Are Accrual Earnings Management and Real Earnings Management Related to Total Risk and Idiosyncratic Risk?

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Keywords:
Earnings Quality, Total Risk, Internal Risk

ABSTRACT

This study aims to determine the association between accrual earnings management and real earnings management with total risk and idiosyncratic risk in Indonesia. This study approach employs quantitative methods. The secondary data in this study were sourced from financial reports and share prices of textile and garment sub-sector companies listed on the Indonesia Stock Exchange from 2015 up to 2019 obtained from www.idx.co.id, www.idnfinancials.com, and www.finance.yahoo.com. Based on purposive sampling, the number of samples in this study amounted to 75 observations. Hypothesis testing employed in this study is multiple regression analysis for panel data. This study suggests that accrual earnings management is negatively associated with total and idiosyncratic risk, but real earnings management is positively associated with total and idiosyncratic risk. Earnings accrual management carried out by managers for efficiency is not a risky action. This study indicates that the Financial Services Authority needs to improve policies related to investor protection in Indonesia. In addition, investors should consider information about the company's ability to generate operating cash flow and stock price trends in recent years compared to information on high earnings in making investment decisions.

INTRODUCTION

The capital market has an essential role in the financing activities of public companies in various countries. For example, the American capital market is dominated by the investment sector. In addition, the capital market has been used to determine the economic condition of a country. An increasing composite stock price index indicates economic growth (Widowati et al., 2020). For investors, the capital market is an investment medium, and for companies, it is a source of corporate funding. In general, investors make investments to obtain capital gains in increasing stock prices and cash dividends which the company usually distributes to investors (Puspitaningtyas, 2017). The fact is that stock prices are determined by investors and other parties in the capital market who use information from financial statements to measure the value and risk of cash flow expected by shareholders (Amadi & Amadi, 2014). An efficient stock market is a market that can provide perfect information so that risks and future cash flow forecasts are reflected in stock prices (Reily & Brown, 2003 cited in Osundina et al., 2016). Shareholder welfare increases along with the increase in company value (Amadi & Amadi, 2014).

However, to achieve this prosperity, various types of risks may be faced by investors from internal companies and external market conditions, namely systematic risk, unsystematic risk, and total risk (Zreik, 2016). Risk originating from market conditions is categorized as systematic risk, while unsystematic risk, often called idiosyncratic risk, can be avoided by diversifying investments (Oktarina, 2010). Fluctuations in common stock prices are an example of systematic risk faced by stock investors (Guo, 2002). If the company has low stock price fluctuations, the changes that occur will also be small (Faride et al., 2014 quoted in Osundina et al., 2016). One example of corporate risk or total risk is the fluctuation of stock returns (Zhang et al., (2018).

The risk is caused by several sources: political risk, interest rate risk, financial risk, business risk, inflation risk, liquidity risk, and the risk of changes in currency values (Malgharni & Karimnia, 2014). If grouped again according to the causal factors, market risk or systematic risk arises when interest rates, currency exchange rates, inflation, and

politics experience changes. For example, when inflation increases the price of goods and services and causes GDP to fall, it will directly impact market efficiency. The decline in GDP also causes economic instability to reduce the exchange rate. These changes have an impact on various stock returns, even in different industries. In addition to systematic risk, the risk that comes from internal companies, namely idiosyncratic risk or specific risk, only affects one company. The forms of this idiosyncratic risk are financial risk, default risk, business risk, and operational risk. Every business or accounting policy carried out by the company affects the condition of the company's performance. When the company cannot compete with other similar companies, the company cannot predict strategies, plan activities, and make the right decisions. Finally, the company is less able to generate profits. Investors rely on good information reflected in financial statements to predict future earnings (Huang et al., 2015).

Idiosyncratic risk is the company's internal risk that can be reduced by diversification. However, this diversification does not eliminate specific risks (Scott, 2015). In this regard, both systematic risk and specific risk jointly hinder investors' welfare. This sum between systematic and idiosyncratic risk is called total risk (Mathew et al., 2018; Rasheed et al., 2019; Shahzad et al., 2020).

Various previous studies on risk have been carried out. The factors that have been used to investigate risk are board characteristics and capital structure (Ferrero-Ferrero et al., 2012); government mechanisms (Schalck et al., 2011); risk communication (Zreik, 2016); sales growth (Kusnadi, 2014; Asghar et al., 2019), CEO seniority and Age (Schalck et al., 2011; Imhof & Seavey, 2014), Tobins'q (Li et al., 2011; Zhang et al., 2018), dividends (Oktarina, 2010; Imhof & Seavey, 2014), investor protection and corporate earnings (Paligorova, 2009), corporate governance (Alam & Ali Shah, 2013; Mathew et al., 2018), local and central control (Zhang et al., 2018), manager compensation (Schalck et al., 2011; Imhof & Seavey, 2014), CEO of Duality (Schalck et al., 2011; Imhof & Seavey, 2014; Zhang et al., 2018; Asghar et al., 2019), firm size (Oktarina, 2010; Li et al., 2011; Vozlyublennaia, 2013; Imhof & Seavey, 2014; Kusnadi, 2014; Surifah, 2015; Chang et al., 2015; Huang et al. , 2015; Zhang et al., 2018; Jafarinejad et al., 2017; Loureiro & Silva, 2018; Neifar & Utz 2018;

