

# The Determinants of Internet Corporate Reporting in Indonesia

Sasya Sabrina<sup>a</sup>, <sup>a</sup>Accounting Department, Faculty of Economics and Communication, Bina Nusantara University, Jakarta, Indonesia 11480, Email: [sasyasabrina@binus.ac.id](mailto:sasyasabrina@binus.ac.id), [sasyasabrina@gmail.com](mailto:sasyasabrina@gmail.com)

This research aims to analyse the determinants of Internet corporate reporting in Indonesia. The determinants studied in this research are firm size, leverage, profitability, and liquidity. The population of this study is the Indonesian manufacturing companies listed in the Indonesia Stock Exchange in 2018. Based on purposive sampling, the final data used are 121 quantitative data. The data of this research are obtained from the financial statements of listed manufacturing companies and the official website of the companies. The data is analysed using a multiple regression test. The research results show that the firm size affects the Internet corporate reporting, leverage has no effect on Internet corporate reporting, profitability has no effect on Internet corporate reporting, and liquidity also has no effect on Internet corporate reporting.

**Key words:** *Internet Corporate Reporting, Firm Size, Leverage, Profitability, Liquidity.*

## Introduction

As with other countries, technological developments in Indonesia have been highly developed. People are used to living side by side with technological tools. The readiest examples are the Internet and smartphones. The community does not need to go to a place to obtain information; the community also does not need a long time to be able to obtain the information needed. Every time there is something they want to know, they just have to browse the Internet and all the information is available. Today's information providers also present more information on online media than print media.

This condition also applies to the business industry in Indonesia. The Internet is a new means of communication in business. Almost all publicly listed companies in Indonesia have official websites. On the website, companies can submit various information, both financial and non-financial, that can be accessed by everyone without any time and place restrictions. One of the key pieces of information submitted by a company through its official website is in the form

of financial reports and annual reports, or often referred to as Internet financial reporting (Ettredge, Richardson, & Scholz, 2002; Sabrina, Lisandra, Meiryani, & Handoko, 2019). Internet reporting can provide up-to-date, timely and useful information (Abdelsalam & Street, 2007; Al-Htaybat, 2011) and can reduce information asymmetry (Gowthorpe, 2004), especially related to financial information because the value of financial information will decline over time (Ezat & El-Masry, 2008).

Many factors can affect Internet corporate reporting, one of which is company characteristics such as firm size, leverage, profitability, and liquidity. Firm size can affect Internet corporate reporting. Large companies have many resources, high technological capabilities, and low incremental costs to develop their websites and conduct Internet corporate reporting (Allam & Lymer, 2003; Henchiri, 2011; Sabrina et al., 2019). In addition, large companies have greater pressure to convey company conditions to the public (Sabrina & Thersia, 2019) because large companies have high business complexity (Oyelere & Kuruppu, 2012). Companies with high leverage will get a lot of attention from debtholders. Therefore, the company will conduct Internet corporate reporting so that the debtholder can monitor the company and can obtain timely information (Boubaker, Lakhal, & Nekhili, 2012; Debreceeny, Gray, & Rahman, 2002). Companies that achieve high profitability tend to deliver it to the public (AbuGhazaleh, Qasim, & Roberts, 2012; Al-Htaybat, 2011; Aly, Simon, & Hussainey, 2010), and one of the ways to deliver is through Internet corporate reporting. As with profitability, companies with high levels of liquidity also tend to convey this information to the public because liquidity is one indicator that stakeholders use in assessing a company (Ezat & El-Masry, 2008).

Research on the determinants of Internet corporate reporting in Indonesia still provide different results. This research will study what factors can influence a company's decision to do Internet corporate reporting. This research will focus on the factors; firm size, leverage, profitability, and liquidity. From the results of this study, it is hoped that investors can make the right investment decisions by looking at how many companies do Internet corporate reporting.

## **Literature Review & Hypothesis Development**

### ***Literature Review***

#### ***Agency Theory***

According to Jensen & Meckling (1976), agency theory describes that there are differences in interests between management (agent) and company owner (principal). Principals are shareholders or investors, while agents are management who manage the company (manager). Conflicts of interest between principals and agents occur because of the possibility that agents

do not always act in accordance with the wishes of the principals, causing agency costs. Agency costs include three things, namely; monitoring costs, bonding costs, and residual loss. Monitoring costs are expenses paid by principals to measure, observe and control agent behaviour so as there is no deviation. These costs arise due to an imbalance of information between the principal and the agent. In certain situations, an agent may incur corporate resources (bonding costs) to guarantee that the agent will not act in a way that can harm the principal, or to ensure that the principal will compensate if he actually performs the action; but differences can still occur between agency decisions and decisions that can maximise the welfare of the principal. The value of money equivalent to the reduction in welfare experienced by the principal is called residual loss. Internet corporate reporting is one way to reduce information asymmetry and monitoring costs (AbuGhazaleh et al., 2012).

