# Effects of Intern Factors on Return on Asset (A Study on Banking Industry in Indonesian Stock Exchange)

La Utu

Sekolah Tinggi Ilmu Ekonomi Enam Enam Kendari, Indonesia

**Abstract**— This research aims to determine and review the effects of intern factors including CAR,NII/TA, NPL, NIE/TA andSIZEonReturn On Asset of banking industry in Indonesian Stock Exchange. This research used secondary data in the forms of financial reports that were published in Indonesia Stock Exchange in the period of 2003 – 2010 as well as other relevant publication that are sourced from Indonesian Bank, Bappepam. Analysis method ispartial least square. Results of the research find out that intern factors are able to increase banking Return On Asset that are registered in Indonesian Stock Exchange. It means that more conducive banking intern factors will lead to higher banking Return On Asset. The strongest intern factor indicator isCapital Adequacy Ratio (CAR). This means that banking in Indonesia will achieve good performance when there is adequate amount of capital.

\_\_\_\_\_

\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

Index Term : Intern Factors, Car, NII, NPL, NIE Return On Asset

# **1** INTRODUCTION

Indonesian Banking plays an important role in supporting national development as a realization of the implementation of banking functions namely collecting and distributing public funds. Increased role of the banking will increase real sector capability in supporting national development so that it can increase economic growth and increase overall public standard of living. The effective level of this role depends on achievement of banking function as a business entity.

Banking as a business entity is required to have capability to improve its owners'welfare as the company purpose. The work of banking purpose achievement depends on its performance. However, it is not only company performance, there are also other factors determining on banking purpose as a business entity. The factors do not only affect on the company purpose, but also on bank performance. One of the factors affecting on the bank performance is controllable factors or called as intern factors.

There are some researches on intern factor effects on the banking *Return On Asset* (ROA), such as Vong & Chan (2009); Naceur (2003); Kosmidou & Pasiouras (2007), Al-Tamimi (2010), Naceur & Kandil (2005), Buyinsa (2010), Davydenko (2010), Li, and Stiawan (2009))but the findings are still contradictive. This is caused by different places, times and periods of observation. So the author thinks that it is necessary to re-test the variables, to determine consistency of effects of a variable on ROA.

Based on previous research findings, it can conclude that intern factors such as capital strength and cost efficiency support the bank business and provide safety and convenience for depositors during unstable economic macro condition. This is the indicator for the functioning banking intermediation role which ultimately affects on related bank performance.

Return on Assetsof a bank is also affected by economic macro

conditions such as inflation flow, economic growth of a country in which the bank operates. There are empiric studies on the effects of macro-economic on ROA, such as researches by Sufian & Chong (2008), Buyinsa (2010), Naceur (2003) found out that higher level of Product Domestic Bruto (PDB) will increase banking ROA. On another side, higher level of inflation will lead to higher level of bank interest rate. High level of interest rate will reduce capital owner intension to develop productive sectors. Related to bank performance, high inflation will increase capital cost so that real sector investment will reduce bank debts which ultimately will decrease bank profitability level (Sukirno, 1998).

Increasing complexity of bank business activity has potential to cause higher risks faced by the Bank. This risk increase is necessary to be followed by increased required capital by the bank for any possibility of arising losses (Stiawan,2009).

Facts based on banking industry performance during 2005-2009 (annex 1) indicate that bank is necessary to own capital empowerment. Also, it is necessary for efficiency improvement to improve input use efficiently namely by increasing fee based income as the most potential source of acceptance for bank. The efficiency improvement can be in the form of more productive input management in order to create higher output(Kost and Rosenwig 1979). Thus, the work for profit achievement that is measured by return on asset management as reflected in Return on Asset (ROA) ratio can be improved by empowering banking intern factors.

Competition between banks plays an important role in achieving bank performance. Porter (1985) stated that company competition in industry will affect on achievement of business performance. This condition is important in banking industry due to the limited share growth, thus it encourages banks to make progressive efforts in an effort to achieve performance, so that it is necessary to given attention at competition between banks.

To maintain bank soundness, bank manager in carrying out his business is required to always maintain a balance between maintaining adequate liquidity and achieving reasonable profitability and meeting adequate capital in accordance with the type of its investors (Indonesian Accounting Association, 2004).

