THE IMPACT OF ENTERPRISE RISK MANAGEMENT, EARNINGS VOLATILITY, FIRM CHARACTERISTICS TO FIRM VALUE

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ABSTRACT

This study aims to examine the effect of Enterprise Risk Management (ERM), earnings volatility and company characteristics such as asset tangibility, company size, company growth, profitability, company age, liquidity and leverage on firm value. The implementation of Enterprise Risk Management in the company is useful for managing risks that may occur in the company's operational activities. Enterprise Risk Management is an effort to improve the quality of risk management implementation that can mitigate risks that arise so that companies are not only able to survive but also excel in business competition. Thus, the application of ERM is alleged to have an influence on firm value. Meanwhile, earnings volatility is a picture of the level of business risk faced by the company so that it can affect the value of a company. The implementation of ERM, the occurrence of earnings volatility and the characteristics of the company itself can be an indication of the company's risk which is predicted to affect the fluctuation of firm value. The sample of this research is non-financial companies listed on the Indonesia Stock Exchange from 2016 to 2018. There are 268 non-financial companies that meet the sampling criteria. This study uses multiple regression analysis to test the research hypothesis. The results of this study indicate that Enterprise Risk Management, earnings volatility, company characteristics such as assets tangibility, profitability and leverage have a positive effect on firm value. Meanwhile, company characteristics such as company size, company growth, company age, and liquidity have no effect on firm value.

Keywords: firm value, enterprise risk management, earnings volatility, assets tangibility, profitability, leverage

1. INTRODUCTION

This study aims to examine the effect of Enterprise Risk Management (ERM), earnings volatility and company characteristics such as asset tangibility, company size, company growth, profitability, company age, liquidity and leverage on firm value. The company's value can be a reflection of the current condition of the company and also provide an overview of the condition of the company in the future. Thus, the firm value described by the company will be used by investors to make decisions on their investment in the company concerned.

Firm value is an interesting research topic because firm value can be a measure of how much bargaining power the company has in the eyes of investors. The higher the value of the company, the more welfare will be received by investors. In order for the firm's value to increase, there needs to be synergy between shareholders and related stakeholders in determining the right decisions.

The level of firm value can be influenced by several internal factors of the company itself. Several internal factors of the company include how the company performs risk management which is an important factor in how the company will survive amidst intense business competition (Abdel-azim & Abdelmoniem, 2015; Abdullah, Janor, Hamid, & Yatim, 2017). It is predicted that the company's transparency in disclosing risk management will increase the value of the company itself due to increased investor confidence in the company. The role of implementing Enterprise Risk Management in the company is very important in order to anticipate and manage risks that may occur in the company's operational activities. Enterprise Risk Management is an effort to improve the quality of risk management implementation so that companies can mitigate risks to a lower level of risk so that the company can survive in its business competition (Iswajuni, Manasikana, & Soetedjo, 2018). The openness of the company in disclosing risk management is a form of corporate responsibility in managing business risk which will increase transparency, which is one of the good corporate governance mechanisms (Abdel-azim & Abdelmoniem, 2015; Abdullah et al., 2017).

Likewise, with other factors such as the volatility of income which can be a picture of the company's future earnings so that it is predicted to affect the level of company value (Gworo, 2019). In addition, the volatility of earnings shows the level of risk faced by the company and is an indication of the fluctuation in the value of the company itself. Ibrahim (2017) stated that earnings volatility shows the inefficiency of the company's management in managing its business activities. Meanwhile, company characteristics such as asset tangibility, company size, company growth, profitability, company age, liquidity and leverage are considered to have an influence on the firm value. This study took a sample of companies in the non-financial sector listed on the Indonesia Stock Exchange in the period 2016 to 2018. This study uses a sample of non-financial companies listed on the Indonesian Stock Exchange because Indonesia is a unique sample, where most companies are owned by family companies and have a weak investor protection system so it is necessary to study internal factors such as ERM, earnings volatility and company characteristics such as asset tangibility, company size, company growth, profitability, company age, liquidity and leverage on firm value.

The contribution of this study is to enrich the literature of previous research on Enterprise Risk Management, earnings volatility and company characteristics such as assets tangibility, company size, company growth, profitability, company age, liquidity and leverage on firm value, which is still inconsistent with the results of previous studies. Abdullah et al. (2017) shows that ERM actually has a negative impact on company value because the implementation of ERM is considered to increase the burden on the company itself. In contrast to research conducted by Abdel-azim & Abdelmoniem (2015) which shows ERM can actually increase value for a company. Likewise, with Ibrahim (2017) shows that earnings volatility has no effect on firm value on the Nigerian Stock Exchange. Likewise, with company characteristics such as asset tangibility, company size, company growth, profitability, company age, liquidity and leverage which have inconsistent previous research results. Thus, the implication of this research is for investors and creditors in making investment decisions or providing credit loans to companies by taking into account

the application of ERM, earnings volatility and company characteristics such as asset tangibility, company size, company growth, profitability, company age, liquidity and leverage in influencing the value of a company. In addition, this study also has implications for auditors and company management in paying attention to the application of ERM, earnings volatility and company characteristics such as asset tangibility, company size, company growth, profitability, company age, liquidity and leverage on firm value in making an initial indication of a company risk.

2. LITERATURE REVIEW

2.1 Signaling Theory

Signaling theory was introduced by Ross (1977) by developing the Modigliani & Miller Irrelevancy Proposition, which assumes that the market knows the company's random return flow and the value of these flows to determine firm value. Signaling theory is developed in both the economic and financial literature which explains explicitly that the internal company will know more about the future prospects than the company's external parties. The company management will claim that the company is experiencing perfect growth and has profitability prospects. Through the intensive-signaling approach, management is likely to choose tangible financial variables such as financial leverage or dividend policy as unambiguous signals. This signal will be sent to the public, especially shareholders, with the aim of letting them know the company's future performance. However, not all of these signals can be conveyed properly by the company. A company that is not successful - for example because it does not have sufficient cash flow to fund its operations or because management has no incentive to tell the truth - is unlikely to provide the right signals to shareholders. Without management incentives to provide accurate and honest signals to shareholders, there will be no signal equilibrium. Ross argues that the greater corporate leverage will be used by managers to signal an optimistic company future (Copeland et al. 2005, 597-598). Signaling theory shows the importance of information issued by company management to investors as one of the company's stakeholders. In fact, company management does not hesitate to disclose important company information that investors need to know, especially if the information is positive.

