INTERNATIONAL JOURNAL OF CURRENT RESEARCH

RESEARCH ARTICLE

ANALYSIS OF THE EFFECT OF CAPITALAND PROFITABILITY IN THE IMPLEMENTATION OF BANKING INTERMEDIATION

*Herry Achmad Buchory

EKUITAS Economics College, Jl. PHH. Mustopa No. 31 Bandung 40124, Indonesia

ABSTRACT

The aim of this study was to analyze the factors that affect the implementation of banking intermediation include Capital and Profitability. The methods used are descriptive and verificative, with secondary data from financial statements all over 26 Indonesian Regional Development Banks as a research object's units. Data analysis technique is the multiple linear regression, hypothesis testing while using t - test to examine the effect of partial variables and test - F to examine the effect of variables simultaneously with a significance level of 5 %.Based on the results it is concluded that partial CARhave negative effect but no significant effects on LDR. While the ROAhas positiveand significant effect to LDR. Simultaneously CAR and ROA significantly influence the level of influence of LDR with 34.9% and the remaining 65.10% thought to be influenced by other variable not examined in this study.

INTRODUCTION

Bank as the depository financial institution holds a very important role in the economy of a country. Bank facilitates the interests of savers with borrowers through products and financial services it offers. Asides from these activities, banks can also provide services that facilitate payments traffic. It can not be denied that the role of banks which can be used as a tool in setting monetary policy is also the primary source of credit to most small businesses and individuals, which will ultimately affect the economic growth of a country (Koch 2000; Buchory 2006). The role that financial institutions have played in financial intermediation and growth, namely to mobilize savings and allocate them to the most productive and growth-promoting activities (Mahran 2012). Banking plays such a major role in channeling funds to borrowers with productive investment opportunities. This financial activity is important in ensuring that the financial system and the economy run smoothly and efficiently (Mishkin and Eakins, 2006). The combined effects of financial intermediation, which are the externality and inter-sectoral factor productivity differential effects on economic growth are significantly positive and do not appear to depend on the stage of economic development attained (Odedokun 1998).Intermediation function performed by banks through the purchase of surplus funds from economic units (business sector, government and individual / household)

Corresponding author: Herry Achmad Buchory
EKUITAS Economics College, Jl. PHH. Mustopa No. 31 Bandung 40124, Indonesia.

to be distributed to deficit economic units (Hempel *et al.,* 1994). In other words, a financial intermediation is the diversion of funds activities from savers (ultimate lenders) to the borrower (the ultimate of borrowers). Implementation of financial intermediation in banking can be seen from the bank's ability to transform the savings are received primarily from household economic units into credit or loans for companies and other parties to make investments in buildings, equipment and other capital goods (Rose 2002).

In the context of Indonesia's economy, the dominant role of banks remainsas compared to other financial institutions. This can be seen from the market share asset indicators of financial industry through the month of June 2013. Banks still dominate the market share, which is equal to 78.24 %, followed by 6.13% for finance companies, 6.15 % for insurance companies, 5.12 % for social insurance companies, 2.70 % for pension funds, 1.09 % for corporate securities and mortgage of 0.57 % . (Infobank Research Bureau 2013). Especially with regard to banking assets in Indonesia, total assets to the position on July 2013, which has reached Rp 4.510,29 billion invested largely in the form of loans of Rp 3.045,5 1 trillion or 67.52%Especially with regard to banking assets, total assets to the position on July 2013, which has reached Rp 4510.29 billion invested largely in the form of loans of Rp 3045.51 trillion or 67.52 % (Bank Indonesia 2013). The ratio of credit to gross domestic product (GDP) of the Indonesian banking in 2011 only amounted to 29.6%, is still relatively low compared to 128.6% for Singapore, 117.3% for Malaysia, 81.2% for Thailand and

31.4% for the Philippines. Indonesian banking though still relatively low but contribution of banking play an important role in facilitating the growth of the Indonesian economy(Infobank Research Bureau 2013).

Regional Development Bank (BPD) in Indonesia was established with the intent to provide funding for the implementation of local development efforts in the framework of National Development (Law no. 13 1962). Later in the decree of Ministry of Internal Affair No. 62 in 1999, affirmed that the principal task of developing the economy and the BPD is moving regional development, while the function is:

 (1) Promoting the creation of the level of economic growth and regional development in order to improve the standard of living of the people
 (2) The holder or a regional treasury and financial management areas
 (3) One source of revenue

However up to this time, in carrying out its duties and functions of the BPD still faces several problems, among which: limited capital; brand awareness community to BPD is still very low; quality of service does not meet the expectations of society; quality and human resources competencies have not been standardized; innovation and product development is still limited; networks office services is still limited; not optimal strategic partnership; structure of public funding is relatively low; composition of the productive loan portfolio is relatively low, and not consolidate information technology (Eko Budiwiyono 2012).