Based on the description, the focus of banking industry's attention is emphasized on ROA as a reflection of empowerment efficiency of all resources. Efforts to achieve ROA are inseparable from internal conditions commonly known as internal factors. Thus, in an effort to examine the consistency of previous research findings and provide alternative information for Indonesian banking industry, this study will examine the variables incorporated in internal factors that affect on ROA. The examined internal factor variables include Capital Adequacy Ratio (CAR), Non-Interest Income (NII / TA), Non-Performing Loans (NPL), Non-Interest Expense to Total Asset Ratio (NIE / TA), Company Size (SIZE) . The purpose of this study is to determine and analyse the effects of internal factors including CAR, NII / TA, NPL, NIE / TA and SIZE on the Return On Asset of the banking industry on the Indonesia Stock Exchange.

# 2 LITERATURE REVIEW

Banks have national and international operation scales. In the operation, bank will interact with other banks in domestic level, with non bank companies as well as also with bank and non bank in foreign countries. These interactions form specific environments based on the interaction level. The environments are intern environment, extern environment and international environment.

It is important to understand banking environment, since there will be bank competition in each environment. This research focuses on intern environment. It means in intern environment, bank will face inter-bank competition. The internal environment is the environment among banks where the bank has two positions namely as a participant in competition between banks and as an organic part of the banking system either as a participant or as an organic part.

Performance can be interpreted as the level of achievement results or company objectives, level of company's mission achievement, level of actual task implementation achievement and company's mission achievement. Performance can also be interpreted as an achievement by the company in a certain period that reflects the company health level (Sugiarso & Winarni, 2005). Financial performance is an important issue that must be achieved by any company, because performance is a reflection of the company's ability to manage and allocate its resources. The bank as a company is obliged to maintain public trust in the performance of the bank concerned, therefore it is necessary to have transparency or disclosure of information on the bank's financial statements which aim to provide information regarding financial position, performance and changes in financial position, as well as the basis for decision making. Bank financial performance is a description of the financial condition of a bank in a certain period, which

information on financial position and financial performance in the past is often used as a basis for predicting financial position and future performance. Assessment of the bank's financial performance can be done by the financial ratio analysis approach of all financial reports reported in the future (Anita & Rahadian, 2003). Financial ratios are designed to evaluate financial statements by reporting both the company's position at a certain time and its operations over the past several periods. But the real value of financial statements is the fact that financial statements can be used to predict earnings and dividends, (Brigham & Houston, 2001) Financial ratio analysis is an analysis by comparing afinancial statement post with other posts both individually and collectively to find out the relationship between certain posts, both in the balance sheet and income statement. Financial ratio analysis can also be used as a tool to evaluate the company's financial performance and conditions, whether the company is healthy or not (Lestari & Sugiharto, 2007).

Financial ratio is result of calculation between two types of bank financial, that is used to describe the relation between both financial data relations which generally are presented in numeric, both percentage or multiplication. Results of this ratio calculation can be a benchmark to assess level of bank soundness during the financial period (Riyadi,2006).

Still according to Riyadi (2006), the performance of bank finance can be analyzed using profitability ratio analyses ( ROA and ROE), cost efficiency ratio (Non Interest Income, Non Interest Expense, Interest Income, Interest Expense), asset improvement ratio (Non Performing Loan), carefulness ratio (Capital Adequacy Ratio, Legal Lending Limit, Net Open Position, Loan Concentration), Government Bond Trading Ratio, Net Interest Margin, operational cost, operational income, Loan To Deposit Ratio.

# **3 CONCEPTUAL FRAMEWORK AND HYPOTEHSES**

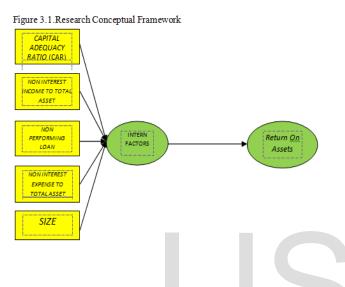
## **3.1 Conceptual Framework**

Based on theoretical review and empirical review that are expressed previously, then the variables in this study are dependent variables namely ROA and independent variables namely internal factors. ROA is to measure bank's ability to earn profits from asset management entrusted to the bank management. To calculate ROA, it can use the following formula (BI Circular No. 6/23 / DPNP dated May 31, 2004):

$$ROA = \frac{\text{profit before tax}}{\text{Total Assets}} x \ 100\%$$

ROA shows the profits earned per rupiah per asset and reflects the ability of management to utilize real financial resource investments and banks to earn profits. ROA is one of the profitability ratios which shows higher ratio meaning as better asset productivity in obtaining net profits. In 2004 Indonesian Banking Architecture (API), Bank Indonesia set the ROA rate> 1.5% so that a bank can be said to be healthy (Lestari & Sugiharto, 2007).

