FACTOR ANALYSIS AFFECTS THE STOCK RETURN

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Abstract – The purpose of this research is to examine the factors that influence Stock Return. The data analysis technique used in this research is multiple linear regression analysis. This research uses a causal method. The population in this research are all banking companies listed on the Indonesia Stock Exchange Period 2015-2018. Retrieval of data using a simple random sampling method. The number of research samples is 108 data.

The results of this research indicate that: Loan to Deposit Ratio has a significant effect on Stock Return, Return On Equity and Operating Costs-Operating Income does not have a signific ant effect on Stock Return.

Keywords: Loan to Deposit Ratio, Return On Equity, Operating Costs-Operating Income, Stock Return.

INTRODUCTION

The capital market has an important role in a country's economic activities, including in Indonesia. The capital market has become one of the economic advances, because the presence of the capital market can be an alternative source of funds for companies. In addition, the capital market also provides various investment alternatives for investors to get stock returns.

The development of the capital market in Indonesia has been very advanced and growing rapidly, as evidenced by the number of companies listed on the Indonesian capital market (Indonesia Stock Exchange) recorded up to 2019 there were around 665 companies. Companies listed on the Indonesia Stock Exchange based on industry classifications determined by the Jakarta Stock Exchange Industrial Classification (JASICA) are divided into several sectors, and one of them is the financial sector in which there is a banking sub-sector. There are 45 listed companies in the bank subsector that are still possible to increase or decrease again in the future (http://www.idx.co.id).

Financial institutions, especially in the banking sub-sector have a very important role in the movement of the Indonesian economy. For a country, the role of banks can also be said as a driving force for a country's economy. Therefore, the role of banks greatly influences the economic activities of a country, in other words the progress of a bank in a country can be used as a benchmark for the country's progress. The more developed a country, the greater the role of banking in controlling the country, meaning that the existence of the banking world is increasingly needed by the government and its people (Kasmir, 2016).

In accordance with regulations and data on the financial sector in Indonesia, financial institutions in Indonesia have a large role in development which, when viewed in terms of assets, according to BPS Data, says that intermediary services for banks, commercial banks and rural banks grew 9.57% in 2015 to 9.82 % in 2016. The banking subsector controls 60-70% of the financial services sector. While other financial services sub-sectors such as pawnshops, venture capital, finance companies grew high from 7.98% to 9.24%. The first period of the OJK Board of Commissioners directed the development of the financial services sector in three aspects, namely, contributive, stable and inclusive. The direction of developing the financial services sector has been stated in the 2015-2019 Financial Services Sector Masterplan. The existence of the OJK since 2013 has played a major role not only in driving the progress of the financial services industry and maintaining its stability but also in the contribution of the financial services sector to economic growth and national development. This is what attracts investors to invest in the banking sector (http://economy.okezone.com).

Company value can be seen from investors' perceptions of the company's success rate which is often associated with stock prices. High stock prices make the value of the company also high, and increase market confidence not
only in the company's current performance but also in the company's future prospects. If the financial performance is declared good, then the possibility of profits earned by the company increases, and dividends to be distributed to shareholders will increase as well.

Loan to Deposit Ratio (LDR) is a ratio of total loans to Third Party Funds (DPK) collected by the Bank (Riyadi, 2015: 199). The greater distribution of funds in the form of credit compared to deposits or public deposits in a bank brings consequences the greater the risk that must be borne by the bank concerned. This statement is supported by the results of research conducted by Nugraha and Ajeng (2018), which states that the Loan to Deposit Ratio (LDR) has an effect to stock returns. But research conducted by Bardono (2011) states that the Loan to Deposit Ratio (LDR) has no effect to stock returns.