2.2 Firm Value

Firm value is the investor's perception of the company's success rate. If the company's share price in the capital market is high, then investors will have a favorable perception of the company, so that investors will believe in the company's business continuity and the company's future performance and prospects. Market value is used because high company value will provide more prosperity for shareholders. The higher the company value, the higher the prosperity felt by shareholders. Investors, the board of directors and commissioners of the company - are trusted as managers of corporate value by investors in order to achieve the expected company value.

2.3 Enterprise Risk Management

In order to anticipate the risks associated with the company's business, companies need to implement Enterprise Risk Management (ERM). The definition of ERM according to the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2004) is a process carried out effectively by management and company employees, applied in strategy formulation, designed to identify potential events that can affect the entity, and manage risks so that is a risk that can be accepted by the company in order to produce reasonable assurance in achieving the company's goals.

In the last few years, ERM has been developed by various companies as an approach to improve the handling of specific risks in the company's business activities. The risks that can occur can be related to operational, financial, market and information technology (IT) risks. In dealing with this, ERM will collect any risks faced by the company as a whole, then manage these risks through a series of systematic methods. ERM is generally integrated with the company's strategic planning and risk policies that apply in the company. ERM is expected to increase firm value, because all risks can be dealt with systematically and consistently, compared to risk management in a reactive or ad hoc manner (Kimbrough & Componation, 2009).

Nocco & Stulz (2006) argue that the application of ERM provides added value to the company through the impact it produces, both macro and micro. At the macro level, ERM can assist management in calculating and managing the risks faced by the company, so that if the company applies ERM in its operational activities, ERM can help the company maintain access to the capital market and other resources that the company needs so that the company can achieve its vision. At the micro level, the ERM system can ensure that all material risks can be managed properly by the company and the company's risk-return tradeoff can be evaluated properly by managers and all company employees.

ERM can be an indicator of good corporate governance. Management has a tendency to notify stakeholders of private matters, while stakeholders have the right to know the internal conditions of the company, especially what activities the company carries out so that they can minimize losses that may occur at any time for them. With the existence of ERM, all activities that can cause fraud that can harm the company and stakeholders can be minimized or even prevented.

The results of research conducted by Abdel-azim & Abdelmoniem (2015); Bertinetti, Cavezzali, & Gardenal (2013); Iswajuni et al. (2018); Santioso (2019); Silva, Silva, & Chan (2019); Ai, Chen, & Zhao (2014) show that the more ERM items that can be disclosed in the financial statements, the impact on the increase in firm value. This is in line with the market's positive response to ERM which can be relevant information in predicting a company's going concern. The application of ERM in companies can also provide added value for the company, which can also increase competitive advantage so that investors are more interested in investing in the company.

However, research conducted by Abdullah et al. (2017); Ali, Hamid, & Ghani (2019); Azizah & Islam (2014) show that ERM has a negative effect on firm value. Companies do not make risk disclosure one of the important points that need attention, meanwhile investors also do not pay attention to the details of risk disclosure when investing in the company (Azizah & Islam, 2014). In general, the application of ERM between companies has differences, especially in terms of effectiveness and costs. The success of implementing ERM does not automatically increase the value of the company, so that the implementation of ERM needs the support of all human resources owned by the company, both management and employees. If all employees and company

management fully support the implementation of ERM in the company, then the impact will be very good for the company's long-term survival (Abdullah et al., 2017).

Meanwhile, the results of research conducted by Agustina & Baroroh (2016); Sayilir & Farhan (2016) show that the application of ERM has no effect on company value because the application of ERM in general still follows existing regulations and has not had a direct impact on company value. There are a number of inconsistencies in the results of previous research findings, so this study examines the relationship between ERM and firm value in a sample of companies in Indonesia. Based on the above background, the research hypothesis is:

Ha_1: Enterprise Risk Management affects firm value.

2.4 Earnings Volatility

Earnings volatility is a description of the level of business risk and bankruptcy that can occur in company activities. Company volatility can be an indicator of the company's business risk and in general, it is often an important thing for lenders (debtholder) to know in terms of estimating future earnings (Gworo, 2019).

Earnings volatility is often seen as an inherent business risk that can arise in the company's operations as well as the result of inefficient management practices. In certain cases, volatility can be a proxy for the possibility of financial distress so that the company must pay a risk premium to external fund providers. In order to reduce the cost of capital, the company will use the revenue it generates itself first in its operations, then if the income is not sufficient, the company will use funds borrowed from external parties (Ibrahim, 2017).

Gworo (2019); Kim & Kim (2018) found a positive influence between earnings volatility and firm value because high earnings volatility is expected to improve the company's performance in the future. Meanwhile, Rountree, Weston, & Allayannis (2008) showed the negative effect of earnings volatility on firm value. Theoretically, companies that have high earnings volatility will lower the value of the company, because high earnings volatility will indicate the risk of bankruptcy, so investors tend to avoid investing in companies that have high earnings volatility. Thus, there are inconsistencies in the results of previous studies so that this study examines the relationship of income volatility to firm value. Based on the above background, the research hypothesis is:

Ha_2: Earnings volatility affects firm value.

2.5 Assets Tangibility

Assets tangibility relates to the total value of tangible or fixed assets owned by the company. Fixed assets are assets that are used by the company in the process of producing goods and services and in the company's operations. Assets tangibility can be a measure of a company's ability in terms of external financing. The most basic reason for this is that the company has sufficient collateral in the event of default on debt to creditors (Dietrich, 2007). Companies that have high tangible assets will find it easier to get loans in the form of debt. The more tangible an asset is, the easier it will be to bring in external financing in the form of debt, because tangible assets mitigate the problem of contractability: tangible assets will increase the value that is acceptable to creditors (Almeida & Campello, 2007).

