© HAK CIPTA MILIK UNIVERSITAS ANDALAS



Hak Cipta Dilindungi Undang-Undang

- 1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar Unand.
- 2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin Unand.

The Influence of Credit Quality and LDR on Regional Development Bank's Performance (Emperical study on Bank BPD in Indonesia)

SKRIPSI



INTAN PERMATA SARI 07153142

JURUSAN AKUNTANSI FAKULTAS EKONOMI UNIVERSITAS ANDALAS PADANG 2011

ACCOUNTING DEPARTMENT FACULTY OF ECONOMICS ANDALAS UNIVERSITY

THESIS APPROVAL LETTER

Herewith, Dean of Economics Faculty of Andalas University, Head of Accounting Program, Thesis Advisor and Thesis Examiner, stated that:

Name : Intan Permata Sari

Student's ID Number : 07 153 142

Field of Study : Bachelor Degree of Economics

Thesis Title : The Influence of Credit Quality and LDR on

Regional Development Bank's Performance (Emperical study on Bank BPD in Indonesia)

Has already passed the thesis seminar on Thursday, June 23, 2011 based on procedures and regulations prevailed on The Faculty of Economics, Andalas University.

Padang, 10 August 2011

Thesis Advisor

<u>Drs. Riwayadi, MBA, Ak</u> NIP.196412281992071001

Approved by:

Dean of Economics Faculty

Head of Accounting Department

Prof.Dr.H. Syafruddin Karimi, SE, MA NIP.195410091980121001

Dr. H. Yuskar, S.E., M.A., Akt NIP.196009111986031001

The Influence of Credit Quality and LDR on Regional Development Bank's Performance

(Emperical study on Bank BPD in Indonesia)

(By Intan Permata Sari, Accounting Dapartment, Andalas University.69 Pages)

ABSTRACT

This research was conducted in 26 Regional Development Banks in indonesia..

The purpose of this research is to get emperical evidence about the influence of Credit Quality and Loan to Deposit Ratio toward regional development bank's performance. in this research, Return on Asset used as an indicator for measuring the performance of Bank BPD.

This research using data from published financial reports Banking Firm that published by Indonesian Banking in the period of 2007-2009. In this study population included all the regional development banks in Indonesia in the period 2007 – 2009 that number reached 26 BPD which spread almost throughout the territory level I in Indonesia. Analyze technique to use in this research is multiple linier regression to obtain totally picture regarding relationship between one variable with other variable.

The result of this research shows Non Performing Loan (NPL) has negative and significant influence on ROA, Earning asset Quality (KAP) has significant and positive influence on ROA mean while Loan to Deposit Ratio (LDR) has negative and not significant influence on ROA, This result is expected that Non Performing Loan (NPL), Earning asset Quality (KAP) and Loan to Deposit Ratio (LDR) variable can be made reference, either by company management and also by investors in determining investment strategy.

Keywords: Regional Develompment Bank, Credit Quality, Loan to Deposit Ratio, Non Performing Loan, Earning Asset Quality, Return on Asset.

ACKNOWLEDGEMENT

Bismillahirrahmanirahim...

Alhamdulillahi Rabbil'alamin. First of all, i would like to say thanks and deliver my greatfulness to Allah Azza wa Jalla for the mercy and grace that give me strenght and patience to finish my thesis, so i can get my bachelor degree in accounting. Then, let recite Shalawat and salam for rasullullah, the great prophet Muhammad Shalallahu A'laihi Wassalam, as uswatun hasanah for human being.

In this good chance, i would like to deliver my gratitude to all of the people who helped and supported me to finish my thesis. My sincerely thanks are presented to:

- 1. My beloved family as my greatest motivation in my life, my father Fadli Arifin, My mother Rozalia Rasyid, My brother Ferza olfa Geni, my sister Loli Nofrianty, SE. There is no word that can experess my greatfulness to my family. thank you so much for everything Ayah, Bunda, Uda and Uni...a grace that is not measurable if someday be able to give happiness to my beloved family. amin..
- Dr. H. Syafruddin Karimi, SE, MA as Dean of Economic Faculty of Andalas University.
- 3. Dr. H. Yuskar, SE, Ma, Ak as The Head of Accounting Department of Andalas University. Thank you for giving me a chance to joined in your team as internal auditor. I learned so many things from you sir.

- 4. My best gratitude to Drs Riwayadi, MBA, Ak as my thesis advisor, thank you so much for your helpful, advice, guidence, time and also the lesson. Pak Riway is not only as a lecturer but he can be a good father for his student. i really admire pak riway.:). Pak riway is my favorite lecturer.:)
- 5. I do thanks to Prof. Edy R Rasyid as my thesis examiner. Really admire pak edy because you have unique treatment for your students to motivate them and i learned from you sir. Hope i can make you proud of me...
- Ibu Dr. Yulia Hendri Yen, SE, MT, Ak as my academic supervisor. I do really thank for your motivation and suggestion that you give to me Bu.
- 7. My comprehensive examiner, Prof. Niky Lukviarman, Drs. Riwayadi, Bpk Amsal Junid and Bapak Fauzan Misra. Got so many learning in this comprehensive exam..especially to pak Fauzan Misra...i know that you want to make me be better pak...thank you so much pak fauzan...
- 8. My greatful to all of the lecturer of economic faculty and alas university.
 Especially for all lecturers of accounting department for sharing their knowledge and experience while i was studying in this faculty.
- 9. All of the accounting department staff, da ari who always joking with me..hehehehe..peace da ari..^_. ni efa and mama loli for helping me in administratif stuff.
- 10. To my beloved adinda Ririn Haryani Putri...so many happiness and sadness we spent together..you are more that a best friend for me..hopefully the success will be with us...and this friendship will never end..hugs and kisses..:) :*

- 11. To all of my best friends in international accouting class 07...especially to Hurriyati Nasution (ili...teman senasib seperjuangan in every phase in our life..hehehehe), Yessi yunelia rahmi (cici..my "adiak tacinto"), Nadia azarine Khairul (really love and admire you adinda, hope one day we can spent more time together to share our success story..amin ^_^), Sari Haryanti (ai...love you..really proud of you...the mature one), Putri Kumala Dewi (my doughter from papa hiu...hahahaha), Hafizhah (fia...remind me about our effort to be the best one in enterpreneurship competition), Nini sumarni (spirit...,i do believe that u can finish your thesis soon), Wila Sandi Refita (wilaaaaaaaaa...Semangat honey..you CAN DO IT). I do hope all the best for all of you guys...
- 12. Thank you so much for AIESECers...my second family...especially for my EB team..Haris dwi putra (ais..pak bos..lets wisuda bareng on september..hehehe), Reri rosana wita (the gorgeous girl..i learn so many things from you honey), gina Maya steffany (the cute and mature one..., really miss to share again with you..^^), Debby sajdatra.(the handsome boy "suka menolong and g sombong"..hehehe)..., water rachim body (ohh..my brother..i do believe that you can bring our LC to be the best one..my twin brother..hehehe), Wira Hayu (brooo...the unique one..i will waiting your success story because i know you are extraordinary, isyaALLAH..amin)...really miss all of the things that we have done during our term...

- 13. My best friend Endila Rusbina, mis...thank u so much for hearing all of my story and difficulties...my best friend dina, sari, rini and tesa..my friend in senior high school PSU GEN VI.
- 14. My friends in kost2an..kak lin, dini, ratih, atiqah, ira, reni, listy, nike and lola and my beloved adinda plus my roomate fizy.
- 15. My senior and junior in accounting dapartement and for everyone who have help and support me that i can not mention one by one.
- 16. Special gratitude to my soul mate uda Ricky Yolanda. you have colored my life and fill my days with happiness..thank you for everything uda..your support, understanding and love..hope we can make our dreams come true. Amin..^_^

Padang, August 10,

2011

Intan Permata Sari

CONTENT

	PAGE
CONTENT	
LIST OF TABLE	i
LIST OF FIGURE	ii
CHAPTER 1: INTRODUCTION	
1.1 Background of Study	1
1.2 Problem Definition	
1.3 Research Objective	4
1.4 Contribution of Study	
1.5 Scope of The Research	
CHAPTER 2: LITERATURE REVIEW, THEORITICAL FRAME	WORK IN
HYPOTHESIS	WORK AND
2.1 Literature Review	7
2.1.1 Definition of Bank	7
2.1.2 Function of Bank	9
2.1.3 Credit	10
2.1.3.1 Definition of Credit	10
2.1.3.2 Credit Principle	10
2.1.3.3 Credit Quality	11
2.1.4 Return on Asset (ROA)	16
2.1.5 Non Performing Loan (NPL)	17
2.1.6 Earning Asset Quality (KAP)	19
2.1.7 Loan to Deposit Ratio (LDR)	20

2.1.8 Previous Research21
2.2 Theoritical Frame Work and Hypothesis24
2.2.1 The Influence of Non Performing Loan to Return on Asset24
2.2.2 The influence of Earning Asset Quality to Return on Asset25
2.2.3 The Influence of Loan to Deposit Ratio to Return on Asset25
2.2.4 The influence of NPL, KAP, and LDR simultaneously on ROA27
CHAPTER 3: RESEARCH METHODOLOGY
3.1 The Type of Research
3.2 Types and Sources of Data
3.3 Population
3.4 Data Collection Method
3.5 Identification and Measurement of variables
3.6 Method of Data Analysis
3.6.1 Testing Classical Assumption
3.6.1.1 Normality Test
3.6.1.2 Heterocedasticity Test
3.6.2 Data Analysis Techniques
3.6.3 Hypothesis Testing35
3.6.3.1 Test Statistic t
3.6.3.2 Test Statistic F
3.6.3.3 Analysis Coefficient of Determination (R2)

CHAPTER 4: DATA ANALYSIS

4.1 Genaral Overview of Research Object
4.2 Process and Analysis of The Result42
4.2.1 Testing Classical Assumption42
4.2.1.1 Normality Test42
4.2.1.2 Test Heterocedasticity44
4.2.2 Hypothesis Testing45
4.2.2.1 T Test46
4.2.2.1.1 Testing Hypothesis 147
4.2.2.1.2 Testing Hypothesis 248
4.2.2.1.3 Testing Hypotesis 348
4.2.2.2 F Test45
4.2.2.2.1 Testing Hypothesis 445
4.2.3 The Coefficient of Determination (R2)49
4.2.4 Multiple Regression Analysis Result50
CHAPTER 5: CONCLUSION AND IMPLICATION OF THE RESEARCH
5.1 Conclusion52
5.2 Research Limitations53

5.3 Suggestion	53
REFERENCE	55
APPENDIXES	50

TABLE

Table 2.1 Summary of Previous Research	26
Table 4.1 List of Regional Developmen Bank	42
Table 4.2 ROA, NPL, KAP and LDR of Bank BPD in Period 2007-2009	43
Table 4.3 Regression Anlysis	51
Table 4.4 Anova	54
Table 4.5 Model Summary	55
Table 4.6 T Test Result	56

LIST OF FIGURE

Figure 2.2 Theoritical Framework	31
Figure 4.1 The development of Non Performing Loan (NPL) on BPD	
During 2007- 2009	45
Figure 4.2 The development of Earning Asset Quality (KAP) on BPD	
During 2007-2009	46
Figure 4.3 The development of Loan to Deposit Ratio (LDR) on BPD	
During 2007-2009	47
Figure 4.4 Histogram Graph (original data)	48
Figure 4.5 Probability Graph	49
Figure 4.6 Scatter Plot	50



CHAPTER I

INTRODUCTION

1.1 Background of the Study

Banking sector plays an important roles in country's economic development because bank is one of financial institution that can answer the challanges for business world in adressing the needs for fund. According to RI law no 10 (1998), Bank is business entity which collects funds from the public in the form of savings and revolve them to the community in the form of credit and / or other forms in order to improve the standard of living of the people.

