The effect of Internet Financial Reporting (IFR) on firm value, stock price, and stock return in the manufacturing companies listed in Indonesia Stock Exchange

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ABSTRACT

The rapid development of internet could be used by the company to disclose financial and non financial information quickly to the investors. However, in Indonesia the disclosure of financial and non financial information through the internet is rarely done by the company. This study aims to examine whether the use of internet financial reporting affect the firm value, stock price, and stock return in manufacturing companies listed in Indonesia Stock Exchange. The data of this study were collected from a sample of 50 manufacturing companies listed in Indonesia Stock Exchange. Simple regression analysis was employed in this study. From the process of analysis, it was found that the companies that used internet to disclose financial and non financial information have a significant and positive impact on their firm value and stock price.

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ABSTRAK


1. INTRODUCTION

Along with the rapid development of technology in recent years, the use of internet media has also increased significantly. This is due to the convenience of access provided by the internet for the users. The users can easily access the internet anywhere and anytime. In addition, the information provided by the internet to its users is also quite extensive.

The increasing technology and the number of the users of the technology inevitably force companies to participate using the technology in order to survive in the face of the increasing global competition. One way is to present business information via internet. Despite no standard governing the disclosure of financial information via internet, many companies today have used websites to present their financial information. The disclosure of financial information via internet media is commonly referred to as Internet Financial Reporting (IFR). This research is necessary to be done because the disclosure of information via internet has not been used optimally by companies in terms of both quality and quantity.

Ashbaugh et al. (1999) in Wardhanie (2012) stated that IFR is seen as an effective means of communication to customers, investors, and share-
holders. The information that is disclosed in the IFR should reflect complete, thorough, and true condition of the company so that the information can be useful for investors. The more information that is disclosed by the company through the IFR is a signal to the market so that the investors are interested to invest in the company.

The role of IFR in decision-making by the investor is actually quite large. However, in Indonesia the research that examines the Internet Financial Reporting is still quite a bit. Some researches only discuss the factors that influence the IFR, and others discuss the impact of IFR on financial performance and market performance of the company.

Almilia (2009) found that firm size, profitability, leverage, and ownership structure are all factors that affect the banking sector companies and LQ-45 in applying IFR. The results of this study are also supported by the research conducted by Prasetya and Irwandi (2012) who found that firm size is a factor that affects the company in implementing the IFR.

Almilia & Budisusetyo (2009) conducted a study on the impact of Internet Financial and Sustainability Reporting on profitability, stock prices and stock returns in Indonesia Stock Exchange. The results of the study found that Internet Financial and Sustainability Reporting have positive and significant impact on company’s stock prices and profitability, but Internet Financial and Sustainability Reporting have no effect on stock returns.

Lai et al. (2010) conducted research on the impact of Internet Financial Reporting on stock prices and found that companies that implement IFR tend to obtain larger abnormal returns and the stock prices move faster.

This study aims to find out the impact of the implementation of IFR on firm value, stock prices, and stock returns in manufacturing companies listed in Indonesia Stock Exchange. The manufacturing companies are selected as the subject of this study because the manufacturing sector is the sector with the highest number of companies. It is expected that by using manufacturing sector as the subject of this research, the results could be generalized.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS

Signaling Theory

Signaling theory is used to explain that financial statements are basically used by companies to provide a positive or negative signal to the users (Su-listyanto 2008: 65). In this study, signaling theory is used to provide information from the company to the external parties, such as investors, for making investment decisions. The information provided should be complete, timely, and relevant so that it can be used by investors as a consideration for investment.

Efficient Market Theory

Efficient market is a market where the prices of all traded securities already reflect all available information, Tandelilin (2001: 112). The information provided should be relevant to the securities being traded so that the information can quickly affect the price of the traded securities. The faster the information to be distributed, the faster the investors to react to the information, whether they will sell, buy or hold the shares they own.

According to Tandelilin (2001: 114), efficient capital market has three different forms of hypothesis as follows:

1. Efficient in the weak form
   Efficient market in the weak form means that all information in the past will be reflected in the price of the securities that are formed now.

2. Efficient in the semi-strong form
   Efficient market in the semi-strong form is a form of market efficiency which is more comprehensive, because it is affected by not only market data (stock price and trading volume of the past), but also all information published, such as earning, dividend, stock split announcement, new shares issuance, and financial difficulty faced by the company.

3. Efficient in the strong form
   Efficient market in the strong form means that all information both published and non-published have already been reflected in the current securities prices.

