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EFFECTS OF EXTERN FACTORS ON RETURN ON ASSET(ROA) IN BANKING INDUSTRY IN INDONESIA STOCK EXCANGE

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Abstract–This research aims to determine and analyze effects of extern factors including Inflation, Gross Domestic Product, rupiah exchange rate and competition level on Return On Asset in banking industry in Indonesian Stock Exchange. This research uses secondary data in the forms of financial statements that were published in Indonesian Stock Exchange in period of 2003-2010 and other relevant publication from Bank Indonesia, Bappepam. Analysis method is partial least square.

Results of the research find out that: (a). Extern factors can improve Return On Asset in banking industry in Indonesian Stock Exchange. This implies that more condusive extern factors will lead to higher banking ROA. (b). controllable inflation cannot lower bank ROA. It means that during period of research, there is controllable inflation, so it does not significantly influence on ROA. Controllable level of inflation in fact can improve bank ROA, (c). gross domestic product is yet able to improve ROA, event in condition of GDP increase in the period of research, the ROA decreases. This can be caused by the use of GDP for investment in real sector, (d). rupiah exchange can improve bank income. So, higher exchange rate will lead to higher ROA and (e) rapid competition can create creativity so competition can encourage income production and increase ROA.

Index Term : Inflation, GDP, Rupiah Exchange Rate to Dollar and Competition Level

1 Introduction

Business banking consistently is required to have ability to improve its owner welfare as the company objective. Efforts to reach the company objectives depend on its performance. However, in addition to company performance, there are also other factors determining banking objectives as a business entity. The factors do not only influence on company objectives but also on bank performance. The factors giving effects on bank performance can be divided into two; namely controllable factors or called as intern factors and uncontrollable factors or called as extern factors giving effects on bank performance namely macroeconomic conditions, such as inflation, exchange rate, gross domestic products, export value and others (Sufian, 2010)

There are several studies on the effects of external factors on bank Return On Assets (ROA), including Vong & Chan (2009); Naceur (2003); Sufian (2011); Sufian & Chong (2008), Kosmidou & Pasiouras (2007), Al-Tamimi (2010), Naceur & Kandil (2005), Buyinsa (2010), Davydenko (2010), Li, and Stiawan (2009)) but the findings are still contradictory. This can be caused by differences in place, time and period of observation. So the author feels that it is necessary to reexamine these variables, to determine the effect consistency of a variable on ROA.

Return on Assetsof a bank is also influenced by macroeconomic conditions such as the inflation rate, economic growth of a country where the bank operates. Empirical studies of macroeconomic influences on ROA are found in the study of Sufian & Chong (2008), Buyinsa (2010), Naceur (2003) who found that higher Gross Domestic Product (GDP) can increase banking ROA. On the other hand, higher inflation rate will lead to higher bank interest rate. High interest rates will reduce willingness of capital owners to develop productive sectors. When associated with bank performance, high inflation will increase capital cost so that real sector investments tend to reduce bank debt, thereby reducing level of bank profitability (Sukirno, 1998).

Macroeconomic conditions also contribute to Indonesian banking development. Relatively constant macroeconomic conditions are caused by global economic recovery as seen by improved United State and Japan economy as well as increasingly strengthening economic of emerging market countries such as China and India. Export and import performance is predicted to keep improving by increased global demands. Household consumption will also improve by improved public purchasing power and be still motor for economic growth. There will also keep improving investment activities mainly in infrastructure sector.

In addition to economic growth, inflation rate also contributes to banking performance. Bank Indonesia monetary policy which continues to monitor the inflation rate provides positive effects on the development of Indonesian banking. Meanwhile, rupiah exchange rate is expected to keep being appreciatedby high spread yield of rupiah investment as well as strengthening foreign exchange reserves. So that prospect of a stronger Indonesian macro economy will certainly have influences on overall improved banking performance, (Economic Review; Adhy & Ihsan, 2009).

Inter-bank competition plays an important role in achieving bank performance. Porter (1985) stated that industrial corporate competition will influence on achievement of business performance. This condition serves an important role in banking industry because of limited share growth, thus it encourages banks to make progressive efforts in achieving performance, so that competition between banks should be a concern. To maintain bank soundness, bank managers in carrying out their business are required to always maintain a balance between maintaining adequate liquidity and achieving reasonable profitability and fulfilling adequate capital in accordance with the type of investors (Indonesian Accounting Association, 2004).