Firmansyah & Muliana, 2018; Asghar et al., 2019), earnings management (Li et al., 2011; Surifah, 2015; Chang et al., 2015; Neifar & Utz 2018; Agustia et al., 2020; Jory et a l., 2020), board independence & size (Schalck et al., 2011; Alam & Ali Shah, 2013; Zhang et al., 2018; Asghar et al., 2019; Firmansyah et al., 2020a), average annual return (Imhof & Seavey, 2014; Loureiro & Silva, 2018), average weekly return (Neifar & Utz 2018; Li et al., 2011), average return monthly (Loureiro & Silva, 2018), weekly standard deviation of returns (Loureiro & Silva 2018; Neifar & Utz 2018), largest shareholding (Schalck et al., 2011; Neifar & Utz 2018; Asghar et al., 2019), ownership insider (Schalck et al., 2011; Alam & Ali Shah, 2013; Kusnadi, 2014), ownership concentration (Paligorova, 2009; Surifah, 2015; Zhang et al., 2018), state ownership (Zhang et al., 2018) , family ownership (Asghar et al., 2019), ROA (Li et al., 2011; Imhof & Seavey, 2014; Kusnadi, 2014; Huang et al., 2015; Zhang et al., 2018; Loureiro & Silva, 2018 ; Neifar & Utz 2018), Leverage (Paligorova, 2009; Oktarina, 2010; Alam & Ali Shah, 2013; Vozlyublennaia, 2013; Imhof & Seavey, 2014; Kusnadi, 2014; Chang et al., 2015; Huang et al., 2015; Jafarinejad et al., 2017; Mathew et al., 2018; Loureiro & Silva , 2018; Neifar & Utz 2018; Firmansyah & Muliana, 2018; Asghar et al., 2019; Firmansyah et al., 2020a), Earning per share (Vozlyublennaia, 2013; Firmansyah et al., 2020a) discretionary accruals (Huang et al., 2015; Loureiro & Silva, 2018), Number of meetings (Schalck et al., 2011; Asghar et al., 2019), reporting quality (Imhof & Seavey, 2014; Chang et al., 2015), market to book ratio (Li et al., 2011; Imhof & Seavey, 2014; Loureiro & Silva, 2018; Neifar & Utz, 2018; Jory et al., 2020), market concentration (Jory et al., 2020) operating cash flow (Imhof & Seavey, 2014; Chang et al., 2015; Huang et al., 2015), capital intensity (Alam & Ali Shah, 2013) negative skewness (Li et al., 2011; Neifar & Utz, 2018), female directors (Asghar et al., 2019), accounting standards (Kusnadi, 2014), Tax avoidance (Firmansyah & Muliana , 2018), big 4 audits (Neifar & Utz 2018), audit independence & audit meeting (Alam & Ali Shah, 2013; Asghar et al., 2019), effective tax rate (Neifar & Utz 2018), committee and audit quality (Asghar et al., 2019), derivative instruments (Firmansyah et al., 2020c).

In addition, research using the independent variable risk has tested its effect on several factors, namely asset productivity, capital structure, financial performance, and company strategy (Chandra, 2009); stock returns (Murhadi, 2013); accrual earnings management (Datta et al., 2017); tax avoidance (Maharani, 2019) and tax aggressive actions (Sulistiowati, 2017). Based on the factors used to test the previous research, they generally test the effect of ownership, information quality, and internal auditors' independence on risk. Managers' policies that are too risky have a negative effect on the company's profit performance. For example, the manager decides to open a new production site with funding through debt without prior cost-benefit considerations. Managers who take actions place investors at higher risk. In addition, other policies that affect risk are related to the accounting policies used in the presentation of financial statements. Managers' discretion can also affect financial statement earnings through earnings management.

Total risk and idiosyncratic risk occur due to the policies chosen by management, one of which is accounting policy. Earnings management is a management activity in the form of choosing accounting policies in running the company. Earnings management is associated with income smoothing actions, and this can be done by shifting profits from the future to the present or even delaying the payment of expenses to the next period. Earnings management is divided into two, namely real earnings management and accrual earnings management. Real earnings management seeks to shift profits through actual expenses such as increasing R&D costs, delaying payment of current expenses into the future, and changing the company's operating structure.

In contrast, accrual earnings management changes estimates and accounting policies when presenting financial statements (Zang, 2012). Management flexibility in choosing accounting policies gives impetus to act opportunistically (Scott, 2015). Management practices are not the same in several countries. Zang (2015) reveals that managers prefer to use real earnings management than accrual earnings management, while in Indonesia, real earnings management is still rarely done by companies (Firmansyah & Irawan, 2018). Nevertheless, Lasdi (2013) and Purwanti (2016) show contradictory results that there has been a shift from accruals to real earnings management before and after IFRS implementation. A high level of earnings management indicates an increase in risk and a decrease in return for investors (Nuryaman, 2013). The impact caused by earnings

management absorbs high costs and is diffuse (Krishnan et al., 2013). It even has a positive effect on the risk of stock price crashes or systematic risk and worsens if investors have no investment protection (Loureiro & Silva, 2018). Myring (2006) categorizes the market in Indonesia as a developing country market. This opinion is in line with Leuz et al. (2003), which states that investors in Indonesia do not get adequate investment protection. In addition, risk elements such as corporate risk or cash flow fluctuations are very influential in developing countries (Asghar et al., 2019). It shows that market risks and specific risks for investors in developing countries such as Indonesia are real risks with a high chance of happening. It should be a fundamental issue for investors, governments, and auditors.

For this reason, the authors are interested in further researching the inseparable relationship between earnings management and total risk and idiosyncratic risk. Research that uses earnings management as an independent variable and its relation to stock-price crash risk has been carried out by Li et al. (2011) used a sample of companies in the United States while Neifar and Utz (2018) used a sample of companies in Germany. Surifah (2015) tested earnings management against expropriation risk and Agustia et al. (2020) against the risk of bankruptcy. The difference between this study and Surifah (2015) and Agustia et al. (2020) is proxies for calculating earnings management. In Surifah's (2015) research using real earnings management proxies, Agustia et al. (2020) proxies for accrual earnings management, while this study uses real earnings management proxies and accrual earnings management. Therefore, research on the effect of earnings management on total risk and idiosyncratic risk using company data in Indonesia with real earnings management as a proxy and accrual earnings management in determining total risk and idiosyncratic risk is a fundamental thing to do. This study aims to examine accrual earnings management and real earnings management against total risk and idiosyncratic risk. Previous research only tested the risk due to the control components and financial indicators contained in the financial statements.

On the other hand, the risk tested in this study used the total risk and idiosyncratic risk variables simultaneously. In addition, this study uses earnings management variables as a form of opportunistic manager action or for efficiency. If previous studies saw the earnings management phenomenon as an event that occurs evenly in various business sectors, this study interprets earnings management differently in each sector, so it is necessary to examine earnings management according to the company sector. Thus, this research can provide more valid and valuable information for various parties, as previous research did not consider.

To support the interpretation of the test results and eliminate bias, this study uses several control variables. The first is Leverage, the proportion of debt with assets owned by the company. The greater the leverage, the more outstanding the debt, thus increasing the risk of the company's default. In the research done by Paligorova (2009) and Oktarina (2010), this variable influences earnings management and company risk. Considerable leverage affects specific risk, systematic risk, and total risk (Zreik, 2016). Companies with large debts are interested in meeting credit requirements, so considerable leverage is one of the managers' motivations to manage earnings (Roychowdhury, 2006). Thus this study uses a control variable because it is leverage. After all, it can provide significant results. Then the second, Size, which is the company's size as measured by the natural logarithm of total assets, the larger a company is, the company will be monitored by the public so that any information provided impacts the company. Good company performance will be immediately responded to by investors with stable prices so that a large company size can reduce risk (Firmansyah et al., 2020b). In addition, several previous studies obtained a negative effect (Oktarina, 2010; Kusnadi, 2014; Huang et al., 2015; Lee et al., 2016; Zhang et al., 2018; Mathew et al., 2018), the effect was not significant. (Alam and Ali Shah, 2013; Al Saedi, 2018) the results with different effects make the size variable retested as a control variable in this study. Finally, the profitability variable is obtained from the division of net income by total assets, which helps determine company performance. Companies with high ROA values can meet investor expectations and reduce risks that may occur. This variable has been used by Li et al. (2011), Kusnadi (2014), Zhang et al. (2018) by obtaining positive influence results, while the findings of Neifar and Utz (2018) and Loureiro and Silva (2018) found a positive influence between ROA and company risk. Because previous studies found a significant influence in the

model used, this study also uses the ROA variable as a control variable so that the estimated model can avoid bias. This study contributes to complementing and adding to the investigative literature related to testing earnings management on risk for investors in the context of total risk and idiosyncratic risk in capital market-based financial accounting research using data and information from developing countries. In addition, the results of this study are also expected to provide information for financial services authorities to improve policies related to the protection of investors and for investors as a consideration for making investment decisions in the capital market.