Internet Financial Reporting

The use of internet for the presentation of financial and non-financial information of a company is commonly referred to as Internet Financial Reporting (IFR). Ashbaugh et al. (1999) in Wardhanie (2012) stated that the IFR is seen as an effective means of communication to customers, investors, and shareholders. The information that is disclosed in IFR should reflect complete, thorough, and true condition of the company so that the information itself can be useful for the investors. According to Almilia & Budisusetyo (2009), the measurement of IFR is based on the IFR Index which is developed based on four criteria consisting of content, timeliness, use of technology, and user’s support.
The Effect of Internet Financial Reporting on Firm Value
Based on signaling theory, the financial statement of the company is basically used to provide positive and negative information to the users. The more information that is disclosed by the company via the Internet (Internet Financial Reporting) is a signal to investors in the investment activities. The disclosure of this information will further impact on the stock price.

In the theory of efficient securities market, the price of all traded securities is a reflection of all information available in the market. All available information will quickly reflect the stock price. The more investors to buy the shares as a result of the disclosure of the additional information on the internet, the higher the stock price will be. The higher the stock price, the higher the value of the company in the eyes of investors will be.

Up to now, no study has examined the relationship between IFR and firm value, so through this study, the researcher tries to determine the effect of IFR on firm value. Based on the description, this hypothesis can be formulated as follows:

H1 : Internet Financial Reporting (IFR) has significant positive effect on the value of the manufacturing firms in the Indonesia Stock Exchange.

The Effect of Internet Financial Reporting on Stock Price
Based on signaling theory, the signaling is done by managers to reduce information asymmetry. The more information that is disclosed on the internet will reduce the information asymmetry between the management and the external parties that will eventually raise the confidence of the investors to invest in the company.

The increased investors’ confidence will lead to higher demand for stocks. The higher the demand for the stock, the higher the stock price will be. This is consistent with the theory of efficient securities market which states that the price of all traded securities is a reflection of all the information available in the market.

This research is supported by the research conducted by Almilia & Budisusetyo (2009) who studied the effect of Internet Financial and Sustainability Reporting on profitability, stock prices, and stock returns in Indonesia Stock Exchange. Based on the description, this hypothesis can be formulated as follows:

H2 : Internet Financial Reporting (IFR) has significant positive effect on the stock price of the manufacturing firms in the Indonesia Stock Exchange.

The Effect of Internet Financial Reporting on Stock Return
Signalling theory states that the larger company will tend to disclose more information to provide either positive or negative signals to the market. The faster the information to be distributed, the faster the investors to react to such information, whether they will sell, buy or hold the shares they have.

This is in line with the theory of efficient securities market which claims that the securities price will fluctuate along with the emergence of new information which is relevant to the securities. The fluctuation in the stock price is caused by the disclosure of information on the internet that will further affect the stock returns obtained by investors.

This research is supported by the research conducted by Almilia & Budisusetyo (2009) who studied the effect of Internet Financial and Sustainability Reporting on profitability, stock prices, and stock returns in Indonesia Stock Exchange. Based on the description, this hypothesis can be formulated as follows:

H3 : Internet Financial Reporting (IFR) has significant positive effect on the stock return of the manufacturing firms in the Indonesia Stock Exchange.

3. RESEARCH METHOD

Research Design
Based on the aim of the study, this study is categorized as a basic research. According to Indriantoro and Supomo (1999: 23), basic research is a research that aims to develop a theory.

Based on the characteristic of the problem, this study is classified as causal-comparative study. Causal-comparative study is a type of study with the characteristic of the problem in a form of causal relationship between two or more variables (Indriantoro & Supomo 1999: 27).

Based on the type of data studied, this study belongs to the type of archival research. Archival research is the study of the written facts (documents) or in the form of a data archive.

Variable Identification
This study uses two types of variable; dependent variable and independent variable. According to Indriantoro & Supomo (1999: 63), the independent variable is a variable that describes or affects other variables. While dependent variable is a variable that is explained or influenced by the independent variable. The variables used in this study are:
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− Independent Variable, ie Internet Financial Reporting (X).
− Dependent Variable, ie firm value (Y1), stock price (Y2), and stock return (Y3).

Operational Definition and Variable Measurement

Internet Financial Reporting

Internet Financial Reporting (IFR), in this study, is used as the independent variable. According to Almilia & Budisusetyo (2009), Internet Financial Reporting (IFR) is a type of voluntary disclosure that can be done by the company without the existence of regulating standard, so the company is free to decide what and how the financial information to be disclosed on the internet. According to Ashbaugh et al. (1999) in Wardhanie (2012), the Internet is seen as such an important media of reporting that information about the performance of the company can be reached by all investors globally.

