PT. BANK SULUTGO AS A REGIONAL DEVELOPMENT BANK AND THE INFRASTRUCTURE LOAN: A SIMULATION ANALYSIS

PT. BANK SULUTGO SEBAGAI BANK PEMBANGUNAN DAERAH DAN KREDIT INFRASTRUKTUR: SEBUAH ANALISIS SIMULASI

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Abstract: Infrastructure development is government's main program in Nawacita. From economic perspective, financial institutions like banks can take an opportunity to fund the infrastructure development. Government encourages banks to increase 60 percent of productive loans and 40 percent for consumptive loans. SulutGo bank as a regional development bank can also take the same opportunity. This study aims to analyze financial ratios when infrastructure loan takes place in SulutGo bank. This study relies on simulation analyses. This study uses data from financial statements of SulutGo bank year 2011-2016. There are two scenarios of simulation used in this study, namely capital-taking and credit-switching. Financial ratios to be analyzed are ROA, LAR, DAR, NPL Net, ROE, LDR, NIM, OEOI, and CAR. One sample T-Test is needed to test the significant changes before and after simulation of both scenarios. The results show that after simulation ROA increases while ROE, NPL and OEOI decrease. The intervention of infrastructure loan affects LAR, DAR, LDR, ROE and OEOI. There is no statistical difference among ROA, NPL, NIM, and CAR between pre and post simulation. Through this infrastructure loan, bank can expand its business area, generate new source of income by getting fee based income based on corporate collateral.

Keywords: infrastructure loan, simulation, financial ratios.

Abstrak: Pembangunan infrastruktur merupakan program utama pemerintah dalam Nawacita. Dari sudut pandang ekonomi, lembaga keuangan seperti bank dapat mengambil kesempatan untuk mendanai pembangunan infrastruktur. Pemerintah mendorong bank-bank untuk meningkatkan kredit produktif sebesar 60 persen dan 40 persen untuk kredit konsumtif. Bank SulutGo sebagai bank pembangunan daerah juga dapat mengambil peluang yang sama. Penelitian ini bertujuan untuk menganalisa rasio-rasio keuangan saat kredit infrastruktur ada di bank SulutGo. Penelitian ini menggunakan analisis simulasi dan data yang digunakan adalah laporan keuangan bank SulutGo tahun 2011-2016. Ada dua skenario dalam simulasi kredit, yaitu pengambilan modal dan pertukaran kredit. Rasio-rasio keuangan yang dianalisa adalah ROA, LAR, DAR, NPL Net, ROE, LDR, NIM, OEOI dan CAR. Uji T satu sampel digunakan untuk menguji perubahan signifikan sebelum dan sesudah simulasi kedua skenario. Hasil menunjukkan bahwa sesudah simulasi ROA meningkat namun ROE, NPL, dan OEOI menurun. Intervensi kredit infrastruktur mempengaruhi LAR, DAR, LDR, ROE dan OEOI. Tidak terdapat perubahan secara statistik pada ROA, NPL, NIM dan CAR sebelum dan sesudah simulasi. Melalui kredit infrastruktur, bank dapat memperluas area bisnis, mendapat sumber keuntungan baru melalui fee based income dari agunan korporat.

Kata Kunci: kredit infrastruktur, simulasi, rasio-rasio keuangan.

INTRODUCTION

Research Background

According to Grigg (1988:3) the definition of infrastructure is a physical system that provides transportation, irrigation, drainage, building and other public facilities needed to meet basic human needs both for social needs and economic needs. Better infrastructure can support community activities and improve their productivity. Banking Survey 2017 emphasize that infrastructure financing become potential target for banks to support economy development and as a big source of income.

Several banks that have contributed a lot to infrastructure financing is state-owned banks such as PT Bank Mandiri,Tbk; PT Bank Negara Indonesia,Tbk; and PT Bank Rakyat Indonesia,Tbk. There are also several Regional Development Banks (RDBs) such as DKI Jakarta banks, Central Java RDBs, West Java RDBs, East Java RDBs, and East Kalimantan RDBs which have been instrumental in infrastructure financing (Quoted from Metrotvnews.com). Realize that the role of regional development banks are very important to support regional development so it is like a hard slap for other regional development banks which is still choose to be a spectator rather than a cast in their own roles especially to give productive loans.