Regional Development Bank (BPD) is one of many types bank in Indonesia that has ability to support regional economic development. Regional bank is established in area level 1, the legal basis is law NO 13, 1962. Nowadays Indonesia has 26 regional development bank that spread in area level I.

The Challenges of current regional development bank and the future is increasingly large and complex. Economic conditions are dynamic and always changing from time to time, in general will affect the operations of an industry. One of the industry is quite sensitive to changes in economic conditions is the banking industry. The banking industry in Indonesia has undergone many changes from time to time. It began in 1983 when various kinds of deregulation started by the government.

Deregulation and the implementation of policies relating to monetary and real sectors have led the banking sector to have the ability to improve macroeconomic performance in Indonesia. This is supported by the issuance of Policy Package in October 1988 (Pakto 1988) and The Republic of Indonesia Act No.7 of 1992, which makes the banks in Indonesia, began to experience change and rapid growth.

Policies and government regulations are actually stimulate the banking world, marked by the establishment of new private banks, and increased banking products that are marketed to the public. In mid 1997 the total banking industry suffered a setback due to the economic crisis that hit Indonesia. The economic conditions are causing some banks liquidated, most of the bank stated in a state of "unhealthy" and declining public confidence in the banking system in Indonesia at that time drastically (wahid yasin, 2009)

Bank as an institution that collects funds from the public in the form of savings and channels them into society in the form of credit has a very important role in the economy. Function of bank as an intermediary contains risk. Management of bank is required to maintain a balance between managing risks faced with the services provided to the public. Risks faced generally cause the issuance of regulations.

Indonesian Bank Regulation No.72/PBI/2005 dated 27 November 2005 on credit quality, where quality can be classified as pass, special mention, substandard, doubtful, and loss. Credit issued by bank has the risk that is not smooth in the form of credit payment or in other words is called non-performing loans (non-performing loans) so it will affect bank performance. Credit problems that occur can be reduced by way of expansion or restructuring. Indonesian Bank

has been set at 5% for the NPL ratio. If banks are able to reduce NPL ratios below 5% then the financial potential that would be obtained even greater.

Earning Assets Quality (KAP) have an effect on the level of profitability due to investment fund made by the bank is on productive assets, so the firm must be maintained in a state smoothly. The better quality of productive assets, the smaller a bad debt ratio at these banks, and small bad debt ratio at a bank then affect the level of profitability become better.

Bad credit is also disturbing bank liquidity. Disruption of the smooth process of payment of the loan principal and interest payments also lead to decreased ability of liquidity. Liquidity demonstrates the ability of banks to meet withdrawals and loan requests in a timely manner. Liquidity is often contrary to profitability at which a bank is too high credit revolved then the pursuit of profitability that will experience liquidity problems. In 2004, Indonesian Bank determine the percentage of Statutory Reserves (GWM), adjusted for the amount of Third Party Funds (DPK). The amount of reserves established by BI is 5% from third party fund.

The main objective of the bank's operations is to achieve a maximum level of profitability. Profitability is the bank's ability to produce / obtain profits effectively and efficiently. Profitability used is ROA which is to calculate for bank management capabilities in making the overall profit. Determine level of profitability with ROA approach aims to measure the ability of bank management in managing assets to generate income.

Problems faced by the banking business raises sharply unequal competition which can lead to inefficiencies of management that affect revenue and the emergence of problem loans that can lead to decreased earnings. Problem loans will influence the capital that also can cause banks have liquidity problems.

The total of credit distributed by regional development banks show positive growth in this five years. All of the credit growth of regional development banks (Bank BPD) is 30% in the first half of 2010. That number has exceeded the target by the end of 2010, which is expected to growth by 20% (Winny Erwindia, Senayan, Jakarta, Wednesday (08/25/2010) detikFinance).

Even though the credit growth of BPD increase every year but this condition is not only an indicator that BPD has good performance because we have also give pay attention to credit quality and liquidity. High number of loans extended is not a guarantee that the credit has good quality because of the risk of potential problem loans and failed to pay would be higher. Therefore this study will review more about credit quality and liquidity impact on the performance of regional development banks in which non-performing loans and earning assets quality are indicator in determining credit quality and LDR as indicator for bank liquidity.

1.2 Problem Definition

- How does the credit quality measured by Non Performing Loan influence the performance of regional development bank in term of profitability (ROA)?
- How does the credit quality measured by Earning Asset Quality influence the performance of regional development bank in term of profitability (ROA)?

- 3. How does the Loan to Deposit Ratio (LDR) influence the performance of regional development bank in term of profitability (ROA)?
- 4. How does the ratio of NPL, KAP and LDR simultaneously influence on ROA?

1.3 Research Objective

Refers to the problem definition above, the objective of these study are:

- To obtain emperical evidence about the influence of Non Performing Loan (NPL) on ROA
- 2. To obtain emperical evidence about the influence of Earning Asset Quality (KAP) on ROA
- To obtain emperical evidence about the influence of Loan to Deposit Ratio (LDR) on ROA
- To obtain emperical evidence about the influence of independent variable (NPL, KAP, and LDR) simultaneously on ROA

1.4 Contribution of Study

Contribution of this study are as follows:

Management of Regional Development Bank (Bank BPD)
 The results of this study can be used by management of Bank BPD to improve corporate performance through improvent in credit quality and capability of liquidity. In this study, the performance of regional development bank is measured by looking the rates of profitability, which

means the company's ability to generate maximum profits effectively and efficiently and ROA is used as one of ratio to determine the profitability of Bank BPD.

2. Investors

The results of this study are expected can give contribution to investors in invest their money by looking the ratio of Non-Performing Loan (NPL), Earning Asset Quality (KAP) and Loan to Deposit Ratio (LDR) as consideration in making investment decisions in the banking firm.

3. Shareholder

The result is expected to be used as one basis consideration in decisionmaking in the financial sector, particularly in order to maximize corporate performance and shareholders, so that the company shares can continue to survive and have a great return.

4. Academics

The results are expected to support further research in conducting research related to financial ratios and changes in earnings in the banking firm.

1.5 Scope of The Research

This research will analyze the factors that influence the ROA as an indicator of the performance of regional development banks. This research just considers 2 broad factors in analyzing the performance of regional development bank, there are credit quality and liquidity. Analysis of the relationship and influence use

linier regression analysis. It was conducted to see relationship between one or several independent variables with one dependent variable.

- The object is ROA (Return on Assets) of regional development bank.
 Data to be used is the monthly ratio of ROA in the period 2007 2009.
- Variables will be tested includes: NPL, Earning Asset Quality (KAP) and Loan to Deposit ratio (LDR) using data from January 2007 – december 2009.

CHAPTER II

LITERATURE REVIEW, THEORITICAL FRAMEWORK AND HYPOTHESIS

2.1 Literature review

2.1.1 Definition of bank

Definition of the bank according to Law No. 14/1967 Article 1 is a "financial institution principally provides credit and business services in payment traffic and circulation of money ", and according to Law no. 7/1992, banks are business entities that collecting funds from society in the form of deposits, and channel to the community in order to improve the standard of living of the people.

Abdurrachman in Encyclopedia of Financial Economics and trade explains that, "the bank is a type of financial institution perform various services, such as a loan, distribute currency, control of currency, act as a storage of valuable objects, business finance companies and others.

The Bank is a company engaged in the financial sector, meaning that banking activities are always associated in the field of finance. So talking about the bank can not separate with financial problems. The first banking activities are to collect funds from the public who is known as funding activities. Understanding the intention is to collect funds or raise funds by buying from the public. Purchase of public funds is done by the bank by placing a variety of strategies for society would invest their funds in the form of deposits. Types of savings that can be chosen by community is like current accounts, savings accounts, certificates of deposit, and time deposits. For society would save money in the bank, then the

bank provide the stimulus in the form of fringe benefits provided to the borrower. Such as remuneration form of interest, profit sharing, gifts, services or other fringe benefits. The higher the fringe benefits provided, will add interest of society to save their money. Therefore, the banks must provide a variety of stimulus and trust so that people are interested to invest their funds. After obtaining the funds in the form of deposits from the public, such funds will be played back or sales back to the community in the form of a loan or more commonly known by the term credit (lending). The credit is also subject to service the loans to borrowers (debtors) in the form of interest and administrative costs. As for banks based on syariah principles can be based on profit sharing. The amount of mortgage interest is strongly influenced by the amount of interest savings. The bigger or more expensive interest savings, the greater the interest and vice versa. Besides the large influence of small savings interest rates of credit are influenced by the profit taken, the operating expenses incurred, reserves the risk of bad debts, taxes and other influences. So it can be concluded that the activities of collecting funds (funding) and the channel and the (lending) is a major activity of banking.

The main advantages of the conventional banking business based on principles derived from interest on foreign deposits given to depositors with interest on the loan or loan disbursement. The advantage of the difference between this interest in a bank known as the spread based. A bank suffered losses from the excess interest, where interest rates higher than lending rates, the term are known as the negative spread-based (Kasmir, 2008).

In addition, banks also conduct other activities. These services are provided to support the smooth operation of raise and distribute funds. Other banking services include the following (Kasmir, 2008)

- 1. Transfer
- 2. Inkaso
- 3. Clearing
- 4. Valas
- 5. Safe deposit box
- 6. Travellers cheque
- 7. Bank card
- 8. Bank draft
- 9. Letter of credit
- 10. Bank guarantees and bank reference
- 11. Others bank services

2.1.2 Function of Bank

The basic function of bank as a collector and distributor of public funds, bank has strategic role to support the implementation of national development, in order to improve livelihoods of the people. Besides its main function to collect and distribute public funds, and support national development, the bank also has the functions as follows:

- a. Issue letters of credit.
- Buying, selling or guaranteeing own risk or for the benefit and the orders of its customers.