As one of the commercial banks, BPD plays a very important role in the economy, especially the regional economy. The role is mainly seen how wide BPD can apply intermediary function. Intermediation function performed by BPD through the process of purchasing the surplus funds from economic units (business sector, government and individual/household) to be distributed to deficit economic units. In other words, a financial intermediation is the diversion of funds activities from savers (ultimate lenders) to the borrower (the ultimate of borrowers). One commonly used indicator to measure the implementation of banking intermediation, is the ratio of loans to deposits or loans to deposits ratio (LDR) (Haruna 2011; Buchory 2006). The higher this ratio is, the better it means that the bank could carry out intermediation function optimally.

The LDR achieved by the BPD to December 2012 is 78, 57% lower than the national banks (83.58%), and other groups such as state banks (79.84%); private national banks (81.58%); non-foreign exchange banks (82.73%); joint banks (115.63%) and foreign exchange banks (111.21%) (Bank Indonesia 2013). The achieved low LDR of BPD indicated that the implementation of banking intermediation by BPD has not been optimal. The not optimal implementation of banking intermediation by BPD is thought to include the effect of the Capital Adequacy Ratio (CAR) and Return on Assets (ROA).Based on the phenomenon above, the problem in this research can be formulated into a research question: How the CAR and ROA influence the implementation of banking intermediation? This study aims to analyse the factors that affect the implementation of the intermediation function of banks that allegedly include the effect of the CAR and ROA.

Literature review

Definition, role, function and core activity of bank

Bank is a financial institution whose main activity is receiving public deposits. The funds will be disbursed in the form of loans to communities who need them. Besides taking deposits and giving loans, banks also provide other financial services.According to the Law No. 7 of 1992 and amended by Law No. 10 of 1998 about Banking, banks are business entities that raise funds from the public in the form of savings and channel them to the community in the form of credit or other forms in order to improve the living standard of the people.

The role of banks in the economy can be expressed as "...banking plays such a major role in channelling funds to borrowers with productive investment opportunities, this financial activity is important in ensuring that the financial system and the economy run smoothly and efficiently" (Mishkin and Eakins, 2006). The same is expressed as follows ".....Commercial banks play an important role in facilitating economic growth. On a macroeconomic level, they represent the primary conduit of Federal Reserve monetary policy. Banks deposit represent the most liquid form of money, such that Federal Reserve efforts to control the nation's money supply and level of aggregate economic activity do so by changing the availability of credit at banks. On a microeconomic level, commercial bank represents the primary source of credit to most small business and many individuals" (Koch, 2000). While other opinions about the role of the bank are as follows: "... A bank can be defined in the term of: (1) the economics function is serves, (2) the services is offers its customer, or (3) the legal basis for its existence. Certainly bank can be identified by the functions they perform in the economy, they are involved in transferring funds from savers to borrowers (financial intermediation) and in paying for goods and services" (Rose and Hudgins, 2008)

For the Indonesian banking bank functions listed in the Law of the Republic of Indonesia No. 7 of 1992 and amended by Law No. 10 of 1998 on Banking, banks are business entities that raise funds from the public in the form of savings and channel them to the public in the form of loans or other forms in order to improve the living standard of the people. In other parts of the act, the bank also provides a variety of services and conveniences that in essence is to meet the needs of people of all financial transactions. The core activities of a bank as a financial institution that are always associated with the transactions or financial activity that occurred in the community are:

1   Intermediation (taking deposits and lending money)
2   Disintermediation (relinquishing the intermediary Debtor/creditor position, while retaining a 'broker' role)
3   Collection and payment system, money transmission
4   Foreign exchange, foreign trade services
5   Participation in the money and capital market (Cade, 1997)

Definition and factors of affecting banking intermediation

In simple terms the role of banks in the economy is to fulfil the desire of ultimate borrowers and the ultimate lenders. However, the role of banks is actually quite complex because there are two interests beside other interests that must be met by a bank and that are those of the owners and the government (regulator). Thus, a bank must be able to balance the various interests (ultimate borrowers, ultimate lenders, owners and regulators) that are sometimes different (Hempel *et al.,* 1994). Given that the banking sector is the intermediary between the parties that have the excess funds and those who need the funds, the reallocation of public funds has important implications for the movement of the economy as a whole. Therefore, the role of banks in the economy is especially from the extent to which the bank can apply its intermediary functions. Financial intermediation is the process of buying funds from surplus economic units (business sectors, government and individual/household) to be distributed to deficit economic units (Hempel *et al.*, 1994). The same is stated by Kidwell and Petterson (2000) which states that intermediation is the process of transformation or direct purchases of a claim with a series of characteristics (maturity, denomination) of DSUs and turn it into a claim indirectly by a different set of characteristics to be sold to SSUs. Meanwhile, according to Gardner (2000), intermediation is a process of transformationfrom secondary securities into primary securities. Primary securities are the claim of individuals, government and non-financial companies, while the secondary securities are claims against financial institutions.

The implementation of financial intermediation in banking can be seen from the bank's ability to transform savings received primarily from household economic units into credit or loans for companies and others to invest in buildings, equipment and other capital goods (Rose, 2002). The indicators commonly used to measure the extent of intermediation by the banking system has been implemented, namely by looking at the ratio of loans to deposits known as Loans to Deposits Ratio (LDR). An indicator to measure the workings of the banking intermediation function is to look at the Loan to Deposit Ratio (LDR). According Buchory (2006), LDR ratio reflects the ability of banks to extend credit and collect public funds.The higher this ratio is, the better it means that the bank could carry out intermediation function optimally. Vice versa, the lower this ratio means the bank in carrying out its intermediary function is not optimal.