In bank's decision to choose participate in financing infrastructure development, bank needs to examine and assess some aspects of infrastructure valuation such as large amount of funds required; chance of undisbursed loan meaning loan that have been prepared for development cannot be disbursed because of external factors such as land acquisition; lower interest rates than consumption credit interest rates; and the opportunity for the bank to make a syndicated loan in order not to violate the Legal Lending Limit (LLL) set by Bank Indonesia. Syndicated loans minimize the likelihood of non-performing loans because projects financed by several banks are given to borrowers whose their credibility is maintained.

The bank's decision to give infrastructure lending is a challenge for bank to help infrastructure development and however bank should maintain its financial soundness. The Bank's assessment is based on Bank Indonesia Regulation Number 6/10 / PBI / 2004 and Bank Indonesia Circular Letter No.6 / 23 / DPNP dated May 31, 2004 in CAMELS method (Capital, Asset Quality, Management, Earnings, Liquidity and Sensitivity to market risk) and in 2011 based on Bank Indonesia Regulation Number 13/1 / PBI / 2011 regarding the Rating of Commercial Banks, banks are required to conduct rating with Risk-Based Bank Rating (RBBR).

PT. Bank SulutGo is the source of information in this study. SulutGo banks known as an agent of development and contribute more to North Sulawesi-Gorontalo region may explore the knowledge and experience of several state-owned banks and other regional development banks (RDBs) that have successfully conducted infrastructure loans, studied some characteristics of infrastructure financing and some preparation so that bank can be said to be ready in national infrastructure financing and also keep maintain its financial soundness. This study will offer strategy to SulutGo banks regarding the infrastructure financing in coming year.

The strategy of funding this infrastructure loan comes from bank's assets as explained as capital-taking and credit switching scenarios. This fund allocation would be calculated and analyzed in new SulutGo's financial ratios. Bank soundness assessment is needed to keep the bank on duty as a trustworthy financial intermediation and in Bank Indonesia's standard as well. Ratios to be analyzed are Return on Assets (ROA), Loan to Assets Ratio (LAR), Debt to Assets Ratio (DAR), Non-Performing Loan (NPL), Loan to Deposit Ratio (LDR), Return on Equity (ROE), Net Interest Margin (NIM), Operational Expense to Operational Income (OEOI), and Capital Adequacy Ratio (CAR). This study discusses the simulation of infrastructure loans and find out statistically the changes in some indicators of bank after infrastructure loan.

Research Objectives

The purpose of this research is to find out and analyze financial ratios of ROA, LAR, DAR, NPL, LDR, ROE, NIM, OEOI and CAR after simulation of capital taking and credit switching.

LITERATURE REVIEW

Infrastructure Credit and Its Cases

A few common economic characteristics differentiate infrastructure assets from other asset classes. Infrastructure is therefore special. Although infrastructure investments are potentially give big profits for the economy as a whole, they are especially subject to market failures. Markets alone will often fail to provide these services – either because an infrastructure project would not be profitable on its own, or because the associated risks are too large or too costly to insure. As a result, infrastructure investment from the private sector in many cases cannot be realized without some form of public support (Gupta, 2017). Presidential Regulation Number 75 year 2014 which becomes the legal basis of priority infrastructure is not the only policy pursued by the government to address the problem of infrastructure development in the country. However, to plunge into infrastructure credit banks needs concern of its components of financial statement (financial report) which will be accountable for bank itself, financial services authorities, costumers and investors in bank's financial ratio and financial soundness as well as maintain bank's financial performance.

Financial Statement Analysis

In general, the definition of financial statements is a report that shows the company's financial condition at a certain period (Kasmir, 2008:89). Harahap (2008:105) states that "The financial statements describe the financial condition and results of a company's business at a certain time or a certain period. The types of financial statements are balance sheet, income statement, cash flow statement and statement of changes in financial position". Banks prepare four financial statements from the summarized accounting data of income statement, owner's equity statement, balance sheet and statement of cash flows and should be correlated each other. The function of this financial statement analysis is to know the process of reviewing and evaluating a company's financial statement after infrastructure loans, thereby gaining an understanding of each component in financial statements that will take into financial soundness of the company and enabling more effective decision- making.