- c. Transferring money for its own interests or the interest of customer.
- d. Placing, borrow, or lend funds to other banks.
- e. Receive payment of bills on the basis of securities and perform calculations with or among third parties.
- f. Perform other activities commonly done by the bank as far as not contrary to the Act and Regulations that apply.

2.1.3 Credit

2.1.3.1 Defenition of credit

Loans are funds owned by third parties, stored in a bank in the hope of obtaining the interest on savings interest. Banks that keep these funds will channel some funds to lend to other parties who need them. In this case the bank is acting as intermediary, borrowers will pay the interest charge that calculated on the basis of a certain percentage of the loan principal. The difference between deposit interests paid to customers of mortgage interest earned from borrowers, are the interest income.

Credit is the provision of money or bills can be equivalent, under contracts lending between banks by another party that requires the borrower to repay the debts after a certain period with the award of interest (banking law no 10, 1998)

Credit is the provision of money or bills can be equivalent, under contracts between bank lending and borrowing with any other party requires another party borrowers to repay their debts after a certain period with interest, fee or profit share (Mahmoeddin, 2002)

Based on the above understanding, the credit can be interpreted as providing money, according to bank approval with other parties under the borrowing agreement and require the borrower to pay it off within a specified period with the provision that the interest rate varies.

2.1.3.2 Credit Principle

There are several reasons why banking business focus on lending.

According to abdullah (2004), the reasons or conditions that encourage things are:

- The nature of banking business that serves as intermediary between the units of surplus fund (savings funds) and deficit units (credit to debtors).
- Lending spreads definitely give that amount of revenue that can be estimated.
- 3. Looking at its position in the implementation of monetary policy, banking is a business sector whose activities are regulated by most state governments so that in some countries banking activities are limited. While in Indonesia, banks are not allowed to allocate their funds through the capital market in the form of buying and selling shares on the stock exchange.
- The main source of bank funds comes from public funds so that morally they should be channeled back to community in the form of credit.

Banks that have gained the trust of depositors in saving their money so
in lending to the debtor must hold the basic principles of credit in order
for credit to be returned on time, including interest income to be
received.

Three basic principles in the provision of credit by Suhardjono (2003) are as follows:

- The principle of trust is the delivery of money or the provision of facilities from lenders to borrowers who billable to other parties, in hopes of lender (bank) interest as a revenue gain from granting such credit.
- The principle of agreement, where lending is based on an agreement of mutual trust that both parties will comply with the obligations of each
- The principle of consensus, is a collective agreement with the lender Among borrowers about repayment periods and interest

2.1.3.3 Credit Quality

Life or death of a bank is affected by the number of loans disbursed in a period. That is, the more credit are distributed, the greater the profit from this field. In fact, almost all banks are still relying on its main income from its lending (based spreads, in addition to the above fee-based income in the form of the costs of other services charged to the customer.

In practice, the numbers of total outstanding loans also have to pay attention to credit quality. That is, the more qualified loans or deserves to be distributed, will minimize the risk against the likelihood of credit problems. In this case the principle of prudence in lending by banks needs to pay attention to credit quality. It is possible which is quite a lot of credit will result in losses if the loans extended are found not qualified and result in credit problems. Therefore, in off-quality loans for the banks need to pay attention to two elements, as follows:

- The rate of profit (return) means the amount of profit that would be obtained on credit. Total profits must meet the applicable provisions if they want considered good health.
- 2. Rate ratio (risk). This means that the level of risks faced by the possibility of wrong estimates in the bank profits from the loans extended. To meet the level of bank profits is said to meet criteria for regulations, banks must consider four factors as below for bank health can be measured according to these provisions: level of return on assets (ROA), return on Equity (ROE), timing of return, future prospect

Furthermore, the level of bank profits must also know the risks it faces. These risks are conditions and situations that will confront in the future a very big impact on bank profitability. In general, the kinds of risks that might be encountered include the following.

1. Environmental Risk

Environmental risks, means that the risks associated with banking environment especially relating to the external environment (external) banking. Environmental risks consist of several risks, among others: economic risk, competition, and regulatory risk.

2. Risk management

Management risk means that the risks associated with the risk that comes from within the company (internal) such as organizational risk, the risk of failure risk and capability.

3. Risk transfer

Risk transfer is also more affected by such bank internal operational risk, technology risk and strategic risk

4. Financial Risk

Financial risks associated with internal effects and external bank such as credit risk, liquidity risk, interest rate risk, leverage, and international risk.

For the amount of loans a bank has good credit quality; it is necessary separation of functions in the organization of credit. The separation is done for each function can work properly and minimize the occurrence of which no objective assessment of the various reasons that may cause irregularities that will eventually cause problems in loan disbursements.

As known that in the Management of credit divided in several functions to make it easier for banks to run their credit activity. Therefore, separation of functions in credit organization must also consider the existence of these functions. Following separation of the functions in the credit organization generally consists of:

1. Credit Marketing

- Credit Analysis
- 3. Assessed guarantee
- 4. Credit Administration
- 5. Credit Audit

The purpose of separation of functions for managing of a credit application can be processed correctly, complete, thorough, and perfect that have low risk and do not cause problems. Assessment start from the very first loan application submitted to the credit runs and ends. Despite the separation of the credit function, all functions must go hand in hand with one goal so in accordance with the previous management's expectations. All parts must work together.

There are many ways for loans granted by banks to have quality. in deciding an application for credit to be given to customers for quality, the committee should be formed of credit (loan committees). This committee is responsible for providing service matters relating to the loans extended. as general duty credit committee are as follows:

- a) Making decisions and review of new credit, which means that each of the new loan application, it should be reviewed with care about the credit worthiness before a decision is taken.
- b) Ensure completeness of credit documents, meaning the credit application, any requirement documents have to be submitted. This requirement is one aspect of a credit worthiness assessment so as to avoid future problems.

- c) Approval for the extension of credit, meaning the credit that has ended his loan and the client still wants to extend credit for any reason, the committee again to give proper credit approval whether or not to be extended with the consideration that in accordance with applicable regulations.
- d) Change the conditions and terms of credit, meaning that if the customer with the situation that developed outside cause customers to experience difficulties, the banks need to make changes concerning the conditions and terms of credit, such as changes in term of payouts, or the interest charged to the customers.

Indonesian Bank classifies credit quality according to the following provisions:

1) Pass

Credit can be said to pass if:

- a. Installment payments of principal and/or interest on time; and
- b. Having a mutation account active or;
- c. Part of credit secured by cash collateral

2) Special mention

- a. There are arrears in payment of principal and / or interest that has not exceeded 90 days; or
- b. It sometimes happens overdrafts; or
- c. rarely a violation of the agreed contract; or
- d. Mutations are relatively active accounts; or
- e. Supported by new borrowing

3) Substandard

it said substandard if they meet the criteria include:

- a. There are arrears in payment of principal and / or interest that has exceeded 90 days;
- b. It often happens overdrafts
- c. Breach of contract in the agreed more than 90 days;
- d. Relatively low frequency of mutation accounts; or
- e. There are indications of financial problems faced by the debtor; or
- f. Weak loan documents

4) Doubtful

It said doubts if it meets the criteria include:

- a. There are arrears in principal repayment and / or interest which has exceeded 180 days; or
- b. Happens a permanent overdraft
- c. Event of default more than 180 days; or
- d. Occur capitalized interest
- e. Legal documents that entry, whether for a credit agreement or binding guarantees

5) Loss

It said traffic jams if they meet the criteria include:

- a. There are arrears in payment of principal and / or interest which has exceeded 270 days; or
- b. operational losses covered by new loans

c. In terms of legal and market condition, security can not be liquidated on a fair value.

2.1.4 Return on Asset (ROA)

ROA is the ability of the capital invested in all asset companies to generate profits. ROA is the one way to assess the effectiveness in using corporate assets in generating profits. The higher of ROA, the higher profits generated, it means that companies increasingly effective in using assets to generate profits. ROA is calculated based on the ratio of earnings before taxes and the average total assets. In This research ROA is used as an indicator of bank performance.

ROA shows effectiveness of the company in generating profits by optimizing the assets owned. The higher ROA show more effective the company, because of the large ROA influenced by the profits the company produced. Information on performance is very useful for users of financial statements. For group of investors, creditors and the general public who want to invest their money to the bank needs to know the performance of the bank. Return on investment useful for evaluation of capital management, profitability analysis, forecasting earnings, as well as planning and control. Using rates of return on investment capital for such purposes need a deeper understanding of the size of this return. Because of the size return includes components that potentially contribute to the understanding corporate performance (Wild, Subramanyam, Halsey, 2005). Banks with relatively large total assets will have better

performance because has a relatively large total revenue as a result of increased product sales. With increase in total revenue, it will increase its profit so that financial performance would be better (Vishnu Mawardi, 2005).

2.1.5 Non Performing Loan (NPL)

In lending, banks have hope for such credit has a minimal risk in terms of fully refundable on time and do not become bad debts. But in reality, when the bank failed in managing these risks in connection with the lending bank, there will be a credit in problem.

Asrof (1994) says that the credit in problem is one of the risk of payment, especially if the expected payment is not enough available to pay debt. On another occasion, credit default occurred due to failure of repayment of the deal generated so that the delayed appearance of loss of revenue potential. Problem loans are loans classified as loss plus the credits have the collectability of doubtful potential loss (Joyosumarto, 1994).

According mahmoeddin (2002) add a definition of non performing loans according to two concepts, namely:

 Understanding the concept of banking, namely credit residing in doubtful and loss classification (non performing loan). Banks are conservative and view loans as a risky asset (risk assets) and hence the bank must manage the risks inherent in the lending process. when risk management is not there, then the loan becomes problematic. Understanding of accounting concepts, namely high-risk lending, forcing banks must set aside part of its profit to face the risk of failure of repayment of credit.

Sutojo (2000), categorized into three non-performing loans in the usual practice of international banking world, namely:

- A delay of payment of interest and / or parent loans, more than 90 days from the due date
- 2. Loans outstanding are not paid at all
- Required renegotiation of the terms of credit repayment and interest as stated in the loan agreements.