For any bank, ROA depends on the bank's policy decisions and on uncontrollable factors related to the economy and government regulations. Internal factors in this study include Company Size (Ln TA), Capital Adequacy Ratio (CAR) and Non-Interest Income to Total Assets (NII / TA), Non-Interest Expense to Total Assets (NIE / TA), Non-Performing Loans (NPL), as the factors that can directly affect on bank's profitability in this case ROA. The effects of internal factors on profitability can be seen in the following conceptual framework:



# 3.1 Conceptual Framework

Based on the description of the framework above, the hypotheses consist of major hypothesis and minor hypothesis. The Major Hypothesis is:

H1. Internal Factors significantly affect on banking industry Return on Assets (ROA) in the Indonesia Stock Exchange. While the Minor hypotheses are:

H1.1	:	Increasingly higher CAR ratio will
		lead to increasingly higher ROA.
H1.2	:	Increasingly higher NII/TA ratio will
		lead to increasingly higher ROA
H1.3	:	Increasingly higher NPL ratio will
		lead to increasingly lower ROA.
H1.4	:	Increasingly higher NIE/TA ratio will
		lead to increasingly lower ROA.
H1.5	:	Increasingly larger bank size will lead
		to increasingly higher ROA.

# 4 RESEARCH METHOD

This research is an associative explanatory research, which means that this research aims to determine the relationship between two variables or more variables by examining the causal relationship between research variables. The population of this study is all banks listed on the Indonesia Stock Exchange. There were 32 banks as the population in 2010. The method of determining samples is purposive sampling method, which is a method of determining samples based on goals

or criteria, which the criteria used in determining the samples are:

- 1. Banks that are listed on the Indonesia Stock Exchange and publishing financial statements continuously for the periods of 2003-2010, having positive profits.
- 2. There is no transfer of ownership and merger during the study period.
- 3. Foreign exchange banks are banks that are given the authority to sell or buy foreign exchange. This criterion is determined because one of the variables as the research reviw relates to the rupiah exchange rate against US dollar.

Based on the above criteria, the number of banks that meet the criteria is 13 banks. The list of banks as the research samples can be seen in Table 4.1.

Þ	Table 4.1	List of Bank as The Research Samples	
	No	Name of Bank	
	1	PT. Bank Central Asia, Tbk	
	2	PT. Bank Danamon Indonesia, Tbk	
	3	PT. Bank Mayapada Internasional, Tbk	
	4	PT. Bank Mega, <u>Tbk</u>	
	5	PT. Bank Nusantara Parahyangan, Tbk	
	6	PT. Bank Permata, Tbk	
	7	PT. Bank OCBC NISP, Tbk	
	8	PT. Bank ICB Bumi Putra, Tbk	
	9	PT. Bank CIMB Niaga, Tbk	
	10	PT. Bank <u>Swadesi</u> , <u>Tbk</u>	
	11	PT. Bank Kesawan, Tbk	
	12	PT. Bank PAN Indonesia, Tbk	
	13	PT. Bank Internasional Indonesia, Tbk	
	Source of	f data; <u>www.bei.go.id</u>	6

A 1 T :-

This research used pooling data and secondary data in the form of bank annual financial statements published by Bank Indonesia and the Indonesia Stock Exchange as well as economic growth reports published by the Central Bureau of Statistics in the period 2003 - 2010. The secondary data used in this study are as follows:

- 1. Bank Financial Statement Data for the periods of 2003-2010.
- 2. Other relevant publications from Bank Indonesia, IDX and Bappepam.

The data analysis used is description analysis as an overview of the studied variables. Ferdinand (2006) stated that descriptive analysis is intended to describe a situation or series of processes; the descriptive model only describes what happened and does not explain whether what happened is good or bad, with positive or negative effects. In addition, it is used inferential analysis to test the hypothesis and produce a fit model; this study used Structural Equation Modelling (SEM) with a variance based or component based approach with Partial Least Square (PLS).