Bank Soundness

The health of a bank can be defined as the ability of a bank to perform normal banking operations and be able to fulfill all its obligations properly in ways in accordance with prevailing banking regulations (Budisantoso and Triandaru, 2006:132). Slamet (2006:185) also asserted that "Bank soundness level is an assessment of a condition of bank financial statement in certain period and time according to Bank Indonesia standard".

Return on Asset

The ROA ratio is the profitability ratio to assess the efficiency of deposit-takers in using their assets. Mathematically can be calculated by the formula:

[ROA = (Profit before tax / Average Total assets) x 100%].

The standard given by Bank Indonesia for banking ROA is more than 2%, and average ROA of Regional Development Bank of Indonesia is 2.58%, means in every period of financial statement, banks can be said as health bank if its profit may increase the bank's assets by 2%.

Loan to Assets Ratio (LAR)

This ratio measures amount of loan to total assets in certain period. The bank's main activity is to keep turning the money and making a profit by lending money for consumer and productive loans. However some components of loans given are not 100% as current credit. Customers who do not fulfill the requirements from bank makes some credit is impaired like in special mention, substandard, doubt full, even loss. This is can be explained in Non-Performing Loan (NPL).

Non-Performing Loan (NPL)

According to Bank Indonesia, NPL ratio is less than 5%. The calculation of non-performing loans based on Bank Indonesia Circular Letter No. 3/30/DPNP dated December 14, 2001 as follows:

[NPL = total credit not impaired or non-performing loan / bank's total loans x 100%].

Increasing of NPL of course closely related to amount of bank's lending in economy, how to determine loans and how the economic conditions are running. Large NPLs will not be a big problem if loans provided include productive loans, preferably if the consumer credit components increase the NPL ratio, it will harm the bank.

Loan to Deposits Ratio (LDR)

Based on standard set by Bank Indonesia, LDR is between 85-115%. Based on the performance of All Regional Development Banks in Indonesia (ARDBI), in 2016, the Loan to Deposit Ratio (LDR) has reached 93.65%. The formula is: (Total loans/total deposits) X 100%. This ratio shows how much the bank can fulfill its obligations to a third party. Another ratio that measure value of liability to assets is debt to assets ratio.

Debt to Assets Ratio (DAR)

Debt or total liabilities should be settled by the bank within the stipulated time frame or how big the bank can pay off all debts with assets owned. It shown in formula: [DAR= (Total Liabilities/Total Assets) X 100%].

Return on Equity (ROE)

The return on equity (ROE) ratio measures management's success in maximizing return on the owner's investment. In fact, this ratio is often called "return on investment," or ROI. ROE formula is: Net profit/total average equity. Return on Investment (ROI) is a way to measure how much net profit can be obtained from all assets owned by the company.

Most of assets of banks come from loans given and its loans come from customer's deposits. It means bank has profit (interest) as its main operational income. The way bank measures its performance of interest income compared to its earning assets called as net interest margin.

Net Interest Margin (NIM)

A good way to determine whether a company is effectively using its earning assets is to look at the proportion of income that's being generated for the value of the company's assets. Based on BI standard, net interest margin is more than 7%. And formula used to calculate net interest margin is:
[NIM = (Interest returns-interest expense)/Average earning assets].

Operational Expense to Operational Income (OEOI)

Bank Indonesia as supervisor also uses OEOI as an indicator to measure the level of efficiency of a bank. Based on Bank Indonesia Circular Letter No.6/23/DPNP/2005 subject: Rating System for Commercial Banks regulates OEOI ratio range from 94% to 97%. Formula used to calculate this ratio is:
[OEOI = Total operational cost/Total operational income X100%].

Capital Adequacy Ratio (CAR)

CAR is one of the health indicators of the bank's capital showing how much bank capital is sufficient to support its needs and as a basis for assessing the prospects for continued bank business. Formula of CAR as follows:
[CAR = (Tier One + Tier Two) Capital / Risk Weighted Assets].

Previous Research

According to Arezki and Amadou (2016) in Global News "Financing Africa's Infrastructure Deficit: From Development Banking to Long-Term Investing" Considering that the differences in investors' preferences that Africa faces, the paper argues that continent's success to fill its green field and, hence, risky infrastructure gap is a delicate balancing act between development banking and institutional long-term investment. Jones and Hertova (2008) in United Nations Conference on Trade and Development "Enhancing the Role of Regional Development Banks" in Section VI described the conditions for a new RDB or SRDB. Such a bank needs to be as strong financially as possible, by endowing it with a large capital base.

