EFFECTS OF BANK SPECIFIC VARIABLES ON THE PERFORMANCE OF INDONESIAN BANKING INDUSTRIES

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Abstract- ***This study aims at examining the effects of specific variables of banks on the performance of the Indonesian banking industry. The data is based on sample of 106 conventional banks that are still active in conducting banking business activities in Indonesia. The type of data collected was a panel data consisting of time series and cross sectional data published by the Monetary and the Financial Services Authorities in Indonesia. The method used in this study is a quantitative statistical approach. To examine the competitiveness of the Indonesian banking industry, this study applied the theory of structure, conduct, performance with the addition of public policy and relative efficiency. The study found that market concentration, loan to group business, and market share of loan have a positive effects on the performance of the banking industry in Indonesia. Also, it was found the value of market share of deposit, loan loss provision, salaries and wage expenses to total assets, and non- performing loan have negative effects on the performance of the banking industry in Indonesia. However, loan to deposit ratio, loan to total assets, total liability to total assets, capital adequacy ratio, and total assets do not have any effects on the performance of Indonesian banking industry. This study suggests that due to the present high level of banking competition, the government should be give attention particularly toward the development of the small-scale banks that are unable to compete with large scale banks. Public policy toward further better performance of banking industries In Indonesia is must. In other words, the issuance of public policy by the government should give a positive impact on the performance of the Indonesian banking industry.***

Index terms- Bank specific variables, market structure, conduct, performance, public policy, relative efficiency, Banking Industry.

1. INTRODUCTION

Competition in the financial services sector in Indonesia is very tight and dominated by banking financial institutions. This can be seen from the comparison of total assets in 2012 until 2014, where the total assets of banking industry were about 92 percent, while the rest of 8 percent were owned by the non-bank industry. Due to the big role of the banking industry in the economy, the right monetary policies and supervisory function of the financial services in managing the economic activity are required. The role of the banks in national development should only be able to balance any deficit components with a surplus component, but also should be able to become a development agency of a country.

Based on the available data, it was recorded that banking activities from 2010 to 2016 in terms of public fund collection and banking credit distribution showed a positive trend. However, in terms of the banking performance by using proxy of return on assets it showed fluctuate and even negative. In terms of public fund collection, for instance, the Indonesian banking industry was able to collect the public fund amounted to Rp 2,563,562 (in billion) in 2010, this amount increased to Rp. 5,399,210 (in billion) in 2016. These figures showed that the banking industry's strategy to raise public funds for the period of 2010 to 2016 was successful.

Policy measures to increase public trust to save funds in banking products (e.g., savings, demand deposits and time deposits) was done through various strategies. These strategies were taken by establishing good relationship with business groups, by

improving customers' convenience, the professionalism of labor, efficiency toward a better plan in information technology,and the improvement toward customers' satisfaction and loyalty.

In terms of the credit distribution, the banks were able to distribute the credit at about Rp 2,765,912 (in billion) in 2010 and it increased to Rp. 6,570,903 (in billion) in 2016. Methods to increase the credit distribution were conducted by increasing the number of banking networks, mentoring and teaching to prospective borrowers about financial management, and by improving the quality of labor in the business segment through training and debriefing. These methods were aimed to speed the process of feasibility appraisal as well as credit approval.

The return on assets also increased from 2.9 percent in 2010 to 3.03 percent in 2011. In 2012 it increased slightly higher to 3.11 percent. However, since 2012 the return on assets has decreased again to 3.08 percent in 2013, 2.85 percent in 2014 and to 2.32 percent in 2015. In 2016 the return on assets was only 2.23 percent. The decrease in return on assets can be caused by internal and external bank problems. The implementation of bank credit regulation policy can also be the cause of the decrease of the return on assets of a bank.