### ***Signalling Theory***

Managers have more information about the company than investors, so managers will pass on this information to investors that could be useful in making decisions (Sabrina et al., 2019). This theory is called signalling theory. Signalling theory is also widely used when explaining Internet corporate reporting. According to signalling theory, companies try to convey the same number of things as other companies in the same industry because if they are not doing so, stakeholders will assume that there is bad news that is hidden by the company (Craven & Marston, 1999). Therefore, to avoid underestimation of the market and increase the trust of shareholders, the company seeks to convey good information to the public. One way to convey this information is by Internet corporate reporting (Aly et al., 2010).

### ***Hypothesis Development***

#### ***The Effect of Firm Size on Internet Corporate Reporting***

Firm size can be associated with Internet corporate reporting for several reasons. Based on agency theory, differences or gaps between principals and agents in large companies will result in information asymmetry, so companies need large agency costs for monitoring activities (Jensen & Meckling, 1976). According to the political cost hypothesis, large companies will be more visible than small companies, so large companies will get the spotlight from regulators and get pressure from several parties in the community (Andrikopoulos & Diakidis, 2011). Therefore, large companies need to incur additional costs for voluntary disclosure. To reduce these costs, companies can implement Internet corporate reporting (AbuGhazaleh et al., 2012; Alali & Romero, 2012; Boubaker et al., 2012). In addition, the complexity of products, business processes and networks in large companies makes these companies need more complex management information systems for control purposes (Ashbaugh, Johnstone, & Warfield, 1999). Large companies also have large resources to be able to do Internet corporate reporting,

so the additional costs required by these companies to implement Internet corporate reporting will be smaller than for smaller companies (Oyelere, Laswad, & Fisher, 2003).

Based on the explanation above, the first hypothesis of this research is:

**H1:** Firm size positively affects Internet corporate reporting

### ***The Effect of Leverage on Internet Corporate Reporting***

The relationship between leverage and Internet corporate reporting can be explained using agency theory (Bekiaris, Psimada, & Sergios, 2014). The higher the company's debt, the higher the monitoring costs needed to ensure that agency problems do not occur. Therefore, companies with high debt levels will convey more information through various communication channels, including Internet corporate reporting, in order to reduce information asymmetry (Al Arussi, Selamat, & Mohd Hanefah, 2009). Boubaker et al. (2012) stated that Internet corporate reporting can reduce agency costs because stakeholders can easily obtain information about the company so they can monitor the company.

Based on the explanation above, the second hypothesis of this research is:

**H2:** Leverage positively affects Internet corporate reporting

### ***The Effect of Profitability on Internet Corporate Reporting***

The relationship between profitability and Internet corporate reporting can be explained by signalling theory (Mokhtar, 2017). Companies that succeed in obtaining high profits will deliver the good news to the public (AbuGhazaleh et al., 2012) with the aim of obtaining a good reputation from stakeholders, while companies with low profitability will disclose less information so they do not need to convey reasons a decrease in profit or loss (Al Arussi et al., 2009). Companies can convey this good information through Internet reporting (Bollen, Hassink, & Bozic, 2006; Marston & Polei, 2004). This disclosure is done by managers so that they get incentives, compensation, or better reputation (Oyelere et al., 2003) and protect companies from undervaluation (Boubaker et al., 2012).

Based on the explanation above, the third hypothesis of this research is:

**H3:** Profitability positively affects Internet corporate reporting

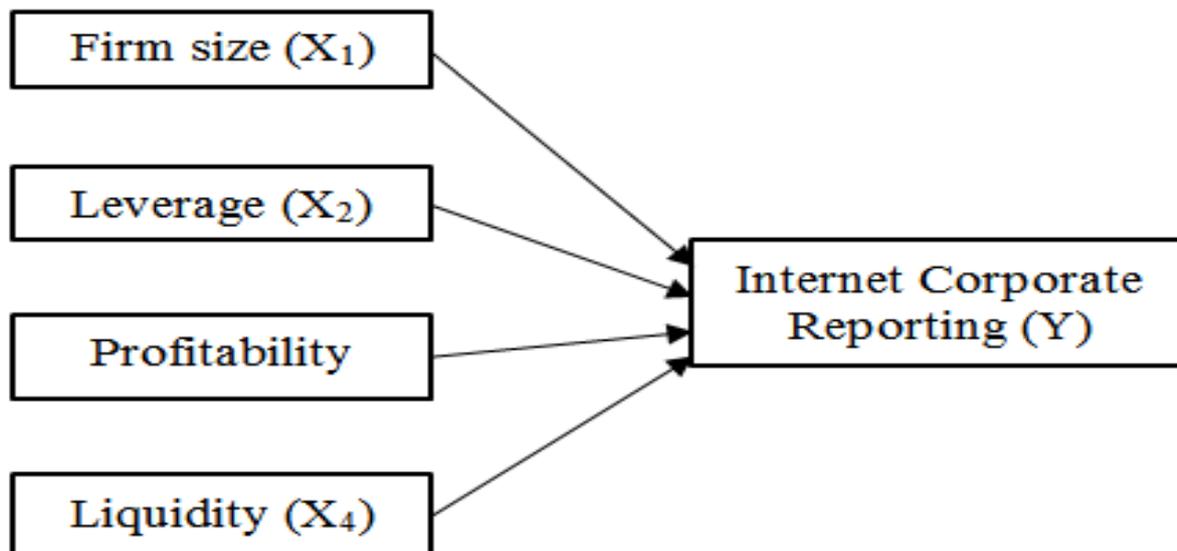
### *The Effect of Liquidity on Internet Corporate Reporting*

