Influence of Nonfinancial Information on Abnormal Returns

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Abstract—Financial information has a weakness in biases as a reference in decision making by investors. Nonfinancial information is needed to supplement financial information to show a company’s overall profile. This study aims to analyze the level of nonfinancial information disclosure and influence of prospector, defender, and analyzer strategies to level of nonfinancial information disclosure with control variable industry, age, share owned by public, and size of the company. The research also examines whether the level of nonfinancial information disclosure has a negative influence on abnormal returns with return on equity (ROE) and price-book value (PBV) as the control variables. The research is quantitative, with a sample number of 819 company annual reports from the period between 2014 and 2015, as listed on the Indonesia Stock Exchange. The research explains that prospector strategy has significantly positive influence on the level of nonfinancial information disclosure and defender strategy has significantly negative influence on the level of nonfinancial information disclosure. The industry, age, and share owned by the public have significantly positive influence on level of nonfinancial information disclosure. The research also finds that the level of nonfinancial information disclosure has a significantly positive influence on abnormal returns. While ROE has an insignificantly positive influence on abnormal returns, PBV has a significantly negative influence.

Keywords—disclosure, nonfinancial information disclosure, abnormal returns

I. INTRODUCTION

Many investors rely solely on financial information to make decisions [1]. While this is not wrong to do, as financial information is very easy to understand, the lack of financial information is biased due to, for example, improper reporting times and earnings management indications. Usually, investors need nonfinancial information to reduce the bias in financial information. Nonfinancial information helps to describe a company thoroughly. Therefore, companies are required to always be transparent in disclosing information [2].

According to Healy and Palepu [3], disclosure of information by firms is also useful in reducing information asymmetry. Managers play an important role in reducing information asymmetry by providing a signal in the form of disclosure of information to investors. With disclosure, the balance of information between agents and principals can occur. Lev [4] states that full disclosure reduces the inequity of access to information among investors by providing equal access to information. Due to the importance of information disclosure, the Jenkin Committee was formed in 1991 by the American Institute of Certified Public Accountants and aims to examine the nature or level of information disclosed by the company for its users [5]. The research results of the committee provide recommendations to companies to give additional information [6]. The information disclosed by the company can be either mandatory information or voluntary information [7]. Mandatory disclosure is the disclosure of information required by applicable regulations. Disclosure not required by law is called voluntary disclosure.

Disclosure of nonfinancial information has become a very important issue in recent years [8]. According to Kaplan and Norton (1996) in Basri [9], disclosure of nonfinancial information is a good indicator in assessing a company's performance in the future compared to disclosure of financial information. Even the disclosure of nonfinancial information has an impact on improving financial performance in the future [9]. Several members of the Financial Accounting Standards Board stated in a May 2001 committee meeting that the evaluation of academic research on nonfinancial information disclosure is very important in reporting performance for the future [10]. Rinerman (1990) in Asih [5] states that the information requirement for users of financial statements cannot be met by disclosure of financial information so that investors move to disclosure of nonfinancial information in the annual report. Obviously, by this time, in the annual report, companies state and even disclose nonfinancial information more widely.

The reason being why company disclose nonfinancial wider is company strategy. There are 3 company strategies, prospector, defender, and analyzer [36]. Companies that have a prospector strategy see market opportunities and experiments at any time [11]. This strategy focus on innovation and creativity to create new product so spend a lot of for capital expenditure [2]. This company will disclose nonfinancial information more widely to make investor believe for what company do.

The opposite strategy is a defender strategy, which is done by companies that have a narrow market and are not looking for market opportunities. Defender strategy aims for maximum level of efficiency so the capital expenditure is small. At the end, company will disclose nonfinancial information less.
Analyser strategy is between prospector and defender. This strategy minimize risk but utilize available opportunity. Company with analyser strategy will see competitor’s ideas and try to adopt it. Company with analyser strategy has disclosure of nonfinancial information wider than defender but less than prospector.

