Quest Journals Journal of Research in Business and Management Volume 9 ~ Issue 2 (2021) pp: 62-72 ISSN(Online):2347-3002 www.questjournals.org

Research Paper



Influence of Return on Assets and Total Assets Turnover on the Systematic Risk of Shares with Price Book Value as Intervening Variables

Ryan Hasianda Tigor¹, Harry Indratjahyo², Eddy Sanusi Silitonga³ Universitas Krisnadwipayana Campus Unkris Jatiwaringin PO BOX 7774/Jat CM Jakarta 13077, Indonesia

ABSTRACT

This study applies a comparative causal method with a quantitative approach in connection with verification analysis with the object of research in the form of issuers - sectoral index issuers for Property, Real Estate and Building Construction listed on the Indonesia Stock Exchange during the 2014 - 2018 period. Whether or not the effect of Return On Asset (ROA) and Total Asset Turnover (TATO) on Systematic Risk (RS) through Price Book Value (PBV) as an intervening variable.

The data collection technique applied in this study is to use the library research method in connection with the application of secondary data. The study population was 86 issuers of the sectoral index of Property, Real Estate and Building Construction. In contrast, the research sample of 39 issuers sectoral index property, real estate and building construction was obtained by applying the purposive sampling method. The data analysis technique applied in this study is to use path analysis.

Based on the test results using the 5% significance level, the following conclusions are obtained: (1) ROA has a positive and significant effect on PBV (2) TATO has a positive and significant effect on PBV. (3) ROA has a negative and significant effect on RS. (4) TATO has a positive and insignificant effect on RS. (5) PBV has a negative and significant effect on RS. (6) PBV mediates the effect of ROA on RS (7) PBV does not mediate the effect of TATO on RS.

KEYWORDS: Return on Asset, Total Asset Turnover, Price Book Value, Systematic Risk, Beta

Received 29 Jan, 2021; Revised: 10 Feb, 2021; Accepted 13 Feb, 2021 © *The author(s) 2021. Published with open access at www.questjournals.org*

I. INTRODUCTION

Investment is a term in economics that often has a variety of different interpretations related to the context and disciplines that become the subject of it. However, in general, the definition of investment, according to Sunariyah (2010: 4), is an allocation of several ownership of capital in one or more assets with an extended period accompanied by expectations regarding future gains. In practice, investment is often associated with investing several capitals in the form of money into several types of assets that can be classified into real assets such as property, gold, land, as well as financial assets, in the form of securities such as stocks, bonds and mutual funds.

The increasing positive sentiment among the public, as a form of awareness regarding the need for investment, which is increasingly unavoidable, has had a significant impact on the paradigm and public awareness that depositing funds is no longer the only investment alternative that is the most desirable. Particularly in Indonesia, this phenomenon is marked by an increase in the percentage of Single Investor Identification (SID), as a database that contains information related to the total number of investors with investment ownership in capital market instruments, particularly stocks and mutual funds. During the period 2012 to 2018, the total number of stock and mutual fund investors experienced a significant increase marked by positive growth from year to year. In 2012, the total number of investors was 281,256, while at the end of 2018, this number had increased to 1,617,367 investors. The highest spike in growth in the number of investors, as seen in the graph, occurred in the 2016 period with a growth percentage of 105.97%, followed by a growth spike after that happened in the 2018 period increase of 44.06%. In connection with this growth, stock instruments are listed as the most popular capital market commodity with a total number of investors as of December 2018 recorded at 829,426 investors (www.cnbcindonesia.com).

However, with the increasing public interest in investing, it is not automatically able to encourage significant growth in trading volume activity in the capital market as reflected in the development of the Composite Stock Price Index (IHSG) as a capital market index containing the movement of all shares on the Indonesia Stock Exchange (IDX).

In the period 2014 - 2018, there has been a high fluctuation in the percentage of stock returns received by investors in the capital market. Where it can be said that the rate of return received by investors in 2014 was quite high, amounting to 20.79% before being followed by a significant decline in returns in 2015 to only 6.14%. As for the graph above, it can also be seen that the highest return received by investors occurred in 2017, with a percentage of 46.87%, before then it was slightly corrected in 2018 to only 43.15%.

The existence of fluctuations related to investors' return of shares is a common and common thing in investment activity, especially in-stock instruments. The term fluctuation often refers to the element of uncertainty resulting from the volatility associated with the price of shares in the market. So that in the end, fluctuations are often seen as an element of risk in investing in stocks.

According to Darmadji and Fakhruddin (2012: 5), the definition of shares is a sign of ownership of a person or entity in a company or limited liability company. The characteristic of stock investment is that in addition to offering benefits above the return rate on deposits in general, it also carries the risk of loss with a proportion equal to the rate of return offered, or in investment law, this is often known as high-risk high return.