The above data differences can be the basis to know further the competition of the banking industry using the theory of Structure Conduct Performance (SCP) and Relative Efficiency (RE) . There are at least two main paradigms (Mainstream) that apply in industrial development. Harvard paradigm which was pioneered by the thinking of Joe Bain and Edward Mason states that the performance of an enterprise in a market is determined by the level of market concentration and the ability of market participants to control the market. The Chicago paradigm which was pioneered by Aaron Director and George Stigler stated that the success of a company to operate efficiently is the key to the success of the company in the market, including oligopoly market (Arsyad and Kusuma, 2014).

The above paradigm actually should be aligned. This is simply because market concentration in industry should increase market share, and vice versa. This condition will further improve bank performance (Chirwa, 2001). However, in the banking industry in Indonesia, it seems that this theory does not work well. Due to these conflicting conditions between theory and the available data, it is therefore important to examine details variables that support the above theory. This study also is important as studies advanced in the literature focusing on the relationship between the market structure and the performance of banks in developing countries are limited. The only available study in this area was conducted by Sarita, et al., (2012). Sarita et.al. (2012), however, did not accommodate public policy variable in their study. For that reason, this study aims to examine the effects of specific variables of banks on the performance of the Indonesian banking industry. Through this study, it is expected there will further improvement of the development theory of the structure conduct performance model in answering the problems of competition of the Indonesian banking industry.

II. LITERATURE REVIEW

1. Structure Conduct Performance Theory

Structure conduct performance is considered as the classical approach of industrial economics. This concept was also as starting point and benchmark for development of various approaches in industrial economic analysis. The study of the theory of structure conduct performance that was conducted by Caves (1967), for instance, found that the higher concentration of the market in the banking industry, will hinder the entry of new competitors in the industrial market. In addition, the increasing market concentration will affect the bank's behavioral style by collusion between banks in the industry, such as the pricing policy. Due to this the banks that were in this group will be able to improve their performance.

Actually, the construction of structured performance theory was introduced by Mason in 1930. This theory was further developed by Bain in 1951 to examine manufacturing industries in America. Since then the theory of structure conduct performance was also used in the banking industry in order to see the relationship between market structure and bank performance. Gilbert (1984) found that the merger of several banks in the 1960s in America have resulted in an increase in the market. This is because banks can dominate the market, thereby increasing bank profits.

Berger and Hannan (1989) suggest that if the SCP (structure, conduct, performance) hypothesis shows that market behavior with no price competition in the banking industry market, the bank will lower the optimal deposit rates and increase the lending rate. Although the difference between credit interest and deposit interest do not give an overall picture, banks can still operate with competition.

Hannan (1991) and Lucey (1996) further asserted that there is a positive relationship between market structure and performance. This is because an oligopoly firm in the industry has the right toward pricing policy. The assumption of structure conduct performance theory is that banking industry in the oligopoly market structure tend to have less competition among banks in the industry. This will improve performance. This finding was supported by Heather (2002) who found industrial structure and firm performance will be related in the oligopoly market structure, where market behavior in industry does not have price competition.

The SCP approach states that the behavior and achievement of a firm's performance is determined by the industrial structure in which it operates (Heather, 2002). The core relationship of structure conduct performance is as a series of sellers' concentration with the behavior of pricing by market toward profit above normal. Therefore, the concept of this theory shows that the market structure has a positive relationship to the performance of the bank with the assumption that the market behavior without any competition in the industry.

The above SCP theory is based on the view that the concentration of the market encourages collusion among companies in the industry to obtain maximum profit. According to this hypothesis, a high level of market concentration will directly affect the level of competition among banks in the industry. This theory is valid if the influence of market concentration on performance is positive and significant, and it is no longer based on the efficiency level of the bank itself (Kuncoro, 2003).

2. Relative Efficiency Theory

Relative efficiency theory emerges to provide an alternative explanation to the traditional theory of SCP that states that the level of market concentration has a direct influence on the banking industry, and hence this is able to increase the income. The theory of relative efficiency, however, states that the performance of bank was obtained due to the efficiency of a bank in managing the factors of production and the efficiency in using limited resources (Demsetz, 1973; Peltzman, 1977).