The benefits of the disclosure level of nonfinancial information are quite widely researched as pertains to lowering the cost of capital stock [11, 14, 15], increasing abnormal returns [16], increasing trading volume [17], and increasing value relevance [5]. It is still interesting to examine the benefits to increasing abnormal returns, due to companies frequently providing a signal to investors with the aim that the stock market value of the company can reflect the company’s value. The company expects a positive reaction and an increase in the value of the company from the investors’ perspective over the disclosures made. The positive response in the capital market is shown by the abnormal returns. According to Jogiyanto [18], abnormal returns are a sign or indicator that can be used to see the condition of the current market or reaction.

As for the effects of abnormal returns, previous research has suggested that there is an influence of voluntary disclosure of information on abnormal returns [16, 19-21]. In subsequent research, there has been found to be an effect of returns on equity to abnormal returns [16]. Cheng [16] concluded that price-to-book value influences abnormal returns. In other research, it has been concluded that there is an influence of disclosure by applying internet financial reporting to abnormal returns [22]. Similarly, the effect of information disclosure on abnormal returns has been examined by Adhariani [7], Junaedi [17], and Asih [5]. However, there is little specific research on the effect of nonfinancial information disclosure on abnormal returns.

Given the importance of the information in the annual report to stakeholders and based on previous research on the disclosure level and benefits, it is interesting to further examine influencer of prospector, defender, and analyser strategy on disclosure nonfinancial information and whether disclosure of nonfinancial information has value relevant to the investor reflected with abnormal returns.

In this research, the following questions were formulated:
(i) whether the prospector, defender and analyser strategy affected the disclosure level of nonfinancial information, and
(ii) whether disclosure level of nonfinancial information has value relevance for investors.

The research is expected to be beneficial to related parties, such as regulators, companies, investors, or researchers.

II. THEORETICAL REVIEW

A. Contract, Agency, and Signaling Theory

First, Jensen and Mecking [24] describe the agency relationship as one or more principal contracts and distribute instructions or authority to the agent to perform services or thoughts with the principal's name to make the best decisions for the principal. Contract theory is relevant to this research because the agent will find a way to maximize the value of the company. One such way is to disclose information to the public.

Jensen and Mecking [24] first introduced the agency theory, which developed very rapidly due to the separation of company management between shareholders or principals with management or agents. Agents tend to make decisions based on personal goals. The relationship between principal and agent can be an issue if there is information asymmetry. Information asymmetry may be a hidden act or manifest in the form of hidden information owned by a manager acting as an agent. There are two forms of information asymmetry [25], namely, adverse selection and moral hazard. The existence of information hidden in the selection of policies that benefit the management can cause adverse selection. Moral hazard is a hidden action by management that will lead to violations and unethical actions.

According to Jensen and Mecking [24], there are two ways to reduce the chances of action management that harms shareholders: supervision and bonding. There is a cost to carry out surveillance and restrictions called agency cost, which consists of the cost of supervising the agent’s performance by the principal, the limitations given to the agent, and the losses incurred despite both surveillance and restriction, which may be referred to as residual loss.

The existence of asymmetric information between management parties that have full corporate information with the investors who are considered to have less information led to the theory of signals [11]. Direct disclosures are conducted and become signals that are relevant to financial information so that the market value of a company's stock can increase and reflect the company's value, while the other signal is indirect.

B. Theory and Disclosure Level

According to Hendriksen (1994) in Asih [5], information to be disclosed may depend on the reader's expertise and on the required standards. Three commonly applied disclosure concepts are as follows:

1. Full disclosure

   The impression that is presented in full disclosure is information overload, so many parties say it is not good [5]. Detailed presentations filled with nonessential information will make all the information blurry.

2. Fair disclosure

   Fair disclosure indirectly aims to provide fair and equal treatment ethically to users of the report by providing appropriate information to potential readers.

3. Sufficient disclosure

   This concept is often used instead of full disclosure and fair disclosure and is the minimum disclosure to be made under applicable regulations. Sufficient disclosure is presented so that investors can interpret the numbers.