Several previous studies have shown that asset tangibility has a positive effect on firm value (Huynh, Wu, & Duong, 2020; Ibrahim, 2017; Izah & Ahmad, 2011; Kouki & Said, 2011; Hoque, Hossain, & Hossain, 2014). However, research conducted by Appolos & Kwarbai (2016); Mule, Mukras, & Mutunga (2015); Sinha (2017) show that asset tangibility has a negative effect on firm value. In certain industrial sectors, for example the service and retail sectors, the purchase of fixed assets in large quantities can reduce company profits, because company funds that should be used for purchasing merchandise (for retail businesses) will be used more to buy as many assets as possible. In addition, many company assets cannot be a significant source of profit for the company's operations (Mule et al., 2015). Likewise, with research conducted by Gharaibeh & Qader (2017); Thakur, Kannadhasan, Charan, & Gupta (2019) which shows that asset tangibility has no effect on firm value because not all fixed assets owned by the company can be used to improve the company's operational performance. There are differences in the results of previous studies, so this study examines the relationship between asset tangibility and firm value. Based on the above background, the research hypothesis is:

Ha_3: Assets Tangibility has an effect on firm value.

2.6 Company Size

Company size is a measure of the size of a company. Company size relates to the risks that the company must face and bear. The larger the company size, the company has the opportunity to have lower business risk compared to small companies. The company's ability to handle a risk is also closely related to the company size, because large companies will find it easier to read the market situation so that it is easier to control the risks that may occur in the company's operations.

Company size is considered capable of significantly affecting firm value, because the larger of the company size, the easier it will be for the company to obtain financing facilities. In addition, company size can also determine the level of investor confidence. The larger of company size, the more familiar the company will be. If the company is widely known by the public, the information needed by investors regarding the condition of the company will be easier to obtain so that it can attract investors.

Research conducted by Aggarwal & Padhan (2017); Assidi, Aliani, & Omri (2016); Oluwagbemiga (2013); Rizqia et al. (2013) show that firm size has a positive influence on firm value. This is based on the ease with which large companies obtain funding which of course can be used to finance the company's operational activities. However, research conducted by Almumani (2014); Ibrahim (2017); Jieting, Yucan, & Xiaomin (2011); Mishra & Kapil (2018) show that company size has a negative effect on firm value because large companies are sometimes unable to utilize their assets effectively, resulting in ineffective asset rotation and accumulation of assets within the company. In contrast, Gharaibeh & Qader (2017); Setiadharma & Machali (2017); Talebnia, Salehi, Valipour, & Shafiee (2010) show that firm size has no effect on firm value. Setiadharma & Machali (2017) state that large company asset values do not always guarantee that investors' impressions of the company will increase. In addition, investors sometimes do not consider accounting information as a basis for making investment decisions. There are differences in the findings of previous studies, so this study examines the relationship between firm size and firm value. Based on the above background, the research hypothesis is:

Ha_4: Firm size affects firm value.

2.7 Company Growth

Company growth is an indicator of the development undertaken by the company within a certain period of time. A company with good asset growth shows that the company can manage its resources well. The greater the asset growth is expected to be able to improve company performance and generate profits. Not only company managers, but parties with an interest in the company want the company to grow, because company growth is seen as having a good impact on the company itself and its stakeholders, so that this can increase the company's value in the eyes of investors.

Research conducted by Gharaibeh & Qader (2017) shows that changes in company growth opportunities have a positive effect on firm value. Parties with an interest in the company want the company to grow, because the company's growth is seen as having a good impact on the company itself and its stakeholders. Based on the above background, the research hypothesis is:

Ha_5: Company growth affects firm value.

2.8 Profitability

Maharani & Suardana (2014) state that profitability describes a company's ability to generate profits, certain asset levels and capital. The greater the profit that can be achieved by the company, the greater the company's ability to pay dividends. This advantage is not only felt by shareholders, but also for company management. High profitability also indicates that the company has good prospects so that it can trigger investors to invest in the company which can increase firm value.

Research conducted by Gharaibeh & Qader (2017); Rachmawati & Pinem (2015) show that profitability has a positive influence on firm value. High profitability reflects good company performance, which also indicates that the company is able to pay dividends at the expected level (Rachmawati & Pinem, 2015). Meanwhile, Ibrahim (2017); Izah & Ahmad (2011) show that profitability has a negative effect on firm value. Thus, there are still differences in the results of previous studies, so this study examines the relationship between profitability and firm value. Based on the above background, the research hypothesis is:

Ha_6: Profitability affects firm value.

2.9 Company Age

The age of the company describes how long it has been listed on the Stock Exchange. The length of time the company has carried out its operations has made the company more experienced in building business entities which will indirectly increase its ability to get more profit. The longer the life of the company, the reputation of the company will increase as well. This is because companies that have been established for a long time are often seen as more experienced in dealing with all conditions, especially if the company is able to survive even in difficult economic conditions. Based on this, a company that has been established for a long time will be able to maintain its business continuity, thereby increasing company value.

Ibrahim (2017) research shows that company age has a positive influence on firm value. A company that has been established for a long time will build a good image in the community because it already has more information and experience, so that in order to maintain this good image, the company will as best as possible maintain its corporate value. Meanwhile, Hatem (2015; Jieting et al. (2011); Mishra & Kapil (2018); Tenai, Cheboi, & Chelogoi (2019) show that company age has a negative effect on firm value. The length of time the company has been established causes the company to be inefficient in carrying out its operational activities. In contrast, Talebnia et al. (2010) show that company age has no effect on firm value. This is because the length of time the company has been established is not the main factor that determines the high value of a company, but how the company runs its business and the resulting performance are factors that can increase the value of the company itself. The results of previous studies show that there are differences in findings, so this study examines the relationship between company age and firm value. Based on the above background, the research hypothesis is:

Ha_7: Company age has an effect on firm value.