While bad debts is defined as a credit which is not recoverable or difficult to obtain redemption and solavtion (Hasibuan, 1994). So therefore we can conclude that every bad debt is a non-performing loans (problem loans), but any non-performing loans is not necessarily bad debt

2.1.6 Earning Assets Quality (KAP)

Earning assets or productive assets, often also called assets generating earnings because of placement of bank funds to achieve the expected level of income. Productive assets are placements of bank fund in the form loans, placement of fund at other bank, securities and equity participation in order to earn revenue (syahyunan, 2002). Placement in such assets are mostly in the form

of credit allowing undue risk. Based on the SE No.6/23/DPNP May 31, 2004 Earning Assets Quality can be calculated by:

KAP = Classified Earning Asset (APYD) X 100%

Total Earning Asset

Earning Assets Quality is the ratio between classified Earning Assets (APYD) to Total Assets. APYD is productive assets either already or potentially not provide income or result in losses, while Total Earning Assets is a total investment of Bank funds in the form of loans, placement of fund at other bank, securities and equity participation that are intended to obtain income (Syahyunan, 2002). There are four components in the calculation APYD on the basis of SE BI no.6/23/DPNP May 31, 2004, namely: (1) 25% of earning assets classified as special mention, (2) 50% of Assets Which are classified as substandard, (3) 75% of Earning Assets classified as doubtful, (4) 100% of Earning Assets classified as Loss.

2.1.7 Loan to Deposit Ratio (LDR)

Loan to Deposit Ratio (LDR) shows the ratio between the volume credit with the volume of deposits held by banks (Muljono, 1999). Loan to Deposit Ratio (LDR) is used to assess the liquidity of a bank by dividing the number of credit with the amount of funds. Loan to Deposit Ratio (LDR) is also a ratio that

indicates the ability of a bank in provide funds to the debtor with the capital held by banks as well as funds that can be collected from the public (Almilia and Herdiningtyas, 2005).

The maximum of Loan to Deposit Ratio (LDR) according to the Bank Indonesia is 102% (Indonesian Bank regulation No 12/19/PB/2010). According to Ali (2006), liquidity arrangements are intended primarily for bank at any time to meet its obligations to be immediately paid. Liquidity was assessed by considering that most bank assets are not liquid with a source of funds with shorter durations. Liquidity indicators such as the size of the secondary reserve (secondary reserve) for daily liquidity needs, the ratio of the concentration dependence of large funds are relatively less stable, and the spread of third-party funding sources is healthy, both in terms of cost as well as the stability. According to the Indonesian Bank, the rating reflects the liquidity aspect of the ability of banks to manage adequate liquidity to meet its obligations in on time and to meet other needs. Besides, bank also should ensure the activities are managed efficiently in the sense that banks can reduce the high cost of liquidity management and at any time to liquidate its assets quickly with minimal losses (SE. Internal BI, 2004).

2.1.8 Previous Research

Some researchers have been conducting research on the influence of Capital Adequacy Ratio (CAR), Non-Performing Loan (NPL), BOPO, Net Interest Margin (NIM), Earning Asset Quality (KAP), Loan to Deposit Ratio

(LDR) to Return on Assets (ROA). The results of some researchers to be used as reference material and comparison in this study, among others, are as follows:

Werdaningtyas (2002) examines the factors affecting premerger refinance bank profitability in Indonesia. In her research, the factors which affect the profitability is market share, CAR, and the LDR, which market share is divided into three components, namely the share of assets, the share of funds, and share of credit. The method used is the multiple linear regressions. The result of this research is market share has no effect on profitability, while the CAR variable has a positive influence on LDR profitability and negatively affect profitability.

Mawardi (2005), analyzing the factors that affect financial performance of commercial banks in Indonesia with total assets of less than 1 trillion. In his research Mawardi using four variables, namely BOPO, NPL, NIM, and CAR. The research method used is the multiple linear regressions. The result can be concluded that NIM has the most impact on banking performance proxies with ROA. For variable BOPO and NPL negatively affect on the ROA, while variable NIM and CAR has a positive influence on ROA.

Lilis Erna Ariyanti (2010) research on the analysis of bank ratios effect on Change in Earning. The variables used are CAR, NIM, LDR, NPL and KAP. The method used is the multiple linier regression. The result show that CAR, NIM have negative and not significant influence on variable changes in Earning, while the LDR, NPL, KAP have significantly positive effect on change in Earning,

Suyono (2005) conducted research on the analysis of bank ratios effect on Return on Assets (ROA). The variables used are CAR, BOPO, LDR, NIM, NPL,

and ROA. The method used is the multiple linear regressions. The results showed that the ratio of CAR, BOPO, and LDR has positive and significant impact on ROA. For NIM, NPL shows positive results but no significant effect on ROA.

Merkusiwati (2007) studied the influence of CAMEL evaluation of company performance. The variables used in this study are the CAR, RORA, NPM, ROA, LDR. The research method used is the equation multiple linear regression. The results showed that the ratio of CAMEL in 1996-2000, 1998, 1999 and 2000 have positive and significant to ROA, in 1997 no significant effect on ROA.

Chindy Anggraeni Luthfihani (2010) conducted research regarding the influence of Earning Asset Quality and NPL on ROA in PT Bank BNI. The results showed that KAP has positive and significant effect on ROA, while NPL has negative but it is not significant on profitability (ROA). In summary, the results of previous researchers to presented in Table 2.1 below:

Table 2.1 Summary of Previous Research

No	Researcher	Variable	Methods	Conclusion Analysis
1.	Werdaningtyas -2002	Market share, CAR, LDR and profitability (ROA)	Multiple linier regression	The results of this research is the market share has no effect on profitability, while the variable CAR has positive effect on profitability and LDR negatively affect on profitability.
2.	Mawardi (2005)	CAR, NPL, BOPO, NIM and ROA	Multiple linier regression	Results of the research indicate that The four variable CAR, NPL, BOPO, as well as NIM collectively equal influence performance of commercial banks. For the variable CAR and NIM has a positive influence on ROA, while variable BOPO and NPL, have a negative effect on ROA. Of the four variables, the most effect on ROA is variable NIM
3.	Lilis Erna Ariyanti(2010)	CAR, LDR, NPL, KAP, NIM and change in earning	Multiple linier regression	CAR, NIM have negative and not significant influence on variable changes in Earning, while the LDR, NPL, KAP have significantly positive effect on change in Earning,
4.	Suyono (2005)	CAR,NIM, NPL, BOPO, LDR and ROA	Multiple linier regression	CAR, BOPO, and LDR have positive and significant impact on ROA. For NIM, and NPL shows the results positive but not significant effect on ROA
5.	Merkusiwati (2007)	CAR, RORA, NPM, ROA, LDR	Multiple linier regression	CAMEL in 1996-2000, 1998, 1999 and 2000 have positive and significant influence to ROA, the 1997 has no significant impact on ROA
6.	Chindy Anggraeni .L (2010)	KAP, NPL and ROA	Multiple linier regression	KAP has positive and significant effect on ROA, while NPL has negative but not significant effect on ROA

Source: from various journals

2.2 Theoretical Framework and Hypothesis Formulation

2.2.1 The influence of Non Performing Loan (NPL) on ROA

Non Performing Loan (NPL) ratio reflects the amount of credit risk faced by banks, the smaller of Non Performing Loan (NPL) and the smaller also the credit risk borne by the bank. In providing credit, bank must conduct an analysis of the ability of debtors to pay back obligations. After credit is granted, the bank shall conduct monitoring against the use of credit, the ability and compliance of debtors in meet obligations. Bank needs to review, assess, and binding against collateral to reduce credit risk (Ali, 2004). Thus if a bank has a high non-performing loans (NPL), then will increase the cost of provisioning of productive assets and other cost, thereby potentially against bank losses and give influence on bank performance.

Proxies of credit risk with non-performing loan (NPL) negatively affect the financial performance of banks and return on assets (ROA) as one of indicator for financial performance. So if the greater of Non Performing Loans (NPL), will reduce return on assets, which also means bank's financial performance has declined. Vice versa, if non- performing loans (NPLs) to fall, then return on assets (ROA) will increases, so the bank's financial performance can be said better. Results of research conducted by Mawardi (2005), shows that non-performing loans (NPLs) have an negative effect on Return On Assets (ROA). Based on the description above it can be hypothesis is obtained as follows:

Hypothesis 1: Non-Performing Loan (NPL) negatively affect on Return on Assets (ROA)

2.2.2 The influence of Earning Asset Quality on Return on Asset (ROA)

KAP is the ratio between classified earning assets (APYD) to total earning assets. APYD is a productive asset that have been or potentially loss, while Total Assets is the total of the Bank's investment funds in the form of loans, placement of fund at other bank, securities and equity participation are intended to generate revenue. The increasing of bad debt ratio which means the deterioration of earning asset quality (KAP) and will impact on decreasing of bank's ability to generate profits. Thus the increasing of earning asset quality will be followed by increasing of profitability. Therefore it can be concluded the influence of Earning Assets Qualityon ROA is positive, it can be formulated hypothesis 2 as follows:

H2: KAP positively affect on Return on Asset (ROA)

2.2.3 The influence of Loan to Deposit Ratio (LDR) to Return on Asset (ROA)

Loan to Deposit Ratio (LDR) is used to measure how much the ability of banks to meet credit demand is submitted without going suspension (Payamta and Machfoedz, 1999). According to Indonesian bank, the liquidity of a bank represented by LDR, which is the ratio between loans with Third Party Fund (DPK). It is used to assess the liquidity of a bank by dividing the number of loans granted by banks to a third party fund.