Smirlock et al., (1986) also states that, in general the efficiency gained by a bank is based on low operating costs and this will then increase market share. Hannan (1991) argues that market share relation with performance is a function of efficiency difference for each operating bank. The higher the efficiency of a bank means the lower will be the production costs of the bank in its operation. Therefore, a larger market share will be able to increase the profit. Efficiency Structure Hypothesis (ESH) assumes that there is a relationship between market concentration and profit. This hypothesis states that the efficiency of the bank in its operation will gain a larger market share, and will then be able to obtain high market concentration (Frame and Kamerschen, 1997).

The theoretical framework of relative efficiency is also supported by Neuberger (1998) who stated that large market share will increase market concentration in the banking industry so that it affects bank performance and market structure. Efficiency has become the focus of attention for every company in improving its performance to generate greater profits through increased revenue and lower costs that must be sacrificed. Efficiency is a means of achieving results by comparing the inputs and their outputs. Companies are technically efficient if they can produce a certain amount of output using the smallest possible inputs (Mora et al., 2005). On the other hand, Fu and Hefferman (2005) argue the banks that are operated economically at optimum scale, they will gain a larger market share since they have lower operating costs, thus maximizing profits.

The relative efficiency hypothesis suggests that the relationship between market structure and the bank performance depends on the efficiency of the bank itself in its operation. If the bank reaches a high level of efficiency compared to its competitors due to its low cost structure, the bank will accommodate a strategy to maximize profits by maintaining the price. The most efficient bank will gain an increase in market share and this efficiency will become the driving force behind market concentration (Kuncoro, 2003).

This empirical study and relative efficiency theory have explained that the efficiency of a particular bank by using market share variables. This theory is true, if the performance of the bank depends on market share without taking into account the level of market concentration. Support for the relative efficiency approach has found that bank efficiency is the dominant variable in explaining the profitability of the banking industry (Evavoff and Fortier, 1988; Smirlock, 1985).

3. Public Policy

Koontz and O'Donnell (1972) define policy as a general statement that guides in decision making process. Mustapadidjaja (1992) explains that the term public policy is commonly used in relation to government activities, as well as the behavior of the state in general and this policy is further expressed in various forms of regulation. The term policy is often used in other terms such as goals, programs, decisions, regulations, proposals and major designs. Meanwhile, Anderson (1997) defines the policy as an action that has purpose and aimed to solve a problem. Any policy product should take into account the substance of the target situation and it is able to deliver a recommendation that addresses programs that can be elaborated and implemented according to the objectives of the policy.

Nugroho (2003) argues that policy is a set of rules that govern life together that must be adhered to and bind by all citizens. Any violation shall be sanctioned in accordance with the weight of the offense committed and the sanction is imposed in the public by the institution which has the duty to impose sanctions. The policy is identical with the regulations or rules that can be interpreted as a legal product issued by the government that must be understood fully and correctly. Other references of public policy definition can be seen in Dunn (2003), Subarsono (2005), Syafiie (2006), Parsons (2006), and Nurcholis (2007) to name a few.

III. RESEARCH METHODS

As mentioned at the outset that this study begins with the theories of structure conduct performance (SCP) and relative efficiency. Variables under examination are return on assets as an endogenous variable, while market concentration, market share of deposit, loan to group business, loan loss provision, market share of loan, loan to deposit ratio, loan to total assets, total liability to total assets, capital adequacy ratio, salaries and wage expenses to total assets, total assets, and non performing loans as the exogenous variables. The objective of this study is to examine the relationship between the above variables and the performance, taking banking industries as unit analysis. The types of data collected were panel data consisted of endogenous variables 1, number of exogenous variables of 12, periods included as many as 7, cross sectional include as many as 106. The total number of observations was 742. The model of the study is as follows.

