

# Regional Development Banking and Mobilization of Funds

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**Abstract:** This study aims to find out the mobilization of funds by Indonesian RDB (Regional Development Bank) and the factors influencing it. The interaction between external changes and the internal condition of the bank may inhibit or even accelerate the fundsmobilization. The mobilization of funds is the main role of banking as an intermediary institution between surplus units and deficit units. The data research is quarterly data from 2010 to 2017. There are 26 RDBs as the sample. This research uses the regression data panel as the research method. The result of this research explainsthat regional external economic variables such as GDP, Exchange Rate and Inflation, market concentration, and banking characteristics affect thefundsmobilizationof Indonesian RDBs. This means the pricing strategy must pay attention to external and internal variables. In the future, Indonesian RDBs need to develop the products that are specific to aintain and increase the mobilization of funds that have been achieved.

## 1 INTRODUCTION

The mobilization of funds in order to improve the efficiency of intermediary performance is not an easy matter. In reality, the central role of banking is full of challenges and risks both from internal and external sources. The mobilization of funds is heavily influenced by factors such as trust, expectation, security, timeliness, flexible service, and prudent fund management. Also, fund mobilization also poses risks such as liquidity risk, interest rate risk, credit risk, and capital risk. These risks are a consequence of the reaction of the banking management behaviour in its reaction to changes in external conditions as well as the internal development of the bank itself.

The bank that has a high non-performing loan will have an impact on the crisis (Abid et al., 2014), it has potential to disrupt the financial system and may result in the financial crisis (Mankiw, 2014). Therefore, the risk mitigation is a priority for every banker to maintain bank stability in order to make banking to remain stable in the fierce competition era especially in financial markets.

In a healthy economy, financial institutions should be able to beintermediary institutions that efficiently mobilize funds from surplus units to deficit units (Mishkin and Eakins, 2012). Therefore, in the economic system, the primary role of banks

and financial institutions is to implement the task of mobilizing public funds by operating their intermediary functions to make efficient relations between SU (supplement units) and DU (deficit units). Banks as the largest element in the financial system in mobilizing funds are given special permission to raise public funds and redistribute in the form of loans or credit to real business sectors. Thus, the main task system of the financial or banking sector is to play an agent role in order to accelerate development and encourage economic growth to improve economic welfare.

The role of banking in mobilizing public funds is a not easy because of the dynamics of uncertain economic conditions, rapid regulatory changes, intense banking competition, and other circumstances that force bankers to be very careful about the collection and distribution of their funds. A credit disbursement is not only oriented to profit but should further think and lead to efforts to improve the economic welfare. In accelerating the fund mobilization, bankers are required to act optimally. They should make the funds that can be purchased at relatively low cost. This is a challenge because there area tight regulation and competition between banks. The development of deposits and loan can represent the acceleration level of funds mobilization. If the loan to deposit ratio (LDR) increases, it means the speed of mobilization of

funds also increases. LDR reflects the ability of banks to extend credit and collect public funds. The higher LDR means the bank optimally do the

intermediation function. LDR reflects the bank's ability to provide credits and raise public funds.

Table 1: Assets Market Share of Indonesian Banking During 2013-2017

Group	2013	2014	2015	2016	2017	Average
State-owned Banks	35.50%	36.98%	37.72%	39.62%	40.43%	38.05%
Foreign Exchange Banks	39.61%	39.18%	38.54%	39.71%	40.13%	39.43%
Non-Foreign Exchange Banks	3.28%	3.33%	3.15%	1.09%	1.19%	2.41%
Regional Development Banks	7.87%	7.85%	7.76%	7.87%	8.19%	7.91%
Joint Venture Banks	5.86%	4.96%	5.11%	4.74%	4.49%	5.03%
Foreign Banks	7.88%	7.70%	7.72%	6.96%	5.57%	7.17%
Total	100%	100%	100%	100%	100%	100%
Total (Million, IDR)	4.954.467	5.615.419	6.132.583	6.729.798	7.387.633	
Assets Growth		11.77%	8.43%	8.87%	8.91%	

Source: Indonesian Banking Statistic

According to Table 1, during 2013-2017, the assets of Indonesian banking continued to increase with the average growth of 9.5%. The proportion of majority asset is controlled by state-owned banks (38.05%) and foreign exchange banks (39.43%). Meanwhile, regional development banks owned at 7.91%, non-foreign exchange banks owned at 2.41%, foreign banks owned at 7.17%, and joint-venture banks owned at 5.03%. The data shows an imbalance in the banking asset market. The structure of the banking market is concentrated in state-owned banks and foreign exchange banks meanwhile the other banks are only market followers.