The standard used by Indonesian Bank to the ratio of LDR is 78% to 102%. If the number ratio of LDR a bank stood at below 78% (example: 70%), it can concluded that the bank could only deliver 70% of all funds that have been collected. If the ratio of LDR reached more than 102%, meaning the total bank loans exceed the funds raised. The higher of Loan to Deposit Ratio (LDR) showed that the more risky bank liquidity conditions, otherwise the lower of Loan to Deposit Ratio (LDR) shows a lack of effectiveness of the bank in channel bank loans, so that the loss of opportunity to gain profit. Changes in Loan to Deposit Ratio (LDR), the change in earnings obtained by these banks will increase (assuming that the bank capable of delivering credit to be effective). If the LDR banks reached more than 102%, meaning the total credit given the bank exceeds the funds raised. Therefore, funds collected from the community a bit, then the bank in this case can also be said not perform its function as the intermediary. If the ratios of Loan to Deposit Ratio (LDR) are on the standards set by Indonesian Bank, the profits earned by the bank will increases (assuming the bank is able to channel credit effectively). With increased profits, then the return on assets (ROA) will also increases, because the profit is a component that forms the return on assets (ROA). Research conducted by Suyono (2005) and Merkusiwati (2007) show the results of that Loan to Deposit Ratio (LDR) has positive and significant effect on Return On Assets (ROA). Based on the description above, can be obtained from the hypothesis, namely:

Hypothesis 3: Loan to Deposit Ratio (LDR) positively effect on Return on Assets (ROA)

2.2.4 The influence of NPL, KAP, and LDR simultaneously on ROA

The independent variable in this research are NPL, KAP, and LDR. All the independent variable simultaneously influence on ROA, so the hypothesis derived is:

Hypothesis 4: independent variable that are NPL, KAP, And LDR simultaneously have significant influence on ROA

From above description and previous studies, which become the independent variables in this study are Non-Performing Loan (NPL), Earning Asset Quality (KAP), Loan to Deposit Ratio (LDR) and Return On Assets (ROA) as dependent variable.

the relationship among variables in this research can be seen in the theoritical framework:

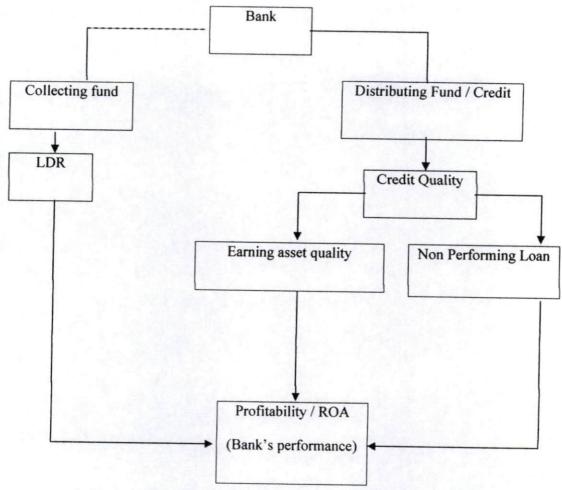


Figure 2.2 Theoritical Framework

Source: modified from previous research

CHAPTER III

RESEARCH METHODOLOGY

The research method is a step and the procedure of collecting empirical information to resolve an issue and test the hypothesis of the study

3.1 The Type of Research

This type of research conducted is the test hypothesis by testing the hypothesis of all variables studied. Time horizon is a time series research because the data were collected based on time sequence. The unit of analysis in this study is the banking company especially Regional Development Bank (Bank BPD).

3.2 Types and sources of data

Data used in this research refers to secondary data, namely primary data has been further processed into other forms such as figures, tables, graphs, diagrams, drawings, so that the data is more informative for the other side (Umar, 2002). Data used in the development of this research is the monthly time series data of the source obtained from the official site on the website www.bi.go.id of Indonesian bank.

3.3 Population

In this study population included all the regional development banks in Indonesia in the period 2007 – 2009 that number reached 26 BPD which spread almost throughout the territory level I in Indonesia. Years of research based on

secondary data availability and accuracy. Acquisition of sample data used is census, which means the whole populations are used as research data. According Supranto (2003), the good of the census is that we can obtain the actual value.

3.4 Data collection methods

Relevant data is needed in order to acquire the solution of the problem and the definition of broad problem area. Source of data used in this study derived from secondary data, which is the primary data that has been further processed and presented by the primary data collectors or other parties, for example in the form of tables or diagrams. The data collection techniques used in this study are:

- Library Research, which is studying the literature related to the object of research will be discussed in order to get the basic theory and as a basis for conducting research.
- 2. Documentation, which is a technique of data collection by collecting and analyzing important data about the company, particularly those associated with Non Performing Loan (NPL), Earning Asset Quality and Loan to Deposit Ratio (LDR) and Profitability in Regional Development Bank that available on the offial site www.bi.go.id of Indonesian banks. The data consist of time series data in the period 2007-2009

3.5 Identification and Mesurement of Variables

The independent variables in this research are non performing loan and loan to deposit ratio which influence the bank's performance. The indicator of bank

performance will be measured by profitability especially using of Return on Asset ratio (ROA), so the dependent variable is Return on Asset (ROA).

1. Return on Assets (ROA)

Santoso (1996) says that the ROA shows the ability of banks to generate income from each unit of assets owned. According to Riyad (2006) This ratio shows the level of efficiency in asset management by the bank concerned.

$$ROA = \frac{Profit \text{ before tax}}{Total \text{ asset}} X 100\%$$

2. Non Performing Loan

This ratio indicates that the bank management's ability to manage problem loans granted by banks. So the higher this ratio the more bad the quality of bank loans that caused the greater amount of non performing loans, the likelihood of a bank in error even greater. Indonesian Bank (BI) through Indonesian Bank Regulation (PBI) provides that the ratio of non performing loans (NPLs) amounted to 5%. Credit in this case is the credit provided to third parties does not include loans to other banks. Credit in problems are credit with substandard quality, doubtful and loss.

3. Earning Asset Quality (KAP)

Earning Assets Quality shows the quality of assets in connection with credit risk faced by banks as consquencies on provision of credit and investment funds in different portfolios. Earning Assets Quality Health assessed using the ratio between the number of classified assets to total earning assets owned by the bank.

4. Loan to deposit ratio

According to Santoso (1996) LDR is the ratio to measure the role of funds in the financial loan. Meanwhile, according to Riyadi (2006) LDR is the ratio of total loans with a total of Third Party Funds (TPF), which can be assembled by the bank. LDR will indicate the level of the ability of banks to distribute third party funds collected by the bank. LDR maximum allowed by Indonesian Bank is 102%.

3.6 Method of Data Analysis

3.6.1 Testing classical assumption

The research data used are secondary data, then to meet the specified requirements prior to testing the hypothesis through t-test and test-f as well as to determine the accuracy of the model it is necessary to testing of some classical assumptions used are: normality test, multicollinearity, heteroscedasticity and autocorrelation which in detail can described as follows:

3.6.1.1 Normality Test

Normality test aims to whether the regression model, the dependent, independent variables and both variables have normal distribution or no. A good regression model is to have a normal or near distribution normal. How to detect be done in two ways namely (Ghozali, 2001)

1. Graph Analysis

One of the easiest ways to see the normality of residuals is to see the histogram graph that compares the observation data with a near-normal distribution. However, only with see the histogram, this can be confusing, especially for the number of small sample. Another method that can be used is to see the normal probability plot that compares the cumulative distribution of the normal distribution. Basis for a decision from the normal analysis probability plot is as follows:

- a) If the data are spread around the diagonal line and follow directions diagonal line shows the normal distribution pattern, then the model regressions meet the assumption of normality.
- b) If the data are spread far from the diagonal line and or not follow the direction of the diagonal line showed no pattern of distribution normal, then the regression model did not meet the assumption of normality.

2. Statistical Analysis

To detect the normality of the data can be done also through the analysis statistics, one of which can be seen through the Kolmogorov-Smirnov test (K-S). K-S test is done by making the hypothesis:

- a. Ho = the data is normally distributed residuals
 Ha = data not normally distributed residuals
 Basic decision-making in the KS test is as follows:
 If the probability of KS test Z value is statistically significant Ho is rejected, which means not normally distributed data.
- b. If the probability of KS test Z value is not statistically significant Ho accepted, which means normally distributed data

Guidelines for decision making are as follows:

- a) Value sig. or significance or probability value <0.05 distribution is not normal
- b) The value of sig. or significance or probability value> 0.05 distribution is normal

3.6.1.2 Heteroskidasticity Test

Heteroskidasticity test aims to test whether the regression model inequality occurs from the residual variance to the observations of one another. Model A good regression is that homoskedastisitas or did not happen heteroscedasticity. One way to detect the presence or absence heterocedasticity it by using test Glejser. Basic decision-making through test Glejser heteroscedasticity test carried out as follows:

- if the beta coefficient parameters of the regression equation significantly statistics, which means there is empirical data which estimated heteroscedasticity.
- If the probability of test values are not statistically significant, the mean data empirical estimates there is no heteroscedasticity.

Another way to determine the heteroscedasticity can use the graph scatterplot, the points that form must be spread at random, scattered both in above or below the number 0 on the Y axis, if this condition is met then not occur heteroscedasticity and regression models fit for use.

3.6.2 Data Analysis Techniques

Analysis technique will be used in this study is to using multiple linear regression analysis techniques to obtain a thoroughly the relationship between variables from one variable to another. In this case for the dependent variable is Return on Assets (ROA) and independent variable are Non-Performing Loans (NPL), Earning Asset Quality (KAP) and the Loan to Deposit Ratio (LDR). To

find out if there is significant influence of independent variables to dependent variable is used multiple linear regression model (Multiple linear regression method), which is formulated as follows:

$$Y = a + b1 X1 + b2 X2 + b3 X3 + e$$
... (2)
where:

Y = Return On Assets (ROA)

X1 = Non Performing Loan (NPL)

X2 = Earning Asset Quality (KAP)

X3 = Loan to Deposit Ratio (LDR)

a = constant

e = residual error (error)

3.6.3 Hypothesis Testing

To perform the testing of hypotheses proposed, necessary to use regression analysis via t test or test f. The objective used regression analysis is to determine the effect of independent variables on dependent variable, either partially or simultaneously, as well as know the size of the dominance of independent variables on variables dependent. Hypothesis testing method proposed by partially testing and testing simultaneously. Measures to test the hypotheses proposed in this study were as follows:

3.6.3.1 Test Statistic t

T test is using to test of significance in partial. The steps taken in testing is (Ghozali, 2001):

Developing the null hypothesis (Ho) and alternative hypothesis (H1) Ho: $\beta 1 = \beta 2 = \beta 3 = \beta 4 = 0$, suspected to be partially independent variables not significant effect on the dependent variable.

H1: $\beta i \neq 0$, suspected to be partially independent variables have a significant effect dependent variable.

Establish criteria for testing are:

Reject Ho if the number of significance is smaller than $\alpha=5\%$

Accept Ho if the number of significance greater than $\alpha = 5\%$

3.6.3.2 Test Statistic F

Tests simultaneously using the F test (test of significance simultaneously). The steps taken in testing is (Ghozali, 2001):

Constructing null hypothesis (Ho) and alternative hypothesis(H1)

Ho : ρ = 0,allegedly independent variables jointly do not significant effect on the dependent variable.

H1: $\rho\neq 0$, allegedly independent variables jointly influence significant effect on the dependent variable.

Establish criteria for testing are:

Reject Ho if the number of significance is smaller than $\alpha = 5\%$

Accept Ho if the number of significance greater than $\alpha = 5\%$

3.6.3.3 Analysis of Coefficient of determination (R2)

The coefficient of determination (R2) is used to determine the extent to which large percentage of independent variables in the model variation can be explained by dependent variable (Gujarati, 1995). The coefficient of determination (R2) is expressed in percentage of the value of which ranges from 0 < R2 < 1. The R2 is small means that the ability of independent variables in explaining the variation of dependent variable is very limited (Ghozali, 2005). Value close to 1 (one) means that the independent variables gave almost all the information needed to predict the variation of the dependent variable.