2.10 Liquidity

Referring to the pecking order theory, companies with high liquidity will borrow smaller amounts of money. Liquidity is the company's ability to meet short-term obligations. Companies that have high liquidity will of course be trusted by investors because they are considered to have good performance as well. Companies that have high liquidity will have large internal funds, which can be used to finance their operations, including investments. If the liquidity of a company is high, then the risk of failure of the company to fulfill its financial obligations or short-term debt will be smaller. On the other hand, if the liquidity of a company is low, the company will have difficulty fulfilling its short-term financial obligations. Furthermore, companies with high liquidity will receive a positive market response (Aggarwal & Padhan, 2017), in line with the concept of signaling theory. Based on the above background, the research hypothesis is:

Ha8: Liquidity affects firm value.

2.11 Leverage

Leverage shows how much the assets owned by the company are financed by debt. The greater the leverage ratio, the greater the investment risk, and vice versa. The use of debt has both positive and negative impacts for the company. Aggarwal & Padhan (2017) shows that leverage has a positive effect on firm value. Debt is a source of funding that can help companies maximize their profits. Meanwhile, the negative impact of debt is that the interest in debt can also lead to failure of company debt payments if the company's financial condition is not healthy. Ibrahim (2017) showed that leverage has a negative effect on firm value. However, research conducted by Rachmawati & Pinem (2015); Sugiharto, Ratnawati, & Moehaditoyo (2016) show that leverage has no effect on firm value. Companies with sufficient capital will use internal funding to finance their operations rather than using debt. The existence of differences in previous studies, this study examines the relationship between leverage and firm value. Based on the above background, the research hypothesis is:

Ha_9: Leverage has an effect on firm value.

3. RESEARCH METHOD

3.1 Research Sample

The sample of this research is non-financial companies listed on the Indonesia Stock Exchange (BEI) from 2016 to 2018. This research data is obtained through the official website of the Indonesia Stock Exchange (www.idx.co.id) and TICMI (ticmi.co.id) on financial report data and company annual reports. The sampling method used was purposive sampling with the following criteria:

1. Non-financial companies listed consecutively on the Indonesia Stock Exchange from 2014 to 2018.
2. Using the Rupiah currency in its financial statements.
3. Companies that have a closing book period on December 31.

This study took a sample of non-financial companies in Indonesia because Indonesia is a unique sample. Most companies in Indonesia are dominated by families, so the need for ERM implementation and disclosure is still low. Indonesia is also a country that has a relatively weak investor protection system so that testing of internal company factors such as ERM, earnings volatility and company characteristics such as asset tangibility, company size, company growth, profitability, company age, liquidity and leverage are very important to determine their impact on firm value.

3.2 Research Variables

3.2.1 Firm Value

Firm value is measured using Tobin's Q. This ratio shows the company's current financial estimate compared to the return on each nominal value obtained from future investments. Tobin's Q is not only a fundamental assessment, but also as an assessment of the company's performance in terms of many aspects that can be seen by investors. Firm value using the Tobin's Q method is measured by the following formula (Ibrahim, 2017):

Company Value = (Market value of outstanding share + Total Debt) / (Total Asset)

3.2.2 Enterprise Risk Management

Enterprise Risk Management according to the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2004) is a process carried out effectively by management and company employees, applied in strategic planning, designed to identify potential events that can affect the entity and manage risks. so that it becomes a risk that can be accepted by the company in order to produce reasonable assurance in achieving the company's goals.

Tracking the presence or absence of ERM application in companies according to Iswajuni et al. (2018) can be seen from keywords related to corporate risk management in company annual reports, such as ERM, Chief Risk Officer, Risk Management Committee, Risk Committee, Strategic Risk Management, Consolidated Risk Management, Holistic Risk Management, Integrated Risk Management, or other keywords related to the company's risk management activities. To measure the ERM variable, it uses a dummy variable consisting of values of ones and zeros. The value of one means that the company implements ERM in its operational activities and the value is zero if the company does not implement ERM in its operational activities.

3.2.3 Earnings Volatility

Earnings volatility is an illustration of the level of business risk and bankruptcy that can occur within the company. Earnings volatility can be an indicator of a company's business risk and in general, it is often important to know by lenders (debtholders) in assessing the company's future earnings (future earnings). Earnings volatility can be measured by the standard deviation of the mean (average) of net income over the years of the study divided by the total number of years studied. In this study, the calculated mean net income is the mean net profit for three years for each research year (Ibrahim, 2017).

3.2.4 Assets Tangibility

The more tangible assets a company has, the easier it will be to bring in external funding in the form of debt, because tangible assets mitigate the problem of contractibility: tangible assets will increase the value that is acceptable to creditors (Almeida & Campello, 2007). Assets tangibility is measured by dividing the total net fixed assets by the total assets (Ibrahim, 2017).

3.2.5 Company Size

Company size is an indication in measuring the performance of a company, with reference to the total value of assets owned by the company (Rachmawati & Pinem, 2015). The larger the size of the company, it will reflect a high commitment from the company to continue to improve its performance. Company size can be measured by calculating the natural logarithm (natural logarithm) of the total assets owned by a company (Ibrahim, 2017).

3.2.6 Company Growth

Company growth is an indicator or measurement of how the development is carried out by the company within a certain period of time. Company growth can also be a measure of the company's success in a certain period of time. Increased company growth can be a good signal for investors of future growth. Company growth is obtained from the percentage of the increase in net total assets (Ibrahim, 2017).

3.2.7 Company Profitability

Profitability is the company's ability to generate profits within a certain period of time. Profitability can be measured using the calculation of earnings per share (EPS), which is by dividing the company's net income to the number of shares of the company in circulation (Gharaibeh & Qader, 2017).

3.2.8 Company Age

Ibrahim (2017) measures the age of a company by looking at how long it has been listed on the stock exchange. The company's age calculation is calculated starting from the date the company made its initial public offering on the stock exchange until December 31 of each research year.