Some of the causes have not been optimal implementation of banking intermediation in the region, according to research by Bank Indonesia is caused by: the limited authority of the bank branches in deciding loans, the effect of the financial condition of the internal branch of the credit, the existence of alternative investment of funds, the business climate in the region, the precautionary principle (Abdullah and Suseno, 2003). In this study, the authors estimates that not the optimal implementation of the intermediary function (LDR) by BPD (regional development bank) is caused by the following factors: capital (CAR) and profitability (ROA).

Loan to deposit ratio

As noted above that the LDR is an indicator in the measurement of banking intermediation. According to the research result Buchory (2006) implementation of financial intermediation function give effect to banking performance. This means that banks will have good financial performance if the bank could apply its intermediary function optimally.For banks in Indonesia, according to Bank Indonesia Circular Letter No. 13/24/DPNP dated October 25th, 2011 Subject : Valuation of Level Commercial Bank Soundness and the circular letter No.15/41 / DKMP Jakarta, October 1st, 2013 Subject: Calculation of Minimum statutory ReservedDemand Deposit and Compulsory Demand deposit by Loan to Deposit Ratio in Rupiah. Loan to Deposit Ratio hereinafter referred to as the LDR is the ratio of loans to third parties in exchange Rupiah and foreign currancy, excluding loans to other banks, the deposits which include demand deposits, savings and time deposits in Rupiah and foreign currencies, excluding interbank funds. Therefore, a bank's LDR is determined by the bank's ability to collect and distribute funds to third parties in the form of credit. The higher the LDR showed greater use of bank deposits for lending, which means bankhas been capable to run intermediary function properly. However, if the LDR is too high can also risea liquidity risk for banks.The implementation of financial intermediation gives effect to banking performance. This means that banks will have good financial performance if the bank apply its intermediary function optimally.

Theeffect of CAR of the LDR

Intermediation function can be implemented optimaly if supported by adequate capital (Buchory, 2006). Even though the funds collected by the third party is very large, but if not offset by additional capital the banks will be limited in extending credit. Bank capital is not only important as a source of funds to meet the needs of the bank, but the bank's capital will affect management decisions in the creation of the rate of profit on the one hand and the potential risks on the other.If the bank's strong capital the bank has a strong financial. Under these conditions, the role of capital for banks is very important both as a buffer to accommodate the increased unexpected losses derived from credit, interest rate, liquidity and operational risk as well in order to build public trust. Capital plays a very important role (Culp, 2001), namely as:

(1) Buffer loss (capital loss as a buffer)
(2) Investment Mechanism (capital as an investment mechanism).

The same opinion was expressed that the role of capital in the bank are:

(1) As a tool for achieving the optimal capital structure (capital as a means for achieving the optimum capital structure)
(2) As security guards bank risk management in order to secure (capital a ssubtitute risk management for banks toensure safety) (Schroeck, 2002).

Similarly, according to Rose (2002) that the bank capital plays a very important role in supporting the bank's operations and viability in the long term for bank. The strength of a bank's capital can be measured by the minimum capital adequacy ratio or the the CAR. CAR is an indicator of the ability of banks to provide funds for expansion and accepting risk loss caused by the operations of the bank.For banks in Indonesia, according PBI. 14/18/PBI/2012 November 28th2012 subject : Minimum Capital Adequacy shall be at the low as follows:

a. 8% of the Risk Weighted Assets (RWA) for the Bank's risk profile rating of 1
b. 9% to less than 10% of the RWA for the risk profile of the Bank with a rating of 2
c. 10% to less than 11% of RWA for the risk profile of the Bank with a rating of 3
d. 11% to 14% of RWA for the risk profile of the Bank with a rating of 4 (four) or a rating of 5

The higher the CAR, the greater the financial resources that are able to be used to support implementation of the particular credit intermediation function. According to Soedarto (2004) and by Budiawan (2008), CAR has a positive and significant impact on bank credit. And according to Buchory (2006) implementation of financial intermediation influence on the capital structure of the bank. This means that the bank in carrying out the functions of financial intermediation, especially in lending is needed an additional funds from the public and supported by adequate capital. Nasirudin (2005) research results showed that the level of capital adequacy significant effect on LDR in Central Java. Then, according Siringoringo (2012) capital structure simultaneously affect the intermediation function Bank. Furthermore, research results Tangko (2012) showed that the variables CAR significantly influence to LDR.Similarly, the result research of Sitorus (2013) entitled *Analysis of Factors influence of Non - Performing Loans (NPLs) at Go Public Bank at Indonesia Stock Exchange period 2005-2011*, the result of the research indicates that the Capital Adequacy Ratio (CAR), influence the Loan to Deposit Ratio (LDR) . While the study results Mbizi (2012), entitled *An Analysis of the Impact of Minimum Capital Requirements on Commercial Bank Performance in Zimbabwe*, findings revealed that there is a significant and positive relationship between commercial bank capitalization and its performance. Utari research results and Haryanto (2011) the results showed that CAR is not significant positive influence on the LDR with a significance level of 0.192 > 0.050.And the results of Tamtomo research (2012) partially Capital Ratio Adequacy positive and significant effect on LDR.