The indicator of funds mobilization which is represented by LDR. Based on Table 2, the average percentage of LDR is at 90%. This shows that distributed funds are smaller than the collected funds. Joint-venture banks and foreign banks show that their LDRs exceeds 100%, this means the credit given to the public exceeds the funds collected. This is interesting to be investigated the factors that influence it. Therefore, it can be detected for further consideration of decision-making to manage an efficient banking industry.

Although the asset of banking regional development bank (RDB) only amounted to 7.91% of the national banking assets, however, the development of RDP assets is still very possible regarding demographic factors. RDB is the host of every province in Indonesia. Therefore the majority ownership shares are owned by the local, provincial government. RDB is more potential

mobilizing public funds, primarily to support the financing of infrastructure development and SMEs.

Based on Table 3, the financial health indicator of RDB group also shows that RDBs are in healthy condition. The capital adequacy ratio (CAR) exceeds the healthy criteria, which is more than 8%. Meanwhile, return on assets (ROA) of RDBs are all above 1.5%. Even though ROA is decreased, whomever the number is still quite high. The cost efficiency which is represented by the cost to income ratio (CIR) shows that RDBs are efficient, the percentage is under 79%.

There are some previous studies about the mobilization of funds that have been researched. Tomak (2013) discussed the determinants of commercial credit loans of private banks and state banks in Turkey. The result shows that the bank size, total liabilities, non-performing loans, and inflation have a significant effect on commercial credit business. Meanwhile, GDP and interest rate have no significant effect on credit business. Buchory (2014) studied the implementation of the intermediation role of RDB. The intermediation role is represented by loan to deposit ratio (LDR). The result shows CAR and ROA are significant to LDR.

Table 2: Loan to Deposits Ratio of Indonesian Banking During 2013-2017

Group	2013	2014	2015	2016	2017
Commercial Banks	89.700%	89.420%	92.110%	90.700%	90.040%
State-owned Banks	86.700%	83.730%	88.580%	88.690%	88.670%
Foreign Exchange Banks	83.770%	85.660%	87.550%	84.830%	86.060%
Non-foreign Exchange Banks	85.100%	87.810%	81.120%	88.370%	92.490%
<b>Regional Development Banks</b>	<b>92.340%</b>	<b>89.730%</b>	<b>92.190%</b>	<b>93.650%</b>	<b>87.620%</b>
Joint Venture Banks	122.200%	123.610%	132.770%	129.010%	129.020%
Foreign Banks	130.050%	140.040%	131.490%	122.380%	122.330%

Source: Indonesian Banking Statistic

Table 3: Performance Indicator of Regional Development Banks During 2013-2017

Tahun	Performance Indicator			
	CAR	ROA	CIR	NIM
2013	17.58%	3.18%	73.49%	7.04%
2014	17.79%	2.68%	78.08%	6.65%
2015	20.61%	2.40%	79.57%	6.66%
2016	21.69%	2.58%	78.08%	7.07%
2017	21.65%	2.40%	78.65%	6.42%

Source: Indonesian Banking Statistic

The general condition of banking, the factual phenomenon of RDBs, and the gaps of findings from previous relevant research motivate this study to find out what factors influenced the development of fund mobilization conducted by Indonesian RDBs. Therefore, this study aims to determine the factors that affect the LDR regarding external factors and internal factors. The external factors are the regional economic conditions, which are GDP-regional, CPI-regional and Exchange Rate-regional, and the structure of national banking market. Meanwhile, the internal factors are NPL, OC/TA ratio, TE/TA ratio, ROA, and NII/TA ratio.