3.2.9 Liquidity

Liquidity can be defined as the ratio of current assets to current liabilities. If the liquidity of a company is high, then the risk of failure of the company to fulfill its financial obligations or short-term debt will be smaller. Likewise, if the liquidity of a company is low, then the company will certainly have difficulty in fulfilling its short-term financial obligations. The liquidity formula is the division of current assets and current liabilities (Oluwagbemiga, 2013).

3.2.10 Leverage

Leverage is a description of the use of debt as a source of funds for the company's operational activities. A high leverage value indicates that the company uses a large proportion of debt so that it has a much greater risk. Leverage can be measured by dividing total liabilities by total assets (Gharaibeh & Qader, 2017).

3.3 Research Model

This research model can be described as follows:

$$TBSQ = \beta_0 + \beta_1 ERM + \beta_2 EVOL + \beta_3 ATAN + \beta_4 FSIZE + \beta_5 PROF + \beta_6 GROW + \beta_7 AGE + \beta_8 LQDT + \beta_9 LEVR + \epsilon$$

Information:
TBSQ: Firm Value
ERM: Enterprise Risk Management
EVOL: Earnings Volatility
ATAN: Assets Tangibility
FSZE: Firm Size
PROF: Profitability
GROW: Company Growth
AGE: Company Age
LQDT: Liquidity
LEVR: Leverage
ε: Error

This study uses a simple pooled ordinary least square (OLS) model which assumes that the intercept and slope coefficients are constant overtime and across firms. OLS pooled model does not pay attention to the dimension of time or individuals, so it is assumed that the behavior of company data will be the same in overtime.

4. RESEARCH RESULTS

The following is a table of research sample selection based on predefined sampling criteria:

Table 4.1 Sample Selection Procedure

No.	Criteria	Number of Companies	Total Data
1.	Non-financial companies consistently listed on the Indonesia Stock Exchange in 2016 – 2018.	345	1.035
2.	Non-financial companies that do not use Rupiah as the reporting currency.	(77)	(231)
3.	Non-financial companies that do not have a closing date December 31.	(0)	(0)
	Total sample	**268**	**804**

Based on the sampling method is purposive sampling, sampling using certain criteria, table 4.1 above shows that the amount of data that can be sampled in this study is 268 companies or 804 data. Sampling of non-financial companies is because financial companies have strict regulations so that they cannot be compared with non-financial companies. The rupiah and December 31 criteria are used to consider the consistency of the research data used.

4.1 Descriptive Statistics

A total of 804 data that had passed the sampling process were then tested for descriptive statistics. The results of descriptive statistical testing can be seen in table 4.2 below:

Table 4.2 Descriptive Statistics

Variabel	N	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
TBSQ	804	0.12283318	20.94561591	1.710573564	2.097433896
ERM	804	0	1	0.17	0.379
EVOL	804	179391145	5638748059579	133689684214.9	417677823641.4
ATAN	804	0	0.965787308	0.321835543	0.246157012
FSZE	804	22.9691835	33.4737275	28.66346116	1.681072932
PROF	804	-2394	4050	114.22869	392.823727
GROW	804	-0.8545407	169.8287262	0.33288659	6.007733601
AGE	804	2	41	16.81	8.767
LQID	804	0.01188913	2726.451141	6.56542442	96.72045954
LEVR	804	0.00845872	7.687379609	0.50958865	0.492982138

TBSQ is the firm value (Tobins Q); ERM is Enterprise Risk Management (dummy variable, value 1 if the company applies ERM, value 0 otherwise); EVOL is earnings volatility (standard deviation of the company's average net income); ATAN is Asset tangibility (fixed assets divided by total assets); FSIZE is company size (logarithm of total assets). PROF is profitability (earnings per share); GROW is the company's growth (changes in assets this year compared to the previous year divided by assets from the previous year); AGE is the age of the company (how long the company is listed on the stock exchange); LQID is liquidity (current assets divided by current liabilities); LEVR is leverage (total liability divided by total assets).

Based on the table of descriptive statistical test results, the firm value has a mean value of 1.710573564. This shows that on average the observed companies have positive firm values. Based on the frequency table for the Enterprise Risk Management variable, 664 (82.6%) research data do not apply ERM in their operational activities, while the remaining 140 (17.4%) research data apply ERM in their operational activities. A total of 32 companies consecutively reported ERM in their financial reports, 30 companies did not consecutively report ERM in their financial reports, or just implemented ERM in the middle of the observation period, and the remaining 205 companies did not implement ERM at all but applied conventional risk management separately per division within their scope of business. Meanwhile, the mean value of the Enterprise Risk Management variable is 0.17. The following is a frequency table for Enterprise Risk Management variables.

Table 4.3 Enterprise Risk Management - Frequency Table

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not implement ERM	664	82.6	82.6	82.6
	Implement ERM	140	17.4	17.4	100
	Total	804	100	100	

Based on the results of the frequency table, it can be stated that it is very rare for companies in Indonesia to conduct or disclose ERM in their financial reporting. The average value of earnings volatility was 133.689.684.214,9. This shows that, on average, companies in Indonesia have a high enough volatility of positive earnings. While the ratio of fixed assets to total assets in this research sample is 0.3218355426. This shows that, on average, the proportion of fixed assets to total assets of companies in Indonesia is relatively small. The firm size has a mean value of 28.66346116, while the average profitability value is 114.22869. This shows that on average non-financial companies in Indonesia have a positive level of profitability. The company growth has a mean value of 0.3328865899. This shows that on average the companies that were sampled in this study experienced growth. The average company age was 16.81. On average, companies in Indonesia are relatively young. The average value of liquidity was 6.565424420. This shows that non-financial companies in Indonesia have good liquidity. The leverage has a mean value of 0.5095886497. This shows that non-financial companies in Indonesia on average have a fairly balanced proportion of debt and asset.