The Effect of ROA of the LDR

Bank is is an organization that combines human effort and financial resources to carry out the functions of the bank in order to serve the needs of the community and to make a profit for the owners of the bank (George Hempel 1999). Banking profits obtained through bank intermediation process. Analysis of profitability needs to be done to measure the level of business efficiency and profit achieved by a bank. Ratio commonly used to measure and compare the performance of

profitability is ROA. ROA is the major ratio used in analyzing bank profitability. ROA is used to assess the ability of bank management in managing all bank assets to create revenue in the form of profit is calculated by comparing net income to average total assets. The higher of the ROA, so better of the bank's management to generate profits. The results study of Utariand Haryanto (2011) showed that ROA is not significant negative influence on the LDR with a significance level of 0.560> 0.050. While according to Tamtomo (2012), found that ROA positive and significant effect on LDR.

Hypothesis

Based on the relationship between research objectives and theoretical framework to the formulation of the research problem, the hypothesis are as follows:
H1: CAR positively effect on LDR
H2: ROA positively effect on LDR
H3: CAR, ROA effect on LDR

Research method

The methods used in this research are descriptive method and verification method. Descriptive method is a method used to analyze data in a way to describe or depict the data that has been collected as is without intending to apply general conclusions or generalizations while the verification method is a method of research that aims to determine the relationship between two or more variables. This verification method is used to test the truth of a hypothesis. Influence or shape the causal relationship between variables X and Y can be known from the research method of verification. (Sugiyono 2009)

Type,data source, population, sample and data collection methods

Data used in this study is secondary data All Indonesian regional development banks which include CAR, ROA and the LDR were obtained from the Indonesian Banking Statistics and Data Center Consultant EKOFIN Publications in 2012 (calculated quarterly). The research population was 26 regional development banks (BPD) serve as the object of study. While the object is observed financial statements position December 31st, 2012. Data collection method used was to study the documentation. Study of documentation is done with the data collection and classification category of written materials related to the research problem.

Operational Variables

This study uses the independent variables, namely CAR and ROA and the dependent variable is the implementation of function banking intermediation as measured by the LDR.

Analysis Techniques Data

The data analysis technique used in this study is a multiple linear regression. First, it is tested to determine whether the assumptions of classical linear regression model doesn't have problem of normality, multi-collinearity, heterocedastity and autocorrelation. If all of them were fulfilled means that the model

has a decent analysis used (Gujarati 2003). To examine the hypothesis was used T-test to determine statistical significance of the effect of independent variables on the dependent variable partialy, F-test to determine the statistical significance of the coefficient of multiple significance or F-test to determine significance of the independent variables on the dependent variable simultaneously. Data processing is done by using the software Statistical Package for Social Science (SPSS) version 20.0 for Windows. The regression equation used is as follows:

$$Y = a + \ X_1 + \ X_2 + e$$

Where,

Y   = Loan to Deposit Ratio (LDR)
a   = A constant which is the value of the variable Y when the variable X is 0 (zero)
    = Coefficient of the regression line
X_1 = Capital Adequacy Ratio (CAR)
X_2 = Return on Assets (ROA)
e   = Residual

RESULTS AND DISCUSSION

The development LDR, CAR, and ROA regional development bank in Indonesia

Based on data until December 2012, the development of LDR, CAR and ROA were achieved by 26 regional development banks operating in Indonesia (see Table 1) can be described as follows:

The average value of LDR achieved until December 31, 2012 amounted to 78.57%. That is BPD throughout Indonesia have been able to apply the functions of bank intermediation through fund raising and lending of 78.57%, lower than the national banks (83.58%), and other groups such as state banks (79.84%); private national banks (8 1.58%); non-foreign exchange banks (82.73%); joint banks (115.63%) and foreign exchange banks (111.21%) (Indonesian Banking Statistics, 2013). But it is still in the range of LDR determined by Bank Indonesia, namely:

1 the lower limit of the LDR target by 78%
2 the upper limit of the LDR target:
a of 100% up to the date of December 1st, 2013
b by 92% from the date of December 2nd, 2013.

The lowest value of LDR at 55.77% is achieved by BPD South Kalimantan, while the highest value of LDR at 113.21% is achieved by BPD South Sulawesi. The average value of CAR achieved until the period December 31, 2012 amounted to 18.33% is above the minimum capital requirement of 8% as required by Bank Indonesia. The highest CAR at 32.29% was achieved by BPD Central Sulawesi and the lowest CAR at 12.30% was achieved by BPD DKI (Jakarta). Therefore, the average value of the CAR indicates that BPD still has the capital ability to increase intermediation function through lending distribution.