CHAPTER IV

DATA ANALYSIS AND DISCUSSION

4.1 General Overview and descriptive data of Research Object

Object of the research used in this study is all the regional development banks in the period 2007-2009. Overall the data will be used in this study; there are 26 regional development banks in that period. Data used in the study were taken from annual statistic report of BI that contain monthly ratio of each variables, especially in the consolidated financial ratio calculation. Total data of the research can be seen in the table below.

Table 4.1

List of Regional Development Banks

No	Name
1	Bank BPD Aceh
2	Bank BPD Sumut
3	Bank BPD Sumbar
4	Bank BPD Riau
5	Bank BPD Jambi
6	Bank BPD Sumsel
7	Bank BPD Bengkulu
8	Bank BPD Lampung
9	Bank BPD DKI
10	Bank BPD Jabar
11	Bank BPD Jateng
12	Bank BPD Yogyakarta
13	Bank BPD Jatim

No	Name
14	Bank BPD Bali
15	Bank BPD NTB
16	Bank BPD NTT
17	Bank BPD Kalbar
18	Bank BPD Kalteng
19	Bank BPD Kalsel
20	Bank BPD Kaltim
21	Bank BPD Sulut
22	Bank BPD Sulteng
23	Bank BPD Sulsel
24	Bank BPD Sultra
25	Bank BPD Maluku
26	Bank BPD Papua

Source: Website Asbanda

Return on asset become one of indicator in measuring bank's performance. Management capability of banks in managing their assets in order to obtain total revenue can be called by Return on Assets (ROA). ROA values reflect the earnings of banking companies to obtain pre-tax profits which depend on bank management performance in asset management and total quality all of its assets. The high level of ROA indicates that the banking company has an excellent performance in generating the profit. ROA values for the regional development banks during the 2007-2009 period is shown in the table as follows:

Table 4.2 ROA, NPL, KAP and LDR of Bank BPD in Period 2007 – 2009

Year	Month	ROA	NPL	KAP	LDR
2007	1	3,66	1,75	0,94	44,83
2007	2	3,36	1,79	0,96	43,92
2007	3	3,48	1,78	0,93	43,61
2007	4	3,5	1,91	1,01	44,59
2007	5	3,51	1,99	1,05	45,58
2007	6	3,43	1,93	1,04	46,39
2007	7	3,34	1,99	1,02	45,83
2007	8	3,3	1,93	1,04	45,23
2007	9	3,18	1,92	1,03	46,15
2007	10	3,11	2,01	1,09	47,44
2007	11	3,13	2,01	1,11	48,1
2007	12	3,08	1,68	0,99	53,53
2008	1	4,43	1,77	1,11	55,94
2008	2	4,03	1,84	1,14	54,18
2008	3	3,94	1,89	1,14	53,2
2008	4	3,91	1,92	1,15	55,42
2008	5	4,03	1,96	1,16	54,48
2008	6	3,92	1,87	1,2	59,07
2008	7	3,98	1,83	1,19	59,96
2008	8	4,01	1,75	1,24	62,49
2008	9	3,89	1,76	1,18	59,01

Year	Month	ROA	NPL	KAP	LDR
2008	10	3,92	1,76	1,17	57,68
2008	11	3,99	1,8	1,22	60,11
2008	12	3,7	1,41	1	67,28
2009	1	5,17	1,59	1,22	63,8
2009	2	4,51	1,61	1,26	63,5
2009	3	4,45	1,64	1,26	60,73
2009	4	4,05	1,81	1,25	60,2
2009	5	4,18	1,8	1,35	62,5
2009	6	4,11	1,81	1,39	64,73
2009	7	3,95	1,86	1,44	67,15
2009	8	3,87	1,87	1,53	67,59
2009	9	3,71	1,91	1,54	68,82
2009	10	3,7	1,93	1,55	69,59
2009	11	3,68	1,95	1,64	73,36
2009	12	3,65	1,71	1,39	79,31
Hig	hest	5,17	2,01	1,64	79,31
Lov	vest	3,08	1,41	0,93	43,61
1	1	36	36	36	36
Me	ean	3,8017	1,8261	1,1925	57,0917
Std. De	eviation	0,44074	0,13113	0,18495	9,46524

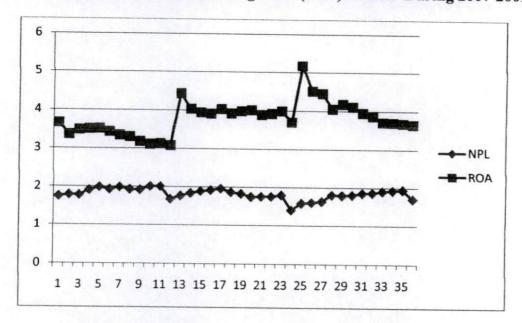
From the table above shows that ROA regional development banks as a whole during the period 2007-2009 is above the average annual ROA stated by the BI (greater equal 2%). Nevertheless, trend of ROA from 2007 to 2009 was relatively stable with an average of 3.8%, this suggests that the Bank BPD succeed in managing its assets

Effect of Non Performing Loans (NPLs) to Return on Assets (ROA) is inversely proportional. In general it can be concluded that all ratios Non Performing Loan (NPL) of Regional Development Banks accordance with the standard ratio of Non Performing Loans (NPLs) that is below 5% (Infobank,

2007). In other words credit crunch faced by Bank BPD in some periods is getting smaller (below 5%). Movement of non performing loans (NPLs) is better (smaller ratios) offset by increasing the ratio of return on assets (ROA). In the period is shown that the movement of Return on Assets (ROA) continues to increase. In Table 4.2 and Figure 4.1 can be seen a decrease in non-performing loans (NPL) followed by an increase in Return on Assets (ROA). So the analysis accordance with the previous theory in which the reduction of Non Performing Loan (NPL) should be accompanied by increasing in Return on Assets (ROA).

Figure 4.1

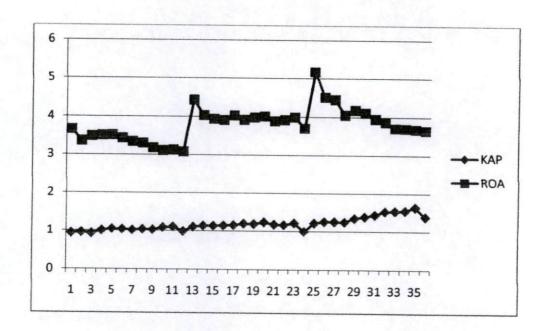
The development of Non Performing Loan (NPL) on BPD During 2007-2009



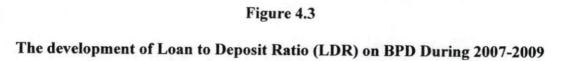
Effect of Earning Asset Quality (KAP) to Return on Assets (ROA) is proportional. This theory accordance with condition on table 4.1 and figure 4.2 in which the increasing of KAP also followed by increasing of ROA

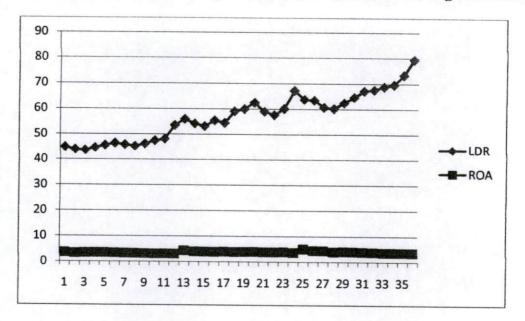
Figure 4.2

The development of Earning Asset Quality (KAP) on BPD During 2007-2009



In Table 4.2 and Figure 4.3 can be seen that magnitude of Loan to Deposit Ratio (LDR) does not meet the standards of the Indonesian Bank (78% -102%). The influence between Loan to Deposit Ratio (LDR) to Return On Assets (ROA) is directly proportional. However, the table shows the value Loan to Deposit Ratio (LDR) increased, while return on assets (ROA) shows the opposite condition





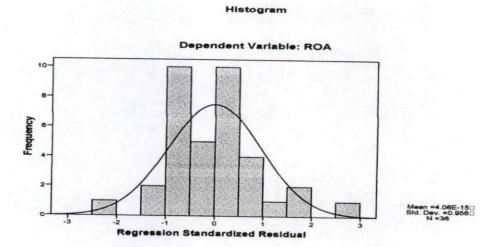
4.2 Process and Analysis of The Result

4.2.1 Testing Classical Assumption

4.2.1.1 Normallity test

Normality test aims to test whether the regression model, residual variable has a normal distribution. To test whether the data distribution Normal or not, there are two ways to detect it, namely with the graph analysis and statistical tests. Graph analysis is the easiest way to see residual normality by looking at a histogram graph that compares the observational data with the distribution of near-normal distribution.

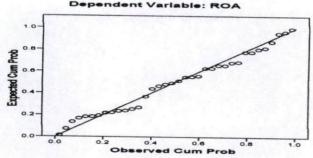
Figure 4.4
Histogram Graph (original data)



From Figure 4.4 shows that nearly normal distribution pattern, will but if the normal conclusion whether the data is only seen from the graph of the histogram, then this can be misleading, especially for small sample size. Another method used in the analysis of graphs is to look normal probability plot that compares the cumulative distribution of the normal distribution. If the normal distribution of residual data, so the line which will describe data will actually follow the diagonal line.

Figure 4.5 Probability Graph





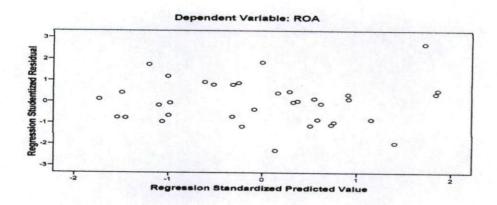
Probability graph in Figure 4.5 above shows the data normally distributed because the distribution of visible residual data approached the normal line.

4.2.1.2 Test Heterocedasticity

Heteroscedasticity test aims to test whether the model regression occurred inequality variant of one observation to observation another. If the residual variance from one observation to other observations still, it is called homoskedasticity and if different will be called heteroscedasticity. A good regression model is a model that does not happen heteroscedasticity (Ghozali, 2006). To determine the heteroscedasticity can use the graph scatterplot, the points that form must be spread at random, scattered both in above or below the number 0 on the Y axis, if this condition is met then not occur heteroscedasticity and regression models fit for use. Test Results heteroscedasticity by using the graphs show the scatter plot in Figure 4.11 below:

Figure 4.6 Scatter Plot

Scatterplot



By looking at the scatter plot chart above, the dots spread random, and scattered both above and below the number 0 on the axis Y. Then can be concluded that there are no symptoms of heteroscedasticity in regression model is used.