Several studies from Korompis (2015) and Suryanto (2017), which is discussed about some financial indicators and give assessment based on CAMEL ratings also analyze non-performing loan in regional development bank. Study from Prasetya and Tasik (2017) also used some financial indicator in analyze index LQ45 although they found that there is no significant in ROA and significant in market capitalization and trade volume.

Based on some previous research, it confirmed that regional development bank have important role to finance infrastructure projects, financial indicators are needed to test and financial soundness that has been explained using RGEC methods, can show the financial health of the bank. But different from previous studies, in this opportunity researcher tried to explain different things, it is not only to examine the financial health that has been published only the bank, but to project the financial indicators that will be owned by Bank SulutGo in the coming period, and assess the financial health of the future with the strategy offered by the researcher that is simulation of infrastructure credit.

Conceptual Framework

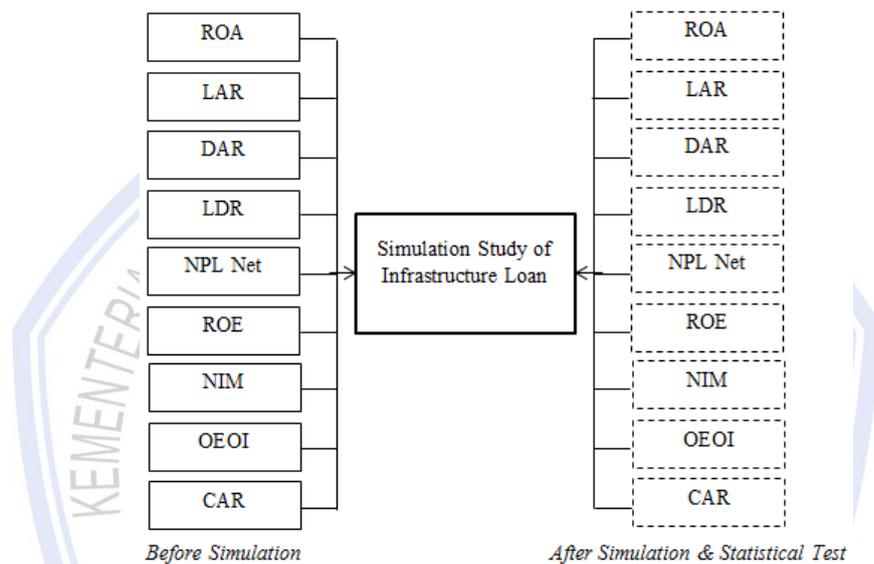**Figure 1. Conceptual Framework**
Source: Conceptual Framework, 2017

RESEARCH METHOD

Type of Research

This research is a quantitative study including simulation analysis to test a particular model or technique used based on information collected.

Place and Time of Research

This research used secondary data of PT Bank Sulut Go. Data collection was conducted from May to August year 2017.
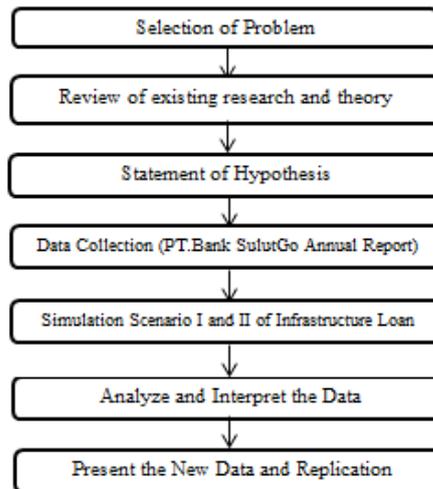
Research Procedure

Figure 2. Research Procedure

Population and Sample

The population in this research is PT Bank SulutGo and sample used is financial statements in year 2011-2016.

Analysis Method

a. Simulation Scenario I (SC I)

In this scenario, researcher uses the allocation of infrastructure funds from the side of bank equity reports (Capital).

b. Simulation Scenario II (SC II)

In SC II, researcher uses a credit switching system. This research is focus on allocate consumptive loan to productive loan.

c. One Sample T-Test

One-sample t-test for assess the difference before simulation and after simulation. Before simulation, researcher uses data from year 2011-2016. While after simulation, there are 2 samples come from scenario I and scenario II. This test assuming that there is unequal variances of each sample of group.