The results of the hypothesis testing on the sample of this study can be shown in the table below:

Table 4.4 Hypothesis Testing Results

Dependen Variabel: TBSQ	Coef.	Sig.
ERM	0.7434382	0.000***
EVOL	6.31E-13	0.001***
ATAN	0.735343	0.012**
FSZE	-0.0987608	0.053
PROF	0.0006295	0.001***
GROW	-0.003523	0.766
AGE	0.0146438	0.079
LQID	-0.0002098	0.776
LEVR	0.7697021	0.000***
CONS	3.383152	0.022
***sig 1%, ** sig 5%		
Number of obs	804	
F(9, 794)	9.56	
Prob > F	0.000	
R-squared	0.0978	
Adj R-squared	0.0875	

Based on the results of the F test above, it shows that the model is fit or feasible to use, because p-value ≤ 0.01. The Enterprise Risk Management (ERM) variable has a significance value of 0,000 so that Ha_1 can be accepted. Enterprise Risk Management has a positive influence on firm value. ERM plays an important role in creating company stability, because ERM can be one of the tools needed in terms of company internal control. The ERM applied by the company indicates that the company has a strong commitment to creating good corporate risk governance. ERM disclosure can also be relevant information in predicting the sustainability of a company, because the market will respond positively to companies voluntarily willing to disclose their ERM information.

The earnings volatility variable (EVOL) has a significance value of 0.001 so that Ha_2 can be accepted and the beta value shows a positive sign. Earnings volatility has a positive effect on firm value. Sometimes investors are more interested in investing in companies that have high business risk, because investors generally assume that companies that have high business risk will provide greater returns, so that the returns received by investors will be greater than companies that have low business risk.

Assets tangibility has a significance value less than 0.05 and a positive beta value so that it has a positive influence on firm value. Companies that have large amounts of fixed assets will find it easier to get funding, especially long-term debt. Creditors will judge that the company's many fixed assets will make it easier to repay loans when there is default by the company, so that by looking at the total value of fixed assets owned by the company, it will be much easier for the company to obtain a loan for its operational activities. as well as for business expansion.

The firm size variable (FSZE) has a significance value of 0.053. This figure is greater than the alpha value, which is 0.05, so Ha_4 cannot be accepted. Firm size has no influence on firm value. The size of the company cannot always predict the value of the company, because the size of the company is only a reflection of the company's total assets. Investors often do not consider the size of the company in their investment decisions, because there are many other aspects that investors can consider besides the size of the company, such as the value of leverage, sales growth, or business strategy. In addition, companies with a significant increase in total assets do not always have optimal productivity, so companies that have many assets but low profitability may occur.

The profitability variable (PROF) has a significance value of 0.001 so that Ha_5 can be accepted. Meanwhile, the beta value shows a positive number so that profitability has a positive effect on firm value. Profitability is of course an important reference for investors in determining their investment decisions, because investors consider that with high profitability, the prospects for the company in the future will be good as well, so the demand for the company's shares will increase. In addition, high profitability indicates that the company has a good performance, so that the company is able to provide sufficient dividends for its shareholders. Investors will be interested in investing in companies that are able to pay adequate dividends and are distributed regularly, so that the demand for the company's shares will increase (Rachmawati & Pinem 2015).

The company growth variable (GROW) has a significance value of 0.766 so that Ha_6 cannot be accepted. Company growth has no influence on firm value. Company growth does not always have an influence on company value, because in general, companies that are growing rapidly will require large operating costs. The company will focus on growing the company so that more available funds will be used for company expansion without paying attention to the welfare of shareholders. On the other hand, investors do not really care about the movement of the company's growth, because for them the most important thing is to invest their capital and receive a return on the invested capital.

The company age variable (AGE) has a significance value of 0.079 so that Ha_7 cannot be accepted. Company age has no influence on firm value. Companies that are mature are not always a guarantee that the company has a good performance, because the one that has the biggest contribution in determining the company's performance is the company's resources, especially human resources.

The liquidity variable (LQID) has a significance value of 0.776 so that Ha_8 cannot be accepted. Liquidity does not have a significant effect on firm value. The liquidity ratio only shows the company's ability to cover its current debt with current assets. On the one hand, high liquidity guarantees the security of the company for its current liabilities, but on the other hand, this high liquidity is caused by accounts receivable and inventories, which cannot be used to pay obligations quickly. For this reason, liquidity is generally not a priority for investors in making investment decisions in a company.

The leverage variable (LEVR) has a significance value of 0.000 so that Ha_9 can be accepted. The beta value shows a positive number so that leverage has a positive effect on firm value. Companies that are able to manage their funding originating from debt will be viewed favorably by investors, which will have an impact on increasing company value. In addition, if the company's income is high and stable, then using debt as a more dominant source of funding will not be a significant problem. In addition, higher leverage will increase company value because the company will get tax savings due to interest payments on the debt.

4. CONCLUSION

This study aims to examine the effect of Enterprise Risk Management (ERM), earnings volatility and company characteristics such as asset tangibility, company size, company growth, profitability, company age, liquidity and leverage on firm value. The results of this study indicate that Enterprise Risk Management, earnings volatility, company characteristics such as assets tangibility, profitability and leverage have a positive effect on firm value. Meanwhile, company characteristics such as company size, company growth, company age, and liquidity have no effect on firm value. Thus, it is important for a company to manage the risks faced by the company properly so that the company can further improve its performance.

The implications of this research for investors and creditors in making investment decisions and giving credit to a company are expected to consider internal factors such as Enterprise Risk Management (ERM) implementation and disclosure, earnings volatility and company characteristics like assets tangibility, profitability and leverage which have an influence on firm value. This research also has implications for company management in managing the company's business. It is expected that they can take policies such as increasing risk management implementation and disclosure, paying attention to earnings volatility, assets tangibility, profitability and leverage which can affect the fluctuation of firm value. Likewise, this research has implications for auditors in determining the initial consideration of company risk and audit risk that can be used during the audit process and providing input to company management.

This study has limitations, namely ERM testing which only uses dummy variables so that for further research it can use an index to enrich the research results. The next research can also examine the value of the company in the following year in order to know the impact of ERM, earnings volatility and company characteristics on firm value in the long-term.