Literature Review and Hypothesis Development Efficient Market Hypothesis Theory

In an efficient capital market, the market responds to widely disseminated information quickly. However, investors are unable to predict future stock price movements because of the limited information they obtain. It has resulted in investors investing only based on fundamental analysis and speculating by buying various portfolios (Kamuti, 2013). Information obtained by investors has a random effect on stock prices. When investors get information that a stock will perform well, the expected return will be smaller because the stock price increases. The increase in the acquisition price was caused by requests from other investors (Firmansyah et al., 2020c). An efficient market will be created when the price balance is influenced by new information (Hidayat et al., 2019). Fama (1970) categorizes the Efficient Market Hypothesis (EMH) into three. The first is weak-form, information that investors can use only based on past stock prices. Although investors have data on stock prices and stock transaction volumes, investors cannot fully predict future fluctuations.

Then the second semi-strong, which is the development of the weak-form, occurs when the stock market provides past stock prices and information related to company policies such as stock splits, earnings announcements, or financial statement announcements. It means that semi-strong, widely published financial and non-financial information provides performance predictions to provide bad news or good news. Therefore, the company's full disclosure becomes an essential component in providing information to the public. The last is the substantial form. The common stock price reflects all publicly available information and information that is only known to individual investors or groups who monopolize access to internal company information. Investors in the stock market who receive this information will respond to buying or selling shares because of the difference between the manager's expected return and the actual return. This behavior forms a new stock price balance so that any additional information to the public is responded to quickly by the market.

Agency Theory

The existence of a contract that binds the relationship between the company's management (agent) and the investor (principal) directly can be interpreted as giving the principal authority over his ownership to the agent to run the business (Jensen and Meckling, 1976). Both the agent and the principal have the goal that the company can generate as much profit as possible. In return for the principal's ownership in the company manager's company, the agent's responsibility is to provide high welfare for the principal. Although a board of commissioners within the company monitors the manager's authority, this condition does not guarantee that the agent fully utilizes the power it has for the principal's welfare. Jensen and Meckling (1976) also reveal that it is essential to understand the bonus or incentive structure between the principal and agent to maximize shareholder welfare. Therefore, this is a management problem for individuals who want to profit more than the principal's welfare. The manager, as an internal party, has more information than the principal. As a result, the crucial actions taken by the agent are often not known by the principal, causing asymmetric information. According to Scott (2015), asymmetric information is when one party has more information than the other party, which is very influential in decision-making. For example, when a company tries to present good financial statements, it gives investors confidence that the mandate has been carried out according to organizational goals. Manager incentives based on company profits motivate managers to take earnings control measures, thus causing misleading information for investors because reported earnings are profits that are not following the company's actual conditions. In addition to the problem of differences in objectives or incentives obtained

by the agent, there are other problems related to risk sharing between the principal and the agent. Management tends to avoid risk while investors are more prepared to accept the risk because the risk owned by investors increases the return rate.

One example of the difference in objectives between the agent and the principal is when the manager uses retained earnings to invest in order to increase the company's ability. However, investors expect these profits to be distributed in the form of dividends. However, if viewed from an opposing perspective, managers increase their profits to get more significant incentives and bonuses through their discretion in presenting financial statements. So forward-looking disclosure can reduce the impact of asymmetric information (Firmansyah and Irwanto, 2020). As the opinion expressed by Jensen and Meckling (1976) that management motivation lies in incentives. Generally, companies provide incentives based on the company's profit performance. It indicates that management can control the rise and fall of profits. When the company has achieved the target, the company will lower current profits so that future profits are more stable.

Meanwhile, when the company is not able to meet the target, the manager will increase profits. It is closely related to investors who see the sustainability of its performance in the long term. The difference between the company's performance in real terms and what is informed to the principal causes idiosyncratic risk because asymmetric information increases when management performs earnings management. Then earnings management responds by the market with fluctuating stock prices and impacts stock returns (Li et al., 2011).

According to Puspitaningtyas (2017), the primary purpose of investment can be capital gains or future stock price increases. However, in investment, there are obstacles to achieving goals such as idiosyncratic risk and total risk. Changes in stock prices in the semi-strong stock market indicate differences in the information held by investors and company managers. Apart from being influenced by the market mechanism, the same price is also affected by economic shocks. Investors rationally base their investment decisions on publicly available information such as dividend distribution announcements, financial reports, and company business expansion. The more

information obtained, the more investors can estimate the sustainability of returns obtained in the future (Firmansyah & Irwanto, 2020).

As the company's manager, management should provide information related to the company's current performance and prospects. According to agency theory, managers as information providers have incentives to present information that benefits themselves in bonuses measured by company profits. A mandate given by investors authorizes managers to run business operations and choose accounting policies. Then the manager uses accounting policies to fulfill the bonus objective to control reported earnings through accrual earnings management. Managers can freely carry out accrual earnings management practices so that company profits can increase. Research Asri et al. (2017) show that managers choose the accounting policies, and accounting transparency in a country increases the risk for investors. In addition, due to accrual earnings management, incomplete financial statement information cannot reduce asymmetric information between management and investors (Firmansyah & Irwanto, 2020).

If the information announced by the company provides confidence that the company will perform well in the future, investors will generally buy the shares. This condition will increase the stock price in the capital market and increase the expected return. However, if the company manager limits information on the company's condition or makes misleading information, investors will undoubtedly be confused about investing. Investors doubted the company's performance, so that the demand for stock prices fell. As a result, stock prices fluctuated. Stock price fluctuations impact the return received, so the idiosyncratic risk measured by the standard deviation of monthly stock returns increases if the stock price varies.

However, when future stock prices cannot be predicted with the current stock price information, investors only rely on financial statements in determining investment decisions. Therefore, the informativeness of financial statements and all actions that affect the quality of the delivery of earnings information are the causes of decisions made by investors.