Definition and Measurement of Variables

Table 1. Definition and Measurement of Variables

No	Variable	Indicator	Measurement	Source
1	ROA	Profitability ratio to assess the efficiency of deposit-takers in using their assets.	ROA = Profit Before Tax / Total Average of Assets	Bank Indonesia Regulation
2	LAR	This ratio measures amount of loan to total assets in certain period	LAR = Total Loans / Total Assets	Bank Indonesia Regulation
3	NPL	Ratio between non-performing loans to total loans granted by banks	NPL = Non Performing Loans / Total Credit	Bank Indonesia Regulation
4	LDR	How much the bank can fulfill its obligations to a third party funds.	LDR = Total Loans / Total Third party Fund	Bank Indonesia Regulation
5	DAR	How big the bank can pay off all debts with assets owned	DAR = Total Liability / Total Assets	Bank Indonesia Regulation
6	ROE	Management's success in maximizing return on the owner's investment.	ROE = Net Profit / Total Average Equity	Bank Indonesia Regulation

7	NIM	Determine whether a company is effectively using its earning assets is to look at the proportion of income	NIM = (Interest returns- Interest expense) / Average earning assets	Bank Indonesia Regulation
8	OEOI	Essential for banks to increase the rate of profit to be achieved.	OEOI = Total Operational Expenses / Total Operational Income	Bank Indonesia Regulation
9	CAR	How much bank capital is sufficient to support its	CAR = (Tier One Capital + Tier Two Capital) / Risk Weighted Assets	Bank Indonesia Regulation

Source: Data Processed, 2017

RESULTS AND DISCUSSION

Financial Ratios
Table 2. Financial Ratios of SulutGo Bank Year 2011-2016, Mean and BI Standard

Year	Quick Ratio	LDR Bank	LFR Bank	Loan to Assets Ratio	Debt to Assets Ratio	CAR Bank	ROA Bank	ROE Bank	NIM Bank	ROI Bank	OEOI Bank	NPL Nett
2011	42.69%	99.78%	101.29%	69.57%	91.89%	12.71%	2.01%	32.02%	8.46%	1.52%	84.96%	0.32
2012	41.20%	108.88%	109.62%	71.68%	91.65%	18.76%	3.00%	39.86%	8.66%	2.37%	77.66%	0.13
2013	39.15%	112.94%	112.94%	72.73%	90.05%	17.27%	3.48%	36.92%	11.17%	2.68%	75.53%	0.21
2014	38.27%	90.10%	90.10%	69.06%	91.99%	14.26%	2.16%	23.16%	9.72%	1.88%	81.52%	0.93
2015	23.00%	103.62%	95.09%	80.27%	91.16%	13.79%	1.56%	20.10%	9.18%	1.92%	87.35%	0.55
2016	26.23%	111.85%	103.68%	78.75%	88.85%	17.45%	2.00%	21.02%	9.25%	2.60%	86.68%	0.5
Mean	35.09%	104.53%	102.12%	73.68%	90.93%	15.71%	2.37%	28.85%	9.41%	2.16%	82.28%	0.44
BI		85-110%				>8%	>2%	>15%	>7%	-	<80%	<5%

Source: Data Processed, 2017

All of financial ratios calculated for 6 years are in the table above. These are calculated to get a formula for doing simulation analysis.

Simulation Scenario I and II

Scenario I used is capital taking. SulutGo bank has 1,13 trillion rupiah as bank's core capital and 1,258 trillion rupiah in owner's equity in 2016. Let's assume that bank allocates 10% of its equity for infrastructure loan next year and changes on some financial ratios. And the assessment after simulation I is below:

Table 3. Assessment after Simulation Scenario I

Outcome of Accounting Changes	Benchmark Based on BI Standard	Benchmark Based on Mean year 2011-2016	Benchmark Based on Last Year	After Simulation		
				Amount (Rupiah)	Ratio (%)	*Criteria OK/ NOT OK
						BI Standard Mean Last Year

