XBRL Adoption of Information Asymmetry in Manufacturing Company

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Abstract— Manufacturing companies in the textile and garment sub-sector are the largest contributors to Indonesia's GDP, the industry has experienced a decline in performance due to the COVID-19 pandemic which resulted in a negative GDP in 2020, companies must continue to disclose financial reporting to provide signals to investors, differences in interests encourage management perform dysfunctional behaviour by not reporting the actual situation so that there is an asymmetry of information between the company's internal and external parties. XBRL is an information technology that helps in the process of disclosing financial information. The purpose of this study is to determine whether the adoption of XBRL on the Indonesia Stock Exchange can reduce information asymmetry in relation to stock trading activities which are represented by variables of company size, stock price, stock volatility, turnover rate stock.

The sampling technique used is purposive sampling method obtained 17 companies or 39 samples. The proxy used to measure information asymmetry is the bid ask spread and the analysis technique of this research is multiple linear regression analysis.

The results of this study indicate that partially XBRL, stock prices, and stock volatility affect information asymmetry, while company size and stock turnover partially do not affect information asymmetry. The five independent variables simultaneously affect information asymmetry with a coefficient of determination of 73.1%.

Keywords— Information Asymmetry, XBRL, Manufacturing Company, Indonesia.

I. INTRODUCTION

The manufacturing industry is the main sector driving economic growth because it contributes up to 20% of Indonesia's Gross Domestic Product. The COVID-19 pandemic has impacted the pace of the textile and garment industry to decline, resulting in a negative Gross Domestic Product (GDP) in the third quarter of 2020. The weakening of the company's performance marked by negative profits is a signal given to investors that the company is in financial trouble. The information issued by the company is important for external parties of the company. The information provided by the company is useful for analysts and investors to measure the risk, performance, and quality of the company [1]. Management as an agent has the responsibility to manage the company for the interests of the principal or shareholders, so that the company's information owned by management is more than that of shareholders [2]. Both parties have their respective interests, management tries to attract investors to invest in their company, while shareholders try to maximize returns from the use of the resources they provide to management in the form of investments. Conflicts of interest and information imbalances encourage management to report untrue financial conditions.

The interests of management and investors are never in line because there are various conflicts of interest that can influence the manager's decision to act in the interests of shareholders, thereby triggering moral hazard and conflicts of interest [3]. According to [4] improving the quality of disclosure (improved disclosure) can improve the quality of financial statements and the quality of disclosure so as to reduce information asymmetry, increase information efficiency, reduce volatility of stock returns, increase firm value, and reduce external funding costs.

One of the information technologies used as a new method of disclosing financial statements is the eXtensible Business Reporting Language, or XBRL for short. XBRL is a business and financial reporting technology applied to improve internal and external reporting, electronic filing, and information sharing. This technology was created to improve efficiency, timeliness, and presentation of financial data appropriately, as well as the ease of obtaining and analyzing data [5]. XBRL data does not change disclosure, but facilitates the collection and processing of information providing benefits to users of sophisticated financial reporting and information [6].

Many previous studies that discussed the effect of XBRL on information asymmetry, including [7], [8] and [6]. In this study, it was found that the adoption of XBRL can reduce information asymmetry with the control variables of firm size, stock returns, stock volatility, stock prices, and stock trading volume.

In contrast to previous research, the case study conducted by [9] showed that the adoption of XBRL had no effect on information asymmetry in the Netherlands, Australia, England, and Singapore. On the other hand, Blankespoor et al [10] the application of XBRL has a significant impact on information asymmetry and reduces the volume of stock trading in the capital market.

This study uses XBRL as an independent variable by adding other independent variables, namely company size, stock price, stock volatility, and turnover. This variable is used as an independent.

II. LITERATURE REVIEW
A. Signaling Theory
Signal theory explains the reason why companies have the urge to provide financial statement information to external parties, this is because there is information asymmetry between the company and outsiders where the company knows more information about the company and its future prospects than outside parties (investors and creditors). One way to reduce information asymmetry is to provide signals to outsiders, one of which is in the form of reliable financial information and will reduce uncertainty about the company's future prospects. Companies with good performance tend to make financial reporting easier, because it is considered as an easy way to differentiate from other companies in the market. This theory encourages companies to report financial statement information to internal and external parties to the company to avoid information asymmetry [4].

B. Agency Theory
Agency theory states that the interests between managers and stakeholder, whether shareholders or lenders, will not always align because there is a risk that managers may engage in actions that are detrimental to providers of equity capital. This difference in interest arises mainly because of information asymmetry, which can lead to higher agency costs. The interests between management and investors will not always be in line because of the risk that management may be involved in actions that are detrimental to investors or also known as dysfunctional behavior [11].

