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DETERMINANTS OF INTERNAL AND EXTERNAL FACTOR ON COMMERCIAL BANK IN INDONESIA

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ABSTRACT

This study aims to examine the influence of the internal and external factor (inflation, Product domestic bruto, the size, and the Non Performing Loan) on financial performance for 3 years during the period 2012-2014.This study uses secondary data which includes 24 companies listed in Indonesia Stock Exchange in 2012 to 2014 by using purposive sampling. Data were analyzed using multiple linear regressions to test the effect of independent variables on the dependent variable.The results showed that not all of the variables had significant effect. Inflation and PDB have a no significant effect. Sizes have a positive effect and significant on financial performance. NPL have a negative effect and significant on financial performance. Recomendation for bank should pay attention on their lending because NPL affects financial performance. For general society, the size and NPL should be paid attention for the funds kept safe. For further research, independent variables can be added and use different proxy

Keywords: Inflation, Product Domestic Bruto, Size, and Non Performing Loan.
JEL classification : G00; G21; E60

INTRODUCTION:

Bank is prime mover in the economy of a country. According to UU no.10 Tahun 1998, bank is an entity that collects funds from public in the form of savings, and distributes it to public in the form of credit and/or other forms in order to improve the standard of living of the people (Kasmir, 2012). According to (Dilley, 2008), bank is an establishment for custody, loan, exchange, or issue of money, for the extension of credit, and for facilitating the transmission of funds.

In economic system, bank serves as an intermediary institution. According to (Matthews & Thompson, 2005), financial intermediation is a process that involves surplus units depositing funds with financial institutions that in turn lend to deficit units. The intermediary function involves who have excess of funds which subsequently distributed to parties who are lack fund.

The role of banks, as mentioned above is a very important part to find out the fund sources that exist in society and distribute fund to productive business. With these functions, bank expected to optimize bank performance to the attainment of financial performance as expected. Therefore, it can push economic activity to make it more effective.

Based on Bloomberg data in 2013, the average growth of ROA Indonesia banking industry was 2.5%. ROA growth in the United States is 1.6% and 1.33% for Asia Pacific. The lowest ROA value is in Europe by 1%. (www.jpnn.com).

However, based on financial statements issued by BEI in 2012-2014, the average ROA of commercial banks decreased. In 2012 the average ROA of commercial banks was 1.39%. However, in 2013, the average ROA of Commercial Bank became 0.98%. In 2014, the average ROA of Commercial Bank was 0.685%, while government-owned Bank showed different results. In 2012 the government-owned Bank's ROA average was 1.85% and in 2013 was 1.9%. It decreased into 1.76% in 2014.

Return On Assets is an ability of the capital invested in the entire assets of the company to generate a profit. The higher the profit generated, the higher the ROA, it means that the company is more effective in using assets to generate profits (Hamdi, 2015). Thus, in this study, ROA is used as a measure of bank performance. Return on Asset (ROA) is used to measure the effectiveness of a company in generating profits by exploiting its assets.

Inflation studied by (Frederick, 2014) showed a positive effect. Inflation has positive effect because banks are able to predict inflation precisely that it can gain more profits. (Ongore & Kusa, 2013) in his research showed that inflation has negative effect on ROA. Meanwhile, according (Ameur & dan Mhiri, 2013)inflation does not affect ROA. (Wibowo & Syaichu, 2013) in their research suggested that inflation has negative influence and insignificant.

In his research, (Hamdi & Lestari, 2015)stated that GDP negatively affect ROA. When national income increases, the amount of consumption and saving will increase. Therefore, people do not need additional funds for consumption because it can be fulfilled with their own income. Thus there is no demand for money in the society. If there is no demand for money from the society, the number of loans to distribute will decrease. The decrease of credit will have an impact on the decline in bank interest income. (Zeitun, 2012) showed that GDP positively affects ROA. According (Obamuyi, 2013)high GDP demonstrates high profitable business opportunities in which banks can achieve high financial performance. This is because the increase in economic activity will signal a state that demand for credit will increase, and with the increase in lending activity, banks can generate more profit. (Ameur & dan Mhiri, 2013) observed that GDP is not significantly affects to ROA.