The relationship between liquidity and Internet corporate reporting can also be explained by signalling theory and agency theory (Aly et al., 2010). Companies that have a high level of liquidity will try to publish it to the public so that their company looks different from companies with a low level of liquidity. However, based on agency theory, companies with low liquidity will convey more information as demanded by stakeholders (Aly et al., 2010). The use of Internet corporate reporting in the delivery of information related to liquidity is a form of corporate confidence in the company's solvency in the future (Oyelere et al., 2003).

Based on the explanation above, the fourth hypothesis of this research is:

**H4:** Liquidity positively affects Internet corporate reporting

**Figure 1.** Research Framework



### **Methods**

#### *Sample, Data, and Methods*

The population in this study is manufacturing companies. A sample is selected using the purposive sampling method. The criteria of sample selection are manufacturing companies listed on the Indonesia Stock Exchange before 2018 that have an official website: a website that can be accessed and is not under maintenance. From the criteria above, 121 companies are chosen as samples for this research. Data used in this research is collected from the audited financial statements and the official websites of the companies selected. Data will be tested using multiple linear regression consisting of the test of coefficient of determination, F test to

test the simultaneous effect, and t test to test partial effect of the independent variables. The regression equation model of this research is:

$$ICR = \alpha + \beta.SIZE + \beta.LEV + \beta.PROF + \beta.LIQ + \varepsilon_1$$

ICR : Internet Corporate Reporting

SIZE : Firm Size

LEV : Leverage

PROF : Profitability

LIQ : Liquidity

### *Variable Operationalisation*

#### *Dependent Variable*

Data for dependent variable is directly collected by exploring the company's official website. The measurement of Internet corporate reporting (Internet corporate reporting index) is based on the characteristics indicators developed by Dâmaso & Lourenço (2011), with some modifications in the terminology. The indicators of Internet corporate reporting disclosure are classified in four categories:

- Information on the first page of the corporate website (ICR-1P)
- Investor relations on the Internet (ICR-IR)
- Annual report on the Internet (ICR-AR)
- Other information on the Internet (ICR-OI)

The Internet corporate reporting index is the sum of these four categories:

$$ICR = ICR-1P + ICR-IR + ICR-AR + ICR-OI$$

**Table 1:** Internet Corporate Reporting Characteristics and Measurement

| <b>Information on the first page of the corporate website</b>                           |  |
|---|--|
| Link to "Investor Relations" or "Investor" or "Shareholder information" on the 1st page | 1 if there is a link to "Investor Relations" or "Investor" or "Shareholder information" on the 1 <sup>st</sup> page, and 0 otherwise |
| Latest News on the 1st page   | 1 if there is Latest News on the 1st page, and 0 otherwise   |
| <b>Total ICR-1P</b>   | <b>The sum of scores of the above 2 characteristics</b>  |
| <b>Investor relations on the Internet</b>   |  |

|  |   |
|--|---|
| Investor relations contacts  | 1 if there is an investor relations contact, and 0 otherwise  |
| Investor e-mail alert (news)   | 1 if it is possible to subscribe to an investor e-mail alert, and 0 otherwise                       |
| Investor FAQ (frequently asked questions)  | 1 if there is FAQ, and 0 otherwise  |
| <b>Total ICR-IR</b>  | <b>The sum of scores of the above 3 characteristics</b>   |
| <b>Annual report on the Internet</b>   |   |
| Download the annual report of the year   | 1 if it is possible to download the annual report for the year, and 0 otherwise                     |
| Download the annual report of the last 3 years   | 1 if it is possible to download the annual report of the last 3 years, and 0 otherwise              |
| Download the financial statement separately in PDF format  | 1 if it is possible to download the financial statement separately in PDF format, and 0 otherwise   |
| Download the financial statement separately in Excel format  | 1 if it is possible to download the financial statement separately in Excel format, and 0 otherwise |
| <b>Total ICR-AR</b>  | <b>The sum of scores of the above 4 characteristics</b>   |
| <b>Other information on the Internet</b>   |   |
| Financial calendar   | 1 if there is a financial calendar available, and 0 otherwise                                       |
| Share price information  | 1 if there is share price information available, and 0 otherwise                                    |
| 5-year summary (financial ratios, key statistics, or other information presented apart from the annual report) | 1 if there is a 5-year summary, and 0 otherwise   |
| <b>Total ICR-OI</b>  | <b>The sum of scores of the above 3 characteristics</b>   |
| <b>ICR Index</b>   | <b>ICR-1P + ICR-IR + ICR-AR + ICR-OI</b>  |

