

| DW | Conclusion |
|-------------|--------------------------|
| <1.550 | Positive Autocorrelation |
| 1.550-1.803 | No Conclusion |
| 1.803-2.197 | No Autocorrealtion |
| 2.197-2.450 | No Conclusion |
| >2.450 | Negative Autocorrelation |

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | .415 ^a | .172 | .121 | 11.63524 | 1.880 |

a. Predictors: (Constant), Bank_Type, Exc_Rate, CAR, TPF_Growth, NPL, Inf_Rate

b. Dependent Variable: LFR

Run Test

Runs Test

| | Unstandardized Residual |
|-------------------------|-------------------------|
| Test Value ^a | .15020 |
| Cases < Test Value | 52 |
| Cases >= Test Value | 53 |
| Total Cases | 105 |
| Number of Runs | 48 |
| Z | -1.078 |
| Asymp. Sig. (2-tailed) | .281 |

a. Median

Appendix 5: Multiple Regression Analysis

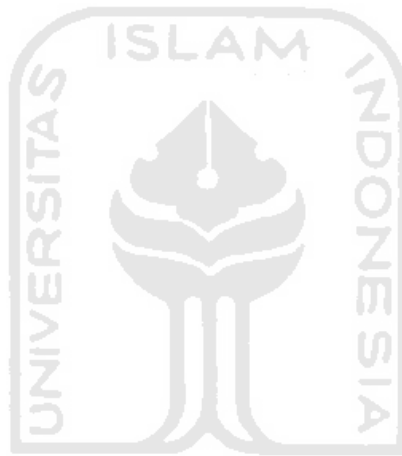
F test

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1 | Regression | 2756.505 | 6 | 459.418 | 3.394 | .004 ^a |
| | Residual | 13267.121 | 98 | 135.379 | | |
| | Total | 16023.626 | 104 | | | |

a. Predictors: (Constant), Bank_Type, Exc_Rate, CAR, TPF_Growth, NPL, Inf_Rate

b. Dependent Variable: LFR



T test

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 51.089 | 9.286 | | 5.502 | .000 |
| | CAR | .574 | .229 | .235 | 2.505 | .014 |
| | NPL | .541 | .657 | .081 | .822 | .413 |
| | TPF_Growth | .146 | .062 | .232 | 2.360 | .020 |
| | Inf_Rate | 156.928 | 149.615 | .121 | 1.049 | .297 |
| | Exc_Rate | .001 | .001 | .150 | 1.284 | .202 |
| | Bank_Type | -3.601 | 3.283 | -.102 | -1.097 | .275 |

a. Dependent Variable: LFR