Based on this information, the Internet Financial Reporting (IFR) can be defined as the use of the Internet as a medium used to present financial and non-financial information of the company. In this study, the measurement of IFR is based on IFR Index as attached in Appendix 1, 2, 3, and 4 with the formula:

$$IFR = SC + SKw + SPt + SDp$$  \( (1) \)

Description:

SC : Score of Content
SKw : Score of Timeliness
SPt : Score of the Use of Technology
SDp : Score of the User’s Support.


According to Almilia & Budisusetyo (2009), the measurement of IFR is based on IFR Index which is developed based on four criteria consisting of content, timeliness, use of technology, and user’s support. IFR Index is measured using a dummy scale made in the form of a checklist. Score of 1 is given to an answer ’yes’, and score of 0 is given to an answer ’no’. The details of each of the criteria will be outlined as follows:

1. Content has valuation criteria of 40 percent.
2. Timeliness has valuation criteria of 20 percent.
3. Use of Technology has valuation criteria of 20 percent.
4. User’s Support has valuation criteria of 20 percent.

Firm Value

The firm value, in this study, is used as the dependent variable. According to Sartono (2001: 8), the firm value is a condition for maximizing corporate objectives by increasing the wealth of the shareholders.

Based on this information, the firm value can be defined as a condition in which the firm can increase the wealth of the shareholders if the firm’s stock price is high. The high firm value reflects the high level of shareholders’ wealth. The high level of the shareholders’ wealth is followed by the high stock prices in the capital market. In this study, the firm value is measured using the value of Tobin’s Q, with the following formula:

$$Q = \frac{MVS + D}{BVA}$$  \( (2) \)

Description:

Q = Firm value
MVS = Market value of all outstanding shares.
MSV is obtained from the number of outstanding shares multiplied by the stock price.
BVA = Book value of total assets
D = Book value of total debt. Debt is obtained from the firm’s total debt + stock – total current assets.

Source: Sudiyatno & Puspitasari (2010)

Stock Price

The stock price, in this study, is used as the dependent variable. According to Tri and Anto (2004), the stock is a financial instrument that states its
owner to get the right to the share of the company’s profit.

Based on that information, the stock price can be defined as the price of a stock in the stock market at a given time whose value is determined based on the amount of the demand and supply that occurs in the capital market. In this study, the stock price is measured based on the annual closing price.

**Stock Return**

Stock return, in this study, is used as the dependent variable. According to Yusuf et al. (2009), stock return is the result obtained from the stock investments.

Based on the above information, stock return can be defined as the rate of profit obtained by the investors on the investment they made in capital market. The formula for calculating stock return is as follows:

$$ R_i = \frac{P_i - P_{i-1}}{P_{i-1}}. $$

(3)

**Description:**

- \( R_i \) = Present stock price
- \( P_{i-1} \) = Previous stock price


**Population, Sample, and Sampling Technique**

The population used in this study is all manufacturing companies listed in the Indonesia Stock Exchange. The samples in this study are manufacturing companies that are listed in the Indonesia Stock Exchange and have corporate website to report both financial and non-financial information with the period of the study from October 2013 to December 2013.

The method used in the determination of the sampling is purposive sampling method, ie deliberate sampling in accordance with the requirements of the samples needed. The criteria for selecting the samples of manufacturing companies that will be examined in this study are as follows:

1. The companies are listen in Indonesia Stock Exchange.
2. The manufacturing companies already have website address.
3. Issuing financial information in the unit of rupiah.
4. The necessary data and information are available for analysis.

Based on the sampling criteria that have been described previously, the manufacturing companies that meet the criteria to be used in the study sample are 50 companies. Details regarding the reduction of the sample in this study can be seen in Table 1.

The data used in this study is a secondary data available on the company’s financial statements and the company’s stock price data obtained from several official sites like Yahoo (www.yahoo.finance.com) and IDX (www.idx.co.id).

4. DATA ANALYSIS DAN DISCUSSION

**Descriptive Analysis**

Descriptive analysis is used to provide a description or explanation of all variables used in the study, both independent and dependent variables.
Table 2 shows that the lowest value of IFR is 9, while the highest value of IFR is 67.5. The company that has the lowest value of IFR is Pelangi Indah Canidu Tbk (PICO), and the company that has the highest value of IFR is Astra International, Tbk (ASII).

