THE EFFECT OF OPERATING COST, OPERATIONAL EFFICIENCY, CREDIT RISK, LIQUIDITY RISK, RISK AVERSION, MARKET SHARE, BI RATE ON MARGIN BANK

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ABSTRACT

The purpose of this study is to know how the influence of operating cost, operational efficiency, credit risk, liquidity risk, risk aversion, market share, spread of interest ratetobank margin, the study population is 41 banking companies registered in Bursa Efek Indonesia in 2010-2016 and the sample research into 30 companies with research methods. The type of research used is associative research that is associative technique of associative research using quantitative analysis technique (statistic). To know the amount of influence between variable of writer use data analysis with help SPSS 20. The results of analysis using regression analysis found that the operating cost affects the margin banks in banking companies listed on the Indonesia Stock Exchange period 2010-2015. The results of analysis using regression analysis found that operational efficiency, credit risk and liquidity risk affects the margin banks in banking companies listed on the Indonesia Stock Exchange period 2010 - 2016. Meanwhile, risk aversion, market share and BI rate have no effect on bank margin on banking companies listed on Indonesia Stock Exchange period 2010-2015.

Key Words: Operating Cost, Operational Efficiency, Credit Risk, Liquidity Risk, Risk Aversion, Market Share, Spread of Interest Rate, Bank Margin

1. INTRODUCTION

Banking companies need to monitor their business profit margins for making good business plans, evaluating expenses, adjusting prices, and as benchmarks to find out how profitable a business is after a certain period of time. The higher efficiency and stability in banking companies can increase bank margin (Beck et al., 2013). Bank Margin is determined by operating cost, operational efficiency, credit risk, liquidity risk, risk aversion, and market share (Lee and Isa, 2017).

Operating cost is very important in the company especially in its operational activities. operational costs consist of interest on time deposits, loans received, labor, maintenance, repairs, fixed assets, inventory, receivables, third party goods and services so as to increase operating income. The higher the operating cost can increase the bank margin because the operational costs incurred by the banking company can make the customer more frequent to conduct banking transactions (Entrop et al., 2015).

Operational efficiency is used to measure the level of efficiency and ability of banks in conducting their operations. The higher operational efficiency in the costs incurred by banks will increase the profitability of the bank

itself. In other words, banks can reduce costs and optimize their operational performance so as to increase profits (Iqbal, 2011).

Credit risk is a risk due to failure of customers or other parties in fulfilling obligations to the bank in accordance with the agreed agreement. Credit risk can be sourced from various bank business activities. The results of Rustam's (2013) study, states that the suitability of the existing theory stipulates that the higher credit risk in the banking company can cause losses to the bank.

Understanding liquidity is the ability to meet obligations, in the context of banking liquidity can be defined as the ability to meet the main obligations in the form of public or customer deposits and other liquid liabilities. The problem of bank liquidity is dilemma problem, meaning that if the bank wants to maintain high liquidity then profit will decrease or low, otherwise if the liquidity is low then the profit becomes high (Taswan, 2015).

In this study, risk aversion is assumed as an excess of capital from the minimum capital ownership requirement (CAR). According to Dendawijaya (2012) capital adequacy ratio is an indicator of the ability of banks to avoid losses caused by risky assets. According to the results of research conducted by Kumari (2014) and Entrop et al. (2014) argued that risk aversion affects margin banks positively and significantly.

Deregulation by the government is not only that but also other deregulation. The high level of competition in the banking market resulted in each bank controlling a relatively similar market share. This is as proposed by Lubis (2012) that if a market has a high level of competition then the market share owned will be low.

Based on the description above, the problem in this research is formulated as follows:

This research intends to confirm (1) This research confirms operational costs affect the margin bank. (2) This research confirms the efficiency ratio has an effect on bank margin. (3) This study confirms that credit risk has an effect on bank margin. (4) This research confirms liquidity risk has an effect on bank margin. (5) This study confirms that risk aversion affects bank margin. (6) This study confirms the market share has an effect on bank margin. (7) This study confirms the BI Rate has an effect on bank margin.

Based on the formulation of the above problem, the purpose of this research is to examine the effect of operating cost, operational efficiency, credit risk,liquidity risk, risk aversion, market share, spread of interest rate to bank margin.