# 5 RESULTS OF THE ANALIYSES

# 5.1 Hypotenses Testing

The hypotheses testing in Partial Least Squareis conducted using (t-test)in path effects between dependent variables and independent variables. Results of hypotheses testing are presented in Table 5.1.

Dependent Variables	Independent variable	Path coefficient	t-stat	Information	
Intern factors	ROA	0,558756	6,379703	Significant	

Table 5.1 Results of Hypotheses Testing

Based on the results of the analysis, the hypothesis stating:

Internal factors have significant effects on the banking industry Return On Assets on the Indonesia Stock Exchange, has enough evidence to be accepted. This is indicated by greater t statistic value than t table (6.379703> 1.96). Positive path coefficient means that more conducive internal factors will lead to higher ROA.

Furthermore, to test the minor hypothesis, the analysis is done by regressing each indicator with the dependent variables. Table 5.2 show results of the regression analysis after being free from deviation of multicolinearity assumption (the complete analysis results can be seen in the annex)

Table 5.2.Results of Regression Analysis of Intern Factor indicator effects on ROA

Variables	В	Т	Sig.	VIF	
(Constant)	,435	,274	,785		
CAR	,084	6,581	,000	1,131	
NIITA	,071	,475	,636	2,041	
NPL	-,059	-1,489	,140	1,182	
NIETA	-,073	-1,067	,289	1,299	
LnTA	,175	2,691	,008	1,948	

Source: Processed Primary Data

Based on Table 5.2, it can be seen that the effects of CAR on ROA has coefficient value of 0, 084 at  $\alpha = 0.00$ . The findings show that there is enough evidence to accept the hypothesis stating that higher CAR will lead to higher ROA. Positive regression coefficient can be interpreted that the relationship between CAR and ROA is in the same direction. This means that higher CAR will lead to higher ROA.

Furthermore, the effects of non-interest income compared to total assets (NII / TA) on ROA have the regression coefficient value of 0.071 at  $\alpha$  = 0.636. The findings show that there is enough evidence to accept the hypothesis stating that higher NII / TA ratio will lead to higher ROA. Positive regression coefficient can be interpreted that the relationship between NII / TA and ROA is in the same direction. Although NII / TA affects on ROA, the effect is not substantial.

The effect of non-performing loans on ROA has the regression coefficient value of -0.059 at  $\alpha$  = 0.636. The findings indicate that there is not enough evidence to accept the hypothesis stating that higher NPL ratio will lead to lower ROA. Negative regression coefficients can be interpreted that the relationship between NPL and ROA is contradictory.

The effect of NIE/TA on ROA has the regression coefficient value of -,073at  $\alpha$  = ,289. The findings indicate that there is not enough evidence to accept the hypothesis stating that higher NIE/TA ratio will lead to lower ROA. Negative regression coefficients can be interpreted that the relationship between NIE/TA and ROA is contradictory.

The effect of size on ROA has the regression coefficient value of ,175at  $\alpha$  = ,008. The findings indicate that there is enough evi-

dence to accept the hypothesis stating that larger size of bank will lead to higher ROA. Positive regression coefficients can be interpreted that the relationship between size and ROA is in the same direction.

## 6 DISCUSSION

## 6.1 Discussion of Measurement Model

Intern factor variables in this research are measured by five indicators, namely Capital Adequacy Ratio as the ratio to determine the level of all bank assets to have risks that are funded by equity and also obtain funds taken from outside the bank;Non Interest Income /Total Asset (NII/TA) as a measurement of management capability in earning income as not fee based income such as product marketing, banking service transaction and others earning fee, commission or provision;Non Performing Loan (NPL) as asset improvement ratio in which bank sustainability level related to productive assets (NPL ratio is used to measure bank management capability in managing any bad credit given by bank);Non Interest Expense (NIE/TA) or Overhead costis all costs (beyond the interest) spent by bank in running its activities. Company size represented in total assets is a very general variable to be used in bank efficiency level research.

These internal factor variables are determined as latent variables with formative relationship. Formative variables imply that the variables are formed by the indicators. Based on the analysis results (Table 5.9), the highest outer weight value is the CAR indicator with outer weight of 0.733808. This means that internal factor variables are formed more by the CAR indicator. But the size indicator also shows a significant value with outer weight of 0.4819. This means that both indicators deserve the attention of banking management listed on the IDX. Both indicators have different magnitudes. Capital Adequacy Ratio deserves attention especially for the management, because it reflects the ability of banks to guarantee sustainability. So that CAR serves as a measure of banking performance. Meanwhile, company size is the center of investor attention. Investors generally view that banks with large capitalization have a higher ability to secure funds.