The level of information disclosure is a comprehensive level in the presentation of information by the company through annual reports. The disclosure level also illustrates the degree of conformity of disclosure in accordance with the provisions of applicable regulations. This level of disclosure has been widely used in research such as Amihud and Mendelson [26], Diamond and Verrechia [27], and Botosan [28]. A required quantification process facilitates calculations in research, either for level or quality of disclosure.
C. Abnormal Returns

According to Elton & Gruber [29], shares show ownership rights over company assets and liabilities. Shares are also the property of the company's profits and losses. Returns on share ownership occur in the form of dividends and stock returns. According to Yulita [30], dividends are the rights of shareholders of the company's profits from running its business activities. Return of stock is the level of profit or loss earned by investor on stock investments made.

Investors usually expect a future return on their investment or so-called expected return. However, under real conditions, investors get the actual returns, which occur at one time. The difference between expected and actual returns is an abnormal return. If the actual return is greater than the expected return, then the abnormal return will be positive. However, the abnormal return will be negative if the actual return is less than the expected return.

A cumulative abnormal return is the sum of abnormal returns in one observation period. The determination of the window in the calculation of cumulative abnormal returns is important. If the window is determined to be too short, then the cumulative abnormal returns cannot see the market reaction that occurs, because investors are slow to react [4]. The window to calculate the optimal return is 15 months, starting from April of the current year until June of the following year, according to Collins et al. in Lev [4].

III. RESEARCH METHODOLOGY

A. Conceptual Framework

The research was developed into two research models. The first study examines prospector, defender, and analyser strategy affect the disclosure level of nonfinancial information. The second study was conducted to test the effect of nonfinancial information disclosure on abnormal returns.

The model 1 hypothesis examines prospector, defender, and analyser strategy influence the disclosure level of nonfinancial information. Based on research conducted by Wondabio [11], company with prospector strategy has wider disclosure nonfinancial information. The control variable for this research is industry type, age, ownership structure and firm size.

Wondabio [11] categorizes strategies based on prospector and defender criteria. A prospector is an organization that at any time sees market opportunities and experiments. This type of organization is less efficient. The greater value of the proportion of capital expenditures to the asset value, the more the company implements the prospector strategy. Conversely, the smaller the proportion of capital expenditures expenditure on asset value, the more the company implements defender strategies. Analyser strategy is between prospector and defender strategy.

B. Hypothesis

H1: The prospector strategy has a positive effect on the disclosure of the company's nonfinancial information.

H2: The defender strategy has a negative effect on the disclosure of the company's nonfinancial information.
H₃ : The nonfinancial information disclosure level has a positive effect on abnormal returns.

C. Operational Variable Summary

Based on the above two research models, there are two dependent variables: (i) the nonfinancial information disclosure level and (ii) cumulative abnormal returns. Independent variables are (i) prospector strategy, (ii) defender strategy, and (iii) nonfinancial information disclosure level. Control variables are (i) firm size, (ii) industry type, (iii) age, (iv) share ownership by public, (v) ROE, and (vi) PBV (see Table I).

D. Data Collection and Sample Selection Methods

The data used in this study is secondary data that can be accessed anytime and from anywhere. Secondary data are (i) annual reports of each company listed on the Indonesia Stock Exchange 2014 and 2015, available on www.idx.co.id and the company website, (2) monthly stock prices in 2014, 2015, and 2016, obtained from the website www.idx.co.id, and (3) other data than those sources obtained from the Indonesian Capital Market Directory (ICMD) 2014, 2015 and 2016, and the Fact Book of 2014 and 2015 (see Table II).

IV. RESEARCH RESULTS

A. Description of Sample Statistics

Table III presents descriptive statistics on the dependent variable and independent variables in the study.