The average ROA value was 3.10% achieved by period December 31st, 2012. The highest ROA value was 5.62% achieved by the West Nusa Tenggara and the lowest ROA was 1.27% achieved by the South Kalimantan. By looking at the average ROA value show that all BPD able to get profit from all their assets. The average ROA value is above that required by Bank Indonesia at 1.25%. This means that the income earned from BPD still has the ability to improve the function of intermediation through lending.

Table 1.The development LDR, CAR and ROA regional development banks in Indonesia December 31st, 2012 (percentage)

No.	Regional Development Banks	LDR	CAR	ROA
1.	DKI - Jakarta	73.50	12.30	1.87
2.	West Java	74.09	18.11	2.46
3.	Central Java	82.62	14.38	2.73
4.	DIY- Jogyakarta	71.89	14.40	2.56
5.	East Java	83.55	26.56	3.34
6.	DI - Aceh	89.89	17.82	3.66
7.	North Sumatera	101.90	13.24	2.99
8.	West Sumatera	100.35	15.12	2.65
9.	South Sumatera	75.98	13.55	1.90
10.	Riau	66.49	19.56	2.95
11.	Jambi	82.29	24.41	3.58
12.	Bengkulu	93.27	15.84	3.41
13.	Lampung	91.73	19.29	2.80
14.	Bali	80.60	16.79	4.28
15.	East Nusa Tenggara	93.45	16.52	3.65
16.	West Nusa Tenggara	108.41	12.92	5.62
17.	Papua	71.65	19.95	2.81
18.	Maluku	78.61	14.72	3.25
19.	North Sulawesi	109.62	14.70	2.95
20.	South Sulawesi	113.21	21.91	3.99
21.	Central Sulawesi	107.27	32.29	1.59
22.	Southeast Sulawesi	92.02	22.53	5.10
23.	East Kalimantan	56.78	20.83	2.50
24.	West Kalimantan	86.80	16.87	3.33
25.	South Kalimantan	55.77	18.22	1.27
26.	Central Kalimantan	71.88	23.75	3.41
	Minimum	55,77	12,30	1,27
	Maximum	113,21	32,29	5,62
	Average	78,57	18,33	3,10

Source: Banking Statistics Indonesia http://www.bi.go.id/ downloaded May, 9, 2013, processed and Ekofin Consulting (2013)

Multiple linear regression analysis

Multiple linear regression analysis was used to determine basically dependence of dependent variable with one or more independent variables, with the aim of estimating or predicting the average of population data or average value of the dependent variable based on the value of the independent variable known (Gujarati, 2003). By regression analysis it can be seen whether there is influence between independent variables with the dependent variable. The results of multiple linear regression analysis in this study can be seen in Table 2. Based on Table 2, the regression equation is as follows:

$$LDR = 0.645 - 0.538X_1 + 9.769X_2$$

The equation above it can be explained as follows:

1. Constant value (a) of 0.645, which means a positive constant value. This shows if the CAR (X_1) and ROA (X_3), has a value of zero, then the LDR (Y) increase by 0.645

2. Regression coefficient for the variable CAR (X_1) is-0.538, indicating a negative the relationship between the CAR (X_1) with LDR (Y), meaning that if the addition of CAR (X_1) for every one unit, assuming other variables constant, the LDR (Y) decreased by 0.538. And vice versa, if there is a reduction of CAR (X_1) of the unit it will increase the LDR (Y) equal to 0.538.

3. Regression coefficient for the variable ROA (X_2) is 9.769 which means it has a positive value, it indicates the direction of the relationship between ROA (X_2) with LDR (Y), meaning that if there is additional ROA (X_2) of one unit, assuming other variables remain the will add to the LDR (Y) of 9.769. Otherwise any such reduction occurred ROA (X_2) by one percent then it will reduce the LDR (Y) equal to 9.769.

Table 2. Test results of multiple linear regression coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.645	.054		11.952	.000
CAR	-.538	.265	-.168	-2.031	.045
ROA	9.769	1.329	.610	7.353	.000

a. Dependent Variable: LDR
Source : Output SPSS 20.0

Analysis of correlation coefficient and coefficient of determination

Correlation coefficient analysis was used to determine the direction and the strong relationship among the three independent variables. Those are the variable CAR (X_1), and ROA (X_2), with LDR as a dependent variable (Y). (see Table 3). Based on Table 3, it can be concluded that the variable the CAR (X_1) and ROA (X_2), with LDR dependent variable has a value of correlation (r) 0.591, meaning that the correlation (relationship level) the CAR (X_1) and ROA (X_2),with LDR dependent variable (Y) are in moderate correlation (Sugiyono, 2009). While the coefficient of determination analysis was used to determine the contribution effect of CAR (X_1) and ROA (X_2), with LDR dependent variable (Y)as a dependent variable (Y) expressed as a percentage. Analysis of the coefficient of determination is squaring the correlation value (R^2) and based on Table 3 that the R^2 value was 0.349.So when multiplied by 100%, the contribution or effect of variable CAR (X_1) and ROA (X_2) with LDR dependent variable (Y) is 34.9% indicating that CAR (X_1) and ROA (X_2) accounted for 34.9% of the LDR (Y), while the remaining 65.1% thought to be influenced by other variables not examined.