In addition to using LDR, usually to measure the value of a company using profitability ratios that are proxied by Return On Equity (ROE). ROE is a profitability ratio that measures a company's ability to generate profits from shareholder investments in that company. This statement is supported by the results of research conducted Febriawan and Perdana's (2017), Eliana (2017), which stated that the Return On Equity (ROE) has effect to stock returns. But research conducted by Budiharjo (2018), Satriawan, et al. (2015) states that the Return On Equity (ROE) has no effect to stock returns.

In addition to being profit-oriented, investors take into account the risk posed by a company, if the investor decides to invest the capital he has in the company. Company risk is reflected in Operating Costs-Operating Income (BOPO). The smaller the BOPO ratio shows the more efficient the bank in carrying out its business activities. This statement is supported by the results of research conducted by Bardono (2011), which states that the Operational Costs-Operating Income (BOPO) has effect to stock returns. However, it differs from research conducted by Nugraha and Ajeng (2018) which states that the Operating Cost-Operating Income (BOPO) has no effect to stock returns.

LITERATURE REVIEW

Agency Theory

This theory states that the company is a place or intersection point for contractual relationships that occur between management, owners, creditors, and the government. This theory tells the story of monitoring various kinds of costs and enforcing relationships between various groups. Agency theory is a new direction about agency. Corporations are places or intersection points of many types of relationships according to contracts that exist between management, owners, creditors, and the government. Agency theory that began to develop refers to meeting the main objectives of financial management, namely maximizing shareholder wealth. This wealth maximization is carried out by management called agents. The inability or unwillingness of managers to increase shareholder wealth raises what is called agency problems.

According to Fahmi (2014: 19-20), agency theory (agency theory) is a condition that occurs in a company where management as an executor is referred to further as an agent and the owner of capital (owner) as the principal builds a cooperation contract called the "Nexus of contract", this cooperation contract contains agreements explaining that the management of the company must work optimally to provide maximum satisfaction such as high profits to the capital owner (owner).

Signaling Theory

Signaling theory suggests how a company should give signals to users of financial statements. This signal is in the form of information about what has been done by management to realize the wishes of the owner. Signals can be in the form of promotions or other information stating that the company is better than other companies. Signal theory emphasizes the importance of information released by companies on investment decisions of parties outside the company. Information is an important element for investors and business people because the information essentially presents information, notes or pictures both for past, present and future conditions for the survival of the company. Complete, relevant, accurate, and timely information is needed by investors in the capital market as an analytical tool for making investment decisions.
RESEARCH METHOD

Definition and Operationalization of Variables

Dependent variable

Stock returns are the results obtained from investments by calculating the difference between current period stock prices and the previous period. According to Jogiyanto (2015: 265) the formula of stock returns can be written as follows:

\[
R_{it} = \frac{P_t - P_{t-1}}{P_{t-1}}
\]

Information:

\(R_{it}\) = Actual return of company I on day t
\(P_t\) = Company stock I price on day t
\(P_{t-1}\) = Stock price of company I on day t-1

Independent Variable

Loan to Deposit Ratio (LDR)

This ratio is calculated by dividing total credit to third parties against third party funds.

\[
LDR = \frac{\text{Total credit to third parties}}{\text{Third party funds}} \times 100\%
\]

Return On Equity (ROE)

This ratio is calculated by dividing net income from total equity.

\[
ROE = \frac{\text{Net Income}}{\text{Total Equity}} \times 100\%
\]

Operating Costs-Operating Income (BOPO).

This ratio is calculated by dividing operating expenses against operating income.

\[
BOPO = \frac{\text{Operating Expenses}}{\text{Operating Income}} \times 100\%
\]

Population and Samples Research

The population in this research are banking companies listed on the Stock Exchange during 2015-2018. The sample in this research was determined using the simple random sampling method, which is a random sampling technique by drawing.
Analysis Method

The data analysis method in this research uses SmartPLS software version 3.0. PLS (Partial Least Square) is a variance-based structural equation analysis (SEM) that can simultaneously test measurement models as well as structural model testing. The measurement model is used to test the validity and reliability, while the structural model is used to test causality (hypothesis testing with predictive models).