The average disclosure of nonfinancial information (DISC) is 63.21, meaning the average company reveals more than 20 out of a total of 33 items. All companies, without exception, disclose 13 items of nonfinancial information, as is mandatory. This proves that companies that obey the rules applied to business operations can run.

| TABLE I: RESEARCH VARIABLE OPERATIONAL SUMMARY |  |
|---|---|---|
| Variable | Description | Scale |
| DISC | Total nonfinancial information disclosure level | Ratio |
| STRAP | Strategy prospector | Nominal 1 |
| STRAD | Strategy defender | Nominal 1 |
| REG | Regulated and nonregulated industry | Nominal 1 |
| YEAR | Company age | Ratio |
| OWNP | Share ownership ratio by public | Ratio |
| SIZE | Company size | Ratio |
| ROE | Return on equity | Ratio |
| PBV | Price-to-book value | Ratio |
| CAR | Cumulative abnormal returns | Ratio |

| TABLE II: SAMPLE DETERMINATION PROCEDURE |  |
|---|---|---|---|---|---|
| Description | 2014 | 2015 | 2014 | 2015 |
| Total companies | 511 | 528 | 511 | 528 |
| Total companies excluding the financial industry | 419 | 422 | 419 | 422 |
| Total companies that issue an annual report | 419 | 422 | 419 | 422 |
| Total listed companies in midyear and exit | 16 | 2 | 16 | 2 |
| Total broken annual reports and less informed | 1 | 2 | 1 | 2 |
| Collected sample | 403 | 418 | 403 | 418 |
| Outlier data | 2 | 0 | 2 | 0 |
| Total samples that meet criteria | 401 | 418 | 401 | 418 |

The sample uses listed companies on the Indonesia Stock Exchange in 2014 and 2015. The population in the study are all listed companies on the Indonesia Stock Exchange. Sample selection is done by purposive sampling. The total number of research samples is 819.

Table information:

DISC : Nonfinancial information disclosure level
STRAP : Strategy prospector
ROE : Return on equity
STRAD : Strategy defender
PBV : Price-to-book value
REG : Company industry
CAR : Cumulative abnormal return

YEAR : Company age

The average level of company strategy prospector (STRAP) is 40% and defender strategy (STRAD) is 40%. This indicates that 40% of company use prospector strategy, 40% use defender strategy and remaining 20% use analyser strategy.

Industry type variables (REG) showed an average of 0.11, meaning that 11% of companies listed on the Indonesia Stock Exchange are in a supervised industry. The remaining 89% are in the unattended industry.
Youngest company's age is 3 years old, meaning that the new company has been established for that long and is already listed on the Indonesia Stock Exchange. This indicates that the company prefers outside funding from the community with much public control, compared to controls only from banks or investors.

The average shareholding percentage by the public (OWNP) is 27%. A higher public shareholding (OWNP) percentage indicates that a company prefers funding from the public.

The company size (SIZE) shows an average of 8,222 billion rupiah. The largest company size (SIZE) is 245,533 billion rupiah.

The average return on equity (ROE) is 0.07, with the highest value at 5.08 and the lowest at −0.95. ROE with a negative value indicates that the company suffered a loss in the current year or the company's capital cannot bail accumulated losses.

The average price-to-book value (PBV) is 2.11, with the highest PBV at 8.27 and the lowest at −121.1. A negative PBV reflects the current equity in minus or that the company has suffered substantial losses so that the company's capital cannot cover such losses.

Returns (CAR) is 0.01, with a highest value of 2.02 and a lowest value of −2.03. A positive CAR indicates that firm return is higher than market return. A negative CAR indicates that the firm's return is smaller than the market return.

B. Result Model Research 1

The research regression is tested with Model 1 as follows:

\[
\text{DISC} = \beta_0 + \beta_1\text{STRAP} + \beta_2\text{STRAD} + \beta_3\text{REG} + \beta_4\text{AGE} + \beta_5\text{OWNP} + \beta_6\text{SIZE} + e
\]

The value of determination coefficient, adjusted for disclosure level of nonfinancial information (DISC), is 61.1%, which means all independent variables are only able to explain variation from dependent variables equal to 61.1%, while the rest are explained by other variables not counted in the regression model (see Table IV).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Prediction</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Strategy prospector (STRAP)</td>
<td>Positive (+)</td>
</tr>
<tr>
<td>H2</td>
<td>Strategy defender (STRAD)</td>
<td>Negative (-)</td>
</tr>
</tbody>
</table>

C. Result Model Research 2

The research regression is tested in Model 2 as follows:

\[
\text{CAR} = \beta_0 + \beta_1\text{DISC} + \beta_2\text{ROE} + \beta_3\text{PBV} + e
\]