The research findings are consistent with resource-based view of the firm. The fundamental principle of RBV is that the basis for competitive advantage of a company is the use of a valuable set of resources (Wernerfelt, Rumelt, in Idrus, 2010). Further, Idrus (2010) asserted that if a company has valuable resources, the company will have a competitive advantage.

## 6.2 Discussion of Measurement Model

The discussion is conducted by examining the causality relationship that occurs between internal factors and ROA stated in the major hypothesis. The following step is to describe the effect of each variable included in the model.

#### 6.2.1. Discussion of Major Hypothesis

Based on the analysis results of intern factor effects on ROA, it shows positive and significant effects, then the research hypothesis stating that intern factors affect significantly on Return on Assets of banking industry in Indonesian Stock Exchange has adequate evidence to be accepted. This finding shows that intern factors are able to describe variance of banking industry ROA changes that are registered in Indonesian Stock Exchange.

Measurement model analysis indicates that intern factor variables are more formed by CAR. It means that decreased or increased CAR determines the increased or decreased ROA. Empirical facts indicate that during 2003 – 2010, increased and decreased ROA is in line with increased and decreased CAR. Based on description analysis, it can be seen that during 2003 – 2010, there was decreased CAR by 1,54; in the same period, there was also decreased ROA by ,68.

These research findings support the statement by Sufian & Ching (2008) stating that it is greatly important for strong capital structure since it can give strength to sustain financial crisis as well as can increase security for depositors during unstable macro-economic condition. Also, low ratio of capital in a bank implies high level of leverage and risks leading to increased interest cost on bank loans. In addition, these research findings also support Trade off Theory*or* Balancing Theory.

According to trade offmodel that was proposed by Miller and Modigliani (MM), by the increasing use of debt (D), the profits (in the form of tax savings) from the use of debt will also increase, but on the other hand, Present Value (PV) of financial distress and PV agency cost also increase. Thus, the use of debt will increase the value of company (bank) but only to a certain point and after the point is reached, then the use of debt will actually reduce the value of company (bank) because increased profits from the use of debt is not proportional to the increase in financial distress and agency cost. The turning point (on the D / E ratio by B) is the optimal capital structure and the optimal amount of debt. In its measurement, the optimal amount of capital structure indication can be used debt equity ratio or debt to capital ratio, but this model is also unable to explain when there will be turning point and the level of optimal capital. Nevertheless, this model provides an indication for banks to carefully determine public capital and funds, because inappropriate composition will lead to bank bankruptcy.

Also with the Pecking Order Theory; this theory is also called as the Financing Hierarchy theory. This theory was proposed by Myers (1984) based on asymmetric information and has a different explanation of the trade off theory. This theory distinguishes equity from retained earnings and the issuance of new shares. The pecking order theory argument is based on asymmetric information so that external funding costs are more expensive and managers will use funding sources with the lowest cost, namely from internal funding sources, if it is necessary for higher needs than internal capital, additional debt is in the second order, and the last is the issuance of new equity. The termof pecking order is explicitly stated by Myers (1984) referring to Gordon Donalson's 1961 study which shows that managers prefer to use internal capital rather than debt capital. Myers (1984) clarified the concept and argued that the funding (capital) decision follows the pecking order theory as follows:

- 1. Bank prefers funding from intern sources. Bank adjust dividend payment target on investment chances, though the dividend is sticky and payment target ratio in stages is only adjusted to increased investment chances.
- 2. Sticky dividend policy and unpredictable profitability fluctuation lead to lack or more intern capital availability than investment spending. If the intern capital is less than the in-

vestment, banking entity should look for extern funding sources to meet bank capital needs.

3. If it is required extern funds, banking entity should try to find out sources of funds from debts (for example, issuance of subordinated debts) since it is considered to be cheaper than the equity. Equity is the final option of funding source to meet bank capital needs.