RESULT AND DISCUSSION

RESULT

Descriptive Test

Table 1 Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
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<tr>
<td>Loan to Deposit Ratio</td>
<td>108</td>
<td>,5061</td>
<td>1,4526</td>
<td>,865741</td>
<td>,1366674</td>
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<td>Return On Equity</td>
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<td>,4891</td>
<td>,5100</td>
<td>,086931</td>
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<td>Operating Cost-Operating Income</td>
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<td>,4880</td>
<td>1,8062</td>
<td>,862394</td>
<td>,1697606</td>
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<tr>
<td>Stock Return</td>
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<td>,009386</td>
<td>,089930</td>
<td>,00116970</td>
<td>,009322350</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>108</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: SPSS 22

Based on the results of descriptive statistics testing in table 1, with the total data of 108 obtained information as follows:

Loan to Deposit Ratio (LDR) has an average value of 86.57%. This shows that on average the ability of banking companies listed on the Indonesia Stock Exchange in 2015-2018 in channeling funds from the public (current accounts, savings, time deposits, certificates of time deposits and other immediate obligations) in the form of credit is quite large. The lowest LDR value is 50.61% owned by Bank Capital Indonesia Tbk and the highest value of 145.26% is owned by Bank Woori Saudara Indonesia Tbk, with a standard deviation of 13.67%.

Return on Equity (ROE) has an average value of 8.69%. This shows that on average the ability of banking companies listed on the Indonesia Stock Exchange in 2015-2018 to use their own capital is still inefficient to generate profits for all shareholders. The lowest ROE value of -48.91% is owned by Bank MNC International Tbk and the highest value of 51% is owned by Bank Ganesha Tbk, with a standard deviation of 10.93%.

Operating Costs-Operating Income (BOPO) has an average value of 86.24%. This shows that on average banking companies listed on the Indonesia Stock Exchange in 2015-2018 were still not efficient in conducting their operations because they were not able to cover operational expenses with operating income. The lowest BOPO value is 48.80% owned by Bank Danamon Tbk and the highest value is 180.62% owned by Bank MNC International Tbk, with a standard deviation of 16.98%.

Stock Return has an average value of 0.001170. This shows that on average the shares of banking companies listed on the Indonesia Stock Exchange in 2015-2018 were still less attractive to investors. The lowest stock return value is -0.009386 owned by Bank Danamon Tbk and the highest value is 0.089930 owned by Bank Central Asia Tbk., with a standard deviation of 0.009322.

Evaluation of the Measurement Model

In this research, hypothesis testing uses the Partial Least Square (PLS) analysis technique with SmartPLS software version 3.0, the following is the result of the PLS model scheme tested:
The loading factor illustrates how big the indicators are related to each construct. The path diagram above shows all indicators have a 1,000 loading factor, which means that all indicators are valid because the loading factor meets the criteria, i.e., the loading factor of the contract must be above 0.70. These results indicate a good relationship between indicators with each construct.

**Evaluation of Structural Models**

After the inspection of the measurement model is fulfilled, then the next is the examination of the structural model. This examination includes the significance of the path relationship and the value of R Square (R²) to see the results of the structural model evaluation. The value of R² aims to find out how much the independent variable influences the dependent variable.

**Table 2 Structural Models**

<table>
<thead>
<tr>
<th>Stock Return</th>
<th>R Square</th>
<th>R Square Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.028</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*Sources: SmartPLS 3.0*

R Square (R²) value of 0.028 means that the variability of the stock return construct can be explained by the LDR, ROE, and BOPO constructs of 2.8%. While 97.2% is explained by other variables not included in this research.