In overall, the mean value of IFR variable is 38.99. Of the total 50 sample companies used, 27 companies have the IFR value above the mean value, and 23 companies have the IFR value below the mean value.

The lowest firm value is -0.18, and the highest firm value is 6.08. The company that has the lowest firm value is Intanwijaya International, Tbk (INCI), and the company that has the highest firm value is Nippon Indosari Corpindo, Tbk (ROTI). The mean value of the firm value variable is 1.23. There are 16 companies that have firm value above the mean value, and 34 companies that have firm value below the mean value.

The lowest stock price is 120, and the highest stock price is 11,000. The company that has the lowest stock price is Sekawan Intipratama, Tbk (SIAP), and the company that has the highest stock price is Mandon Indonesia, Tbk (TCID). The mean value of the stock price variable is 2,155.22. There are 17 companies that have stock price above the mean value, and 33 companies that have stock price below the mean value.

The lowest stock return is -0.90 and the highest stock return is 1.42. The company that has the lowest stock return is Astra International, Tbk (ASII), and the company that has the highest stock return is Malindo Feedmill Tbk (MAIN). The mean value of the stock return variable is 0.15. There are 25 companies that have stock return above the mean value, and 25 companies that have stock return below the mean value.

Classical Assumption Test
The classical assumption test used in this study is the normality test. Normality test is conducted to test whether, in the regression model, residual or confounding variable has a normal distribution (Ghozali 2005: 160).

Table 3 shows that the value of Kolmogorov-Smirnov test for the first equation is 1.253 with a significance level of 0.087. It can be seen that the significance level of the first equation residuals is greater than 0.050 (α = 5%), so the data for the first equation can be stated ‘normally distributed’.

The second equation is that the effect of IFR on the stock price generates Kolmogorov-Smirnov value of 1.243 with a significance level of 0.091. It can be seen that the significance level of the second equation residuals is greater than 0.05 (α = 5%), so the data for the second equation can be stated ‘normally distributed’.

The third equation is that the effect of IFR on the stock returns generates Kolmogorov-Smirnov value of 0.730 with a significance level of 0.662. It can be seen that the significance level of the third equation residuals is greater than 0.050 (α = 5%), so the data for the third equation can be stated ‘normally distributed’.

Hypothesis Test
This study uses a simple linear regression analysis to test the hypothesis. The regression equation used in this study is:

\[ Y_1 = \alpha + \beta_1 X + e \]  
\[ Y_2 = \alpha + \beta_2 X + e \]
$Y_3 = \alpha + \beta_3 X + e$

Description:

- $X$ = Internet Financial Reporting
- $Y_1$ = Firm Value
- $Y_2$ = Stock Price
- $Y_3$ = Stock Return
- $\alpha$ = Constant
- $\beta_1 - \beta_3$ = Regression Coefficient
- $e$ = error

The hypothesis 1, 2, and 3 states that Internet Financial Reporting (IFR) has significant positive effect on firm value, stock price, and stock return of the company. The hypothesis is accepted if the level of significance is less than 0.05, and it is rejected if the level of significance is more than 0.05.

Table 4 shows that the adjusted value ($R^2$) for the first equation is 0.187. This means that 18.7 percent of the dependent variable (firm value) can be explained by the independent variable (IFR) and the remaining 81.3 percent is explained by other causes outside the model. The second equation has an adjusted value ($R^2$) of 0.122. This means that 12.2 percent of the dependent variable (stock price) can be explained by the independent variable (IFR). The remaining 87.8 percent is explained by other causes outside the model. The third equation has an adjusted value ($R^2$) of -0.021. The adjusted value ($R^2$) for the third equation produces a negative value, meaning that the independent variable is not able to explain the variance of the dependent variable at all.

The results of the data processing in Table 4 show that the F value for equation 1 is 12.284 with a significance level of 0.001. The significance level of equation 1 is less than 0.05, it means that the regression model can be used to predict the firm value. The F value for equation 2 is 7.822 with a significance level of 0.007. The significance level of equation 2 is less than 0.05, it means that the regression model can be used to predict the stock price. The F value for equation 3 is 0.002 with a significance level of 0.968. The significance level of equation 3 is more than 0.05, it means that the regression model cannot be used to predict the stock return.