(Rini & Sufian, 2013) stated that the size of bank may affect bank's ability to generate profits. Banks that are large are generally able to generate greater profits than the banks are small. The results of this study are supported by a previous study conducted by (Alkhatib & Harsheh, 2012), and Kurnia and Mawardi (2012). According to (Dietrich & Wanzenried, 2011) the size of a company does not have a significant effect partially on Financial Performance. The increase in non-performing loans will reduce bank earnings (Ameur & dan Mhiri, 2013). In addition to the negative effect, it also happens because banks operate under its maximum level (Naceur & Goaied, 2003)

The fourth factor in this study is NPL. NPL *(Non Performing Loan)* is a ratio that shows bank's ability to manage non-performing loans granted by a bank, that the higher this ratio is, the worse the bank performance is. (Akhtar, 2011) in his research revealed that NPL is negative effect on ROA. (Ameur & dan Mhiri, 2013) showed that NPL positively affect on ROA. (Socol & Dănulețiu, 2013) explains that NPL has no significant effect on ROA.

LITERATUR REVIEW:

Inflation Theory:

According (Latumaerissa, 2011), quantity theory is the eldest theory about inflation, but this theory (which recently experiencing improvement by a group of University of Chicago economists) is still very useful to explain inflation process in modern times. This theory highlights the role in inflation process from aspects of money supply, psychology (expectation) of society about an increase in prices.

Keynes Production Approach:

Production approach method is calculation of national income by calculating the amount of production of each economic sector. To avoid double, this method calculate only value added of all sectors of economic activity. The formula in calculating GDP by the income approach is as follows:

$$GDP = (P \times Q1) + (P \times Q2) + (P \times Q3) + \ldots + (P \times Qn)$$

With:

Q: The price of goods or services in each sector

Q: Quantity of items in each sector

Liquidity Theory *(Anticipated Income Theory):*

According Simorangkir (2004: 143) *anticipated income theory* is a theory which states that bank liquidity problems can actually be planned. If something can be planned, it means that problem can be solved well, nothing to worry about. Bank liquidity can always be maintained if loan payment by debtor is executed on time. This theory stresses the dynamic and broad liquidity. It is explained that loan payment or new depositors who entrust their money to make banks more ***liquid.***

Risk management:

Risk management is a set of methodologies and procedures used to identify, measure, monitor and control risks arising from all the business activities of the bank (Peraturan Bank Indonesia no 13/23 / PBI / 2011). Risk management refers to methods and procedures used by organizations to manage risks or seize opportunities related to the achievement (Amran, 2009).

Risk management is the foundation of banking system (Khalid & Amjad., 2012) The foundation determines strength to face unpredictable situation. That strength helps bank to maintain the existence and continuity of the company. If the risk management is implemented, a bank is able to deal with situations that affect the sustainability of the company.

Inflation:

According to (Bodie & Marcus, 2001) inflation is a value wherethe price level of goods and services in general increase. Inflation is a monetary event that shows a tendency to rise in prices of goods in general, which means the decline in the value of money. The main cause and the only one that allows these symptoms appear is the excess of money in circulation as a result of additional amount of money in society.

Various indicators of inflation can be used to measure the rate of inflation, one of which is consumer price index (CPI). CPI contains comparative changes in prices of goods and services which calculated to represent consumer spending. (Badan Pusat Statistik, 2013).

Gross domestic product:

According to (Mc Eachern, 2000), GDP (Gross Domestic Product) is a measure of market value of final goods and services produced by resources within a country during a certain period, usually one year. GDP can also be used to study the economy over time or to compare several economies at a time.

GDP only comprises final goods and services, which is goods and services sold to the last users. Goods and services which are purchased to be processed again and sold again *(intermediate* goods and services) are not included in GDP to avoid the problem of double counting, ie counting a product more than once.

The GDP data used in this study are the data of Indonesia's GDP in 2012-2014 released by the Badan Pusat Statistik. The approach of this research is production approach in accordance with the standard of the Badan Pusat Statistik.

Size:

According (Widjaja, 2009) size is a measure that indicates the size of a company, such as total sales, the average

level of sales, and total assets. In general, large companies that have large total assets are capable of generating huge profits. Company size is a measure of the amount of assets owned by the company that large companies generally have large total assets. Large companies find it easier to access capital markets compared with small ones. The larger companies are the easier to obtain external capital in larger quantities. Therefore, investors are interested in investing in these companies that raise the value of the company.
In this study, the size of a company is measured by Natural logarithm (Ln) of total assets. This is because the total amount of assets of each company is different and even has a large margin which can cause extreme value.