Accrual earnings management actions reduce the quality of information and increase asymmetric information, thereby lowering expected returns.

Following Agustia and Oktovianti (2012) and Nuryaman (2013), earnings management increases reduce stock returns. Then, a decrease in expected return causes stock prices to fluctuate and further increases idiosyncratic risk. More specifically, accrual earnings management increases the idiosyncratic risk (Datta et al., 2017).

With the increase in accrual earnings management, the idiosyncratic risk received by investors increases so that there is a relationship between accrual earnings management and idiosyncratic risk, namely, the higher the accrual earnings management, the higher the idiosyncratic risk. Based on this, the first hypothesis in this study is:

H_1: Accrual earnings management has a positive effect on idiosyncratic risk

Stocks traded in the capital market also face systematic risks such as economic shocks. Fluctuations in the price of all common stock and preferred stock in time series can be known by using the Composite Stock Price Index (JCI). As the difference between expected return and share return indicates a risk, a change in expected return also increases the systematic risk (Oktarina, 2010).

Following the market model theory and the opinion expressed by Djajadi and Yasa (2020), stock beta measures the systematic risk obtained by regressing between monthly stock returns and JCI market returns and the government's risk-free (Firmansyah et al., 2020). Government risk-free is usually based on ten-year government bonds, and stock market returns are obtained from JCI returns. The beta of the stock shows the sensitivity of the stock to the market. When the stock has a high beta, the movement will follow market conditions. It means that when an economic shock occurs, stocks with high betas will also be more affected than stocks with low betas.

Total risk is the sum of idiosyncratic and systematic risk, which are inherent in every company. Compared to idiosyncratic risk, systematic risk is unavoidable even with diversification. Therefore, the company's ability to face total risk is considered by investors in making investments. In a semi-strong market, the same information is obtained by various investors in the same amount and time, so the decisions between investors are not much different (Firmansyah et al., 2020b).

In this regard, the JCI fluctuations indicate a difference in information between investors and company managers. The discrepancy between the company's financial condition and the actual condition due to accrual earnings management is bad news for investors. Then, all bad news increases distrust, thereby increasing earnings certainty. Even though investors have the primary goal of obtaining high returns, the greater the uncertainty, the more accrual earnings management increases the chance of a stock price crash (Jin and Myers, 2006; Kim et al., 2011; Loureiro and Silva, 2018).

An increase in systematic risk has an impact on an increase in total risk. Thus, this study suspects that accrual earnings management by company managers increases stock beta and increases total risk. The greater the distrust of investors on the financial statements presented with accrual earnings management, the total risk received by investors will increase. Based on this, the second hypothesis in this study

H_2: Accrual earnings management has a positive effect on total risk

Viewed from the inner side of the company, real earnings management causes reduced operating cash flow and has an impact on the future (Li et al., 2011). If the company experiences uncertainty in operating cash flows, the company will have difficulty generating profits because the primary source is financed from cash flow. In addition, companies that cannot provide forecasts of future earnings tend to make managers make risky decisions that will place investors at a higher level of risk. This is supported by research by Imhof and Seavey (2014), which states that the company's ability to predict earnings can reduce the positive influence between risky decision making and firm value, and fluctuating operating cash flows positively affect the company risk.

Kothari et al. (2005) define earnings before extraordinary items, consisting of operating cash flows and total accruals. From this definition, unpredictable cash flows are an indication that the company has no certainty of future earnings. Compared to accrual earnings management, the effects of real earnings management are more dangerous for investors. Real earnings management carried out throughout the year is more difficult to detect by investors who are external parties to the

company. This opinion is reinforced by Surifah (2015), which states that real earnings management increases the company's internal risk (Surifah, 2015). As a result, asymmetric information is increasing between investors and companies. The direct impact received by the company due to real earnings management actions is that the company has difficulty carrying out operating activities because cash is more liquid than other assets. The company's inability to generate profits, which investors do not know, causes investors to increase expectations of even greater returns. Expected high returns, if not matched by actual returns, increasingly indicate idiosyncratic risk. The discrepancy between actual and reported conditions is bad news for investors. Thus, in addition to the effect of real earnings management on the company's operating activities, real earnings management also increases the company's idiosyncratic risk because investors cannot assess the company's ability in real terms. Companies with more bad news in fluctuating operating cash flows due to real earnings management affect idiosyncratic risk. The higher the real earnings management, the higher the idiosyncratic risk, hence the third hypothesis in this study:

H_3: Real earnings management has a positive effect on idiosyncratic risk

Public companies that have made investors can freely own an initial public offering, whose ownership is indicated by ordinary shares. Following agency theory, this ownership gives investors authority to managers to carry out business operations. Publicly owned companies become the center of attention by investors to respond to every information about the company. Investors can only predict various indicators that can move stock prices, including earnings announcements or financial performance and company strategic policies. Any bad information related to financial performance is responded negatively by the market by lowering the expected return, resulting in decreased demand and stock prices. Investors are only able to assess the company from the financial statements and stock price trends. Then, the company's performance that is not transparent is assessed as uncertainty to generate future profits. It means that the quality of the information in financial statements plays

an essential role in the market mechanism. For example, when a company has lowered research & development costs to be able to repurchase common stock. According to Roychowdhury et al. (2006), this action is real earnings management because the company reduces research & development costs to increase the current period's profit.

On the other hand, investors see repurchasing shares as a positive indicator of increasing profits. The manager took this action to reduce dilutive earnings per share, thus giving the impression that earnings per share seemed high. In addition, actions such as current overproduction cause current period profits to be high, while subsequent period profits are low because the products sold have low unit costs.

Differences in the perception of investors and managers impact misleading information so that the market responds incorrectly to information. Li et al. 2011 revealed that real earnings management positively affects stock price crash risk (SPCR) compared to accrual earnings management. It is due to its effect on cash flow and a decrease in the ability of accrual earnings management to predict the occurrence of SPCR. When various companies carry out real earnings management simultaneously, investors distrust the related industrial sector as a whole. Investors who are unable to diversify their portfolios prefer companies that have future business continuity. Jory et al. (2020) also found the same result that real earnings management increased the potential for SPCR. Thus, in addition to the effect of real earnings management on asymmetric information and the quality of financial reports, real earnings management also increases the total risk for the company. The actions of managers in the aggregate reduce the firm value, market expectations, resulting in misleading information. In addition, the poor quality of financial statement information provides bad news for investors so that at some point, all investors make decisions based on speculation. When various companies conduct REM simultaneously, investors distrust the related industrial sector as a whole. Real earnings management leads to total risk, then the fourth hypothesis in this study is