This research is expected to contribute theories about operating cost, operational efficiency, credit risk, liquidity risk, risk aversion, market share, spread of interest rate that can affect the high bank margin. As well as the Contribution of Practice how to increase the bank margin so as not to harm investors who will invest in the company, and Policy Contribution will provide an overview of the things that impact if the bank margin increases so that influence the policy issued by management or government in order to improve the nation's economy.

2. LITERATURE REVIEW

2.1 Operating Cost

Entrop et al. (2015) defines operating cost is the cost that must be incurred by the company to run its business activities. Lee and Isa (2017) explained that the purpose of establishing added value from the operational costs incurred by the company is to create better services provided to its customers.

2.2 Operational Efficiency

More specifically, Matthews in Ismail (2010) describes that the operational efficiency gained by banks is closely linked to the efficiency of the banking market and the efficiency of the intermediation process as well as the efficiency in implementing monetary policy through regulation of bank loans.

2.3 Credit Risk

According to Darmawi (2011), credit risk is giving credit to its customers. The provision of sound credit implies a smooth credit repayment by the customer on the loan principal or interest expense. According to Kashmir (2010), credit risk arises from credit uncollectible loans due to a grace period (return time). Thus, credit risk is the result of credit provision to customers who can not afford to pay in accordance with the period determined by the bank.

2.4 Liquidity Risk

Liquidity is a very important thing for banks to be managed properly because it will affect profitability and business sustainability and continuity. Conversely, if the bank adheres to aggressive liquidity management it tends to be close to liquidity shortage risk but has the opportunity to gain high profit (Rudi Dogar Harahap, 2010).

2.5 Risk Aversion

In this study, risk aversion is assumed as an excess of capital from the minimum capital ownership requirement (CAR). According to Dendawijaya (2009) capital adequacy ratio is an indicator of the ability of banks to avoid losses caused by risky assets By avoiding risk, the bank will maintain and improve profitability. It is assumed that rising risk aversion will also increase net interest margin.

2.6 Market Share

Market share is the influence of money market indicators on stock market indicators that are generally done without looking at the condition of the stock market. Various strategies and policies are taken to increase its market share. The main purpose of increasing market share is to strengthen the influence and role of banks in a nation's economy. The larger the market share is expected to help the bank in maximizing profits.

2.7 BI Rate

The BI Rate is a policy rate reflecting the stance or stance of monetary policy stipulated by Indonesian banks and announced to the public. The BI Rate is announced by the Board of Governors of Bank Indonesia at each monthly Board of Governors Meeting and implemented in monetary operations conducted by Bank Indonesia through liquidity management in the money market to achieve the operational targets of monetary policy.

2.8 Bank Margin

Net Interest Margin (NIM) is the ratio used to measure the amount of net interest earned by banks in using earning assets (Achmad and Kusumo, 2003). The NIMratio shows the bank's management capability in managing its earning assets to generate net interest income. Net interest income is derived from interest income less interest expense. The greater this ratio, the higher interest income on earning assets managed by the bank so that the possibility of banks in problem condition is getting smaller (Almilia and Herdiningtyas, 2005).ratio shows the bank's management capability in managing its earning assets to generate net interest income. Net interest income is derived from interest income less interest expense. The greater this ratio,the higher interest income on

earning assets managed by the bank so that the possibility of banks in problem condition is getting smaller (Almilia and Herdiningtyas, 2005).

2.9 Conceptual Framework

The framework of this study is presented below:

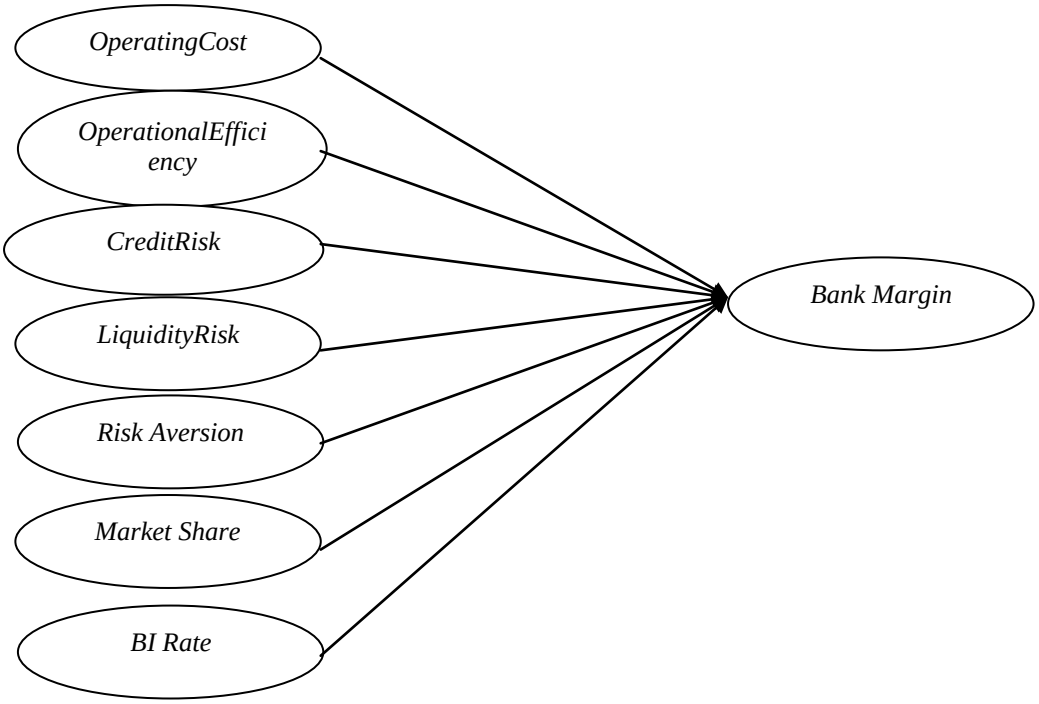

Figure 2.1 Theoretical Framework

3. RESEARCH METHODOLOGY

3.1Hypotheses Development

3.1.1 The effect of Operation Cost to net interest margin

The bank's operational costs consist of all costs directly related to the bank's business activities in order to carry out its principal activities (Sharif, 2013). Increasing operational costs can reduce NIM Banking so that operational costs and banking margins can have a positive effect.

3.1.2 The effect of efficiency ratio on net interest margin

Efficiency ratio or BOPO ratio is the ratio between operational cost to operating income. Maudos and Fernandes (2004), found that inefficient banks are associated with low interest rates because they have low productive assets and high cost of funds. So from the research mentioned that Bank margin relate negatively to operating efficiency.

3.1.3 The effect of credit risk on net interest margin

Credit risk is the possibility of loss of money due to incompetence, insecurity or timing of other parties or third parties to pay obligations. Credit risk is proxied with non performing loans (NPLs). Thus, the NPL ratio will reflect the credit risk borne by the bank. The smaller the NPL ratio the smaller the potential risk of non-performing loans borne by the bank, sothat the net interest income obtained by banks from the credit distribution will be greater.

3.1.4 The effect of liquidity risk on net interest margin

Liquidity is a measure of the bank's ability to repay all of its current liabilities. The ratio used to measure liquidity is the loan to deposit ratio

(LDR). According to Kosmidou et al. (2005), the less funds held in the form of liquid investments the higher the NIM will be obtained by banks, because liquid assets provide relatively lower returns, so the higher the liquidity the NIM will also be lower.

3.1.5 The effect of risk aversion on net interest margin

Risk aversion is a term that views the bank as an institution that is risk averse (dislikes risk) in lending to third parties. If CAR increases, risk aversion also increases, and vice versa. Thus, risk aversion positively affects net interest margin.

3.1.6 The effect of market share on net interest margin

According to the paradigm of market forces, increasing market forces lead to monopoly profits, which translates into an increase in banking margins. Hawtrey and Liang (2008) corroborate the findings, and conclude that banks with larger market forces have the freedom to set appropriate loan margins. This evidence shows that the margin of a positive bank is related to market share-the larger the market share, the greater the margin.