## 2 LITERATURE REVIEW

Theoretically, the linkage of mobilization of public funds with internal and external factors can be seen if banking is seen as a system. The banking system that is part of the financial system works in the economic system in society. The Bank as the largest element of the financial system seeks to

optimize its performance by following the dynamics of changing basic economic conditions and market structure (external factors), then the bank exploits these changes by adjusting to its internal conditions to achieve equilibrium.

The interaction between the internal banking condition and external factors can be both directional and causality. According to the theory of SCP (structure conduct performance) the relationship between BC (Basic condition, S (market structure), C (conduct) and P (performance) bank direction. This means bank performance is a function of external conditions and behaviour. Structure affect behaviour and behaviour also affects performance, it makes the market inefficient, indicative of collusion, while ESH theory actually states that the relationship between S, C and P, is not the only direction but causality: It can mean that in an efficient market it is performance that becomes a function of behaviour and market structure. The theory of financial intermediation was first proposed by Schumpeter in 1939, stating that financial intermediation is based on minimizing the cost of production of information to solve incentive problems. The costs incurred by the bank (intermediary) receive the delegation from

the owner of the funds to monitor the funds lent to the debtor. This has advantages regarding cost in collecting information because this alternative is the activity of each bank, so it is more profitable when compared to the owner of the funds to monitor directly. As an intermediary institution, the intermediary function is measured by a comparison between the number of third-party funds that can be collected by the amount of credit or financing disbursed or otherwise known as LDR (Ascarya and Yumanita, 2010). To describe the relationship between the performance of mobilization of public funds by, here are the results of literary studies from previous studies.

### **2.1 The Relationship between ROA (Return on Asset) and LDR (Loan to Deposit Ratio)**

The bank that has a high operating profit will make management increase the mobility of funds, which means the bank will increase the credit obtained from the funds collected from the public. Profitability is represented by return on assets (ROA), which is a profitability ratio that describes the company's ability to generate profits from every asset used. A high ROA indicates the banks have operating profit more than assets

### **2.2 The Relationship between NPL and LDR**

The banks which have a low non-performing loan (NPL) indicates they also have a low credit risk decreases. This condition encourages banks to increase the volume of loans obtained from public funds. The high bad credit management will decrease the bank liquidity. Non-performing loans cause a loss of income opportunity from the credit; it reduces profits and the ability of banks to provide credit, particularly to pay bank liabilities to depositors. The high level of NPL will make the bank more selective in distributing credits because non-performing loans reduce the value of LDR (Fitria and Sari, 2012).

### **2.3 The Relationship between OC/TA with LDR**

The ratio of OC/TA ratio describes the amount of overhead cost compared to the total assets of the bank. The concept of overhead cost still has different between banking practitioners. Ideally, all costs (excluding interest costs) which is incurred by the

bank in performing its activities are supposed to be calculated as an overhead cost. Moreover, there is a concept states that all costs of funds beyond the cost used in collecting funds and the costs incurred in the management of credit disbursement should be calculated as an overhead cost. Therefore, earning asset is assumed to bear the cost. If overhead cost increases, this means all the banking activities including fund mobilization activities will increase. For example, technology will raise the overhead cost, but the bank is expected to be more efficient.

### **2.4 The Relationship between TE/TA and LDR**

The high capital will make the bank's solvency increases. This also will raise the banking trust and encourage people to make a deposit. In the end, the banking credit distribution will also be high. The effect of CAR on LDR has also been reviewed previously investigated by Nasiruddin (2005). Nasiruddin (2005) found out that CAR has a positive and significant effect on LDR.

### **2.5 The Relationship between NII / TA and LDR**

The high net interest income will make banking management more enthusiastic to increase the mobility of funds. The bank will encourage people to save more so that the ability of banks to extend credit also increase. The ratio of NII/TA is used to measure the bank's management capability in managing its earning assets to generate net interest income. The volume of loans provided greatly affects the bank's profit through interest income. If interest income is high, the bank's profit is also predicted to increase so it can affect bank liquidity. The amount of interest income depends on the amount of credit volume provided. The results of Rosadaria (2012) and Buchory (2014) found out that NIM has a positive and significant effect on bank liquidity.