$$ROA = \alpha_0 + \beta_1 MC_{it} + \beta_2 MSD_{it} - \beta_3 LTGB_{it} - \beta_4 LOGLLP_{it} + \beta_5 MSL_{it} + \beta_6 LDR_{it}$$

$$+ \beta_7 LTA_{it} + \beta_8 TLTA_{it} + \beta_9 CAR_{it} + \beta_{10} SWETA_{it} + \beta_{11} \text{LOG}TA_{it} - \beta_{12} NPL_{it} + e$$

Note that:

ROA	:	*Return on assets* (%),
α	:	constant
$\beta_{(1\ldots12)}$	:	Coefficients of independent variables,
MC	:	*Market concentration* (%),
MSD	:	*Market share of deposit* (%),
LTGB	:	*Loan To Group Business* (%),
LOG*LLP*	:	*Loan loss provision* (%),
MSL	:	*Market share of loan* (%),
LDR	:	*Loan to deposit ratio* (%),
LTA	:	*Loan to total assets ratio* (%),
TLTA	:	*Liabilities to total assets ratio* (%),
CAR	:	*Capital adequate ratio* (%),
SWETA	:	*Salary and wage expenses to total assets* (%),
LOG*TA*	:	*Total assets* (%),
NPL	:	*Non performing loan* (%),
e	:	*Error term*,
t	:	time,
i	:	Banks

The approach to estimate the above model is by using three approaches. The first approach is the Common Effect Model (CEM). In this model estimation, the dimensions of time and individual are ignored. In other words, the behavior of corporate data is the same in various periods. The method use to estimate is by using the Ordinary Least Square (OLS) approach or the least squares technique (see, Basuki and Yuliadi, 2014). The second approach is the Fixed Effect Model (FEM). In this model, it is assumed that differences between individuals can be accommodated from different intercept (see, Sekaran, 2006). The third approach is the Random Effect Model (REM). In the random effect model the intercept differences are accommodated by the error terms of each company. The advantage of using the random effect model is that heteroscedasticity problem is removed or so called the Error Component Model (ECM) or Generalized Least Square (GLS) technique.

Further, to choose the most appropriate model in managing panel data, the study used two testing methods. The first test is a Chow test. This test is used to determine the model of the common effects or fixed effects that is mostly accurate in estimating panel data. The second test is the Hausman test that is a statistical test to choose whether the model of fixed effects or random effects is most appropriate to use (sekaran, 2006).

IV. RESULTS AND DISCUSSION

The results of Chow Test are shown at Table 1.

Table 1. The Results of Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	7.231021	(105,624)	0.0000
Cross-section Chi-square	590.666099	105	0.0000

Cross-section fixed effects test equation:
Dependent Variable: ROA
Method: Panel Least Squares
Date: 11/05/17 Time: 21:37
Sample: 2010 2016
Periods included: 7

Cross-sections included: 106
Total panel (balanced) observations: 742

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.381112	1.245993	-2.713589	0.0068
MC	0.052565	0.007585	6.930267	0.0000
MSD	-2.007846	0.144309	-13.91355	0.0000
LTGB	0.049586	0.033076	1.499154	0.1343
LLP	-0.344457	0.110623	-3.113785	0.0019
MSL	1.504112	0.172917	8.698480	0.0000
LDR	-0.003347	0.000960	-3.484727	0.0005
LTA	-0.005236	0.006175	-0.847812	0.3968
TLTA	-2.80E-05	0.008152	-0.003441	0.9973
CAR	-0.008984	0.005163	-1.739962	0.0823
SWETA	-0.083869	0.060238	-1.392299	0.1643
TA	1.112321	0.203065	5.477658	0.0000
NPL	-3.417302	0.506897	-6.741616	0.0000

R-squared	0.430050	Mean dependent var	1.388114
Adjusted R-squared	0.420668	S.D. dependent var	2.060788
S.E. of regression	1.568546	Akaike info criterion	3.755540
Sum squared resid	1793.584	Schwarz criterion	3.836296
Log likelihood	-1380.305	Hannan-Quinn criter.	3.786673
F-statistic	45.83827	Durbin-Watson stat	0.737272
Prob(F-statistic)	0.000000		

As can be seen at Table 1, the probability value (Prob.) for Cross-section F was 0.000 or less than 5 percent. This suggests that the selected model is the Fixed Effect Model. The Fixed Effect Model is more appropriate than Common Effect Model.