C. Information Asymmetry
Information asymmetry is divided into two types, namely information asymmetry that occurs in the capital market and information asymmetry experienced between management and company owners. Information asymmetry experienced by management and company owners occurs when management has more information about the company than the owners or shareholders as a whole. Variations in the amount of information held between shareholders with one another, such as majority and minority shareholders, give rise to the emergence of informed and informed investors. Information asymmetry in the market occurs when one of the capital market participants has more information than the other market participants. Insider-traders are market participants who have more information so they tend to be more careful in making decisions because they have private access to information. This situation causes an imbalance of information held by other capital market participants causing information asymmetry. The imbalance of information held by capital market players causes the performance of the capital market to be not good. A good capital market considers efficiency regarding the dissemination of information quickly and accurately so that all capital market participants have symmetrical or equal information [2].

D. XBRL
Extensible Business Reporting Language (XBRL) is an electronic communication language that is universally used for the transmission and exchange of business information, which enhances the process of preparation, analysis and accuracy for various parties who provide and use business information [12]. XBRL documents are produced annually, replacing old paper-based reports with digital versions that are more useful, more effective, and more accurate [13]. XBRL assists financial report makers in the process of data collection, data validation, and disclosure of financial information. For analysts, XBRL can provide easy access to fast data. For investors XBRL helps in the investment decision-making process because it provides comparative data on the performance of various companies, so as to emphasize information gaps for management and investors, as well as various capital market players.

III. RESEARCH METHODOLOGY
Population and Sample
The population of this study are textile and garment sub-sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2018-2020 period. The sampling technique was carried out using the purposive sampling method, which was a data sampling technique with predetermined criteria. Based on the characteristics of the sample selection, 17 companies will be used as research samples in the textile and garment sub-sector manufacturing companies.

Data Collection Procedure

The data collection procedure used in this research is documentation. This is done by collecting, recording, and reviewing secondary data in the form of financial reports of manufacturing companies in the textile and garment sub-sector (selected as samples) for the 2018-2020 period.

III. DISCUSSION

Analysis Model

Hypothesis testing was carried out with the help of SPSS 26.0 statistical calculation software using the multiple linear regression analysis method.

Table 1: Multiple Linear Regression Analysis Test

Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	0,065	0,010	
	XBRL	-0,040	0,005	-0,691
	SIZE	0,080	0,207	0,033
	PRICE	-2,464E-05	0,000	-0,198
	VOLATILITY	0,289	0,088	0,294
	TURNOVER	0,022	0,029	0,067

$$SPREAD = 0{,}065 - 0{,}40X1 + 0{,}080X2 - 0{,}000024X3 + 0{,}289X4 + 0{,}022X5$$

Table 2: F Simultaneous Test Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0,020	5	0,004	21,609	.000[b]
	Residual	0,006	33	0,000		
	Total	0,026	38			

Table 3: Coefficient of Determination Test (R^2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.875[a]	0,766	0,731	0,01371

Based on the results of research and hypothesis testing, the following is a discussion for each hypothesis, namely the effect of XBRL adoption, firm size, stock price, stock volatility, and stock turnover on information asymmetry either partially or simultaneously:

1. XBRL adoption partially affects information asymmetry

XBRL is an information technology that is used for financial reporting, presenting financial reports in a standardized or uniform format, making it easier for analysts and investors to access and analyse information. XBRL adoption is described by a dummy variable, for companies that have adopted XBRL will be given a score of 1, while companies that have not adopted XBRL will be given a score of 0. The implementation of XBRL can increase transparency and reduce information asymmetry. Based on signalling theory, companies will try to give signals to investors in the form of disclosure of information in the form of financial statements. By implementing XBRL, the quality of the reports produced is better so that access to

information for investors and analysts becomes easier so that the information symmetry between management and investors is reduced. The results showed that the adoption of XBRL had a negative effect on information asymmetry. This means that the higher the level of application of XBRL, the lower the information asymmetry that occurs. The results of this study support previous research conducted by [14], [10], [15], Blankespoor et al (2013), Khedmati et al (2019), which stated that the implementation of XBRL had an impact on significant to information asymmetry.

2. Firm size partially affects information asymmetry

Firm size is measured by the market value of the firm's equity. Large companies tend to have high trading activity and receive more attention from media and investment analysts. The level of information asymmetry for large companies tends to be lower than for small companies. Based on previous research, the larger the size of the company, the lower the information asymmetry between investors and management in the company. Larger companies often have the superior

financial and human resource capacity needed to invest in high information capabilities. The results of this study indicate that the size of the company is not significant and has a positive correlation. This means that the larger the size of the company, the higher the information asymmetry between investors and management in the company. There is no generally accepted standard measure used to determine whether a company is large or small. The existence of information asymmetry is considered as the cause of earnings management. Firm size affects earnings management because according to signaling theory, management does not convey all the information it has in full, resulting in information asymmetry financial statements [16]. This is contrary to previous research, namely [7], [17], and [18] which stated that the larger the size of the company, the lower the information asymmetry.