### **2.6 The Relationship between Market Concentration and LDR**

Market concentration can be interpreted as a percentage of market share dominated by relatively large companies to the total market share. Accidental factors do not cause concentration but it caused by the permanent forces that lie behind the concentrations that usually do not change much over time. Concentration also indicates the level of

production of a market or industry that focuses only on one or a few (2-10) largest companies. Concentration is the number of market shares of reputable companies or oligopolists, whereby companies are aware of the interdependence of each other.

If market conditions become more concentrated, the market is increasingly monopolized, and the competition is decreasing. Normally, the more concentrated market share of the company's market is narrowed so that the ability of banks in the mobilization of public funds decreases. The ability of mobilization of funds by the follower decreases, this may not be true if the follower bank has certain capabilities/advantages in expanding the market, they penetrate the newmarket to increase the mobility of public fund, the bank will increase financial inclusion so that society save more and bankability to distribute credit also increased.

## 2.7 The Relationship between Exchange Rate and LDR

If the domestic currency exchange rate is depreciated, then the value of bank asset in the form of the domestic currency will decrease. This can make interest rates rise and the acceleration of mobilization of public funds to go down. The opposite may happen if the interest rate set by the bank already includes exchange rate risk, therefore if the exchange rate of domestic currency depreciates the bank does not need to raise the interest rate so that the mobilization of public funds will increase.

## 2.8 The Relationship between Inflation and LDR

If inflation occurs, the value of the bank's assets in the form of the domestic currency will decrease. This could make bank interest rates rise, and the achievements of banks in the mobilization of public funds are going down. The opposite may happen if the interest rate set by the bank already includes the risk of inflation, so if the inflation occurs then the bank does not need to raise interest rates so that the mobilization of public funds still running and still rising.

The previous research on inflation has been studied by Hasanudin and Prihatiningsih (2010). They used Rural Bank in Central Java as the sample; the result shows inflation has a positive effect on credit growth of Rural Bank.

## 2.9 The Relationship between GDP and LDR

The relationship between GDP and LDR is by the theory of money demand. If GDP rises, it means income society rises, therefore demand for money for transactions and keep watch also rises. On the other hand, the ability of people to save also increases. When the income of society is high, then bank deposits will also increase which make the increment of the ability of banks in distributing credits.

## 3 RESEARCH METHOD

### 3.1 Data and Research Variables

This study is applied research because the purpose of this study is to apply the previous research method and then it will be developed theoretically. This research is also explanatory research because this study also aims to explain the causal relationship between variables through hypothesis testing.

The object of this research is the banking market industry in Indonesia. While the subject of research is RDBs (regional development bank). This research observes the development of the regional economy, market structure, banking characteristics, and the research focus is banking liquidity. The data used are secondary data from published financial statements of the Bank Indonesia, World Bank, BPS, and Indonesian Banking Statistics (SPI) in the period of 2010-2017, quarterly data.

The population is all regional development banks which operate in Indonesia from 2010 until 2017. The sample is saturation sample which consists of 27 Indonesian regional development banks.

### 3.2 Model Specification

To create patterns of influence of regional economic conditions, market structure and banking characteristic on funds mobilization, the econometric model as follows:

$$LDR_{it} = \alpha_0 + \alpha_1 CR_{it} + \alpha_2 ERR_{it} + \alpha_3 CPIR_{it} + \alpha_4 GDPR_{it} + \alpha_5 NPL_{it} + \alpha_6 NIITA + \alpha_7 TETA_{it} + \alpha_8 OCTA + \alpha_9 ROA_{it} + e_{it} \quad (1)$$

Symbol i indicates individual bank or individual province while t is period of the quarter in a certain year; LDR = loan to deposit ratio. The LDR is an

indicator to measure the fund mobilization of banks. A higher LDR implies a lower intermediation banking; CR = Concentration ratio; ERR = regional exchange rate; CPIR = regional consumer price index; GDPR = regional gross domestic product; NPL = non performing loan = credit risk; ROA = return on total assets / banking profitability; TE / TA = equity to assets Ratio; NII / TA = NII proportion in total assets and OC / TA = proportion of overhead of total assets

### 3.3 Research Variables

According to Table 4, the variables of internal factors and external factors refer to previous theories and research. The internal factors are banking specific characteristics (Athanasoglou et al., 2008). Banking specific characteristics are factors derived from the internal condition of the bank, which can be seen from the financial ratios in the balance sheet and earnings report bank loss.