3.1.7 The effect of BI Rate on net interest margin

The BI Rate is the benchmark interest rate used by the Central Bank to control the inflation rate with interest rates set to Banking in Indonesia. It can lower NIM from banking in Indonesia. However, if the bank fails to anticipate the BI policy, the effect on the NIM will be negative, because banks are too slow to adjust their interest rates, resulting in a faster increase in interest costs than the increase in profits.

Variables	Measuring instrument	**Correlation**	**Source**
Operating Cost (X_1)	The ratio of operational costs / Total Assets	+	Lee dan Isa (2017)
Operational Efficiency (X_2)	The ratio of operating costs / Gross Income	-	Lee dan Isa (2017)
Credit Risk (X_3)	The ratio of loan loss provision / Total Gross Loan	+	Lee dan Isa (2017)
Liquidity Risk (X_4)	The ratio of liquid assets / short-term funding	+	Lee dan Isa (2017)
Risk Aversion(X_5)	The ratio of equity / Total Assets	+	Lee dan Isa (2017)
Market Share(X_6)	Bank Asset / Total Banking Assets	+	Lee dan Isa (2017)
BI Rate ((X_7) BI Rate july 21, 2016 : 6.25%	The BI Rate is a policy rate reflecting the stance or stance of monetary policy stipulated by Indonesian banks and announced to the public. Bank Indonesia is strengthening the monetary operations framework by introducing a new BI rate policy rate or BI 7-	+	www.bi.go.id (2017)

now 4.25 % (sd. Oct 26, 2017)	Day Repo Rate, which will be effective on August 19, 2016. In addition to the current BI Rate, the introduction of the new policy rate is not change the monetary policy stance being applied. BI 7-Day Repo Rate as the new reference has a stronger relationship to the money market interest rate, its transactional or traded in the market, and encourages deepening of the financial market.		
Bank Margin (Y)	Interest income - interest expenses / Total assets		Lee dan Isa (2017)

3.2 Object of Research

The object of this study is a banking company listed on the Indonesia Stock Exchange 2010-2016 period, which for the retrieval of data such as financial reports through the website www.idx.co.id. The population of research is 41 banking companies listed on Indonesia Stock Exchange, while the sample of research is 30 companies. The sampling technique used in this research is purposive sampling.

3.3 Data collection

Collecting data by the author with the method of observation and archive data collection techniques where the data is processed secondary data is quantitative data provided by the organization (business unit) so that researchers live to use and process data.

4. RESULT AND DISCUSSION

This research was conducted on banking companies listed on the Indonesia Stock Exchange period 2010 to 2016. Based on the characteristics of the sample that has been determined, the sample used in this study as many as 30 companies. the following descriptive statistical data are presented from the sample under study:

Table 4.1 Characteristics of Research Sample

Information	**Quantity**
Banking companies listed on the Indonesia Stock Exchange Period 2010-2016	41
Banking companies that do not have periodic financial reports during the observation period from 2010 to 2016	(11)
Total companies sampled	**30**

The following descriptive statistics are presented from the research sample:

Table 4.2 Descriptive Statistics

	BM	OC	OE	CR	LR	RA	MS	BI
Mean	0.045123	0.037616	0.944997	0.029049	0.815578	0.198879	0.033333	0.067857
Median	0.042765	0.032358	0.760018	0.019688	0.845263	0.170264	0.011677	0.065000
Maximum	0.129537	0.111161	9.810460	0.906844	1.406644	1.904222	0.198580	0.077500
Minimum	0.004632	0.003004	0.206353	0.000598	0.053023	0.061294	0.000668	0.057500
Std. Dev.	0.019468	0.019612	0.911969	0.065765	0.150457	0.172038	0.050803	0.007389
Skewness	1.164480	1.570073	6.499351	11.63828	-1.003945	7.837174	2.064986	-0.006142
Kurtosis	5.489739	5.769841	53.54770	153.3349	7.276660	72.96504	6.272899	1.417873
Jarque-Bera	101.7000	153.4097	23835.32	202495.9	195.3126	44981.92	242.9747	21.90366
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000018

Sum	9.475931	7.899320	198.4493	6.100365	171.2714	41.76456	7.000000	14.25000
Sum Sq. Dev.	0.079209	0.080386	173.8225	0.903943	4.731179	6.185809	0.539407	0.011411
Observations	210	210	210	210	210	210	210	210