**The Effect of Internet Financial Reporting on Firm Value**

The regression results show that the significance level is 0.001, or less than 0.05. This means that the first hypothesis (H1) which is formulated in this study is accepted. Based on the signaling theory, signaling is done by managers to reduce information asymmetry. The more information that is disclosed on the internet, it will reduce the information asymmetry between management and external parties that will eventually make investors’ confidence rise and then invest in the company. The increased investors’ confidence will lead to higher demand for stocks. The higher the demand for the stock, the higher the price of the stock. This is consistent with the theory of efficient securities markets which states that the price of all traded securities is a reflection of all the information available in the market. The results of this study support the theory. The results of this study are consistent with the results of the research conducted by Almilia & Budisusetyo (2009) who found that Internet Financial Reporting has significant positive effect on stock price.

**The Effect of IFR on Stock Price**

The regression results show that the significance level is 0.007, or less than 0.05. This means that the second hypothesis (H2) which is formulated in this study is accepted. Based on the signaling theory, signaling is done by managers to reduce information asymmetry. The more information that is disclosed on the internet, it will reduce the information asymmetry between management and external parties that will eventually make investors’ confidence rise and then invest in the company. The increased investors’ confidence will lead to higher demand for stocks. The higher the demand for the stock, the higher the price of the stock. This is consistent with the theory of efficient securities markets which states that the price of all traded securities is a reflection of all the information available in the market. The results of this study support the theory. The results of this study are consistent with the results of the research conducted by Almilia & Budisusetyo (2009) who found that Internet Financial Reporting has significant positive effect on stock price.

**The Effect of IFR on Stock Return**

The regression results show that the significance level is 0.968, or greater than 0.05. This means that the third hypothesis (H3) which is formulated in this study is rejected. Signalling theory states that the larger the company will tend to disclose more information to provide positive and negative signals to the market. The faster the information distributed, the sooner the investors to react to the information. It is whether to sell, buy or hold the shares they own.

This is in line with the theory of efficient securities market that states that the securities price will
fluctuate along with the emergence of new information which is relevant to the securities. The fluctuation in the stock price, which is caused by the disclosure of information on the internet, will further affect stock returns obtained by investors. However, the results of the statistical analysis in this study show that the IFR does not have a significant effect on stock returns.

No significant relationship between IFR and stock return is thought to occur because of the current value of stock price which is less than the previous stock price value, so it will make the return obtained by the investors negative. Another reason that makes the relationship between IFR and stock return not significant is that because the company's stock price increase is not significant, so it will make the company, with its high stock price, have a price changes tendency which is relatively lower than the company with low stock prices. This has an impact on the returns obtained by investors. The company with high stock price will have low return, while the company with a low stock price will have a high return.

The results of this study are consistent with the results of the research conducted by Almilia & Budisusetyo (2009) who found that Internet Financial Reporting has positive but not significant effect on stock returns.

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

In general, it can be concluded as the following.
1. Internet Financial Reporting has significant effect on firm value.
2. Internet Financial Reporting has significant effect on stock price.
3. Internet Financial Reporting has no significant effect on stock return.

This study has some limitations, such as inadequate number of sample used in this study because many manufacturing companies still do not have website yet. Besides that, several manufacturing companies have sleeping stocks that make the results of this study become biased. The measurement of the stock return has not yet considered the dividend.

The future studies are expected to be able to increase the number of samples of research, that is all companies listed in the Indonesia Stock Exchange in order to obtain better results, not to use the company with sleeping stocks as a sample in the study so that the research is not biased, and to add variety of dependent variable that is affected by IFR such as stock trading frequency. In addition, the further research is also expected to enter a dividend as a measure of return.