Myers and Majluf (1984) developed this model on the condition of asymmetric information by assuming that management acts to represent the interests of former shareholders and assumes the former shareholders are passive. They show that asymmetric information causes more expensive debt capital. This happens because higher level of information asymmetry shows higher risk of the bank and so that the lender will collect a higher risk premium. As a result, there will be more expensive capital costs or interest rates from debt. If internal capital does not meet the investment needs, banking institutions will not fund it through the issuance of new equity, which, according to Myers and Majluf (1984), will reduce the value of banks.

Based on this explanation, the internal environment is very important for the banking industry. Thus, it is necessary for banking management to have a team to analyze the environmental conditions.

### 6.2.2. Discussion of Minor Hypothesis

The discussion of minor hypotheses is carried out mainly on the variables included in the regression analysis. These variables are CAR, NII / TA, NPL, NIE / TA and Size. Besides that, the explanation of CAR effect on ROA will not be analyzed because it has been discussed in the discussion of the major hypothesis.

#### **Discussion of NII/TA Effects on ROA**

Based on the analysis results of Non-Interest Income effects on corporate innovation, it shows positive and insignificant effect. Thus, the research hypothesis which states that higher NII / TA ratio will lead to higher ROA has no adequate evidence to be accepted. These results indicate that income outside interest has not been able to explain variations in changes in bank ROA listed on the Indonesia Stock Exchange.

Empirical facts show that during 2003 – 2010, increased and decreased ROA was in line with increased and decreased NII / TA. However, the increased or decreased NII / TA has not been able to encourage increased or decreased in ROA. Based on the description analysis, it can be seen that during 2003-2010, there was only NII / TA growth by 12.95% while ROA growth was 24.49%. This fact indicates that banks in Indonesia rely more on spreads to earn income. So that ROA is more determined by income derived from interest. This means that it is still not able to empower the Non-Interest Income represents operating income from "off-balance sheet", or non-interest income from the sale of securities, and net income from the difference in exchange rates.

The research findings do not support the research findings by Sufian & Chong (2008); Sufian (2010) who found out that income outside interest was able to substantially increase ROA. This means that banking conditions in Korea and Philippines as the research location by Sufian & Chong (2008); Sufian (2010) is different from Indonesian banking. Banks in Korea and Philippines have started to switch from inter-income income to fee base income.

## Discussion of NPL Effects on ROA

NPL will increase costs, so it potentially damages banks. This higher ratio will lead to worse bank quality which causes greater number of non-performing loans, and therefore the bank must bear losses in its operational activities so this can affect on decreased profit (ROA) earned by the bank, said Kasmir (2004). Kasmir's statement received support in this study which finds out a negative relationship between NPL and ROA, although the effect is insignificant. The insignificant effects can be interpreted that bank management will continue to try to control NPLs, so that it cannotexceed the limits of Bank Indonesia regulations. When NPL increases, it does not only reduce the reputation of management but also lowers the bank's bona fide.

Empirical facts found that during the period of 2003-2010, the NPL banking industry was 2.68% while there was also a decreased NPL banking by 3.16. The decrease difference of only 0.48 is certainly insignificant enough to affect on the variation in ROA changes.

This study supports a research by Mahardian (2008) which also found that NPLs negatively affect on the bank ROA. This finding indicates that banks in Indonesia consistently pay attention to NPLs.

## Discussion of NIETA Effects on ROA

Non interest expense is a cost spent by a bank other than interest expense; the biggest portion of non interest expense is salary, allowance, cost of running branch office facilities and others as called by overhead cost. There is different percentage of the overhead cost of each bank from one another. This greatly depends on the efficiency of a bank in controlling costs and the ability of bank to expand its business which will tend to have low overhead costs with the assumption that there are cost controls in normal standards. Since more productive and efficient bank aims to minimize operational costs. As the use of new electronic technologies, such as ATMs and other automatic means of shipping services, it may have caused decreased wage costs (Sufian & Chong, 2008).

There will be negative effects between NIE / TA on the bank ROA when there is increased overhead costs, it will reduce bank profitability. There is also a negative relationship found by Vong & Chan which stated a negative relationship between non interest expense and ROA, because an efficient bank is able to operate at a lower cost.

The findings of this study support the theory and empirical facts presented above. This means that Indonesian banking management is doing its maximum efforts to reduce overhead costs and try to find the optimal position of overhead costs. However, fluctuations in overhead costs have not been able to determine ROA fluctuations. This condition could be seen during the period of 2003-2010 which there was a growth of NIE / TA by 3.7% per year while the growth of ROA was 2.68%.