H_4: Real earnings management has a positive effect on total risk

RESEARCH METHODS

This type of research is quantitative research using multiple linear regression analysis. The type of data used in this study is secondary data from annual financial reports of textile and garment sub-sector companies listed on the Indonesia Stock Exchange from 2015 to 2019. The data is downloaded from www.idx.co.id, www.idnfinancials.com. In addition, to calculate monthly market returns and monthly stock returns, data were obtained from finance.yahoo.com. This study uses textile sub-sector companies listed on the Indonesia Stock Exchange until the end of December 2019. This study uses a purposive sampling technique; namely, the data is selected according to certain criteria, while the criteria used are as follows:

Tabel 1 Research Sample

Criteria	Amount
The companies listed on IDX until 31 Dec 2019	670
Non-manufacturing sector companies	(521)
Companies other than the Textile and Garment sub-sector	(130)
The company has complete financial statements from 2015-2019	(3)
Ordinary shares were actively traded during the year 1 Jan 2015 s.d. 31 Dec 2019	(1)
Number of companies that can be used for this research	15
Number of Years of Observation	5 Year
Total data observed	**75**

Idiosyncratic risk (IDIOVOL) and total risk are dependent variables, while accrual earnings management and real earnings management are independent variables. In addition, this study uses profitability, firm size, and leverage as control variables. Idiosyncratic risk is measured using a standard deviation proxy from the residuals obtained from the market model. To show the annual effect of IDIOVOL and eliminate bias, the standard deviation needs to be multiplied by square root 12, which refers to the research conducted by Firmansyah et al. (2020). Several studies that use the standard deviation of the residuals from the market model regression to measure IDIOVOL are Serfling (2014), Chang et al. (2015), Zhang et al. (2018), Jafarinejad et al. (2017), and Hatane et al. (2019), Wang et al. (2020), Jory et al. (2020).

The first step is to look for stock returns with the following formula:

$$R_{it} = \frac{P_{(t)} - P_{(t-1)}}{P_{(t-1)}}$$

Where:
$P_{(t)}$: Stock's price in period t
$P_{(t-1)}$: Stock's price in period t (t-1)

The definition of the IDIOVOL formula is as follows:

$$R_{it} - R_f = \alpha + \beta(R_{mt} - R_f) + \varepsilon_{it}$$

Where:
R_{it} : Monthly stock return period t
R_f : Risk-free (10 Year's Government bonds)
α : Constant
β : Stock beta
R_{mt} : Monthly market return (JCI) period t
ε_{it} : Residual

After regression using the market model, it is obtained which is the residual market model. Then, the residual is in the standard deviation and multiplied by $\sqrt{12}$, as done in the study of Firmansyah et al. (2020).

$$IDIOVOL = \sqrt{\frac{\sum_{i=1}^{n}[\varepsilon_{it} - (\varepsilon_{it} - \bar{\varepsilon})]^2}{n}}\sqrt{12}$$

The advantage of using the market regression model is that it can be used for a small number of return samples compared to the Fama-French model, which must separate large and small companies and include the market to book ratio variable. The fundamental difference between the two lies in the assumption of IDIOVOL. If in the market, the IDIOVOL model cannot be eliminated, whereas according to Fama-French, the IDIOVOL model can be eliminated by diversifying the portfolio. This study assumes that IDIOVOL cannot be eliminated because this risk will remain attached to an investment. Therefore, in this study, it is more appropriate to use the market model.

Total risk is measured using the annualized standard deviation of return as the proxy used by

Hwang et al. (2012), Alam and Ali Shah (2013), Serfling (2014), Mathew et al. (2018), Hatane et al. (2019), Wang et al. (2019), Firmansyah and Irwanto (2020), Jory et al. (2020). TOTRISK is calculated using the formula:

$$TOTRISK = \sqrt{\frac{\sum_{i=1}^{n}[X_i - (X_i - \bar{X})]^2}{n}}\sqrt{12}$$

Keterangan:
TOTRISK: Risiko total
X_i : Monthly stock return
$\bar{X}$: Average monthly stock return

The data used in this study is the monthly stock price. To obtain the annual return, multiply it by 12 as the proxy used by Firmansyah et al. (2020). Two proxies can be used to measure TOTRISK, namely adding up IDIOVOL and systematic risk or performing a standard deviation of monthly stock returns. This proxy is used because several companies have different stock betas so that the sum of IDIOVOL and systematic risk can give different interpretations. Therefore, return volatility indicates a combination of IDIOVOL and systematic risk.

The accrual earnings management model used in this study refers to the model of Kothari et al. (2005) and has also been used by Neifar and Utz (2016), Firmansyah and Irwanto (2020), Safira (2020), which employs the following formula:

$$\frac{TAC_{i,t}}{TA_{i,t-1}} = \alpha_0\left[\frac{1}{TA_{i,t-1}}\right] + \alpha_1\left[\frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{TA_{i,t-1}}\right] + \alpha_2\left[\frac{PPE_{i,t}}{TA_{i,t-1}}\right]$$

$$+ \alpha_3 ROA_{i,t-1}$$

Where:
$TAC_{i,t}$: Income before extraordinary items – cash flow from operating
$TA_{i,t-1}$: Total asset t-1
$\Delta REV_{i,t}$: Change in revenues in period t with t-1
$\Delta REC_{i,t}$: Perubahan piutang periode t dengan periode t-1
PPE : Gross *Plant, Property dan Equipment*

The residual results from the regression model are discretionary accruals made by managers. This value is not absolute considering that changes in stock prices caused by accrual earnings management increase profit and decrease profit. In addition,

when determining the suitable model, the absolute accrual earnings management value does not meet the criteria of a good model. The advantage of this model is that it can reduce misinterpretation of the average industry performance by adding the ROA variable to the modified Jones model.

Following the research of Roychowdhury et al. (2006), REM is a manager's activity to make changes in the timing of sales recognition (CFO), policies related to lowering COGS manipulation by increasing production (PROD), and expenses incurred at the manager's discretion (DISX). Several studies have used this model among the studies conducted by Li et al. (2011), Chang et al. (2015), and Firmansyah and Irawan (2018). For this reason, the first step is to find the residual value of each cross-section regression model. When managers do REM, by giving significant discounts to increase sales, the company's cash flow will decrease compared to when not giving discounts. For this reason, the residual from CFO needs to be multiplied by -1 to give the effect that a positive CFO is an indication of REM (Cohen et al., 2008).

$$\frac{CFO_{i,t}}{TA_{i,t-1}} = \alpha_0\left(\frac{1}{TA_{i,t-1}}\right) + \beta_1\left(\frac{SALE_{i,t}}{TA_{i,t-1}}\right) + \beta_2\left(\frac{\Delta SALE_{i,t}}{TA_{i,t-1}}\right) + \varepsilon_{it}$$