Based on this description, focus of banking industry's attention is on ROA as a reflection of all resource empowerment efficiency. Efforts to achieve ROA cannot be separated from external conditions. Thus, in an effort to examine consistency of previous research findings and provide alternative information for Indonesian banking industry, this study will examine the variables incorporated in external factors influencing on ROA. External factors that are considered important are inflation, gross domestic product (GDP), exchange rate of the rupiah against US dollar and level of competition.

This study aims to determine and analyze the influence of external factors including inflation, gross domestic product, rupiah exchange rate against dollar and level of competition against industrial banking return on assets on the Indonesia Stock Exchange.

2 Literature Review

2.1 Banking Environment

Banks run national and international scale operation. In the operation, bank will make interaction with other banks in domestic areas, both non bank company and bank as well as non banks in overseas areas. This interaction forms unique environment according to its interaction level. The environments are intern environment, extern environment and international environment.

Understanding on banking environment is very important, because there will be bank competition in each environments. It means in internal environment, banks will face inter-bank competition, and in external environment, banks will face competition from non-bank financial institutions and merchants selling on credit. Whereas in international environment, banks will face international competition, especially with foreign banks that provide loans to domestic debtors, banks compete with overseas non-bank financial institutions that provide credit to residents and banks will also compete with overseas parties selling credit products.

2.1.1 Extern Environment

The external environment is a multiple environment, in other words as a double or multiple environment. This environment consists of physical, technological, legal, social-demographic, economic, business environment, macroeconomics, politics and competition. While important parties for banks in this environment are households, government units and non-financial companies. Non-financial companies are companies that operate using their own capital, while financial companies are companies that operate using debt capital (for example banks). Financial and non-financial companies are detailed into 9 sectors (Indonesian Capital Directory Market, 2003)

2.1.2 International Environment

Relevant components to the international environment are monetization of world economy, level and stability of rupiah exchange rate against international currencies or vice versa, position of a country's foreign exchange current account, relative inflation, relative interest rates, national economic growth rate and international competition. These factors are interrelated and banks can take advantage of the factorbehaviors, especially banks that deal with international transaction problems (foreign exchange).

2.2 Financial Performance

Performance can be interpreted as level of company results or objectiveachievement, level of company missionachievement, actual level of task implementation achievement and company missionachievement. Performance can also be interpreted as company achievement in a certain period that reflects company level of soundness (Sugiarso & Winarni, 2005). Financial performance is an important thing that must be achieved by any company, because performance is a reflection of company's ability to manage and allocate its resources. Banks as a company is obliged to maintain public trust related to its performance, therefore it is necessary for transparency or disclosure of information on bank financial statements in order to provide information regarding financial position, performance and changes in financial position, and as a basis for decision making.

Bank financial performance is an illustration of the bank's financial condition in a certain period, which past financial position information and financial performance are often used as a basis for predicting future financial position and performance. Assessment of bank financial performance can be assessed by financial ratio analysis approach of all future financial reports (Anita & Rahadian, 2003). Financial ratios are designed to help to evaluate financial statements by reporting both company position at a given time and its operations over past several periods. But the real value of financial statements is the fact that financial statements can be used to help predicting earnings and dividends, (Brigham & Houston, 2001).

2.3 Macroeconomic Variables

Macroeconomic analysis is an analysis on extern and macro factors in the forms of events beyond the company, so that these are uncontrollable by the company. Macroeconomic environment will influence on company operation in this case is company management decision in policy-making related to banking financial performance.

Any factors giving effects on banking company management decision is called as extern factors. Extern factors, namely any factors from outside the company include monetary decision, exchange rate fluctuation, inflation level, financial instrument innovation and others (Siamat, 2005).In this research, it only analyzes macroeconomic instruments among others are inflation level, Gross Domestic Product (GDP), rupiah exchange rate on dollar and competition level.

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Inflation

Rivai & Andria (2009) defined it as a process of increasing prices in general and sustainable manner. In other words, inflation is a process of decreasing exchange rate continuously.