4.2.2 Hypothesis Testing

4.2.2.1 T Test

The result of the calculation of regression analysis to test the hypothesis proposed can be seen in Table 4. 12 as follows:

Table 4.3 Regression Analysis Coefficients(a)

	Model	Unstand Coeffi		Standardized Coefficients	Т	Sig.
		В	Std. Error	Beta	The same	
1	(Constant) 7,472	7,472	1,553		4,811	0,000
	NPL	-2,594	0,804	-0,772	-3,228	0,003
	KAP	2,132	0,993	0,895	2,146	0,04
	LDR	-0,026	0,021	-0,555	-1,243	0,223

Dependent Variable: ROA Source: Secondary data are

processed

From the results of regression analysis above, it appears that the variable independent of non-performing loan (NPL) significantly affects on Return On Assets (ROA) with significance level respectively amounted to 0.003 which is smaller than the significance level of 0.05 and variable Earning Asset Quality (KAP) have a positive and significantly affect on the variable Return On Assets (ROA). meanwhile Loan to Deposit Ratio (LDR) has negative effect on ROA but it is not significantly affect.

4.2.2.1.1 Testing Hypothesis 1

The first hypothesis proposed states that the Non-Performing Loans (NPL) has negative and significant effect on Return on Assets (ROA). From results were obtained with regression coefficient values for the variables of Non Performing Loan (NPL) is -2,594 and significance value is 0.003, where the value is significant because smaller than 0.05. It can be concluded that non-performing loan (NPL) significant effect on ROA. With Thus, the first hypothesis which states that non-performing loans (NPL) significantly and negatively related to the

Return on Assets (ROA) is accepted. The results of this study indicate that at the current level of Non Performing Loan (NPL), Bank BPD is still relatively low or below 5%. Banking company always keep the amount of Non Performing Loan (NPL) were below 5%. Poor credit quality will increase the risk, especially if the lending is done by not using the principle of prudence and expansion in the less controlled, so that lending by banks will have a greater risk as well. Risk in the form of difficulties in credit repayment by the debtor will affect the performance of banking. The result of the research is accordance with the conclusion analysis by mawardi (2005)

4.2.2.1.2 Testing Hypothesis 2

The calculation of the partial test obtained that variable Earning Asset Quality has significant and positive effect on ROA. This is indicated by the level of significance is 0.04 (smaller than 0.05) and the regression coefficient Earning Asset Quality is positive (equal to 2,132). This result accordance with the hypothesis that increasing of earning asset quality will followed by increasing of profitability, thus the hypothesis 2 is accepted.

4.2.2.1.3 Testing Hypothesis 3

The third hypothesis is proposed stating that the Loan to Deposit Ratio (LDR) has negative and not significant effect on Return on Assets (ROA). From results were obtained with regression coefficient values to variables Loan to deposit ratio (LDR) is -0,026 with a significance value is 0.223, where the

significant value is greater than 0.05. Thus the third hypothesis stating that the Loan to Deposit Ratio (LDR) has positive and significant effect on Return on Assets (ROA) is rejected. The results of this study indicate that LDR has no effect on ROA, this is because the loans extended by banks not a lot of profit contribution on the year of research. This reason also influence by ratio of LDR is not achieve the standard stated by BI which is has minimum LDR 78 % meanwhile the avaerage LDR of Bank BPD just 57,09 during 2007-2009. The higher of LDR showed that the more risky the bank's liquidity. If the percentage disbursement of loans to deposits was between 78% -102%, then bank can be said to have a good level of profitability, so that the bank's financial performance is also good (Bank Indonesia, 2004). Bank liquidity demonstrates the ability of banks to provide funds in sufficient quantities, just in time to meet their obligations. Banks are too high to pursue profitability with excessive lending to experience liquidity problems.

4.2.2.2 Test F

4.2.2.2.1 Testing Hypothesis 4

F statistic test essentially indicates whether all the variables independent to be included in the model have an influence together towards its dependent variable. The result of this calculation to test F seen in Table 4.4 below:

Table 4.4

ANOVA(b)

Mode	el	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2,929	3	,976	8,073	,000(a)
	Residual	3,870	32	,121		,000(a)
	Total	6,799	35			

a Predictors: (Constant), LDR, NPL, KAP

b Dependent Variable: ROA

From the results of regression analysis of the transformation can also be shown that the independent variables together have a significant impact on dependent variable, so the hypothesis 4 is accepted. This can be evidenced from the calculation of F value is 8,073 with a significance value 0.000. Because the probability is much smaller than 0.05 or 5%, then the model can be used for predict Return On Assets (ROA) or it can be said that the Non Performing Loan (NPL), Earning Asset Quality (KAP) and Loan to Deposit Ratio (LDR) jointly affect the return on assets (ROA) and it can be concluded that the proper model to be studied (goodness of fit).

4.2.3 The Coefficient of Determination (R2)

The coefficient of determination (R2) essentially measures how far the ability of the model in explaining the variation of dependent variable. The R2 close to one means the independent variables gave almost all the information needed to predict the variation of the dependent variable (Ghozali, 2006). The calculation result can be seen the coefficient of determination in Table 4.5 below:

Table 4.5

Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,656(a)	,431	,377	,34775	1,381

a Predictors: (Constant), LDR NPL, KAP

b Dependent Variable: ROA

From the calculation results about the effect of independent variable on the dependent variable that can be explained by the model is 37,7 and the rest is 62.3% is influenced by other factors that are not included in the regression model, such as macro economic factors, politics factors and market sentiment factors. The influence is not so large probably because of less wide range of research that uses only 3-year financial statement data.

4.2.4 Multiple Regression Analysis Results

The result of data anlyisis using the regression methods and calculated by SPSS. Based on the SPSS output, the partial effect of the 3 independent variables namely Non Performing Loan (NPL), Earning Asset Quality (KAP) and Loan to Deposit Ratio (LDR) to Return On Assets (ROA) is shown in Table 4.6 as follows:

Table 4.6 T Test Result Coefficients(a)

Model		Model Unstandardized Coefficients		Standardized Coefficients	Т	Sig.
		В	Std. Error	Beta		
1	(Constant)	7,472	1,553		4,811	0,000
	NPL	-2,594	0,804	-0,772	-3,228	0,003
	KAP	2,132	0,993	0,895	2,146	0,04
	LDR	-0,026	0,021	-0,555	-1,243	0,223

Dependent Variable:

ROA

Source: Secondary data are porcessed

By looking the table above, the regression equation can be arranged linear regression as follows:

$$ROA = 7,472 - 2,594 \text{ NPL} + 2,132 \text{ KAP} - 0,026 \text{ LDR}$$

Regression equation above has the meaning as follows:

- Constant for 7,472 percent indicated that if non performing loans, earning asset quality and loan to deposit ratio equals to zero, the average profitability in Regional Development Bank (BPD) is 7,472 percent.
- 2. Regression coefficient for variable X1 or Non-Performing Loans (NPLs) amounted to -2,594. A negative coefficient shows that non-performing loans (NPLs) have negative effect on Return on Assets (ROA) of the Regional Development Banks in period 2007-2009 and significannt coefficience is 0,003 (< 0,05), means that NPL significantly affect on ROA. Negative coefficient of -2,594 meaning that any increase in problem</p>

- loans at 1 percent predicted would reduce the profitability to 2,594 percent with the assumption that earning asset quality and LDR does not change
- 3. Regression coefficient for variable X2 or Earning Asset Quality ammounted to 2,132. Positive coefficient shows that Earning Asset Quality has positive effect on ROA and influence ROA sigificantly, this proven by significant coefficient of KAP on ROA is 0,04 (< 0,05). Earning asset quality have positive coefficient 2,132 percent, meaning that any increase in earning asset quality (KAP) by 1 percent is predicted to increase the profitability as much as 2,132 percent, with the assumption of non-performing loans and LDR have not changed.
- 4. Regression coefficient for variable X3 or Loan to Deposit Ratio (LDR) amounted to -0,026. negative coefficient shows that the Loan to Deposit Ratio (LDR) has negative effect on Return On Assets (ROA) of the Regional Development Banks in period 2007-2009. A negative coeeficoent -0,026 percent, meaning that any increase in LDR by 1 % is predicted would reduce the profitability to 0,026 percent, with the assumption of NPL and KAP have not changed.

4.2.5 Discussion

Based on data analysis known that NPL, KAP and LDR simultaneously have significant impact on ROA in Bank BPD during 2007-2009. That can be proven by F test which is the significant level 0,000 or smaller than 0,05. So the hypotheis 4 can be accepted. Partially NPL and Earning Asset Quality have

significant effect on ROA. Meanwhile the LDR variable partially has no effect on ROA.

Credit in problems measured using the non-performing loan (NPL), the ratio of non performing loans (loans that fall into the category substandard, doubtful and loss) to total loans extended. Hypothesis test results have shown that Bank BPD is able to maintain its credit quality with the avarage of NPL ratio during 2007 until 2009 is 1.8621 percent. the highest NPL ratio was only 2.01% and the lowest 1.41% in which the ratio is still very low compared to the maximum NPL ratio stated by BI as much as 5%. This research also found that the NPL has a negative and significant impact on profits. This is also proven by the data in table 4.2 that increasing of profit accompanied by NPL reduction (example: like occurred in January of 2009 where the highest return on assets reached 5.7% and the NPL at the time was 1.57%, where this NPL ratio is close to the lowest ratio of NPL during the reseach period (1.41%). These findings reinforce earlier findings made by Cindy Anggreini. L (2010) where NPLs significantly and negatively related to ROA and strengthen hypothesis of Kashmir (71:2008) that the role of banks as financial institutions never be separated from credit problems, even the activities of banks as financial institutions, provision of credit is a main activity. The amount of total outstanding loans will determine the bank's profits. If banks are not able to extend credit while deposit funds collected from society is so many, it will cause the bank loss. Therefore, credit management should be done the planning of total loans distribute, determination of interest rates, lending procedures, analysis of credit distribute to a control of bad credit.