3. Stock prices partially affect information asymmetry
The stock price is the closing price of the stock used at the end of trading hours. It is calculated by averaging daily stock prices or a certain period of time. The stock price shows the level of supply and demand that occurs in the company. If the demand for shares increases, the stock price also increases. Meanwhile, if the demand for shares decreases, the share price will also decrease. Stock prices have a negative significant relationship to information asymmetry. This means that the higher the stock price, the lower the information asymmetry. The stock price is an indicator of the success of the company's management, because it reflects the strength of trading transactions in the capital market. In addition, stocks that provide high returns are highly favored by investors so that brokers or dealers as stock brokers can carry out buying and selling activities quickly and can reduce the value of the bid ask spread of the stock. The results of this study are in line with [7] and [18] which state that stock prices have a negative effect on information asymmetry.

4. Stock volatility partially affects information asymmetry
Stock volatility indicates the risk or uncertainty of stocks in the capital market. Volatility is calculated by the difference between the highest stock price and the lowest stock price, then divided by the average number of the highest and lowest stock prices. Volatility is the range of price changes experienced by a security in a certain period of time. If the price is relatively stable, then the security has low volatility. In this study, stock volatility has a positive significant relationship to information asymmetry. This means that the higher the risk or uncertainty of shares in the capital market, the higher the information asymmetry in the capital market.

This is in line with the results of research conducted by [18], [6], and [7] which states that an increase in stock volatility means an increase in information asymmetry.

5. Stock turnover partially affects information asymmetry
The stock turnover or turnover rate shows the trading volume in a certain period of time for a particular company divided by the total number of shares of the company outstanding in that period. Stock turnover has no significant and positive correlation with information asymmetry. The inconsistency in this study with previous research may be due to the Covid-19 pandemic in Indonesia affecting the capital market and causing changes in trading times on the Indonesia Stock Exchange and this is a negative signal (bad news) that causes investors to be more interested in selling their share ownership. The Covid-19 pandemic has also affected the dynamics of the stock market, causing stock exchanges around the world to decline and increasing inefficiency in the stock market. In Indonesia, this also has a negative impact on the capital market and affects investors in making investment decisions [6]. This study is in line with [19] which states that stock turnover does not affect the company's information asymmetry. This is contrary to research conducted by [18], [6], and [7] which resulted in research that stock turnover has a negative significance to information asymmetry.

6. XBRL adoption, firm size, stock price, stock volatility, and stock turnover have an effect on information asymmetry simultaneously
Based on the results of statistical calculations obtained XBRL adoption, company size, stock prices, stock volatility, and stock turnover have an effect on information asymmetry simultaneously. These results prove that the research model can be used to predict information asymmetry. The application of XBRL can increase transparency and reduce the level of information asymmetry. In accordance with signalling theory, companies will issue information in the form of financial statements to provide signals to investors. XBRL will improve the quality of financial reports thereby reducing information asymmetry between investors and management within the company. XBRL also helps capital market players to obtain the same information because XBRL provides speed and ease of data access, thereby reducing information asymmetry and improving capital market performance. A good capital market considers efficiency regarding the dissemination of information quickly and accurately so that all capital market participants have symmetrical or equal information [20]. The results of this study are in line with the research of [18], [6], and [7] which jointly

state that the variables of XBRL adoption, firm size, stock price, stock volatility, and stock turnover affect asymmetry information.

V. CONCLUSION

Based on the results of the analysis and discussion of research conducted to determine the effect of XBRL adoption, company size, stock price, stock volatility, and stock turnover on information asymmetry in 17 textile and garment sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2018-2020 period, then can be concluded as follows:

1. The adoption of XBRL significantly and negatively correlated with information asymmetry in textile and garment sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2018-2020 period.
2. Firm size is not significant and positively correlated to information asymmetry in textile and garment sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2018-2020 period.
3. Stock prices have a significant negative effect on information asymmetry in textile and garment sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2018-2020 period.
4. Stock volatility has a significant positive effect on information asymmetry in textile and garment sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2018-2020 period.
5. Stock turnover is not significant and positively correlated to information asymmetry in textile and garment sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2018-2020 period.
6. The adoption of XBRL, company size, stock price, stock volatility, and stock turnover simultaneously affect information asymmetry in textile and garment sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2018-2020 period.

VI. LIMITATION

This study produces a coefficient of determination of 73.1%, further research is expected to enlarge the sample with a range of research periods, use other methods, replace or add research, and add or use indicators other than information asymmetry in measuring the effect of XBRL implementation such as corporate governance, performance corporate governance, transparency, efficiency behavior, timeliness of financial reporting, investor trading, and risk information.

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