Gross Domestic Product (GDP)

Gross Domestic Product (GDP) can mean as goods and services that are domestically produced in certain year.Sukirno (1998), GDP reflects population activities in a country in term of a goods production in certain period of time.

Rupiah Exchange Rate on Dollar

Rupiah exchange rate is a comparison of rupiah price with other currency. The exchange rate is a price in the exchange process. Also in exchange of different currencies, there will be comparison of price or value of both currency. This comparison is called as exchange rate.

Competition

Porter (19985) stated that competition greatly determines business performance. There are some factors determining on this competition including number of competitor, level of industrial growth, characteristics of produced products or services, number of fixed costs, entry obstacles and competitor diversity. Competition level can be measured as comparison of a bank market target on total markets. Technically, competition level can be produced as a comparison between number of a company selling and total of industrial selling (Whelen, 2012).

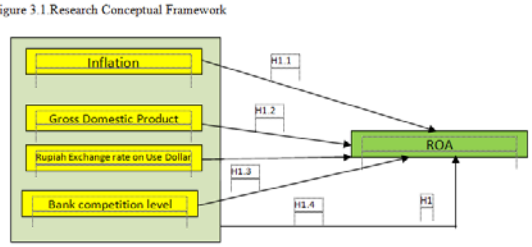
3 Conceptual Framework and Hypotheses

3.1 Conseptual Framework

Based on theoretical study and empirical studies that have been stated previously, then the variables in this study are dependent variable which is external factors and independent variable which is Return on Assets (ROA). Bank profitability is greatly influenced by macroeconomic conditions, generally higher economic growth encourages banks to lend more and allows them to impose higher margins while improving their assetquality. This study measures macroeconomic relationship consisting of inflation, GDP, the amount of money circulating, exchange rate of Rupiah against US dollars, capital market capitalization and competition as factors that can influence on ROA on foreign exchange national private banks listed on the Indonesia Stock Exchange .

Effects of extern factors on profitability can be seen in the following conceptual framework;

Figure 3.1 Research Conceptual Framework



3.2. Research Hypotheses

Based on the conceptual framework above, then the major hypotheses are:

H1. Extern factors influence significantly on Return On Asset (ROA) in banking industry in Indonesian Stock Exchange

While, the minor hypotheses are:

- H1.1 Higher inflation leads to lower ROA.
- H1.2 Higher GDP leads to higher ROA.
- H1.3 Higher rupiah exchange rate leads to higher ROA
- H1.4 Higher bank competition level leads to higher ROA.

4 Research Method

This study is an associative explanatory research, meaning that this study aims to determine the relationship between two variables or more variables by examining causal relationships between research variables. The research population is all banks listed on the Indonesia Stock Exchange. The total population in 2010 was 32 banks. The sampling method is purposive sampling method, which is a method of determining the samples based on objectives or criteria, which the criteria used in determining the samples are:

1. Banks that are listed on the Indonesia Stock Exchange and issue financial statements continuously during the period of 2003-2010, with positive profit.
2. There is no transfer of ownership and merger during the study period.
3. Foreign exchange banks, namely banks that are given the authority to sell or buy foreign exchange. This criterion is determined because one of the variables studied in this study relates to the rupiah exchange rate against the US dollar.

Based on the above criteria, there are 13 banks meeting the criteria. The list of banks as these study samples can be seen in Table 4.1.

Table 4.1 List of Bank as the Research Samples

No	Name of Banks
1	PT. Bank Central Asia, Tbk
2	PT. Bank Danamon Indonesia, Tbk
3	PT. Bank Mayapada Internasional, Tbk
4	PT. Bank Mega, Tbk
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 Swadesi, Tbk
11	PT. Bank Kesawan, Tbk
12	PT. Bank PAN Indonesia, Tbk
13	PT. Bank Internasional Indonesia, Tbk

Source of data; www.bei.go.id

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

1. Data on bank financial statements in 2003-2010.
2. Other relevant publications from Bank Indonesia, IDX and Bappepam.

The data analysis is descriptionAnalysis, which is a description of the studied variables. Ferdinand (2006) stated that descriptive analysis aims to describe or illustrate a situation or series of processes, the descriptive model only explains what happened and does not explain whether what has happened was good or bad, had a positive or negative impact. In addition, inferential analysis is used to test hypotheses and produce a fit model (fit), this study uses Structural Equation Modeling (SEM) with a variance based or component based approach with Partial Least Square (PLS).