Where:
$CFO_{i,t}/TA_{i,t-1}$: Cash flows from operating activities in period t are scaled to total assets in period t
$SALE_{i,t}/TA_{i,t-1}$: Change in sales from period t to period t-1, which is scaled by the total assets of period t-1
$\Delta SALE_{i,t}/TA_{i,t-1}$: Change in sales from period t-1 to period t-2, scaled by total assets of period t-1
α_0 : Constant
ε_{it} : Residual in period t

Then, the manager tries to reduce the cost of goods sold by increasing production costs, so that in this proxy, PROD is the sum of the cost of goods sold (COGS) with inventory changes (ΔINV). When the residual has a positive sign, the manager has made efforts to manipulate production costs to increase the profit he gets.

$$\frac{PROD_{i,t}}{TA_{i,t-1}} = \alpha_0\left(\frac{1}{TA_{i,t-1}}\right) + \beta_1\left(\frac{SALES_{i,t}}{TA_{i,t-1}}\right) + \beta_2\left(\frac{\Delta SALES_{i,t}}{TA_{i,t-1}}\right) +$$

$$\beta_3\left(\frac{\Delta SALES_{i,t-1}}{TA_{i,t-1}}\right) + \varepsilon_{it}$$

Where:

$PROD_{i,t}/TA_{i,t-1}$: Production cost which is the sum of COGSt and INV⟧_t and scaled by total assets of period t-1

$SALES_{i,t}/TA_{i,t-1}$: Sales of period t scaled by total assets of period t-1

$\Delta SALES_{i,t}/TA_{i,t-1}$: Sales period t minus sales period t-1 is scaled by total assets of period t-1

$\Delta SALES_{i,t-1}/TA_{i,t-1}$: Changes in sales for period t-1 are scaled to total assets for period t-1

α_0 : Constant

ε_{it} : Residual in period t

Furthermore, the discretionary burden proxy by managers is measured using the residuals from the regression model used by Roychowdhury (2006) with the following formula:

$$\frac{DISEXP_{i,t}}{TA_{i,t-1}} = \alpha_0\left(\frac{1}{TA_{i,t-1}}\right)+ \alpha_1\left(\frac{\Delta SALE_{i,t-1}}{TA_{i,t-1}}\right)+ \varepsilon_{it}$$

Where:

$DISEXP_{i,t}/TA_{i,t-1}$: Total SGA expense added up with advertising and R&D expenses scaled to total assets for period t-1

$\Delta SALES_{i,t-1}/TA_{i,t-1}$: Changes in sales for period t-1 are scaled to total assets for period t-1

α_0 : Constant

ε_{it} : Residual in period t

The residual is multiplied by -1 because the manager does not do REM if the residual result shows a positive value (Firmansyah and Irawan, 2018). The final step is to add up all residuals generated by each activity through the Cohen et al. (2008) formula:

REM=(-AB_CFO)+(AB_PROD)+(-AB_DISX)

Vozlyublennaia (2013) states that companies with high leverage will face significant interest expenses in the future and reduce profits, thereby increasing idiosyncratic risk and providing bad news for investors. This study uses a formula that has been used by Ferreira and Laux (2007), Oktarina (2010), Agustia and Oktovianti (2012), Nuryaman (2013), Chang et al. (2015), Sulistiowati (2017), and Hatane et al. (2019) using the following formula:

$$LEV = \frac{Total\ Debt}{Total\ Asset}$$

To measure the company's size using the natural logarithm value of total assets done by Oktarina (2010). Companies with large sizes tend to have low IDIOVOL because significant total assets indicate converting their profits into assets to increase revenue. Several previous studies that have used this control variable include Li et al. (2011), Imhof and Seavey (2014), Kusnadi (2014), Huang et al. (2015), Chang et al. (2015), Surifah (2015), Zhang et al. (2018), Firmansyah and Muliana (2018), Loureiro and Silva (2018), Neifar and Utz (2018), Asghar et al. (2019), Al Saedi (2018) as for the formula as follows:

$$SIZE = \ln(Total\ Asset)$$

Profitability using the ROA proxy, the company's ability to generate profits is measured by the division of Net income by Total Assets, as done by Firmansyah and Irawan (2018). Companies with a considerable profitability value mean that the company can efficiently generate profits because the assets owned can optimally generate large profits. This variable was chosen for control because investors view the company's profitability as an indicator that the company can provide exemplary performance in the future. This condition can cause IDIOVOL to be reduced. Several studies that have used this variable are Li et al. (2011), Imhof and Seavey (2014), Kusnadi (2014), Huang et al. (2015), Zhang et al. (2018), Loureiro and Silva (2018), Neifar and Utz (2018) with the following formula:

$$ROA = \frac{Net\ Income}{Total\ Asset}$$

Furthermore, the data analysis test of this study used regression analysis for panel data. This study uses two models. The first model is accrual earnings management and real earnings management on idiosyncratic risk. The following is the first regression model in this study:

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$$IDIOVOL_{it} = \beta_0 + \beta_1 AEM_{it} + \beta_2 REM_{it} + \beta_3 ROA_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it...} \quad (1)$$

The second model examines the effect of accrual earnings management and real earnings

management on total risk. The following is the second regression model in this study, namely:

$$TOTRISK_{it} = \beta_0 + \beta_1 AEM_{it} + \beta_2 REM_{it} + \beta_3 ROA_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it...} \quad (2)$$

RESULTS AND DISCUSSION

Descriptive statistics in this study for all variables are as follows:

Table 1 Descriptive statistics

Variabel	IVOL	TOTRISK	AEM	REM	ROA	SIZE	LEV
Mean	0,4052	0,4215	-1,92 x 10-18	1,33 x 10-12	-0,0096	28,1869	0,9666
Med	0,3508	0,3747	-0,0113	0,028	0,002	27,8721	0,6467
Max	1,931	1,9309	0,1609	0,3976	0,098	30,7022	5,0733
Min	0,0402	0	-0,1308	-0,3591	-0,2204	26,7537	0,0758
Std. Dev.	0,3064	0,3145	0,057	0,1418	0,0616	1,1543	1,1456
Obs.	75	75	75	75	75	75	75

Source: Processed

The results of testing the hypothesis are as follows:

Table 2 Hypothesis Testing Results Model 1 and Model 2

	Model 1				Model 2			
Var.	Coeff.	t-Stat.	Prob.		Coeff.	t-Stat.	Prob.	
C	-2,900	-3,269	0,002	***	-2,895	-3,188	0,002	***
AEM	-2,529	-3,661	0,001	***	-2,576	-3,642	0,001	***
REM	1,004	3,539	0,001	***	1,026	3,534	0,001	***
ROA	1,631	2,687	0,009	***	1,825	2,937	0,005	***
SIZE	0,119	3,750	0,000	***	0,119	3,678	0,001	***
LEV	-0,026	-0,845	0,401		-0,026	-0,834	0,407	
R^2		0,270				0,274		
Adj. R^2		0,217				0,221		
F-stat.		5,104				5,204		
Prob(F-stat.)		0,0004				0,0004		