Source: (Dâmaso & Lourenço, 2011)

### *Independent Variables*

Firm size is a measured natural log of total assets, leverage is measured using debt to equity ratio (total liabilities divided by total equity), profitability is measured using return on assets (earnings after tax divided by total assets), and liquidity is measured using current ratio (current assets divided by current liabilities).

## Results and Discussion

Below is the result of multiple linear regression:

**Table 2:** Test Result

| Variables         | Coefficient | t-stat  |
|-------------------|-------------|---------|
| Constant          | -7.919      | -1.993* |
| Firm Size         | 0.491       | 3.575*  |
| Leverage          | 0.130       | 0.887   |
| Profitability     | 2.432       | 1.171   |
| Liquidity         | 0.169       | 1.283   |
| Adjusted R Square |             | 9.3%    |
| F test            |             | 4.091   |
| Sig               |             | 0.004*  |

Dependent Variable: Internet Corporate Reporting

\*= significant at 0.05 level

### ***The Effect of Firm Size on Internet Corporate Reporting***

Based on table 2, firm size has a positive coefficient of 2.964 and is significant at 0.05. It means the firm size positively affects Internet corporate reporting. It indicates that the greater the size of the firm, the higher the Internet corporate reporting index. Hypothesis 1 is accepted. This result is consistent to other studies in other countries (Al Arussi et al., 2009; Alali & Romero, 2012; Boubaker et al., 2012; Desoky & Mousa, 2013; Kelton & Yang, 2008; Marston & Polei, 2004; Pozniak, 2013; Xiao, Yang, & Chow, 2004). Some research shows different results. Abdelsalam & Street (2007); Aly et al. (2010); Dolinšek & Lutar-Skerbinjek (2018); Pozniak & Ferauge (2015) find that the firm size does not affect Internet corporate reporting.

### ***The Effect of Leverage on Internet Corporate Reporting***

Based on table 2, leverage is not significant at 0.05. It means the leverage does not affect Internet corporate reporting. Hypothesis 2 is rejected. This result is consistent with the research by Al Arussi et al. (2009); Alali & Romero (2012); Aly et al. (2010); Andrikopoulos & Diakidis (2011); and Sabrina & Thersia (2019). Other researchers find a significant positive relationship between leverage and Internet reporting (Bekiaris et al., 2014; Samaha & Abdallah, 2012).

### ***The Effect of Profitability on Internet Corporate Reporting***

Based on table 2, profitability is not significant at 0.05. It means profitability does not affect Internet corporate reporting. Hypothesis 3 is rejected. This result is consistent with the research

by Abdelsalam & Street (2007); Boubaker et al. (2012); Dâmaso & Lourenço (2011); Dolinšek & Lutar-Skerbinjek (2018); Marston & Polei (2004); and Xiao et al. (2004). Other researchers find a positive correlation between profitability (Al-Htaybat, 2011; Henchiri, 2011) and Internet reporting and there are also researchers finding a negative correlation between profitability and Internet reporting (Bekiaris et al., 2014; Pozniak & Ferauge, 2015).

### ***The Effect of Liquidity on Internet Corporate Reporting***

Based on table 2, liquidity is not significant at 0.05. It means liquidity does not affect Internet corporate reporting. Hypothesis 4 is rejected. This result is consistent to the research by (Aly et al., 2010). Ezat & El-Masry (2008) and Oyelere et al. (2003) find that liquidity has an effect on Internet corporate reporting.

### **Conclusion & Limitations**

Based on the multiple linear regression result on 121 listed Indonesian manufacturing companies, it can be concluded that the firm size has a significant positive effect on Internet corporate reporting. The bigger the company is, the more information disclosed on the Internet. This result also confirms the theories used in this research such as agency theory and political cost hypothesis. Leverage, profitability, and liquidity have no effect on Internet corporate reporting.

The limitations of this research are the population and the independent variables. The population is limited to only manufacturing companies and the independent variables are limited to the firm characteristics. There are no external factors involved in this research.

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