Regression results showed that the level of disclosure of nonfinancial information (DISC) had a significant positive effect with CAR at a level of 5%, and PBV had a significant positive effect with CAR at a level of 5%. However, ROE has a negative but insignificant effect on CAR at a level of 5% (see Table VI).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.00</td>
</tr>
<tr>
<td>DISC</td>
<td>0.00</td>
</tr>
<tr>
<td>ROE</td>
<td>0.60</td>
</tr>
<tr>
<td>PBV</td>
<td>0.02</td>
</tr>
<tr>
<td>R square</td>
<td>0.09</td>
</tr>
<tr>
<td>Adjusted R square</td>
<td>0.08</td>
</tr>
<tr>
<td>Std. error of estimate</td>
<td>5.50</td>
</tr>
<tr>
<td>Sig</td>
<td>0.00</td>
</tr>
</tbody>
</table>

The value of coefficient of determination, adjusted for nonfinancial information disclosure level (DISC), is 8.4%, which means that all independent variables are only able to explain the variation of the dependent variable by 8.4%, while the rest are described by other variables not in the regression model (see Table VII).

V. DISCUSSION

Prospector strategy (STRAP) has proven to have a significant positive effect on the dependent variable level of disclosure of nonfinancial information (DISC). Also the
result show negative significant for strategy defender (STRAD) to level of disclosure of nonfinancial information (DISC). More prospector for company strategy, more nonfinancial information will be disclosed. This indicate, prospector strategy consider nonfinancial information is more important than company that has defender strategy. The results of this study also support previous research conducted by Wondabio [11].

Disclosure of nonfinancial information (DISC) proved to have a significant positive effect on the dependent variable CAR. This is because investors see the disclosure of nonfinancial information in a value-added company, so investors react positively. This means that investors have started to disclose nonfinancial information as a basis for investment consideration. The results of this study also support previous research conducted by Chang [16] and Amalia et al. [32].

VI. CONCLUSION

The study found that all listed companies on the Indonesia Stock Exchange in 2014 and 2015 are comply in disclosing nonfinancial information that is mandatory in annual reports. Companies wish to avoid incurring penalties from the regulators that will cause licensing issues for the companies.

The study aims to analyze and see influence of prospector and defender strategy to extent of disclosure level of nonfinancial information. Based on the results of the tests conducted, the study concluded that there is a significant positive effect prospector strategy on the level of nonfinancial information disclosure and significantly negative effect defender strategy on the level of nonfinancial information disclosure. The extent of disclosure of nonfinancial information to companies that have a prospector strategy will cause investors to pay less to obtain nonfinancial information while the lack of disclosure of nonfinancial information to companies that have a defender strategy will cause investors to incur greater costs of information non-financial. The results of the study are in accordance with the theory of relevance and signal theory.

The study also analyzed and saw the effect of nonfinancial information disclosure level on abnormal returns. The study concluded that the nonfinancial information disclosure level has a significant positive effect on abnormal returns. The research control variable ROE has a positive but insignificantly effect on abnormal returns, and PBV has a significant negative effect. Investors react positively to the disclosure of nonfinancial information reflected from the abnormal returns. This means that investors have started to make disclosure or nonfinancial information a basis for investment consideration.

VII. SUGGESTIONS

Regulators are expected to review information felt to be important to the reader of the annual report, particularly the information elements that are included in the nonfinancial information and that have not been widely disclosed by the company. Thus, regulators can play a role in enhancing information transparency and providing optimal protection to shareholders.

The company is expected to develop appropriate disclosure strategies and policies and to interact with investors in the capital market to understand their information needs to reduce the communication gap between principal and agent. Companies need to improve disclosure of nonfinancial information to the public, given that much of the nonfinancial information is of concern to investors but very little is disclosed in the company's annual report.

The investor can make an investment decision not only from the disclosure of financial information but also from nonfinancial information. The implementation of transparency in the company is now gaining more attention because the stakeholders need to know whether the company has disclosed information related to operations in the media annual reports or in other media.

REFERENCES