In terms of the Hausman test, it was found that the prob value is 0.0182 (Table 2). This suggests that with the 95% confidence level, it can be concluded that the fixed effect model is more suitable to be used to explain the effect of specific variables on the performance of the banking industry in Indonesia.

Table 2. The Results of Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	24.358271	12	0.0182

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var (Diff.)	Prob.
MC	0.065431	0.053280	0.000161	0.3388
MSD	-2.171270	-2.113505	0.002236	0.2219
LTGB	0.083652	0.080979	0.000192	0.8472
LLP	-0.564850	-0.469664	0.002358	0.0500
MSL	1.381456	1.654426	0.053450	0.2377
LDR	-0.000098	-0.002222	0.000001	0.0618
LTA	0.005336	0.001212	0.000013	0.2555
TLTA	0.018146	0.011419	0.000027	0.1992
CAR	0.000513	-0.004226	0.000007	0.0779
SWETA	-0.263469	-0.208267	0.000952	0.0737
TA	0.418227	0.896451	0.022866	0.0016
NPL	-2.145406	-2.523714	0.034911	0.0429

Cross-section random effects test equation:
Dependent Variable: ROA
Method: Panel Least Squares
Date: 11/05/17 Time: 21:43
Sample: 2010 2016
Periods included: 7
Cross-sections included: 106
Total panel (balanced) observations: 742

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.230183	1.840765	0.125047	0.9005
MC	0.065431	0.016306	4.012637	0.0001
MSD	-2.171270	0.136926	-15.85721	0.0000
LTGB	0.083652	0.035426	2.361277	0.0185
LLP	-0.564850	0.115598	-4.886349	0.0000
MSL	1.381456	0.298070	4.634674	0.0000
LDR	-9.77E-05	0.001676	-0.058337	0.9535
LTA	0.005336	0.007385	0.722481	0.4703
TLTA	0.018146	0.010326	1.757310	0.0794
CAR	0.000513	0.005702	0.090044	0.9283
SWETA	-0.263469	0.070583	-3.732751	0.0002
TA	0.418227	0.260295	1.606739	0.1086
NPL	-2.145406	0.492012	-4.360476	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.742890	Mean dependent var	1.388114
Adjusted R-squared	0.694682	S.D. dependent var	2.060788
S.E. of regression	1.138700	Akaike info criterion	3.242513
Sum squared resid	809.1023	Schwarz criterion	3.975536
Log likelihood	-1084.972	Hannan-Quinn criter.	3.525104
F-statistic	15.41008	Durbin-Watson stat	1.568653
Prob(F-statistic)	0.000000		

As shown at the above Tables, the relationship between market concentration and return on assets was positive. The positive coefficient of market concentration means that when the market concentration increases, it will cause an increase on return on assets, and vice versa. This finding supports previous research conducted by Heggestad and Mingo (1976), Gilbert (1984), Bourke (1989), Lloyd-Wlliams et al (1994), Molyneux and Forbes (1995), Moore (1998), Wihana et al (1998), Chirwa (2001), More and Nagy (2003), Katib (2004), Mora et al (2005). A higher market concentration of deposit will have a positive effect. This is because the decreasing cost of bank loan disbursement losses will decrease the level of competition in the banking market due to the influence of large market concentration, and ultimately a positive impact on banking performance.