## **Discussion of Size Effects on ROA**

Assets reflect the assets used for the company's operational activi-

ties. Increased assets followed by increased operating results will further increase the trust of external parties in the company. So that, the creditorswill possibly be interested in investing in the company, as the argument by Weston & Brigham, (1994). The argument is supported by this study so that the hypothesis proposed is supported by data.

The argument stating that this significant effect implies that companies with large assets have the opportunity to get greater profits. Sarita (2010) stated that the number of assets can still support the performance of banks operating in Indonesia. This illustrates that the overall size of bank has been able to improve bank performance, because each bank has a different economic scale so that there is a high competition in competing for customers.

The findings of this study support researches conducted by Kosmidou & Pasiouras (2007), Sufian (2010), Naceur & Kandil (2005), Davydenko (2010), Stiawan (2009) who found that there was a positive relationship between firm size measured by asset size and capital owned by a bank on its profitability.

# 7 CONCLUSION AND RECOMMENDATION

## 7.1 Conclusion

Based on the analysis results, then it can conclude that:

- 1. The intern factors can improve Return On Assetof the banking industry in Indonesian Stock Exchange. This means that more conducive intern factors will lead to higher ROA. The strongest intern factor indicator is CAR. It means that banking in Indonesia will achieve good performance when they have adequate capital.
- 2. The capital adequacy ratio can increase ROA, meaning that greater amount of capital will increase the ROA since greater amount of capital will lead to higher amount of disbursed loans, which will increase the bank's profit.
- 3. Bank income excluding interest is not able to increase ROA. This indicates that Indonesian banks still depend on income from the difference in loan interest and deposit interest.
- 4. Increasingly problematic loans affect on decreased ROA, but for Indonesian banking conditions, the effect is not substantial. This condition is caused by the functioning of control role in some Indonesian banks.
- 5. Increasingly higher bank operating costs will reduce income, but when there are controllable costs, the bank will be more efficient, so that costs outside interest cannot substantially affect on the variation in ROA.
- 6. Size of the bank determines the variation in ROA changes, meaning that larger bank size will lead to higher bank ROA. This is in line with the principle of economic scale.

## 7.2 Recommendation

Based on the conclusion as a summary of analysis results, then there are some recommendation, as follow:

- 1. In the efforts to increase ROA, it is necessary for Indonesian banks to pay attention to the capital aspects, namely maintaining an optimal CAR position.
- 2. Competition determines profitability and determines ROA. Therefore, Indonesian banks should take competitive strategies that are in line with any available strengths and opportunities.

3. For the next researchers, NPL and Non interest income indicators are not able to reflect the internal factors. This can be caused by a limited number of samples. Therefore it is necessary to increase the number of samples.