Table 4: Operational Definition Variables and Their Measurements

Variable			Measurement/ Formula	Notation	Impact	
DEPENDENT (Independent Variable)	Dependent Variable	Fund Mobilization	<ul style="list-style-type: none"> <li>➤ Loan to Deposit Ratio</li> </ul>	<ul style="list-style-type: none"> <li>▪ (Loan/Deposit) X 100%</li> </ul>	LDR	
	Internal banking	Profitability, Assets Capital, Cost & Revenue Management	<ul style="list-style-type: none"> <li>➤ Return o Assets</li> </ul>	<ul style="list-style-type: none"> <li>▪ (NOI/TA) X 100%</li> </ul>	ROA	+
			<ul style="list-style-type: none"> <li>➤ Non-Performing Loan</li> </ul>	<ul style="list-style-type: none"> <li>▪ (NPL / Total Loan ) X 100%</li> </ul>	NPL	-
			<ul style="list-style-type: none"> <li>➤ Net Interest Income</li> </ul>	<ul style="list-style-type: none"> <li>▪ (NII/Total Assets) x 100%</li> </ul>	NIM	+
<ul style="list-style-type: none"> <li>➤ Overheadcost Ratio</li> </ul>			<ul style="list-style-type: none"> <li>▪ (Overheadcost/Total Assets) X 100%</li> </ul>	OC/TA	-	
<ul style="list-style-type: none"> <li>➤ Capital</li> </ul>			<ul style="list-style-type: none"> <li>▪ (Equity/Total Assets) x 100%</li> </ul>	TE/TA	+	
Banking Market Structure	Market Share & Competition	<ul style="list-style-type: none"> <li>➤ Market Concentration of Assets</li> </ul>	<ul style="list-style-type: none"> <li>▪ Total market share assest 4 bank terbesar pada pasar assets perbankan (%)</li> </ul>	CR4A	-	
Macro Economy	Exchange Rate Inflation Economy Activity	<ul style="list-style-type: none"> <li>➤ Exchange Rate-regional</li> <li>➤ Inflation - regional</li> <li>➤ GDP-regional</li> </ul>	<ul style="list-style-type: none"> <li>▪ Rupiah/USD</li> <li>▪ (CPIt-CPIt-1)/CPIt-1 *100</li> <li>▪ GDR-riil (Constant Price)</li> </ul>	ER-r Inf-r GDP-r	- - +	

## 4 RESULTS AND DISCUSSION

To make inferential analysis, firstly in this research is done by making three models of panel data regression, i.e OLS (Ordinary Least Square) model, FE (Fixed Effect), and RE (Random Effect). After

that, selected the best among the three models by using Chow test to choose between OLS model with FE model; Hausman's test to choose between FE model and RE model, and LM (Lagrange Multiplier) to choose between OLS or RE models.

Table 5: The Factors Affecting Loan to Deposits Ratio in Regional Banking

Independent Variables	Model			
	FE	RE	OLS	GLS
NPL	-1.2158385***	-1.2158385***	-1.2158385***	-1.2158385***
NII/TA	5.4877495***	5.4877495***	5.4877495***	5.4877495***
OC/TA	0.60485704	0.60485704	0.60485704	0.60485704
ROA	-3.5475949***	-3.5475949***	-3.5475949***	-3.5475949***
TE/TA	1.1549594***	1.1549594***	1.1549594***	1.1549594***
CR4A	84.5836790**	84.5836790**	84.583679**	84.583679**
ER-R	0.00123691***	0.00123691***	0.0012369***	0.0012369***
CPI-R	0.0402731300*	0.040273130*	0.040273130*	0.040273130*
GDP-R	1.501e-08**	1.501e-08**	1.501e-08**	1.501e-08**
cons	-20.656519	-20.656519	-20.656519	-20.656519
F( 9,791)/ <i>Wald chi<sup>2</sup>(9)</i>	50.380	449.08	41.650	379.57
Prob > F / <i>Prob &gt; chi<sup>2</sup></i>	0.00000	0.00000	0.00000	0.0000
R-sq: within	0.3718	0.3711		
between	0.0886	0.1384		
overall	0.2845	0.3034		
R-squared			0.3215	
Adj R-squared			0.3138	
Number of obs	801	801	801	801
Number of groups	26	26	26	26
Obs per group: min	30	30	30	30
avg	30.8	30.8	30.8	30.8
max	31	31	31	31
OLS/RE : <i>chi<sup>2</sup>(1)</i>		514.34		
Prob > <i>chi<sup>2</sup></i>		0.0000		
OLS/FE : F(25, 766)	10.830			
Prob > F	0.00000			
FE/RE : <i>chi<sup>2</sup>(8)</i>		14.920		
Prob > <i>chi<sup>2</sup></i>		0.0606		
Multicol test /Mean VIF		32.65		
Autocorr test / F( 1,25)		18.513		
Prob > F		0.0002		