REFERENCES

Abdel-azim, M. H., & Abdelmoniem, Z. (2015). Risk Management and Disclosure and Their Impact on Firm Value: the Case of Egypt. *International Journal of Business, Accounting, and Finance*, *9*(1), 1–14.

Abdullah, M. H. S. B., Janor, H., Hamid, M. A., & Yatim, P. (2017). The Effect of Enterprise Risk Management on Firm Value: Evidence from Malaysian Technology Firms. *Jurnal Pengurusan*, *49*, 3–11. https://doi.org/10.5267/j.ac.2020.4.011

Aggarwal, D., & Padhan, P. C. (2017). Impact of Capital Structure on Firm Value: Evidence from Indian Hospitality Industry. *Theoretical Economics Letters*, *07*(04), 982–1000. https://doi.org/10.4236/tel.2017.74067

Agustina, L., & Baroroh, N. (2016). The relationship between Enterprise Risk Management (ERM) and firm value mediated through the financial performance. *Review of Integrative Business and Economics Research*, *5*(1), 128–138.

Ai, J., Chen, H., & Zhao, Y. (2014). Does ERM Improve Firm Value? Evidence from Listed Chinese Nonfinancial SOEs. *Electronic Copy Available at: Http://Ssrn.Com/Abstract=2538915*.

Ali, M. M., Hamid, N. S. A., & Ghani, E. K. (2019). Examining the relationship between enterprise risk management and firm performance in Malaysia. *International Journal of Financial Research*, *10*(3), 239–251. https://doi.org/10.5430/ijfr.v10n3p239

Almeida, H., & Campello, M. (2007). Financial constraints, asset tangibility, and corporate investment. *Review of Financial Studies*, *20*(5), 1429–1460. https://doi.org/10.1093/rfs/hhm019

Almumani, M. A. (2014). Determinants of equity share prices of the listed banks in Amman stock exchange: Quantitative approach. *International Journal of Business and Social Science*, *5*(1), 91–104. Retrieved from https://ijbssnet.com/journals/Vol_5_No_1_January_2014/12.pdf

Appolos, N. N., & Kwarbai, J. D. (2016). Tax Planning and Firm Value: Empirical Evidence from Nigerian Consumer Goods Industrial Sector. *Research Journal of Finance and AccountingOnline)*, *7*(12), 2222–2847.

Assidi, S., Aliani, K., & Omri, M. A. (2016). Tax optimization and the firm's value: Evidence from the Tunisian context. *Borsa Istanbul Review*, *16*(3), 177–184. https://doi.org/10.1016/j.bir.2016.04.002

Azizah, & Islam, S. M. N. (2014). Do Risk Management, Internal Control, and Corporate Reputation Positively Impact on Firm Value? A Panel Data Econometric Analysis and Policy Implications. *International Conference on Multidisciplinary Innovation for Sustainability and Growth (MISG- 2014)*, *1*, 12–28.

Bambang Baroto, M., Bin Abdullah, M. M., & Wan, H. L. (2012). Hybrid Strategy: A New Strategy for Competitive Advantage. *International Journal of Business and Management*, *7*(20), 120–133. https://doi.org/10.5539/ijbm.v7n20p120

Bertinetti, G. S., Cavezzali, E., & Gardenal, G. (2013). The Effect of the Enterprise Risk Management Implementation on the Firm Value of European Companies. *SSRN Electronic Journal*, (August). https://doi.org/10.2139/ssrn.2326195

Birjandi, H. (2014). The Effect of Cost Leadership Strategy On ROA and Future Performance of Accepted Companies in Tehran Stock Exchange. *Research Journal of Finance and Accounting*, *5*(7), 152–159.

Copeland, Thomas E., Weston, J. Fred, Shastri, Kuldeep. 2005. *Financial Theory and Corporate Policy Fourth Edition*. Pearson.

Dietrich, D. (2007). Asset tangibility and capital allocation. *Journal of Corporate Finance*, *13*(5), 995–1007.