REFERENCES

www.finance.yahoo.com
www.idx.co.id
### APPENDICES

#### Appendix 1

The Content Index of IFR Disclosure Instruments

<table>
<thead>
<tr>
<th>Types of Item</th>
<th>Description</th>
<th>Score</th>
<th>Multiplier</th>
<th>Max. Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Number of Years/Quarterly Shown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1. Annual Reports</td>
<td>Score 3 if available in more than 2 recent years</td>
<td>3</td>
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<tr>
<td></td>
<td>Score 2 if available in 2 recent years</td>
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<td></td>
<td>Score 1 if available in 1 recent year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score 0 if no annual report</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2. Quarterly Reports</td>
<td>Score 3 if available in more than 1 recent year</td>
<td>3</td>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>Score 2 if available in 4 recent quarterly</td>
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<tr>
<td></td>
<td>Score 1 if available in 1 recent quarterly only</td>
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<td></td>
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<tr>
<td></td>
<td>Score 0 if no quarterly report</td>
<td></td>
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<tr>
<td>2. Other Financial Information</td>
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<tr>
<td>2.1. Stock Quote</td>
<td>Score 1 = Yes</td>
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<td>3</td>
<td>3</td>
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<tr>
<td>2.2. Graph of Stock Price</td>
<td>Score 0 = No</td>
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<td>2</td>
<td>2</td>
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<td>3. Language</td>
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<td>3.1. English</td>
<td>Score 1 = Yes</td>
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<tr>
<td></td>
<td>Score 0 = No</td>
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<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3.2. Other than English</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>4. Financial Information</td>
<td></td>
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<tr>
<td>4.1. Statement of Financial Position</td>
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<tr>
<td>a. PDF</td>
<td>Score 0 = No</td>
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<tr>
<td>b. HTML</td>
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<td>4.2. Statement of Financial Performance</td>
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<td>4.3. Statement of Cash Flow</td>
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<td>4.4. Statement of Movement in Equity</td>
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<tr>
<td>4.5. Note to Financial Statement</td>
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<td>4.6. Disclosures of Quarterly Results</td>
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<td>4.7. Financial Highlight</td>
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<td>b. HTML</td>
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<tr>
<td>c. Levels of growth, ratio, graphics</td>
<td></td>
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<td>4.8. Chairman’s Report</td>
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<td>b. HTML</td>
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<td>4.9. Auditor’s Report</td>
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<td>4.10. Stakeholder Information</td>
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<td>4.11. Company Information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.11.1. Vision and Mission</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.11.2. Board Directors and Board of Commissioners</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.11.3. Contact to Investor Relations</td>
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<td></td>
<td></td>
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<tr>
<td>4.12. Company’s social responsibility</td>
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</tbody>
</table>

### Appendix 2
**The Timeliness Index of IFR Disclosure Instruments**

<table>
<thead>
<tr>
<th>Types of Item</th>
<th>Description</th>
<th>Score</th>
<th>Multiplier</th>
<th>Max. Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press Release</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
| 1.1. Existence | Score 1 = Yes  
Score 0 = Yes | 1 | 2 | 2 |
| 1.2. Number of Days Last Updates News | Score 2 if the company’s news update is in the period of 1 recent week  
Score 1 if the company’s news update is in the period of more than 1 recent week  
Score 0 if the company’s news update is more than 1 recent month | 2 | 1.5 | 3 |
| 2. Unaudited Last Quarterly Result | | | | |
| 2.1. Existence | Score 1 = Yes | 1 | 2 | 2 |
| 2.2. With Proper Disclaimer | Score 0 = No | 1 | 1 | 1 |
| 3. Stock Quotes | | | | |
| 3.1. Existence | Score 1 = Yes  
Score 0 = No | 1 | 2 | 2 |
| 3.2. Update in how many days | Score 1 if update this week  
Score 0 if update over 1 week | 1 | 1 | 1 |
| 4. Vision Statements/Forward looking statements | | | | |
| 4.1. Existence | Score 1 = Yes | 1 | 2 | 2 |
| 4.2. Proper Disclaimer | Score 0 = No | 1 | 1 | 1 |
| 4.3. Chart of Future Profit Forecast | | | | |


### Appendix 3
**The Technology Index of IFR Disclosure Instruments**

<table>
<thead>
<tr>
<th>Type of Item</th>
<th>Description</th>
<th>Score</th>
<th>Multiplier</th>
<th>Max. Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Download plug in on spot</td>
<td>Score 1 = Yes</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2. Online feedback and support</td>
<td>Score 0 = No</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3. Use Presentation of Slides</td>
<td></td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4. Use Multimedia Technology</td>
<td></td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5. Analysis Tool</td>
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<td>1</td>
<td>4</td>
<td>4</td>
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<tr>
<td>6. Advance Features (XBRL)</td>
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<td>1</td>
<td>5</td>
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</table>


### Appendix 4
**The User Support Index of IFR Disclosure Instruments**

<table>
<thead>
<tr>
<th>Types of Items</th>
<th>Description</th>
<th>Score</th>
<th>Multiplier</th>
<th>Max. Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Help &amp; FAQ</td>
<td>Score 1 = Yes</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2. Link to Homepage</td>
<td>Score 0 = No</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3. Link to Top</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4. Sitemap</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5. Site Search</td>
<td></td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>6. Consistency of Web Page Design</td>
<td></td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
| 7. Number of “click” to get financial information | Score 1 if less than 2 clicks  
Score 0 if more than 2 clicks | 1 | 4 | 4 |