Source: Secondary Data, Processed

Then, after chosen the best model is tested BLUE (best linear unbiased estimation). If the test is interpreted the model, but if not pass will be made an alternative model of GLS (Generalized Least Square).

Chow test results show that  $\text{prob-F} = 0.0000 < 0.05$ , it means that the model selected is the FE model. Hausman test shows  $\text{prob-F value} = 0.06 > 0.05$ , it means the model chosen is RE model. The LM test shows the  $\text{prob-F value} = 0.0000 < 0.05$  which means the model chosen is the RE model. Therefore, from the model selection test it is evident that the suitable or appropriate model is the RE model. The RE model as the best model needs to be tested BLUE via post-estimation test.

To find out whether the selected RE model meets the BLUE criteria or not, a multicollinearity and autocorrelation test is required. The multicollinearity test results show a VIF (Variance Inflating Factor) of  $32.65 > 10$ ; means there are indications of multicollinearity. While the Autocorrelation test shows  $\text{prob-F} = 0.0002 < 0.05$ , there is an indication of autocorrelation. So, RE does not meet the qualification of BLUE test. Therefore, we need to look for the alternative models. In this research, the alternative chosen model is GLS (Generalized Least Square).

Based on Table 5, the GLS model shows that the mobilization of public funds by RDBs which is represented by LDR is influenced by macroeconomic factors, market structure, and banking characteristics. This means the systemic development of mobilization of public funds by Indonesian RDBs is related to regional macroeconomic conditions such as GDP-R, CPI-R and ER-R; the structure of the national banking asset market (CR4A) and the bank's internal conditions such as NPL, NIM, ROA and TE/TA.

#### 4.1 The Effect of NPL on LDR

The non-performing loan has a significant and negative effect on LDR. This is a good condition because a low NPL indicates smaller credit risk which makes bank increase the allocation of credit. This result is in accordance to research from Saryadi (2013) which stated the higher NPL would result in the greater credit risk. Fitria dan Sari (2012) stated that a high NPL would make the bank more selective in distributing credit.

#### 4.2 The Effect of NIM on LDR

The ratio of NII/TA variable has a significant positive effect on LDR which means the greater net interest margin will also make the greater LDR. This indicates bank has managed to optimize the difference between interest income and interest expenses from total assets operated by the bank. The optimal net interest margin drives to increase LDR. The result is in accordance with the findings of Rosadaria (2012) and Buchory (2014) which found out that NIM had a significant positive effect on bank liquidity.

#### 4.3 The Effect of ROA on LDR

Return on assets has a significant negative effect on LDR which means a low ROA will make a high LDR. This does not mean if a low ROA will make operating profit goes down. Mathematically, a lower ROA occurs because the growth of operating profit is smaller than the growth of asset. Asset growth affects increasing market access which makes the bank's ability to attract and distribute fund is getting stronger. This study supports Myers's (1984) who stated that a high level of profitability would make firms use retained earnings as a source of funds compared to outside sources of funds from debt (in this case, third-party funds) and it results in a decline of the intermediary function of banks especially in lending.