https://doi.org/10.1016/j.jcorpfin.2007.05.001
Gharaibeh, A. M. O., & Qader, A. A. A. A. (2017). Factors influencing firm value as measured by the Tobin's Q: Empirical evidence from the Saudi Stock Exchange (TADAWUL). *International Journal of Applied Business and Economic Research*, *15*(6), 333–358.
Gworo, C. O. (2019). Earnings Volatility and Market Value of Companies Listed at The Nairobi Securities Exchange Market. *The Strategic Journal of Business & Change Management*, *6*(1), 17–26.
Hatem, B. S. (2015). Interdependence between Managerial Ownership, Leverage and Firm Value: Theory and Empirical Validation. *International Journal of Economics and Finance*, *7*(12), 106. https://doi.org/10.5539/ijef.v7n12p106
Hoque, J., Hossain, A., & Hossain, K. (2014). Impact of Capital Structure Policy on Value of the Firm – A Study on Some Selected Corporate Manufacturing Firms Under Dhaka Stock Exchange. *Ecoforum*, *3*(2 (5)), 77–84.
Huynh, T. L. D., Wu, J., & Duong, A. T. (2020). Information Asymmetry and firm value: Is Vietnam different? *Journal of Economic Asymmetries*, *21*(September 2019), e00147. https://doi.org/10.1016/j.jeca.2019.e00147
Ibrahim, M. (2017). Capital Structure and Firm Value in Nigerian Listed Manufacturing Companies: an Empirical Investigation Using Tobin's Q Model. *International Journal of Innovative Research in Social Sciences & Strategic Management Techniques*, *4*(2), 112–125. Retrieved from http://www.internationalpolicybrief.org/images/2017/SEPT-JOURNALS/IRSSSMT/ARTICLE9.pdf
Iswajuni, I., Manasikana, A., & Soetedjo, S. (2018). The effect of enterprise risk management (ERM) on firm value in manufacturing companies listed on Indonesian Stock Exchange year 2010-2013. *Asian Journal of Accounting Research*, *3*(2), 224–235. https://doi.org/10.1108/ajar-06-2018-0006
Izah, M. T., & Ahmad, R. R. (2011). The Relationship between ERM and Firm Value: Evidence from Malaysian Public Listed Companies. *International Journals Economics and Management Science*, *1*(2), 32–41. Retrieved from https://sriv.pw/fuhez-w.pdf
Jieting, C., Yucan, L., & Xiaomin, G. (2011). Empirical research on the relation between stock liquidity and firm performance. *8th International Conference on Service Systems and Service Management - Proceedings of ICSSSM'11*. https://doi.org/10.1109/ICSSSM.2011.5959394
Kim, J., & Kim, J. (2018). Corporate Sustainability Management and Its Market Benefits. *Sustainability (Switzerland)*, *10*, 1–14. https://doi.org/10.3390/su10051455
Kimbrough, R. L., & Componation, P. J. (2009). The relationship between organizational culture and enterprise risk management. *EMJ - Engineering Management Journal*, *21*(2), 18–26. https://doi.org/10.1080/10429247.2009.11431803
Kouki, M., & Said, H. Ben. (2011). Does Management Ownership Explain the Effect of Leverage on Firm Value? An Analysis of French Listed Firms. *Journal of Business Studies Quarterly*, *3*(1), 169–186.
Maharani, I. G. A. C., & Suardana, K. A. (2014). Pengaruh Corporate Governance, Profitabilitas dan Karakteristik Eksekutif pada Tax Avoidance Perusahaan Manufaktur. *E-Jurnal Akuntansi Universitas Udayana*, *9.2*, 525–539.
Mishra, R. K., & Kapil, S. (2018). Board characteristics and firm value for Indian companies. *Journal of Indian Business Research*, *10*(1), 2–32. https://doi.org/10.1108/JIBR-07-2016-0074
Mule, R. K., Mukras, M. S., & Mutunga, N. O. (2015). Corporate size, profitability and market value: an econometric panel analysis of listed firms in Kenya. *European Scientific Journal*, *11*(13), 376–396.
Nocco, B. W., & Stulz, R. M. (2006). Enterprise Risk Management: Theory and Practice. *Journal of Applied Corporate Finance*, *18*(4), 8–20.
Oluwagbemiga, O. E. (2013). Perceived Relationship between Corporate Capital Structure and Firm Value in the Kenyan Listed Companies. *Research Journal of Finance and Accounting*, *4*(19), 157–165. Retrieved from http://www.iiste.org/Journals/index.php/RJFA/article/viewFile/9511/9833
Rachmawati, D., & Pinem, D. B. (2015). Pengaruh Profitabilitas, Leverage Dan Ukuran Perusahaan Terhadap Nilai Perusahaan. *Equity*, *18*(1), 1. https://doi.org/10.34209/equ.v18i1.456
Rizqia, D. A., Aisjah, S., & Sumiati. (2013). Effect of Managerial Ownership , Financial Leverage , Profitability , Firm Size , and Investment Opportunity on Dividend Policy and Firm Value. *Research Journal of Finance and Accounting*, *4*(11), 120–130.
Ross, S. A. (1977). The determination of financial structure : the incentive-signalling approach. *The Bell Journal of Economics*, *8*(1), 23–40.
Rountree, B., Weston, J. P., & Allayannis, G. (2008). Do investors value smooth performance? *Journal of Financial Economics*, *90*(3), 237–251. https://doi.org/10.1016/j.jfineco.2008.02.002
Santioso, L. (2019). Effect of Enterprise Risk Management , Sales Growth and Earnings Quality to Firm Value of Listed Manufacturing Company in IDX from 2013-2015. *International Journal of Innovative Science and Research Technology*, *4*(4), 13–23.
Sayilir, Ö., & Farhan, M. (2016). Enterprise Risk Management and Its Effect on Firm Value in Turkey. *Journal of Management Research*, *8*(4), 86. https://doi.org/10.5296/jmr.v9i1.10124
Setiadharma, & Machali, M. (2017). The Effect of Asset Structure and Firm Size on Firm Value with Capital Structure as Intervening Variable. *Journal of Business & Financial Affairs*, *06*(04), 4–8. https://doi.org/10.4172/2167-0234.1000298
Silva, J. R., Silva, A. F. da, & Chan, B. L. (2019). Enterprise Risk Management and Firm Value: Evidence from Brazil. *Emerging Markets Finance and Trade*, *55*(3), 687–703. https://doi.org/10.1080/1540496X.2018.1460723
Sinha, A. (2017). An Enquiry into Effect of Capital Structure on Firm Value:A Study of Power Sector Companies in India. *Parikalpana: KIIT Journal of Management*, *13*(2), 107. https://doi.org/10.23862/kiit-parikalpana/2017/v13/i2/164525
Sugiharto, Ratnawati, H. T., & Moehaditoyo, S. H. (2016). Risk Management Mediates the Influence of Good Corporate Governance, Managerial Shareholder, and Leverage on Firm Value. *IOSR Journal of Business and Management*, *18*(11), 62–70. https://doi.org/10.9790/487X-1811066270
Talebnia, G., Salehi, M., Valipour, H., & Shafiee, S. (2010). Empirical Study of the Relationship between Ownership Structure and Firm Performance: Some Evidence of Listed Companies in Tehran Stock Exchange. *Journal of Sustainable Development*, *3*(2), 51–64. https://doi.org/10.5539/jsd.v3n2p264

Tenai, J., Cheboi, J., & Chelogoi, S. (2019). Effect of Innovation Capital on Financial Performance of Firms Listed in Nairobi Security Exchange. *Journal of Business Management and Economic Research*, *3*(13), 38–59. https://doi.org/10.29226/tr1001.2020.173

Thakur, B. P. S., Kannadhasan, M., Charan, P., & Gupta, C. P. (2019). Corruption and Firm Value: Evidence from Emerging Market Economies. *Emerging Markets Finance and Trade*, *0*(0), 1–16. https://doi.org/10.1080/1540496X.2019.1613643

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