Table 3. Test results correlation coefficient and coefficient of determinationmodel summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.591[a]	.349	.336	.1044818

Source: Output SPSS 20.0

Partial significance test (t-test)

To examine hypotheses on the significance of the partial model used t-test. It is intended to determine the effect of independent variables (CAR and ROA) partially to the dependent variable

(LDR). Partially, the influence of the three independent variables to the LDR as an independent variables, shown in the Table 4 partial test results (t-test), it can be argued that:

1.Effect of CAR on the LDR

Partial test results between the CAR with an LDR shows the t-test value of - 2.031 is greater than t-table (1.983) with a significant value of 0.045 which is below 0.05. This means that the CAR effects on LDR. Thus hypothesis H1 stating CAR positive effect on LDR is rejected.The test results are in line with previous research conducted by Utari and Haryanto (2011) which states that CAR does not have significant positive effect on the LDR with a significance level of 0.192> 0.050.However, contrary to the results of research by Soedarto (2004); Nasirudin (2005); Buchory (2006); Budiawan (2008); Tangko (2012); Tamtomo (2012); Mbizi (2012) and Sitorus (2013) which states that CAR has positive and significant effect as an indicator on the implementation of banking intermediation function.

2.Effect of ROA on LDR

Partial test results between ROA with the LDR shows the t-test value of7.353 is greater than t-table (1.983) with a significant value of 0.000 which is below 0.05. This means that the ROA effect on LDR. Thus hypothesis H2 which states ROA has a positive effect on LDR is acceptable. The test results are in line with previous research conducted by Tamtomo (2012) which states that the ROA has positive and significant effect on LDR. However, in contrast to the Utari and Haryanto (2011) which states the results showed that ROA is not significant and has negative effect on the LDR with a significance level of 0.560 > 0.050

Table 4. Partial test results (t-test)

Model	t-count	t-table	Sig	Description
1 (Constant)	11.952		.000	
CAR	-2.031	1.983	.046	Significant
ROA	7.353	1.983	.000	Significant

a. Dependent Variable: LDR
Source : Output SPSS 20.0

Simultaneous significant test (F-test)

F - test was conducted to determine the effect of independent variables (CAR and ROA) simultaneously to the dependent variable (LDR). Simultaneous influence of the three independent variables to the independent variables LDR is shown in Table 5. Based on the results of the F-test calculations in Table 5, F-count was27.050 larger than the F-Table (3.443) with a significance value (sig) of 0.000 is smaller than 0.05. This means that the independent variables (CAR and ROA) simultaneously significant effect to dependent variable (LDR). Thus the H3 hypothesis which states CAR and ROA effect on LDR is acceptable. The test results are in line with previous research conducted by Prayudi (2011) that the variable CAR, NPL, OEOI, ROA and NIM with the F test, simultaneously affect the LDR. Furthermore, according to Siringoringo (2012) research results, that is simultaneously affect the capital structure of the Bank

intermediation function. And Tangko (2012) research results, showed that the variables CAR and NPL have significantly influence on LDR, and NPL variable has a significant negative effect on LDR. Similarly, the results of research Sitorus (2013) which states that the CAR, ROA, NIM and OEOI influence the LDR. Nasirudin (2005) states that CAR and NPL have a significant effect on LDR. While Tamtomo (2012) found that during the research period partially, variable of CAR and ROA ratio is positive and significant effect on LDR of a company, NPLs has negative effect and significant on LDR of a company, while the third party funds no effect on LDR of a company.

The research results showed that the CAR variables significantly influence to LDR and NPL variable and has a significant negative effect on LDR. But according to Utari and Haryanto (2011), the results showed that the five independent variables (CAR, NPL, ROA, OEOI and GWM) influence by 24.4% against the level of liquidity proxy LD, .and the CAR does not have significant positive influence on the LDR with a significance level of $0.192 > 0.050$, NPL has a significant negative influence on the LDR with a significance level of $0.000 < 0.050$. ROA does not significant negative influence on the LDR with a significance level of $0.560 > 0.050$, and OEOI has a significant positive effect on the LDR with a significance level of $0.001 < 0.050$.

Table 5. Simultaneous test results (F-test)

ANOVA[a]					
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.591	2	.295	27.050	.000[b]
	Residual	1.103	101	.011		
	Total	1.693	103			

a. Dependent Variable: LDR
b. b. Predictors: (Constant), ROA, CAR

Conclusion

Based on the background, the formulation of the problem, hypotheses, methods and research results and discussion, some conclusions can be drawn as follows:

1. In 2012 BPD (Regional Development Bank) throughout Indonesia are able to carry out banking intermediation function as measured by the Loan to Deposit Ratio (LDR) of 78.57%, still lower than the national banks and other banks, but still within the range of the LDR is determined by Bank Indonesia. Lowest LDR value reached by the BPD South Kalimantan, while the highest LDR value achieved by the BPD South Sulawesi.
2. Based on the test results partially that variable of CAR have negative effect but no significant effects on LDR. While the ROA has positive and significant effect to LDR. Simultaneously CAR and ROA significantly influence to LDR
3. The amount of the contribution or influence variable of CAR and ROA to the dependent variable of LDR is 34.9% while the remaining 65.1% thought to be influenced by other variables not examined in this study.