Analysis the effect of KAP on ROA accordance to the hypothesis proposed by the author that KAP has positive effect on ROA in which the increasing of KAP Ratio will be followed by decreasing of Earning Asset Quality and it causes a decreased in ability of banks to generate profits. this finding also proven by the data on table 4.2 and figure 4.2. From the figure we can see that the increasing of KAP ratio will be make the Earning Asset quality would be decrease and followed by decreasing of profitability. This condition show the positive effect of Earning Asset Quality on ROA. These findings strengthen the research of Lilis Erna Ariyanti (2010) and Cindy Anggreini. L (2010)

A negative coefficient of LDR is not consistent with the hypothesis proposed. This is due to the ability to distribute third party fund is not maximized, so that the bank invests the funds collected in the form of other Earning assets are does not have risk. This can be seen from the average value of the LDR for the bank overall in the table 4.2 just 57,0917% which indicates the bank has not effective in distributing the third party fund in the form of credit.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS OF THE RESEARCH

5.1 Conclusion

This study examined, whether Non Performing Loan (NPL), Earning Asset Quality (KAP) and the Loan to Deposit Ratio (LDR) affect the return on assets (ROA) of Regional Development bank in periode 2007-2009. Results hypothesis testing by using multiple regression analysis with 3 independent variables (Non Performing Loan (NPL), Earning Asset Quality (KAP) and the Loan to Deposit Ratio (LDR)) and one dependent variable Return on Assets (ROA) shows that:

- Based on the R square value of 0.377. This means that 37.7 percent ROA
 is influenced by 3 independent variable that are NPL, KAP and LDR,
 while the remaining 62.3 percent influenced by other factors out side the
 model.
- 2. The research result shows the calculation of F value is 8.073 with a significant value 0.000 or less than 0.05 which indicates that the variable NPL, KAP and LDR, jointly have a significant influence on ROA. So, the hypothesis 4 is accepted.
- 3. Non Performing Loan (NPL) has negative and significant effect on ROA, thus the hypothesis 1 is accepted. In the research period find that level of non Performing Loan (NPL) is still relatively low (avarage 1,8261%) or

- below 5%. The low of NPL ratio will followed by incrasing of profitability because BPD can optimize the profit from interest loan.
- 4. From the results of the discussion on testing hypotheses about the influence Earning Assets Quality of ROA through T-tests, shows that the variable Earning asset Quality has significant and positive impact on ROA, thus hypothesis 2 is accepted.
- 5. Loan to Deposit Ratio (LDR) has negative and not significant effect on Return on Assets (ROA), thus the hypothesis 3 is rejected. Based on hypothesis proposed, if the ratio of LDR located on the standards set by Indonesian Bank, the profit obtained by these banks will be increase (assuming the bank capable in delivering credit effectively). With increasing of profit, then the Return on Assets (ROA) will also increase. This condition is contradict with the result of this reseach whic is LDR has no effect on ROA. Eventhough LDR of Bank BPD continuesly increse but this condition did not give much contribution on ROA.

5.2 Research Limitations

This study has limitations that is, the validity of ratios in this research can make the result of the research being bias because the data used in this research just taken from annual statistic report of Indonesian Bank without directly calculate the ratio from original data in every Bank BPD in indonesia.

5.3 Implication

Implication of the research consist of:

1. Investors

Investor should be careful in making decision to invest their money on Regional Development bank because the increasing of LDR not always followed by increasing of profitability. this condition might be happen caused by the influence of credit quality. It is possible when quite a lot of credit will result in losses if the loans extended are found not qualified and result in credit problems

2. Management of Bank BPD

Management of Bank BPD have to be concern on prudence principle in revolving the credit because the increasing of LDR have to followed by increasing on Earning Asset Quality and finally giving impact on achieving maximum profitability but the research result shown that the increasing of LDR is not always followed by increasing of profitability.

References

- Bank Indonesia, 2010, "Indonesian Banking Statistic".
- Basar, Adhy & Ihsan Ismady, 2009, "Kondisi Perbankan 2009 dan Prospek Perbankan 2010".
- Cerqueiro, Geraldo, 2008, "Bank Cocentration, Credit Quality and Loan Rate", Tilburg University.
- Erna, Aiyanti Lilis, 2010, "Analisis Pengaruh CAR, NIM, LDR, NPL, BOPO, ROA dan Kualitas Aktiva Produktif Terhadap Perubahan Laba Pada Bank Umum di Indonesi", Universitas Diponegoro.
- Kasmir, 2008, "Bank dan lembaga keuangan lainnya", Rajawali Pers.Sekaran, Uma, 2003, "Reasearch Methodes for Business", Jhon Wiley & Sons, Inc.
- Knaup, Martin & Wolf Wagner, 2008, "A market Based Measured Credit Qulity and Bank's Performance During Subprime Crisis"
- Meyer, P. A. and & HW Pifer. 1970. "Prediction of Bank Failures." *Journal of Finance*. September, pp. 853 868
- Mongid, Abdul.2000. "Accounting Data and Bank Future Failure: A Model For Indonesia. Simposium Nasional Akuntansi
- Muljono, T. P. 1999. Aplikasi Akuntansi Manajemen dalam Praktik Perbankan. Ed. 3. BPFE Yogyakarta
- Ohlson, J. A. 1980. "Financial Ratios and the Probabilistic Prediction of Bankruptcy." *Journal of Accounting Research*, Vol. 18, No. 1 Spring. pp.109-131

- Platt, H. D. and M. B. Platt. 2002. "Predicting Corporate Financial Distress: Reflecting on Choice-Based Sample Bias." *Journal of Economics and Finance*, Vol. 26, No. 2, pp.184 199
- Riyadi, S. 2006. Banking Assets and Liability Management. Ed. 3. Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia
- Santoso, W. 1996. "The Determinants of Problem Banks in Indonesia (An Empirical Study).", http://www.bi.go.id. Diakses tanggal 25 Desember 2007
- Sawir, A. 2005. Analisis Kinerja Keuangan Perusahaan. Ed. 3. PT.Gramedia Pustaka Utama
- Scott, William R. 2000. Financial Accounting Theory. Second Ed. Prentice Hall Canada Inc.
- Sinkey, J. F Jr. 1975. "A Multivariate Statistical Analysis of The Characteristic of Problem Bank." *Journal of Finance*, Vol. XXX, No. 1, March, pp. 21 36
- Soebagio, hermawan, 2005, "Analisis faktor-faktor yang mempengaruhi terjadinya NPL pada bank umum komersial", Universitas Diponegoro.
- Suharman, H. 2007. "Analisis Risiko Keuangan untuk Memprediksi Tingkat Kegagalan Usaha Bank." *Jurnal Imiah ASET*, Vol. 9, No. 1 Februari
- Syahyunan, 2002, "Analisis Kualitas Aktiva Produktif Sebagai Salah Satu Alat Ukur Kesehatan Bank", Universitas Sumatra Utara.
- Qualitative Research and Reliabilityhttp://www.suite101.com/ www.asbanda.com

APPENDIXES

Regression

Descriptive Statistics

	Mean	Std. Deviation	N
ROA	3,8017	,44074	36
NPL	1,8261	,13113	36
KAP	1,1925	,18495	36
LDR	57,0917	9,46524	36

Correlations

		ROA	NPL	KAP	LDR
Pearson Correlation	ROA	1,000	-,491	,359	,486
	NPL	-,491	1,000	,085	-,368
	KAP	,359	,085	1,000	,846
	LDR	,486	-,368	,846	1,000
Sig. (1-tailed)	ROA		,001	,016	,001
	NPL	,001		,311	,014
	KAP	,016	,311		,000
	LDR	,001	,014	,000	
N	ROA	36	36	36	36
	NPL	36	36	36	36
	KAP	36	36	36	36
	LDR	36	36	36	36

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	LDR, NPL, KAP(a)		Enter

a All requested variables entered. b Dependent Variable: ROA

Model Summary(b)

Mod el	R	Adjuste R d R of the Square Square Estimate Change Statistics						Durbin- Watson		
	R Square Chang e	are F ing Chang	df2	Sig. F Chang e	R Square Chang e	F Chang e	df1	df2	Sig. F Change	
1	,656(a)	,431	,377	,34775	,431	8,073	3	32	,000	1,381

a Predictors: (Constant), LDR, NPL, KAP b Dependent Variable: ROA

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	2,929	3	,976	8,073	,000(a)	
	Residual	3,870	32	,121	0,0.0	,000(a)	
116	Total	6,799	35				

a Predictors: (Constant), LDR, NPL, KAP b Dependent Variable: ROA

Coefficients(a)

Model		Unstand Coeffi	Standardized Coefficients	
		В	Std. Error	Beta
1	(Constant)	7,472	1,553	
	NPL	-2,594	,804	-,772
	KAP	2,132	,993	,895
	LDR	-,026	,021	-,555

a Dependent Variable: ROA

Coefficient Correlations(a)

Mode	el		LDR	NPL	KAP
1	Correlations	LDR	1,000	,829	-,947
		NPL	,829	1,000	-,800
		KAP	-,947	-,800	1,000
	Covariances	LDR	,000	,014	-,020
		NPL	,014	,646	-,639
		KAP	-,020	-,639	,987

a Dependent Variable: ROA

Collinearity Diagnostics(a)

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
		(Constant)	NPL	KAP	LDR	(Constant)	NPL	
1	1	3,968	1,000	,00	,00	,00	,00	
	2	,026	12,265	,01	,02		,03	
	3	,005	28,258	,07	,03		,10	
	4	,001	88,674	,92	,95		,87	

a Dependent Variable: ROA

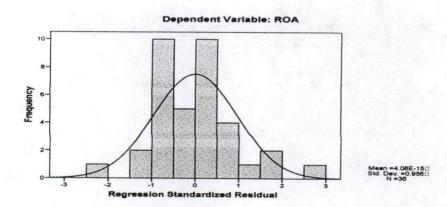
Residuals Statistics(a)

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3,3000	4,3404	3,8017	,28928	36
Std. Predicted Value	-1,734	1,862	.000	1,000	36
Standard Error of Predicted Value	,061	,232	,109	,039	36
Adjusted Predicted Value	3,2948	4,6120	3,8216	,31557	36
Residual	-,76103	,87071	.00000	.33251	36
Std. Residual	-2,188	2,504	.000	.956	36
Stud. Residual	-2,301	2,698	-,025	1.036	36
Deleted Residual	-,91203	1,01091	-,01993	.39541	36
Stud. Deleted Residual	-2,478	3,021	020	1.084	36
Mahal. Distance	,099	14,564	2,917	3,187	36
Cook's Distance	,000	.763	.054	,137	36
Centered Leverage Value	,003	,416	,083	.091	36

a Dependent Variable: ROA

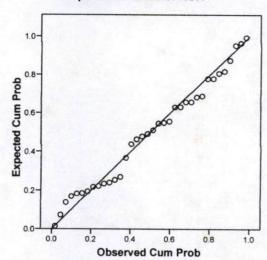
Charts

Histogram



Normal P-P Plot of Regression Standardized Residual

Dependent Variable: ROA



Scatterplot