5 Analysis Results

5.1 Testing on Major and Minor Hypotheses

Hypothesis testing in Partial Least Squareis conducted by using t (t-test)in each path effects 0f dependent variable and independent variable. Results of hypotheses testing are seen in Table 5.1

Table 5.1 Results of Hypotheses Testing

Dependent variable	Independent variable	Path coefficient	t-stat	Nformation
Extern factors	ROA	0,225425	2,995244	Significant

Based on the analysis results, the major hypothesis states that:

External factors have significant effects on Return OnAssets inBanking industry on the Indonesia Stock Exchange; it has enough evidence to be accepted. This is indicated by t statistic value is greater than t Table (2.995244> 1.96). Positive sign of path coefficient implies that more conducive external factors will lead to higher ROA.

Then, to test the minor hypothesis, the analysis is done by regressing each indicator with the dependent variable. Table 5.2 describes results of the regression analysis after being freed from deviation of multinational assumption (Complete analysis results can be seen in the appendix).

Table5.2. Results of Regression Analysis on effects of extern factors on ROA

Variabel	B	t	Sig.	VIF
(Constant)	,435	,274	,785	
INFL	,030	,759	,450	4,835
PDB	-,011	-,272	,786	4,819
KURS	,0004	-2,071	,041	1,120
PERS	,022	2,427	,017	1,444

Source: Processed primary data, 2012

The effect of inflation on ROA gets a regression coefficient, 030 at α =, 450. The findings show that there is not enough evidence to accept the hypothesis stating that higher inflation leads to lower ROA. Positive regression coefficients can be interpreted that the relationship between inflation and ROA is in the same direction.

The effect of gross domestic product on ROA gets a regression coefficient of -0.011 at α = 0, 786. The findings show that there is not enough evidence to accept the hypothesis that higher GDP leads to higher ROA. Negative regression coefficient can be interpreted that the relationship between GDP and ROA is in the opposite direction.

The effect of rupiah exchange rate on ROA gets the regression coefficient value 0004 at α =, 041. This finding shows that there is enough evidence to accept the hypothesis stating that higher rupiah exchange rate against the dollar will lead to higher ROA. Positive regression coefficient can be interpreted that the relationship between the Exchange with ROA is in the same direction.

6 Discussion

6.1 Effects of Extern Factors on Return On Asset (ROA)

Extern factors influence significantly on Return On Assetin banking industry in Indonesia Stock Exchange with adequate acceptable evidence. This research finding is consistent to industrial organizational approach stating that "The Industrial Organization (I/O) approach to competitive advantage advocates that external (industry) factors are more important than internal factors in a firm achieving competitive advantage (David, 2011)" the statement implies that to achieve competitive excellence, extern factors (industry) are more important than intern factors.

David (2011) then stated that "Proponents of the I/O view, such as Michael Porter, contend that organizational performance will be primarily determined by industry forces. It is an example of the I/O perspective, whichfocuses on analyzing external forces and industry variables as a basis for getting and keeping competitive advantage. Competitive advantage is determined largely by competitive positioning within an industry, according to I/O advocates.

Managing strategically from the I/O perspective entails firms striving to compete in attractive industries, avoiding weak or faltering industries, and gaining a full understanding of key external factor relationships within that attractive industry. I/O research provides important contributions to our understanding of how to gain competitive advantage (David, 2011). Based on the explanation, then extern factors play an important role for banking industry. Thus, it is necessary for banking industry to have environmental condition analysis team.

6.2 Discussion of Inflation Effects on ROA

Sukirna (1998) stated that inflation is direct effects of macroeconomic condition such as increased labor wage and indirect effects namely changes on interest rate and asset price in bank profitability. Higher inflation will lead to higher interest rate. Higher interest rate will reduce capital owner willingness to develop productive sectors. Related to bank profitability, low level of investment leads to investor action to reduce debts to bank so it can reduce bank profitability level.

The theoretical statement does not receive support from this research. This study finds that inflation has positive effect on ROA. This indicates that high inflation does not encourage to decrease ROA. This may be caused by most Bank income is taken from interest income ofdisbursed loans.