REFERENCES

Abedafattah Zuhair Al-Abedallat and Faris Nasir Al-Shubiri, 2013. Analysis The Determinants of Credit Risk in Jorfaianan Banking: An Empirical Study.*Journal Management Research and Practice*,Volume 5 Issue 3 / September 2013. pp: 21-30. ISSN 2067- 2462

Amriani, Riski Fitri, 2012. Analysis of the Effect of CAR, NPL, ROA AND NIM Against LDR On State-owned Bank in Indonesia Period 2006-2010, Thesis, Management Department Faculty of Business and Economic, Hasanuddin University, Makasar

Astohar, 2012. The Role of Net Interest Margin (NIM) in Strengthen Effect on the Loan to Deposit Ratio (LDR) of changes in Earnings On a Devisa Bank Registered in Indonesian Bank 2006-2009.*Economic Focus Journal, STIE (Economic School) Pelita Nusantara Semarang,* No. 1 Volume 7, June 2012, ISSN 19076304.

Bank Indonesia, Bank Indonesia Regulation (PBI) No. 14/18/PBI/2012 on November 28th, 2012 on The Minimum Capital Adequacy of Commercial Banks, Capital for Commercial Banks Headquartered in Indonesia.

Bank Indonesia, Circular Letter (SE) No. 15/41 / DKMP, October 1st, 2013 Subject: Calculation of Minimum statutory ReservedDemand Deposit and Compulsory Demand deposit by Loan to Deposit Ratio in Rupiah.

Bank Indonesia, Circular Letter (SE) No.13/24/DPNP on October 25th,Subject : Valuation of Level Commercial Bank Soundness

Bank Indonesia, Indonesian Banking Statistics, Volume 11, No.. 7, June 2013.a registered in Indonesian bank Bank 2006-2009, *Economic Focus Journal, STIE (Economic School) Pelita Nusantara Semarang*, Edition No. 1 Volume 7, Juni 2012, ISSN: 19076304

Bank Indonesia*,* Publication of Banking Financial Statement / www.bi.go.id / downloaded on February 4th, 2013.

Buchory, Herry Achmad, 2006. The Influence of Financial Intermediary Function Implementation, Risk Management Application and Bank Capital Structure on Banking Financial Performance, Disertasi Fakultas Ekonomi, Universitas Padjadjaran Bandung.

Buchory, Herry Achmad, 2014. Analysis of factors affecting implementation of banking intermediation function: study on regional development bank all over Indonesia in 2012. ProceedingSIBR 2014 Conference on Interdisciplinary Business and Economics Research, 7th-8th February 2014, Kuala Lumpur, Malaysia. Paper No. K14-157, p. 1-22.

Budiawan. 2008. Analysis of Factors Affecting the Distribution of Credit in Rural Bank (BPR) Case Study at Bank Indonesia Banjarmasin. Thesis, Magister Management Study Program of Diponegoro University Semarang

Budiwiyono, Eko, 2012. BPD (Regional Development Bank) For Strength In Accelerating Implementation of Regional Autonomy: Prospects and Problems, Papers Presented at the National Seminar on Indonesian Economist Association, Yogyakarta, 2012.

Cade, Eddie. 1997. Managing Banking Risk. London : Gresham Books, Cambridge.

Culp, Christopher L. 2001. The Risk Management Process, Business Strategy and Tactics. New York : John Willey and Sons, Inc.

Ekofin Konsulindo, Banking and Financial Consultans, 2013. Indicators and Directory of Indonesian Banking in 2012, Jakarta.

Gardner, Mona J., Dixie L. Mills, Elizabeth S. Cooperman, 2000. Managing Financial Institutions: An Assets/Liability Approach. New York : Dryden Press.

Graddy, Duane B., Austin Spencer, William H. Brunsen, 1985. Commercial Banking and The Financial Services Industry. First Edition. Virginia : Reston Publishing Company Inc., A Prentice-Hall Company.

Granita, Jen Kharisa, 2011. Influence Analysis of deposits, CAR, ROA, NPL, NIM, BOPO, Interest Rates, Inflation and Exchange Rate Against LDR (Studies in National Private Exchange Bank 2002-2009 period). Thesis in Bachelor Program Economic Faculty Diponegoro University, Semarang

Gujarati, Damodar, 2003. Basic Econometric, Fourth Edition. NewYork : Mc. Graw-Hill Book Co.

Harmanta and Mahyus Ekananda. 2005. Disintermediation Function Post-Crisis Banking in Indonesia 1997: Factor of Demand or Supply Loans, A Model Approach to Disequilibrium. Bulletin of Monetary Economics and Banking, Bank Indonesia, June 2005, Volume 8 No. 1, p 51 – 78.

Haruna, Muhammad Auwalu, 2011. Determinant of Cost of Financial Intermediation in Nigeria's Pre-consolidated Banking Sector,Department of AccountingAhmadu Bello University, Zaria, Nigeria

Hempel, George H., Simonson Donald G., Coleman Alan B.,1994. Bank Management Text and Cases, Fourth Edition. New York : John Wiley and Sons, Inc.