Non-Performing Loans:
Non-performing Loan (NPL) Ratio shows the ability of bank management to manage non performing loan granted by banks. Loans in this case are loans granted to society or company, excluding loans to other banks. Non-performing loans are classified as substandard, doubtful and loss. According to the SBI No. 3 / 30DPNP dated December 14, 2001, Non-Performing Loans (NPL) is measured from the ratio of nonperforming loans to total loans. High NPL will increase cost, potential to bank losses. The higher the ratio, the worse the quality of bank credit that led to the greater number of non-performing loans, and therefore the bank should bear the losses in its operations.
Based on the research objectives, the formulation of the problems proposed, and review of previous theoretical studies, the hypothesis proposed in this study are as follows:
H1: Inflation has negative effect on financial performance
H2: GDP has positive effect on financial performance
H3: Size has positive effect on financial performance
H4: NPL has negative effect on the financial performance

METHODOLOGY:

This is a quantitative research that determinant of causality. In this study the author chose causality of variables influence inflation, gross domestic product, size, and NPL on financial performance of commercial banks. This research use secondary data. The data collect by documentation technique.
Population used for this study is Commercial Bank listed on the Indonesian Stock Exchange 2012-2014. The sampling technique uses purposive sampling.
Variables used in this study were divided into two: dependent variable and independent variables. Dependent variable (Y) in this study is financial performance proxied by ROA. According (Socol & Dănuleţiu, 2013), to calculate ROA, the following formula is used:

$$ROA = \frac{Earning\ Afer\ Tax}{TotalAssets} \times 100\%$$

Independent variables used in this study include: inflation (X1), gross domestic product (X2), size (X3), and NPL (X4)

a. Inflation

Inflation in this study was measured by the Consumer Price Index. Consumer price index is a price index that measures the average of certain goods bought by consumers (Prasetyo, 2011: 207). Inflation can be calculated by using the following formula:

$$LI_t = \frac{IHK_t - IHK_{t-1}}{IHK_{t-1}} \times 100\%$$

Information:
LI_t = Rate of inflation or t periods
IHKt = Consumer Price Index t period
IHKt-1 = Consumer Price Index t – 1 period

b. Gross domestic product

Gross domestic product is the sum of goods and services produced by a country. Calculation of GDP used Ln GDP (Frederick, 2014). GDP is calculated as follows:

$$\text{PDB} = Ln\ (Gross\ Domestic\ Product)$$

c. Size

According to Frederick (2014) bank size is indicated by natural logarithm of total assets. Bank size can be

calculated by using the following formula:

$$Bank\ size = Ln\ (Total\ Aset)$$

d. NPL

Non-performing loan (NPL) is the ratio of nonperforming loans to total loans. The calculation of non-performing loans is as follows:

$$NPL = \frac{Total\ NPL}{Total\ credit} \times 100\%$$

The analysis technique used in this research is multiple linear regression analysis. Before regression analysis is performed, classical assumption to test is carried out first that regression model is not biased or that the regression model is BLUE *(*Best Linear Unbiased Estimator*)*. The classical assumption deviation itself can be seen from the symptoms of normality, multicoloniarity, autocorrelation, and heteroscedasticity.

FINDINGS AND DISCUSSION:

Result:

Test results by using multiple linear regressions showed that score of Test F in Table 1 shows that inflation variable, gross domestic product, size, and NPL simultaneously affect the bank's financial performance.

T test in this study showed that only size variable and NPL affect financial performance.