Source: Processed

Discussion of the effect of accrual earnings management on idiosyncratic risk

The results of the first hypothesis test show that accrual earnings management is negatively associated with idiosyncratic risk. Therefore, idiosyncratic risk will decrease when management performs accrual earnings management so that the first hypothesis in this study is rejected. It is contrary to the findings of Datta et al. (2017), which states that there is a positive influence between accrual earnings management and idiosyncratic risk. However, this condition strengthens Agustia et al. (2020); companies that carry out earnings management always provide optimal information so that the textile sub-sector companies do not experience significant idiosyncratic risks. Idiosyncratic risk is a specific risk borne by each company. It is closely related to the company's sustainability and the company's ability to generate maximum profit. Several factors influence idiosyncratic risk. For example, textile companies in Indonesia have varying sizes and are positively correlated with idiosyncratic risk. Companies that have significant assets represent much ownership by the public so that investors have diverse goals. Significant ownership allows the difference between the goals of investors and managers, resulting in agency

costs. Managers take advantage of this opportunity to achieve individual goals by projecting future earnings through accrual earnings management. The accrual earnings management of textile sub-sector companies in Indonesia is relatively low, and more companies do not aggressively carry out accrual earnings management. There has been a shift in earnings management methods in several countries after the global financial crisis.

In contrast, Firmansyah and Irawan (2018) obtained different results; precisely in Indonesia, company managers often use accrual earnings management. This condition can occur when companies have different business processes, so it is more appropriate to look at the earnings management phenomenon from each sector or those with similar characteristics. After implementing IFRS convergence PSAK, managers are more careful to control their earnings because issues related to accrual earnings management in Indonesia have become critical issues for various parties. Managers prefer to provide full disclosure as required by PSAK in order to provide relevant information. Managers take advantage of their authority to carry out accounting policies to provide more complete disclosures to investors. Complete disclosure is very influential in the semi-strong market, so that in this theory, it is assumed that the financial statements have been presented in full. Therefore, freely available information obtained by various investors will result in decisions that are not much different from one another (Firmansyah et al., 2020a).

Accounting policies taken by managers aim to improve company efficiency. For example, a textile company is identical to production machines, and an efficiency-oriented manager will take a policy to shrink the machine based on the unit activity method. This method will be more in line with the principle of matching cost against revenue in PSAK. It will have an impact on the company's profit as expected by investors.

As users of the company's financial statements who have performed earnings management, investors can interpret the information submitted by the company in the form of decision responses in the stock market. This finding is in line with Subramanyam's (1996) research which states that accrual earnings management increases the relevance of firm value in the eyes of investors by communicating internal information that is not reflected in historical costs and income smoothing. The more transparent a company is to the public,

the greater the investor confidence. In addition, companies that inform the risk that may occur in the future can better reduce the effects of idiosyncratic risk compared to companies that do not inform the risk (Zreik, 2016).

Regarding stock price fluctuations, the textile sub-sector companies in Indonesia are relatively not too sharp, and there are even companies that have stock prices from the beginning of the year to the end of the year with a fixed value. Companies with low idiosyncratic risk are more attractive to investors who cannot diversify their portfolios (Murhadi, 2013).

In Indonesia, textile stock investors may see investment opportunities to be owned long-term in return for dividend income, not to obtain capital gains. If this is true, investors will have a thorough look at the company's fundamentals, not just from momentary information related to non-financial information. Investors expect companies to project future earnings, and managers use this opportunity to be more careful in making risky decisions. Therefore, the manager's accrual earnings management actions clarify financial statement information to reduce the company's idiosyncratic risk.

Discussion of the effect of accrual earnings management on total risk

The results of the second hypothesis test indicate that accrual earnings management is negatively associated with total risk. The second hypothesis in this study is rejected because managers who carry out accrual earnings management can reduce the impact of total risk. This result contradicts the findings of Loureiro and Silva (2018) that accrual earnings management has a positive effect on total risk. Total risk is the risk for each company that comes from a combination of idiosyncratic risk and systematic risk. Systematic risk is more comprehensive and impacts the entire company than idiosyncratic risk, affecting companies with specific characteristics. The total risk of textile companies in Indonesia is low and varied because only a few companies experience above-average total risk. It is closely related to the beta of each company. Changes in idiosyncratic risk follow total risk because idiosyncratic risk can be suppressed by accrual earnings management so that the main component of total risk is systematic risk.

Descriptive statistical analysis shows that the distribution of real earnings management is skewed to the left. Many companies perform real earnings management above the average of similar companies. In textile companies in Indonesia, there has been a shift from accrual earnings management to real earnings management, as evidenced by the positive average value of real earnings management while the negative average accrual earnings management. Several factors may motivate managers to carry out real earnings management, among others. First, the ease of using accrual earnings management is easier for authorities such as the OJK and tax authorities to know because managers can change profits until the end of the fiscal period until the announcement of earnings, secondly obligations in IFRS convergence PSAK requires companies to provide full-disclosure and also comply with the application of accounting principles so that managers cannot readily apply to change accounting policies without clear reasons.

Discussion on the effect of real earnings management on idiosyncratic risk

Real earnings management is the manager's action to carry out activities such as giving significant discounts, accelerating sales recognition, reducing costs related to manager discretion, increasing production to reduce production costs per unit, and affecting profit (Purwanti, 2016). Companies that want to have a good impression of financial performance seek to increase the company's value by increasing profits. The purpose of the company's impression will be to reduce the informative quality of earnings. If the company has low earnings quality, asymmetric information will also increase (Bachtiar, 2007). At the same time, investors as external parties rely heavily on publicly available information. As a result, investors expect a significant expected return because the actions of managers have distorted the risk due to the delivery of financial information.

Compared to accrual earnings management, real earnings management by managers in Indonesia is an opportunistic act of managers to fulfill bonus incentives. Following the agency theory proposed by Jensen and Meckling (1976), agents perform earnings management to obtain large bonuses because bonuses are based on company profits. The discrepancy between earnings after real earnings management and actual earnings is a risk for investors so that real earnings management

by managers increases risk and reduces returns received by investors.

In contrast to accrual earnings management, real earnings management directly affects the company's operating cash flow. For example, when a company provides a considerable discount, sales will increase, but the net value will be reduced by a sales discount so that the company's cash inflow will be smaller than when it does not provide a sales discount. When the company produces more products than it should, the fixed cost per unit will decrease, and COGS will be low, then a decrease in COGS will increase profits (Roychowdhury, 2006). The increase in corporate profits also is negatively associated with the amount of tax to be paid. This situation is increasingly risky for investors when real earnings management is carried out throughout the year.