**Hypothesis Test**

**Table 3 Path Coefficient Values**

|                  | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T (|O/STDEV|) | P Values |
|------------------|---------------------|-----------------|-----------------------------|----------|----------|
| BOPO -> Stock Return | -0.223              | -0.195          | 0.254                       | 0.880    | 0.379    |
| LDR -> Stock Return  | -0.104              | -0.110          | 0.051                       | 2.035    | 0.042    |
| ROE -> Stock Return   | -0.121              | -0.136          | 0.162                       | 0.747    | 0.456    |

*Sources: SmartPLS 3.0*

Based on the above table, the results can be used to answer the hypotheses in this research. Hypothesis testing in this research was conducted by looking at the T-Statistic value and the P Values value, it can be seen that the test
of the relationship between constructs showed that the LDR variable was positively related and significantly affected stock returns with a T value > 1.96 and a P value < 0.05. Whereas the BOPO and ROE variables did not significantly influence stock returns with a T value of < 1.96 and a P value > 0.05. So it can be concluded that only the LDR variable has a significant effect on stock returns.

**DISCUSSION**

1. **The Effect of Loan to Deposit Ratio to Stock Return**

Hypothesis test results in table 3 show that the Loan to Deposit Ratio (LDR) has a significant effect to stock returns. This can be seen from the P values of 0.042 smaller than 0.05 with a T value of 2.035.

LDR influence on stock returns because banking companies use LDR as a basis for consideration in making decisions to channel funds from the public in credit. This will affect the ups and downs of stock returns on banking companies.

The results of this research support research conducted by Nugraha and Ajeng (2018) which states that LDR has a significant effect to stock returns.

2. **The Effect of Return On Equity to Stock Return**

Hypothesis test results in table 3 show that Return On Equity (ROE) has no significant effect to stock returns. This can be seen from the P value of 0.456 which is greater than 0.05 with a T value of 0.747.

This result contradicts the theory that ROE is a benchmark of profitability, where shareholders generally want to know the probability level of share capital and the profits they have replanted in the form of invested profits. High and low ROE will affect the level of demand for these shares on the stock exchange and the selling price (Budiharjo, 2018).

A low ROE level indicates the company's poor condition. This means the company has not been efficient in using its own capital to generate profits for all its shareholders. So that it will reduce the attractiveness of investors to invest in these companies which have an impact on decreasing stock prices and the stock returns obtained will be small.

The results of this research support research conducted by Budiharjo (2018) and Satriawan, et al. (2015) which states that ROE has no significant effect to stock returns.

3. **The Effect of Operating Costs-Operating Income to Stock Returns**

Hypothesis test results in table 3 show that Operational Costs-Operating Income (BOPO) has no significant effect to stock returns. This can be seen from the P values of 0.379 greater than 0.05 with a T value of 0.880.

A high level of BOPO shows that operational costs incurred are higher than operating income earned. This means that the company has not been efficient in carrying out its operations which results in a smaller profit and a smaller profit.

The results of this research support research conducted by Nugraha and Ajeng (2018) which states that BOPO has no significant effect to stock returns.

**CONCLUSIONS**

1. **Loan to Deposit Ratio (LDR) has a significant effect to stock returns.** This is because banking companies use LDR as a basis for consideration in decision making to channel funds from the public in credit. This will affect the ups and downs of stock returns on banking companies.
2. Return on Equity (ROE) does not have a significant effect to stock returns. A low ROE level indicates the company’s poor condition. This means the company has not been efficient in using its own capital to generate profits for all its shareholders. So that it will reduce the attractiveness of investors to invest in these companies which have an impact on decreasing stock prices and the stock returns obtained will be small.

3. Variable Operating Costs-Operating Income (BOPO) does not have a significant effect to stock returns. A high level of BOPO shows that operational costs incurred are higher than operating income earned. This means that the company has not been efficient in carrying out its operations which results in a smaller profit and a smaller profit.

SUGGESTIONS

It is expected that in subsequent research using other proxies such as Capital Adequacy Ratio (CAR), Cost of Loanable Fund (COLF), Return On Risked Asset (RORA) so that it is more comprehensive and the results of the research are much better.

REFERENCES