This study does not support the study by Naceur (2003), Davydenko (2010), who found that inflation has negative effects on banks which it can be explained that high rate of inflation increases uncertainty so that people reduce the demand for bank credit. Besides inflation has negative effects if the bank does not immediately anticipate the situation, for example banks which do not immediately increase theirinterest rates will face the biggest possibility namely bank fees will also increase faster than bank revenues and this will greatly influence on decreased bank profits.

6.3 Discussion of GDP Effects on ROA

Gross Domestic Product is used as one of the macroeconomic analysis tools to measure total economic activity in a country in certain period of year, in which GDPcan influence some factors related to offer and demands of bank loans. Related to banking world, GDP is related to saving. Meanwhile, one of bank activities is as aintermediary in financial sector, namely collecting funds from the public and distribute it in the form of investment. Investment profit will then be a part of bank profitability.

This research fact indicates that GDP influences negatively on ROA meaning that higher GDP will lead to decreased ROA. This can be caused by public tendency to allocate their funds for investment so that in the period, earned GDP cannot lower bank revenue.

This study does not support researchesby Vong & Chan (2009), Naceur (2003), Al-Tamimi (2010), Sufian & Chong (2008); Kosmidou, Tanna & Pasiouras (2007), who find out that a country's Gross Domestic Product has very positive effects on bank profitability.

6.4 Discussion of Rupiah Exchange Rate on ROA

Rupiah Exchange Rate on US Dollar is rupiah price on United State currency. Changes on rupiah exchange rate on US dollar will provide different effects on each company, if a company has export orientation, it will obtain positive effects on increased US Dollar on rupiah so that it can lead to increased company profit. Foreign exchange bank is one of the bank activities to export and import so that this will also influence on bank revenue.

This study finding supports te statement. This means that increased rupiah exchange rate will increase revenue from buying and selling rates. Hasibuan (2007 stated that by Foreign Exchange Bank, a bank can transact in foreign currencies with a fast transaction turnover, as well as a large volume of transactions, so that it can be ascertained that bank receives operating income from large foreign exchange transactions, because in addition to obtaining revenue from services transactions in the form of fees and commissions, foreign exchange banks also obtain large revenues derived from foreign exchange differences between selling rate and buying rate.

This studyfinding supports a research conducted by Davydenko (2010) that currency exchange rate in a country has positive effects on bank ROA.

6.5 Discussion of Competition Effects on ROA

Competition serves an important role in achievement of bank performance. More number of bank will lead to higher competition. This is relates to limited market targets. Increasing tense competition will lead to smaller chances of company to earn profits. This will influence on low level of ROA.

The research result finds out positive competition meaning that competition intensity can improve banking industry ROA. Higher competition intensity will lead to higher banking creativity so that it can encourage the public to utilize sources of banking funds and this ultimately will lead to banking ability to improve its profits.

This study finding is not in line with a research (Matthews Murinde, Zhao (2007) who found that the higher level of competition will lead to lower bank's performance. This indicates that controlling the number of banks operating in Indonesia encourages a sense of security for the community. This is based on the experience in the 1998 crisis.

7 Conclusion And Recommendation

7.1 Recommendation

Based on analysis results, then it can be concluded that:

1. External factors can increase Return On Assets of banking industry on the Indonesia Stock Exchange. This implies that more conducive external factors will lead to higher bank ROA. The most powerful indicator forming the external factors is the Amount of Money Supply.
2. Controlled inflation is not able to reduce bank ROA. This means that during the research period inflation is controlled, so it does not significantly influence on ROA. Controlled inflation rate can increase bank ROA.
3. Gross domestic product has not been able to increase ROA, even increased GDP in the study period has reduced ROA. This can be caused by GDP use for investment in real sector.
4. The rupiah exchange rate can increase bank income. So that higher exchange rate wil lead to higher ROA.
5. Tight competition can create creativity, so that competition can encourage earning income and increase ROA.

7.2 Recommendation

On the conclusion as summary of analysis results, there are some given recommendations, namely:

1. Competition determines profit and determines ROA. Therefore Indonesian banks should choose a competitive strategy that is well-adjusted to their strengths and availableopportunities.
2. This study looks at GDP indicators based on absolute values, thenit is necessary for following researcher to do alternative measurements using constant prices, GDP based on expenditure and growth.

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