## REFERENCES

- Adhi Pradigdo. 2010, Pengertian Bank Sentral, Bank Devisa, dan LPS. Wikipedia Indonesia. Ensiklopedia bebas berbahasa Indonesia (diakses Februari, 2011).
- [2] Al-Tamimi, Hussein A.H., Factor Influencing Performance of The UEA Islamic and Conventional National Banks. Global Journal of Business Research. Vol.4.Number 2. University of Sharjah.UEA.
- Berger A. 1995. "The relationship between capital and earnings in banking", Journal of Money, Credit and Banking, Vol.27:404-31.
- [4] Brigham, E.F. and Houston J.F. 2001, Financial Management, Edisi Eight. Erlangga. Jakarta.
- [5] Buser, S., A. Chen, and E. Kane. 1981. "Federal deposit insurance, regulatory policy, and optimal bank capital", Journal of Finance, Vol. 35: 51-60.
- [6] Buyinsa, Faysal. 2010. Determinant of Profitability of Commercial Banks in Sub Saharan Africa Countries. Departement of Economics. Johanssen Keppler University. Linz Austria.
- [7] David Fred R. 2011, 2009, 2007 Strategic management: concepts and cases, Pearson Education, Inc., Prentice Hall, New Jersey 07458.
- [8] Davydenko, Antonina. 2010. Determinants of Bank Profitability in Ukraine. Economic Review: Vol. 7.Issue 1. American Univesity. Bulgaria
- [9] Demerguç-Kunt A. and H. Huizinga. 1999. "Determinants of commercial bank interest margins and profitability: Some international evidence", World Bank Economic Review, Vol.13: 379-408.
- [10] Ferdinand, A. 2006. Management Research Methode: Guidelines for Writing Thesis, Thesis and Dissertation in Management Science. Second edition. Economics Faculty
- [11] Ghozali, Imam. 2006. Aplikasi Analisis Multivariat Dengan Program SPSS. Cetakan IV. Undip. Semarang.
- [12] Kosmidou K., Tanna S., and Pasiouras F., 2007. Determinants of Profitability of Domestic UK Commercial Banks: Panel evidence from the period 1995-2002. Applied Research Working Paper Series. Conventry University Business School.
- [13] Lestari, I.L dan Sugiharto T. 2007. Kinerja Bank Devisa dan Bank Non Devisa dan Faktorfaktor yang Mempengaruhinya. Vol. 2. FE. Universitas Gunadarma.
- [14] Mahardian, Pandu, 2008. Analisis Pengaruh CAR, BOPO, NPL, NIM dan LDR Terhadap ROA (Studi Kasus Pada Perusahaan Perbankan yang tercatat di BEJ periode Juni 2002-Juni 2007). Tesis Program Pascasarjana. Magister Manajemen. UNDIP.
- [15] Naceur,S.B.,2003. The Determinants of The Tunisian Banking Industry Profitability: Panel Evidence. ERF Research Fellow. Depertement of Finance University Libre de Tunis.
- [16] Riyadi,Selamet. 2006. Banking Assets and Liability Management.Edisi ketiga.FE Universitas Indonesia. Jakarta.
- [17] Sarita, Buyung, 2010. Pengaruh Struktur Pasar dan Moral Hazard Terhadap Kinerja Industri Perbankan Di Indonesia.(Pidato Pengukuhan Guru Besar Bidang Ilmu Manajemen Keuangan) FE.UNHALU.
- [18] Stiawan. 2009, Analisis Pengaruh Faktor Makroekonomi, Pangsa Pasar dan Karakteristik Bank Terhadap Profitabilitas Bank Syariah (Studi pada Bank Syariah periode 2005-2006). Tesis Program Pascasarjana Universitas.
- [19] Sufian, F. 2010. Profitability of The Korean Banking Sector: Panel Evidence on Bank-Specific and Macroeconomic Determinants. Journal of Economic and Management. Vol.7.No.1.
- [20] Sufian,F.and Chong R.R. 2008. Determinants of Bank Profitability in a Developing Economy: Empirical Evidence From The Philippines. AAMJAF. Vol.4. No.2.
- [21] Sugiarso, G. dan Winarni F. 2005. Financial Management. Media Pressindo . Yogyakarta.

- [22] Sukirno, Sadono. 1998. Pengantar Teori Ekonomi Makro. Fakultas Ekonomi UI. Jakarta.
- [23] Vong, Anna P.I. and Chan, Hoi Si. 2009. Determinants of Bank Profitability in Macao. Working Paper. Faculty of Business Administration. University of Macau.
- [24] Weston, J.F. and E.F.Brigham, 1997, Dasar-dasar Manajemen Keuangan, Edisi Kesembilan, Jakarta: Erlannga.
- [25] www.bi.go.id .Statistik Perbankan Indonesia. Vol.9. No.2. Januari 2011.

Lampiran 1 : Perkembangan kinerja industri perbankan selama kurun waktu 2005-2010.

Tabel 1.1. Rata-Rata Kineria Industri Perbankan 2005-2010

Taber 1,1, Kata-Kata Kinerja muustri j				rerbankan 2005-2010			
Kinerj a	2005	2006	2007	2008	2009	2010	rata-rata
ROA %	2,17	2,35	2,44	1,25	2,20	2,58	2,16
CAR %	16,92	19,84	18,21	14,84	16,61	15,76	17,03
NII/TA %	2,11	1,95	2,02	2,25	1,01	1,88	1,87
NPL %	3,22	3,69	2,61	2,73	2,88	2,35	2,88
NIE/TA% %%%	3,21	3,92	3.80	4,51	3,76	2,87	3,68
SIZE(TA) ((TA)	571,2	663,0	768,7	883,4	958,5	1.203,3	841,35

Sumber; <u>www.bi.go.id</u> (Statistik Perbankan Indonesia)