Table 1: Test Results Statistics

t test				
variable	**B**	**T**	**Sig.**	**Information**
Constant	23.590	.277	.783	
Inflation	-. 114	-.842	.403	No effect
PDB	-1629	-.281	.780	No effect
Size	. 199	2306	.024	Positive effect
NPL	-.461	-9042	.000	Positive effect
test F			.000	Positive effect
Adjusted R ^{2}			58.6%	

Source: SPSS output, 2016

Table 1 shows that only size variable and NPL affects financial performance, it is seen from the significant value of α <0,05. Based on results of multiple linear regression analysis, multiple linear regression equation can be formulated as follows:

Financial Performance = 0.199 Size - 0.461 NPL

The coefficient of determination ($R^{2)}$ which is viewed through *Adjusted* R^2 score in Table 1 have value of 0, 586 or 58.6%. This suggests that the ability of the model to explain variations in the dependent variable is 58.6%, which means that 58.6% of financial performance is affected by inflation variable, gross domestic product, size, and NPL. While the rest explained by other variables such as CAR, ROA, exchange rate and BI rate.

DISCUSSION:

Effect of inflation to Financial Performance:

This study does not find effect of inflation on ROA. The absence of influence between inflation and ROA shows that a decrease or an increase in inflation will not affect the rise or fall of financial performance (ROA) of the bank. The results of this study is supported by research conducted (Ameur & dan Mhiri, 2013), (Zeitun, 2012), and (Wibowo & Syaichu, 2013).

The results does not affect because when inflation increase, bank's profit from rising interest rates will rise. But the salaries to be paid banks will increase. This is in accordance with pasal 44 PP No. 78 tahun 2015, where one of the formulas for determining the minimum wage is inflation. Profit of an increase in interest rates will always be escorted by the salary increase. Therefore, it can be concluded that inflation does not affect bank's financial performance. The results are consistent with the research of (Kanwal & Nadeem, 2013) which states that bank will feel little or no ill-effects of inflation if the benefit from the rising interest rates in a row with the increase in operating costs.

Effect of Gross Domestic Product to Financial Performance:
Based on the test, the result did not fiund no significant effect between gross domestic product of the ROA. The absence of influence of gross domestic product shows that rise or decline in GDP will not affect bank profit. Research conducted by (Ameur & dan Mhiri, 2013), (Kanwal & Nadeem, 2013).
The absence of influence between the gross domestic products due to companies outside the banking sector is more concerned with internal funding of the use of bank loan the company obliged to pay interest charges by making loan. Therefore, the amount of loans extended by banks was not optimal.
GDP is a factor that is difficult to predict or control. GDP is also a factor that does not directly affect the achievement of the bank's profit because changes in GDP only indicate changes in the value of income and expenditure of all people in the country. The GDP change cannot directly affect the bank's operations such as lending because they depend on the policies and strategies of banks to extend credit and to get customers. And to make a profit, bank should be able to attract customers to borrow and transact through the bank (Yanuardi, 2014)

Size Effect on Financial Performance:
The positive influence and significant correlation between the sizes of banks with ROA is in accordance with the concept of the theory of liquidity. Loan repayments or new depositors who deposit their money in banks cause the liquidity of banks rising. Banks with large size will have large total assets; therefore, the number of loans disbursed is big.
The positive influence and significant correlation between the sizes of the bank by ROA is consistent with the results of research conducted by (Rini & Sufian, 2013). Bank size may affect bank's ability to produce profit. Large banks are generally able to generate greater profits than small ones. The larger the bank is, the better the performance. The results of this study are supported by a previous study conducted by (Alkhatib & Harsheh, 2012), and Kurnia and Mawardi (2012).

NPL Effect on Financial Performance:
The results are consistent with the concept of credit management. Credit management should be done as well as possible from loan amount planning, interest rate, lending procedures up to the control of non-performing loans. The extension of credit which is in accordance with the applicable requirements will increase bank profits. However, if it is not suitable with the procedure, it will be detrimental to the bank.
Negative and significant correlation between the NPL and ROA is consistent with the results of research conducted by (Ongore & Kusa, 2013), Akram and Harsheh (2012) and (Rini & Sufian, 2013). The increase of non-performing loans will decrease interest income from loans. If the income is not increased, the profit obtained is also not optimal (Mitasari & Djumahir).

CONCLUSION:

Based on this research, hypothesis testing, and discussion it is concluded that (1) inflation does not affect financial performance (2) gross domestic product does not affect financial performance (3) size has positive effect on financial performance (4) NPL has negative effect on financial performance.
Bank should pay attention on their lending because NPL affects financial performance. For general society, the size and NPL should be paid attention for the funds kept safe. For further research, independent variables can be added and use different proxy.

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