Outcome	Benchmark BI Standard	Benchmark Mean 2011-2016	Benchmark Last Year	Amount (Rupiah)	Ratio (%)	BI Standard	Mean	Last Year
Assets				11361839380113				
Equity				1340229690984				
Net Profit				182226079361				
ROA	≥2.00	2.37	2.00		2.34	OK	NOT OK	OK
LAR		73.68	78.75		78.18		OK	NOT OK
DAR		90.93	88.85		88.2		OK	OK
LDR	85-115	104.65	111.85		113.11	OK	OK	OK
ROE	≥15.00	28.85	21.02		20.73	OK	NOT OK	NOT OK
NIM	≥7.00	9.41	9.25		9.24	OK	NOT OK	OK
OEOI	≤80.00	82.28	86.68		86.44	NOT OK	NOT OK	NOT OK
CAR	≥8.00	15.71	17.45		16.98	OK	OK	NOT OK

*Criteria are estimated by benchmark used. OK means it is better or increase than before, NOT OK means the value is going down.
Source: Data Processed, 2017

Scenario II used is credit switching. SulutGo bank has 8,28 trillion rupiah in consumptive loan and around 7,5 trillion for common consumptive loan. In this scenario, SulutGo bank needs to increase productive loan to 60% from 419 billion. It means bank has to ready for increasing productive loan to 5 trillion and decreasing consumptive loan from 8 trillion to 3 trillion rupiah. From 5 trillion rupiah in productive loan, researcher assumes that 10 percent which is 500 billion rupiah used for infrastructure loan. The assessment after simulation scenario II is below:

Table 4. Assessment after Simulation Scenario II

Outcome of Variable Changes	Benchmark Based on BI Standard	Benchmark Based on Mean year 2011-2016	Benchmark Based on Last Year	After Simulation		*Criteria OK/ NOT OK		
				Amount (Rupiah)	Ratio (%)	BI Standard	Mean	Last Year
Assets				11332461300752				
Equity				1310851611623				
Net Profit				226266079361				
ROA	≥2.00	2.37	2.00		2.59	OK	OK	OK
LAR		73.68	78.75		77.90		OK	NOT OK
DAR		90.93	88.85		88.43		OK	OK
NPL Net	≤5.00	0.45	0.54		0.50	OK	NOT OK	OK
NIM	≥7.00	9.41	9.25		9.71	OK	OK	OK
OEOI	≤80.00	82.28	86.68		86.14	NOT OK	NOT OK	OK

CAR	≥8.00	15.71	17.45	16.08	OK	NOT OK	NOT OK

*Criteria are estimated by benchmark used. OK means it is better or increase than before, NOT OK means the value is going down.

Source: Data Processed, 2017

The results of simulation scenario I and II and growth of each ratio can be seen in table 3 as follows:

Table 5. Results of Simulation Scenario I and II and Growth

Outcome of Variable Changes	Before Simulation (%)	After Simulation (%)		Growth +/- (%)	
		Scenario I	Scenario II	Scenario I	Scenario II
ROA	2	2.34	2.59	17.00%	29.50%
LAR	78.75	78.18	77.90	-0.72%	-1.08%
DAR	88.85	88.20	88.43	-0.73%	-0.47%
NPL Net	0.54	0.54	0.50	0.00%	-7.41%
LDR	111.85	113.11	111.85	1.13%	0.00%
ROE	21.02	20.73	21.02	-1.38%	0.00%
NIM	9.25	9.24	9.71	-0.11%	4.97%
OEOI	86.68	86.44	86.14	-0.28%	-0.62%
CAR	17.45	16.98	16.08	-2.69%	-7.85%

Source: Data processed, 2017

In simulation scenario I and II, SulutGo banks has different result of ratios from each scenario is used. ROA can increases by giving infrastructure credit, other changes of ratios are LAR can decrease, NPL can decrease, LDR can decrease, ROE can decrease, NIM can decrease and increase based on scenario used, OEOI can decrease, CAR can decrease.

One Sample T-Test
This t-test assuming that each sample has different variances. And researcher does 2 steps for each variable as follows:
- T-test I to compare means of variables from data 2011-2016 and variables in scenario I
- T-test II to compare means of variables from data 2011-2016 and variables in scenario II
The significant changes are in ratios of LAR, DAR, LDR, ROE and OEOI.

Discussion
Scenario I explains that SulutGo banks get funds from its equity (capital taking). This case can be implemented by small bank or big bank small liabilities. Ratio of ROA is increase because of bank concerns with other outstanding loans. While in one sample T-Test result shows that ROA is insignificant meaning that without intervention of infrastructure loan, ROA of bank will increase because of other components in asset that influence it. Scenario II explains the switching of assets (loans) to infrastructure loan. This scenario is more acceptable because of it is encouraged by government. One of infrastructure loans benefit is reduce the non-performing loan so it will increase ROA and decrease NPL. Although the interest rate of productive loan is less than consumptive loan but infrastructure loan is needed by trusty organization.