In terms of market share of deposit, the study also found that there is a significant negative relationship between market share of deposit and return on assets. The coefficient of the market share of deposit is negative. It means that when the market share of deposit increases, it will cause a decrease in return on assets, and vice versa. This finding supports previous research, which states that market share of deposit has a negative effect on return on assets (see, for instance, Jauch and Glueck (1988); Hauner and Peiris (2005); Aikaeli (2008); Donatosi and Giokasii (2008); Syaifuddin (2009). This finding indicates that the higher market share of deposit will reduce the performance of banks operating in Indonesia. The collection of public funds is inefficient in its use so it resuls in a large deposit interest rate to be borne by the bank.

The study also found that there is a significant positive relationship between loan to group business and return on assets. The coefficient of loan to group business to return on assets is positive that means that when there is increase of loan to group business it will cause increase to return on assets, and vice versa. This finding supports studies conducted by Laffont and N'Guessan (2000), Laffont and Rey (2001), Grimaud, Laffont and Martimort (2002), Aniket (2004) and Simtowe et al (2006) who found that loan to group business has positive impact on banking performance. This suggests that loan to group business agreements are easy to reach a

good deal if they are under perfect collusion. If the debtor and creditor are aware of each other, then the application of loan to group business will be efficient to avoid the credit risk. By knowing the design of the organization, then the application of credit distribution by the agent will be quickly be decided by each supervisor and will have a positive impact on banks and companies that are in the same group.

Loan loss provision was found to be related with return on assets. However, the relationship was negatively significant. This means that when there is an increase in loan loss provision it will cause decrease to return on assets, and vice versa. This finding supports previous research conducted by Beatty and Liao (2009), Socol (2011).This indicates that banks will reduce lending to reduce the likelihood of provisioning risk from non-performing loans since it will give an impact on lower banking performance. Large or small distribution of banking credit to the community will depend on the amount of reserves made in the previous year due to non-performing loans. Banks are sometimes free to execute reserves in excess of provisions in the hope of lower recorded earnings to reduce taxation. The assessment and strategy of bank management plays an important role in the provision of reserves for declining credit scores. Banks should protect their annual performance against unexpected credit losses by playing a loan loss provision strategy.

In term of the market share of loan, the study found that there is a significant positive relationship between market share of loan and return on assets. The coefficient of market share of loan is positive. It means that when there is an increase of market share of loan it will increase return on assets, and vice versa. This finding supports previous research conducted by Arsadi and Lawrence (1987), which states that there is a positive relationship between market share of loan and return on assets. The magnitude of the acquisition of credit can provide benefits for the bank's performance. Mastery of credit obtained by banks was due to the age of the bank, business strategy and strategy in running its operations. The market share of loan at the new bank is lower than the long-standing bank and has a larger market share. Furthermore, the decrease in the operating costs of the new bank will increase competition to a number of new banks that will enter the market.

The relationship between loan to deposit ratio and return on assets was found to be negative. This means that when there is an increase of loan to deposit ratio, it will cause decrease of return on assets, and vice versa. This finding supports previous studies which states that there is a negative relationship between loan to deposit ratio and return on assets (see, Bourke,1989, Yudiartini and Dharmadiaksa, 2016). This indicate that the distribution of loans to customers in a certain period cannot compensate the bank's obligation to immediately meet demand deposits who want to withdraw their funds and operating costs of large loan disbursements. If it is not managed efficiently then the banking system will experience a decline in banking.

Loan to total assets was also found to have positive relationship with return on assets. The coefficient of loan to total assets is positive means that when there is an increase of loan to total assets, this will lead to an increase on return on assets, and vice versa. This finding confirms previous research conducted by Aguirre and Lee (2001), Kurnia (2012). This indicates that if the banks have different groups of total assets and large total assets, these banks will be more flexible to expand their business through credit channeling. Thus, to achieve the target set by the bank (e.g. credit growth), then one of the ways that can be used is by relying on total assets as a source of funds.