The uncertainty of future cash flows affects the company's ability to generate profits because the components of profit come from operating cash flows and accruals, so changes in CFO impact earnings. As a result, investors as risk-averse prefer companies with profit certainty (Oktarina, 2010). The mechanism of supply and demand in the stock market has an impact on changes in stock prices. Thus, real earnings management actions by managers further increase idiosyncratic risk.

Discussion on the effect of real earnings management on total risk

The fourth hypothesis test results that real earnings management is positively associated with total risk, so the fourth hypothesis test in this study is accepted. The results of this study are also in line with the results of research conducted by Li et al. (2011) that after the implementation of SOX, the ability of accrual earnings management to predict the occurrence of crash risk decreases compared to the ability of real earnings management to predict crash risk. Textile companies face a total risk than idiosyncratic risk. The total risk that occurs is a combination of systematic risk and idiosyncratic risk.

In the previous discussion, the idiosyncratic risk variable in textile companies can be reduced by accrual earnings management. Thus, the systematic risk component has an essential role in the rise and fall of risks. Compared with idiosyncratic risk, systematic risk or beta affects the decline in

stock returns, while idiosyncratic risk does not provide significant changes (Rasheed et al., 2019). Systematic risk is closely related to government policies and the country's economic conditions and impacts all industrial sectors.

In general, the Indonesian textile sector is experiencing competition with local products and imported products, which impacts the company's ability to earn profits due to reduced market share. From the inner side of the company, real earnings management makes information more limited. Ferreira and Laux (2007) explain that information restriction decreases the quality of information.

Therefore, the poor quality of financial reports due to the implementation of real earnings management increases the potential risk of falling stock prices. When all textile companies do real earnings management, investors get bad news that the textile industry lacks future performance, so that the effect is that investors are less able to entrust their investments to company managers. As a result of declining market demand, market prices are also decreasing along with the decline in firm value, causing fluctuations in stock prices.

This condition is further exacerbated by the absence of investor protection for the actions of managers who carry out real earnings management. Real earnings management activities are not an act of fraud but rather an action of managers who take advantage of the authority over asymmetric information between managers and investors related to the company's internal performance, distorting the quality of financial information. Managers use real earnings management for countries with low GDP and do not protect investors who tend to get a higher potential risk of falling stock prices if the company also carries out earnings management (Loureiro and Silva, 2018).

Real earnings management is more difficult to find because it is carried out throughout the year while investors have limited private information. Managers take advantage of this opportunity for opportunistic purposes, such as meeting debt requirements or achieving bonuses. Investors view this action as an unusual event compared to similar industries. Then, investors in the stock market make stock price adjustments to the negative information and reduce the expected return. Thus, this study concludes that real earnings management actions affect the informativeness of earnings, thereby

reducing investors' perceptions of the company's sustainability. In addition, all accumulated negative information disseminated by the company's internal parties also destroys investor confidence in the industry sector.

CONCLUSION

The motivation of company managers to use accrual earnings management is non-opportunistic, thereby increasing the disclosure of financial statements. Complete information provides confidence, increases the company's value, and minimizes the company's uncertainty generating profits in the future. This condition equates the goal between the return expected by investors and the actual return generated by the company. In addition, the accrual earnings management policy carried out by company managers is solely carried out to carry out accounting policies so that the company as a whole can prevent idiosyncratic risks and improve investor welfare. As internal company parties with more information than investors, managers provide information transparently to the public using accrual earnings management to increase a good market impression. When the stock market sees that the company's profit projection is profitable, market demand will also increase so that the stock price will increase and meet investors' expected return.

On the other hand, managers use this opportunity to be more careful in carrying out company management actions. If the manager misuses it for his benefit, it will automatically lead to investor distrust of the information provided by the manager. Therefore, the manager's transparency and the manager's prudence in investing for the progress of the business can simultaneously reduce the risk that impacts the fall in stock prices.

Earnings management through real actions such as increasing sales by giving discounts, increasing production costs to reduce COGS, and recognizing future income to the present make future cash flows unpredictable. This condition causes the company not to forecast earnings because the profit component comes from operating cash flow and accruals. Managers' motivation to do real earnings management in Indonesia is opportunistic and distorts financial statement information. As a result, investors doubt the company's sustainability

in the future, so fluctuating stock prices indicate the response. In addition, real earnings management is used for opportunistic purposes, so that it is more dangerous for the company's sustainability because the information submitted by the manager results in misleading information. The discrepancy between the actual condition and what is conveyed to the public only meets the individual interests of managers as individuals. Investors actively view the available information as something that is not fair compared to benchmarking similar industries. When the company's internal parties publish all the negative information that has been accumulated, the expected return will decrease so that the total risk will increase.

There are several limitations to this study. First, this research is only limited to testing the Textile and Garment sub-sector manufacturing companies on the IDX, so the results of this study cannot be used in general considering the different characteristics of specific industries in Indonesia. Second, the literature that discusses the relationship between earnings management and corporate risk in Indonesia's research is quite rare, so that information from various sources is needed to support this research. Third, the risk variable used does not use the volume of shares traded so that the effects of shares that are not actively traded cannot be known. Fourth, this study's accrual earnings management test does not use absolute values because some of the models' tested effects do not meet the criteria of a good model.

Future research can use a more extended research period, add a sample of companies, and include the financial sector to provide a more general discussion and comprehensive review. Then, they are separated according to the characteristics of each company, for example, dividing according to the size or cycle of the company's stages. Regarding earnings management, testing can be done by testing the effect of each component of real earnings management, including Abnormal CFO, COGS, and DISX with risk variables. In addition, further researchers can add firm life cycle stage variables because company risk is closely related to company maturity.

This study indicates that real earnings management has more harmful effects and increases the risk for investors, so that model market operators need to evaluate the stock price movements of issuers who carry out earnings management. Given that real earnings management's effect increases idiosyncratic and total risk, OJK can make new policies related to investor protection. Companies that carry out earnings management tend to have sales that increase significantly, but the cash flow is negative. It indicates that the company manipulates sales to provide confidence for external parties, both stockholders and bondholders. The impact that occurs in the future will result in public distrust of both local and domestic investors, which will reduce the company's ability to compete with products from other countries.

Investors should make decisions based on lucrative profits and the company's ability to generate operating cash flow and look at stock price trends in recent years because they indicate its actual performance. Investors can consider risk problems that cannot be eliminated to diversify their investments and choose companies to compete with competitors. To reduce the risk that may be caused by systematic risk, investors need to diversify their investments.

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