#### 4.4 The Effect of TETA on LDR

A high capital adequacy ratio can provide a large space internally and externally for banks because the adequacy of banks capital is a requirement of safety regulations. The higher capital adequacy will make an optimal intermediary function of banks in this case the credit distribution.

In this research, the ratio of TE/TA has a significant and positive effect on LDR which means the high capital will increase LDR. Increasing the capital of banks to make the solvency of banks increases, this impacts on trust society because the ability of banks to collect public funds and channelled back to the community in the form of credit becomes increasingly rising. The study supports the findings of Saryadi (2013) which states that if CAR increases, it will increase LDR.



#### 4.5 The Effect of Concentration on LDR

CRA4 variable is the level of assets market power of the four largest banks. The result shows that concentration has a significant and positive effect on LDR which means that the direction of the national banking assets market structure is in line with the development of funds mobilization by RDBs. This is reasonable because RDBs are one of the parts of the national banking system. It only has a small market share, so it becomes a market follower. Therefore, funds mobilization of RDBs is affected by the dynamics of the national banking market structure.

#### 4.6 The Effect of Exchange Rate on LDR

The trend of Rp/USD currency of regional-province has a positive effect on LDR. This means the dynamics of forex market province has a role in the rise of the turmoil of the RDBs' capability in mobilizing funds. The more Rp/USD currency rises nominally; it will help RDBs in mobilizing funds. Banking management succeeded in utilizing the depreciation of rupiah to keep increasing LDR. This result supports the research from Mongid (2008) which suggests that the exchange rate has a significant positive effect on the provision of credit.

#### 4.7 The Influence of Inflation on LDR

The regional inflation which represents the development of provincial market output prices has a significant and positive influence on LDR. This means that price development in the regional goods/services market plays a significant role in RDBs' capability in mobilizing funds. A high CPI will support RDBs in mobilizing funds. This is because banking management managed to anticipate the impact of inflation in pricing strategy to keep increasing LDR.

#### 4.8 Influence of GDP on LDR

The GDP-R variable or regional gross domestic product development progress a significant and positive influence on LDR. This means the regional output market condition contributes to the rise of the turmoil on the mobilization capability of RDBs' funds. The greater the regional economic activity means better people's income, so this encourages people to be able to save, on the other hand, the demand for public money also rises, especially the

demand for money for transactions. Therefore, the access to BPD in collecting and channelling funds is increasing.

## 5 CONCLUSIONS

### 5.1 Finding

The funds mobilization of RDBs in all provinces in Indonesia is influenced by the external factor of internal banking. The external factors consist of regional GDP, regional exchange rate, regional inflation and national banking concentration. They have the significant and positive effect of the loan to deposit ratio. Meanwhile, the internal banking factors that have a significant positive effect are NIM (net interest margin) and TE / TA (equity/asset ratio). The variable which has a negative significant effect is non-performing loan and return on assets.

This indicates that bank operations in Indonesian RDBs are systematically working to optimize the rotation of funds, the funds mobilization is affected by changes in regional economic conditions and the structure of the national banking market. Therefore, the RDBs need to mitigate the risk. Moreover, the utilization and anticipation of the opportunities and threats sourced from these external factors need to be oriented in long-term perspective without neglect on short-term interests especially in managing the health aspects of profitability, capital, interest rate spread, earning assets and cost-revenue management.

### 5.2 Implications

The implementation of intermediation role of RDBs by increasing the effectiveness of funds mobilization can be enhanced to prioritize management pricing. Net interest income can be increased by increasing the volume of third-party fund and loan by making loan growth bigger than third party fund growth. It also can be increased by arising financial inclusive to penetrate and explore new potential market, but it still should consider the prudential aspect of reducing risk.

The effectiveness of fund mobilization can also be done by developing specific banking products. Therefore the customers will be still loyal. The product development is not only focused on credit and deposit market, but it is also important to develop fee-based income-based products. This is important because the future of the market will be more competitive so that the NIM must be thinning.

The development of fee-based income products is an alternative to maintain the stability of bank revenue.

It is important to prioritize and upgrade EWS (early warning system) to anticipate changes in regional macroeconomic conditions and market structure changes, as these external variables are significant to the accelerated mobilization of funds. These external factor changes need to be included in every decision making especially in the pricing strategy which greatly affects the rapid mobilization of public funds by banks.