The relationship between total liability to total assets and return on assets was found to be positive. This means that when there is an increase in total liability to total assets, it will cause an increase on return on assets, and vice versa. This finding supports the previous research conducted by Subaciene et. Al. (2010), and Al-damir (2014). This indicates that bank debt used in operations must be balanced with total assets owned. Company managers can optimize the loan compared to the use of total assets in order to avoid financial turmoil and assist in obtaining profit.

The capital adequacy ratio was also found to have a positive relationship with return on assets. The coefficient of capital adequacy ratio is positive which means that when there is an increase in capital adequacy ratio it will cause an increase on return on assets, and vice versa. This finding supports previous research conducted by Bourke (1989), Molyneux and Thornton (1992), Molneux and Seth (1998), Suharyoko (2007), Varotto (2011), Rachma (2012), Juoro (2013), Ismaulandy (2014), Syafi'I (2014), and Tika (2014). This indicates that capital is needed as a source of free funds and as a source of cheap funds. Thus, banks that have large capital will be free to expand credit and this will have an impact on banking performance.

The salaries and wage expenses to total assets have a significant negative relationship with return on assets. The negative value of coefficient of salaries and wage expenses to total assets means that when there is increase of salaries and wage expenses to total assets it will cause decrease to return on assets, and vice versa. This finding supports previous research conducted by Lipsey et al., (1989), Blocher et al., (1999). This finding indicates that the inefficient number of workforce will have an impact on the company's performance. Thus, to produce a greater level of output, the banks should optimize the use of their resources.

The total assets was also found to have positive relationship with return on assets. The positive value of the coefficient of total assets to return on assets means that when there is an increase in total assets, this will lead to an increase in return on assets, and vice versa. Previous studies confirmed this finding include DeYoung and Hasan (1998), Akhigbe and McNulty (2003). This suggests that increasing total bank assets can increase investment in the bank and this will have impact on business expansion as well as increased profits.

Finally, the study found that non performing loan also has relationship with the return on assets. The relationship of these two variables was negatively significant. This means that the increase of non performing loan will cause a decrease on return on assets, and vice versa. This finding supports previous research conducted by Arisandi (2008), Rahayu (2012), Haneef et al (2012), Utari et al (2012), Widyawati and Wahyudi (2014), Pratiwi and Hindasah (2014), and Yudiartini and Dharmadiaksa (2016). The impact of the decline in performance is perhaps due to restrictions on bank lending. This suggests that if the non performing loan ratio

increases, then the bank faces an increasingly troubled credit. Thus, banks will restrict lending, and the bank performance will consequently declining.

V. CONCLUSION AND SUGGESTIONS

This study found many interesting findings. The first is that a higher market concentration, loan to group business, and market share of loan will have a positive impact on the performance of the banking industry in Indonesia. Second, a higher value of market share of deposit, loan loss provision, salaries and wage expenses to total assets, and non performing loan will negatively affect the performance of the banking industry in Indonesia. Third, the theory of structure conduct performance was able to explain the competition of the banking industry in Indonesia than the theory of relative efficiency. However, in examining the performance of the banking industry in Indonesia, it is not enough to use only the theory of structure, conduct, performance and relative efficiency. Public policy variable was found to be important to be accommodated in examining the banking performance.

Based on the above findings, this study suggests the following. First, there is a need for banking industries in Indonesia to reconsider their competition strategy in order to have a positive impact on their performance. Second, a regulatory improvement seems to be important to be made regarding the limitation of ratios that may adversely affect the performance of the Indonesian banking industry. Third, further research to accommodate macroeconomic variables that affect the banking performance is important to be undertaken. Fourth, the present high level of banking competition should be given attention by the relevant authorities. This attention is particularly needed for the small-scale banks that are unable to compete with large scale banks. Finally, public policy toward further better performance of banking industries In Indonesia is must. In other words, the issuance of public policy by the government should give a positive impact on the performance of the Indonesian banking industry.

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