Based on statistical data, it can be seen that the lowest value of Bank Margin is 0.004632 and the highest value is 0.129537. With an average value of 0.045123 and a standard deviation value of 0.019468. The lowest value of the operating cost is 0.003004 and the highest value is 0.111161. With an average value of 0.037616 and a standard deviation value of 0.019612. The lowest value of operational efficiency is 0.206353 and the highest value is 9,810,460. With an average value of 0.944997 and a standard deviation value of 0.911969. The lowest value of credit risk is 0.000598 and the highest value is 0.906844 With an average value of 0.029049 and the standard deviation value is 0.065765. The lowest value of liquidity risk is 0.053023 and the highest value is 1.406644. With an average value of 0.815578 and a standard deviation value of 0.150457. The lowest value of risk aversion is 0.061294 and the highest value is 1.904222. With an average value of 0.198879 and the standard deviation value is 0.172038. The lowest value of market share is 0.000668 and the highest value is 0.198580. With an average value of 0.03333 and the standard deviation value is 0.174503. The lowest value of the BI rate is 0.057500 and the highest value is 0.077500. With an average value of 0.067857 and the standard deviation value is 0.007389.

Table 4.3 Result

Cross-section random effects test equation:				
Dependent Variable: BM				
Method: Panel Least Squares				
Date: 02/12/18 Time: 13:24				
Sample: 2010 2016				
Periods included: 7				
Cross-sections included: 30				
Total panel (balanced) observations: 210				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.045562	0.011263	4.045336	0.0001
OC	0.761464	0.087007	8.751739	0.0000
OE	-0.007767	0.001026	-7.567038	0.0000
CR	-0.044142	0.012317	-3.583913	0.0004
LR	-0.022507	0.008867	-2.538433	0.0120
RA	0.000146	0.004896	0.029741	0.9763
MS	-0.239970	0.216936	-1.106183	0.2702
BI	0.086474	0.098363	0.879132	0.3805

Operational costs are used to measure the level of efficiency and ability of banks in conducting its operational activities. Increasing operating costs can reduce NIM Banking so that operational costs and banking margins can have a positive effect. Operational costs can illustrate the expenditure of bank management, so it will show whether the bank is efficient

or inefficient in carrying out its operational activities. The smaller the ratio of BOPO, the more efficient the bank in carrying out its operational activities, so that by managing the operational cost, it will decrease the cost of fund and increase the operational income, where the interest income is part of the operational income, thus reducing the ratio of BOPO and NIM will increase. The NPL ratio will reflect the credit risk borne by the bank. The smaller the NPL ratio the smaller the potential risk of non-performing loans borne by the bank, so that the net interest income obtained by banks from the credit distribution will be greater. Liquidity is a measure of the bank's ability to repay all of its current liabilities. Banks are required always in a position to pay, meaning the bank must have sufficient money (idle fund). This ratio measures the loans disbursed compared to third party funds (demand deposits, savings and time deposits). The higher this ratio, the lower the bank's liquidity. Risk aversion has no effect on bank margin. The high CAR value is attributed to the tendency of commercial banks to be classified as risk averse, which tends to channel funds to non-riskier parties such as fund placements in Bank Indonesia and Government Bonds. Large CAR figures, resulting in funds stored in Bank Indonesia to be unproductive, because the funds are not channeled to the public in need of funds. This has a negative impact on bank performance, as it may reduce the opportunity to earn net interest income from credit disbursement. The results of this study found that, market share has no effect on bank margin. The results of this study found that BI rate has no effect on bank margin.

5. CONCLUSIONS

Based on the results obtained from adjusted R2 values, the variation of dividend policy (DPR) can be explained by 7 independent variables of operating cost, operational efficiency, credit risk, liquidity risk, risk aversion, market share and BI rate of 77.02%, while the remainder is explained by other variables outside the model. The results of analysis using regression analysis found that operating cost, operational efficiency, credit risk and liquidity risk affects margin banks in banking companies listed on the Indonesia Stock Exchange period 2010 - 2016. Meanwhile, risk aversion, market share and BI rate have no effect on banks margin on banking companies listed on the Indonesia Stock Exchange period 2010 – 2016.

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