In two scenarios used in this simulation analysis, variables that are statistically significant in changes after infrastructure loan are LAR, DAR, LDR, ROE and OEOI. In SC I, LAR decrease 0.72% from 78.75 to 78.18 while in SC II decrease 1.08% from 78.75 to 77.90. In SC I, DAR decrease 0.73% from 88.85 to 88.20 while in SC II decrease 0.47% from 88.85 to 88.43. In SC I, LDR decrease 1.13% from 111.85 to 113.11 while in SC II LDR is not change. In SC I, ROE decrease 1.38% from 21.02 to 20.73 while in SC II ROE is not change. In SC I, OEOI decrease 0.28% from 86.68 to 86.14 while SC II decrease 0.62% from 86.68 to 86.14. Benefit of these scenarios is bank can decrease its OEOI so bank can run more effective in its duty as financial

intermediation, bank can decrease its debt to assets ratio although loan to debt ratios is decrease also but still in BI standard.

Other variables that are not statistically significant after simulation are ROA, NPL Net, NIM and CAR. ROA in SC I Increase 17% from 2 to 2.34 and SC II Increase 29.5% from 2 to 2.59. NPL Net in SC II decrease 7.41% from 0.54 to 0.50. NIM in SC I decrease 0.11% from 9.25 to 9.24 and SC II increase 4.97% from 9.25 to 9.71. CAR in SC I decrease 2.69% from 17.45 to 16.98 and SC II decrease 7.85% from 17.45 to 16.08.

Although those ratios show growth after simulation, in statistics it is not significant. It means the intervention of infrastructure loan is not affect the changes of ROA, NPL Net, NIM and CAR also because of some ratio in previous year higher than ratios after simulation, for example in year 2013 there is high performance of financial indicator in SulutGo banks compare to other years and that is not explained in this research. The important thing is bank can keep maintain its financial ratios based on BI standard and increasing ROA, NIM and decreasing NPL.

SulutGo bank as an agent of development can implement the scenarios offered to help infrastructure development and as a tool to expand its business area. SulutGo bank as a decision-maker can take an opportunity in developing supply chain financing from upstream to downstream. Based on infrastructure funding, bank can generating new funding sources, and fee based income from corporate collateral through syndication fee. Infrastructure loan can decrease NPL, meaning it reduces credit risk, it will help bank to increase its CAR. That makes infrastructure loan becomes interest market for many banks including regional development bank. The decrease of OEOI in infrastructure intervention also can be an opportunity of bank to get into new BOOK level.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the results obtained the following conclusions:

1. By using financial report in year 2016, SulutGo banks can allocate infrastructure loan by using two scenarios. Scenario I from its equity (capital taking) which is not more than 10% (100 billion) to keep bank in BOOK II. Scenario II can using credit portion (credit switching) based of association of regional development bank policy which is 60 percent of productive loan, 40 percent of consumptive loan, in this case SulutGo banks can allocate 500 billion for its infrastructure.
2. After simulation scenario I, some financial ratios that grow or better than before are ROA, DAR, LDR, and OEOI.
3. After simulation scenario II, some financial ratios that grow or better than before are ROA, NPL Net, NIM and OEOI.
4. There is statistically significant change after simulation in LAR, DAR, LDR, ROE and OEOI. There is no statistical difference between ratio of ROA, NPL Net, NIM, and CAR from before and after simulation.
5. SulutGo bank as a decision-maker can take an opportunity in developing supply chain financing from upstream to downstream. Based on infrastructure funding, bank can generating new funding sources, and fee based income from corporate collateral through syndication fee.

Recommendations

This simulation is used to SulutGo banks as decision maker to allocating infrastructure loan in next period from fund that company has, without think over of adding customer's deposit. Bank SulutGo is agent of development in North Sulawesi and Gorontalo provinces, so as a recommendation, bank can decrease its consumptive loans and increase its productive loan mostly for infrastructure to help people and support government program in future.

Researcher also recommend for other researchers, with limitation and lack of this research, hopefully other researchers can do better and different simulation to expand knowledge.

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