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Tabel 3: The Factors Influence Loan to Deposits Ratio in Indonesian RDBs

Independent Variable	Model			
	FE	RE	OLS	GLS
NPL (Non performing loan)	-1.2158385***	-1.2158385***	-1.2158385***	-1.2158385***
SPREAD (Spread rate)	5.4877495***	5.4877495***	5.4877495***	5.4877495***
OC/TA (overhead cost)	0.60485704	0.60485704	0.60485704	0.60485704
BEP (Basic Earning Power)	-3.5475949***	-3.5475949***	-3.5475949***	-3.5475949***
TE/TA (total equity/total asset)	1.1549594***	1.1549594***	1.1549594***	1.1549594***
CRA4 (concentration of assets)	84.5836790**	84.5836790**	84.583679**	84.583679**
ER-R (Exchange rate-Region)	0.00123691***	0.00123691***	0.0012369***	0.0012369***
CPI-R (Inflation-Regional)	0.0402731300*	0.040273130*	0.040273130*	0.040273130*
GDP-R (GDP-Regional)	1.501e-08**	1.501e-08**	1.501e-08**	1.501e-08**
cons	-20.656519	-20.656519	-20.656519	-20.656519
F( 9,791) / Wald $\chi^2(9)$	50.380	449.08	41.650	379.57
Prob > F / Prob > $\chi^2$	0.00000	0.00000	0.00000	0.0000
R-sq: within	0.3718	0.3711		
between	0.0886	0.1384		
overall	0.2845	0.3034		
R-squared			0.3215	
Adj R-squared			0.3138	
Number of obs	801	801	801	801
Number of groups	26	26	26	26
Obs per group: min	30	30	30	30
Avg	30.8	30.8	30.8	30.8
Max	31	31	31	31
OLS/RE : $\chi^2(1)$		514.34		
Prob > $\chi^2$		0.0000		
OLS/FE : F(25, 766)	10.830			
Prob > F	0.00000			
FE/RE : $\chi^2(8)$		14.920		
Prob> $\chi^2$		0.0606		
Multicol test / Mean VIF		32.65		
Autocorr test / F( 1,25)		18.513		
Prob > F		0.0002		

Table 4: The Factors Which Influence Loan to Deposits Ratio in Indonesian RDBs

Independent Variable	model			
	fe	re	ols	gls
Nplgipt	-1.2158385***	-1.2158385***	-1.2158385***	-1.2158385***
Spreadsipt	5.4877495***	5.4877495***	5.4877495***	5.4877495***
Octaipt	0.60485704	0.60485704	0.60485704	0.60485704
Bepipt	-3.5475949***	-3.5475949***	-3.5475949***	-3.5475949***
Tetaipt	1.1549594***	1.1549594***	1.1549594***	1.1549594***
cra4t	84.5836790**	84.5836790**	84.583679**	84.583679**
kurspt	0.00123691***	0.00123691***	0.0012369***	0.0012369***
ihkpt	0.0402731300*	0.040273130*	0.040273130*	0.040273130*
pdrbcppt	1.501e-08**	1.501e-08**	1.501e-08**	1.501e-08**
cons	-20.656519	-20.656519	-20.656519	-20.656519
F( 9, 791)	50.380		41.650	
Prob > F	0.00000		0.00000	
Wald chi²(9)		449.08		379.57
Prob > chi²		0.00000		0.0000
R-sq: within	0.3718	0.3711		
between	0.0886	0.1384		
overall	0.2845	0.3034		
R-squared			0.3215	
Adj R-squared			0.3138	
Number of obs	801	801	801	801
Number of groups	26	26	26	26
Obs per group: min	30	30	30	30
avg	30.8	30.8	30.8	30.8
max	31	31	31	31
OLS/RE : chi2(1)		514.34		
Prob > chi²		0.0000		
OLS/FE : F(25, 766)	10.830			
Prob > F	0.00000			
FE/RE : chi2(8)		14.920		
Prob>chi²		0.0606		
Multicol test /Mean VIF		32.65		
Autocorr test / F( 1,25)		18.513		
Prob > F		0.0002		