Karim, Mohd Zaini and Sok-Gee Chan, 2008. *Bank* Efficiency and Non Performing Loans in Malaysia and Singapore, Proceeding of Applied International Business Conference 2008. P. 948 – 958.

Keputusan Menteri Dalam Negeri No. 62 year 1999 on Guidelines for Organization and Work of Regional Development Banks

Kidwell, David. S, Richard I. Petterson, 2000. Financial Institution, Market and Money. New York : Dryden Press.

Koch, Timothy W. 2000. *Bank Managemen*t, International Edition. Orlando: The Dryden Press, Harcourt Brace College Publishers.

Mahran, Hatim Ameer, 2012. Financial Intermediation and Economic Growth in Saudi Arabia: An Empirical Analysis, 1968-2010.*Journal Modern Economy*Volume 3. Issue 5 (Sept. 2012): p. 626-640.

Mbizi, Rangga 2012. An Analysis of the Impact of Minimum Capital Requirements on Commercial Bank Performance in Zimbabwe, International Journal of Independent Research and Studies – IJIRSISSN: 2226-4817; EISSN: 2304-6953Vol. 1, No.4 (October, 2012) 124-134

Mishkin, Frederic S. and Stanley G. Eakins, 2006. Financial Market and Institutions, Fifth Edition, New York : Peaerson, Addison Wesley

Nasirudin, 2005. Analysis of Factors Affecting the Loan to Deposit Ratio (LDR) at Rural Bank in Region Job Bank Indonesia Semarang. Thesis Magister Management Study

Program of Diponegoro University Semarang.

Odedokun, M.O. 1998. Financial intermediation and economic growth in developing countries,*Journal of Economic Studies*, Vol. 25 Issue : 3 p. 203 – 224.

Oktaviantari, Luh Putu Eka and Ni Luh Putu Wiagustini, Effect of Banking Risk To Profitability on Rural Banks in Badung,Economic Faculty Udayana University, Bali, Indonesia

Pratama, Billy Arma, 2010. Analysis of Factors Affecting Bank Lending Policy (Study on Commercial Banks in Indonesia Period 2005-2009). Thesis, Master Program in Management, Diponegoro University, Semarang

Prayudi, Arditya, 2011. Pengaruh Capital Adequacy Ratio (CAR), Non Performing Loan(NPL), BOPO, Return On Asset (ROA) dan Net Interest Margin(NIM) terhadap Loan to Deposit Ratio (LDR), [online] http://www.papers.gunadarma.ac.id/index.php/mmanagement/article/.../14225, download May, 9, 2013.

Rose, Peter S. and Sylvia Hudgins, 2008. Bank Management and Financial Services, Sixth Edition. Mc. Graw – Hill International Edition, Chicago.

Rose, Peter, S., 2002. *Commercial Bank Management*. Chicago: Richard D. Irwin, Inc.

Schroeck, Gerhard, 2002. *Risk Management and Value Creation*. New Jersey : John Wiley and Son, Inc.

Siringoringo, Renniwaty 2012. *Characteristics and Functions of Banking Intermediation in Indonesia*. Bulletin of Monetary Economics and Banking, Bank Indonesia, Volume 15 No. 1, July 2012. p. 61 – 83. JEL Classification : G21, G32

Sitorus, Vera Yohana, 2013. Analysis of Factors influence Non Performing Loan (NPL) at Go Public Bank at Indonesia Stock Exchange period 2005 -2011, © 2013 sciencegate.ch,Point Software AG, Zürich.

Soedarto, M. 2004.*AnalisisFaktor - Factor that Affects Distribution Rural Credit Bank (BPR (Rural Bank) Case Study in Work Area Bank Indonesia Semarang),* Thesis Magister Management Study Program Diponegoro University Semarang.

Sugiyono 2009.*Research Methods,*Jakarta: Salemba Empat.

Supriyanto, Eko B. 2012.Indonesian Banking Challenges in 2013, Bureau of Research Infobank, Jakarta.

Tamtomo, Handy Setyo, and Hersugondo 2012. *Effect of CAR, NPL, ROA Against LDR Indonesia Banking Company*, Students' *Journal of Accounting and Banking,Stikubank University,Semarang*,Volume1,No.1,2012.Abstract,p. 1.

Tangko, Irene Lastry Fardani, 2012. Analysis of Effect of Capital Adequacy Ratio (CAR) and Non-Performing Loans (NPL) of the Loan to Deposit Ratio (LDR) in the state-owned bank in Indonesia, ThesisManagement Departemen Economic and Business Faculty, Hasanudin University Makasar.

Undang-undang (LAW) No. 62 year 1999 Main Provisions of the Regional Development Banks

Undang-Undang (LAW) No. 7 year 1992 as amended in LAW No. 101998 on Banking

Utari, Mita Puji and Haryanto, A. Mulyo 2011. Analysis of Effect of CAR, NPL, ROA and BOPO on LDR (Case Studies in National Private Exchange Bank in IndonesiaPeriod 2005-2008).Undergraduate thesis, Diponegoro University Semarang.

****

ISSN-0975-833X