A risk related to stocks that is impossible to eliminate even by implementing a diversification policy or arranging several investments into a portfolio is called systematic risk or market risk (Jogiyanto, 2016: 308). Brealey (2008: 312) then adds that basically, the main source of systematic risk is macro aspects relating to economic conditions and market conditions in general, such as the risk of inflation, the rupiah exchange rate, interest rates, and so on, which affect the capital market simultaneously. This means that this type of risk is impossible for investors to avoid because it applies equally to all issuers' shares in the capital market.

However, although it cannot be avoided, the magnitude of the impact of Systematic Risk on each issuer's shares will show different measures of risk. The size of the effect of a systematic risk affecting stocks can be estimated using a parameter called Beta. According to Brigham and Houston (2010: 348), Beta's definition is a parameter that functions to indicate how far the return of a stock fluctuates in following the broader capital market movements. This means that a beta coefficient acts as a parameter measuring a security's sensitivity to the entire market's signals. The greater the beta coefficient of stock, the higher the risk that investors must bear.

Apart from being influenced by macro aspects, a systematic risk of shares is also influenced by other aspects. According to Hunan (2001: 157), one of the aspects influencing the systematic risk of shares is the company's fundamental factors. In measuring the fundamental aspects of a company, it is necessary to apply fundamental analysis as a rule concerning efforts to gain an understanding of the company's internal condition by applying financial ratios. Instead of applying technical analysis, which only uses a benchmark in the form of the historical price of shares on the stock exchange, fundamental analysis is believed to represent the intrinsic value of a company's valuation.

In this study, several fundamental factors act as determinants to analyze the relationship and its effect on systematic stock risk. However, because there are so many company essential factors that can affect systematic risk, this research is limited to the influence of fundamental factors concerning specific conditions related to the company's business performance with the application of financial ratios, including Total Asset Turnover (TATO), Price Book Value (PBV) and Return On Asset (ROA). The selection of these three ratios is a determinant of the systematic risk of shares. These ratios can act as a proxy for every fundamental aspect of the company, including parts of profitability, management efficiency, and firm value.

According to Hunan and Pudjiastuti (2006: 258), the Price Book Value (PBV) ratio is a group of categories of valuation ratios (Investment Valuation Ratio), which is useful in measuring the potential and business value of a company. The higher the PBV ratio of a company, the higher the market is willing to value its shares above its book value, which implicitly means that the company has a value from the investor's point of view.

In a number of studies, it has been proven that the PBV ratio can have a negative effect on the systematic risk of stocks, as stated in the research of Zubadi (2005), Fidiana (2009) and Sadeli (2010), however, it is also proven to have a positive effect on the systematic risk as stated by the research of Andayani et al. (2010). In connection with the inconsistencies related to the results of a number of these studies, the researchers considered it necessary to re-conduct research related to the PBV ratio's effect on the systematic risk of stocks.

In addition to the PBV ratio, this study also determines the Return On Asset (ROA) ratio as a determinant of systematic risk which acts as a representation of the company's profitability aspect. The ROA ratio is an indicator of the measure of the company's ability to assess the success rate of the company's management in generating total company profits at an acceptable level about the use of all its assets. The greater the ROA ratio value of a company, the higher the company's profitability.

In several studies, it is proven that the ROA ratio is able to negatively affect the systematic risk of stocks, as stated by the research of Girish et al. (2019) and Zeinora (2015), but it is also proven to have a positive effect on the systematic risk as stated in the research of Alaghi (2013), Nabaraj. (2015) and Nawaz et al. (2017). In connection with the problem of inconsistency from a number of these research results, the researchers considered it necessary to re-conduct research related to the effect of ROA on Systematic Risk.

In addition to being proven to influence the systematic risk of shares, in some studies, it was also stated that the ROA ratio also affects the PBV ratio as a proxy for the aspect of firm value. This is as stated in the research of Salim (2019) and Cheryta et al (2017) that profitability (ROA) shows a positive influence on the value creation of a company (PBV). However, the ROA ratio has also been shown to have a negative effect on the PBV ratio as stated in the research of Khairunnisa et al. (2019) and Rukmawanti et al (2019). Due to the inconsistency with respect to the results of the above research, the researchers considered that there was a need for further research regarding the effect of ROA on PBV.

Apart from the aspect of profitability, the fundamental factors in this study were also assessed based on the aspect of management efficiency using the Total Asset Turnover (TATO) ratio. According to Kasmir (2013: 114), the tendency from the aspect of company efficiency through measurement using the TATO ratio is a parameter that shows how high the level of effectiveness of company management is in managing its assets in an effort to generate sales. The bigger the TATO of a company, it means the higher the level of management efficiency of the company concerned.

In a number of studies, it is proven that the TATO ratio is able to have a negative effect on Systematic Risk as stated by the research of Gabriel (2012) and Soeroso (2013), but is also able to have a positive effect on Systematic Risk as stated by the research of Iqbal (2015) and Susanti (2017). In connection with the inconsistency of the results of the study, it is considered necessary to conduct another study regarding the effect of TATO on Systematic Risk.

In addition to being proven to be able to influence the systematic risk of shares, in a number of studies, it is also stated that the TATO ratio also affects the company value proxied by the Price Book Value (PBV) ratio. This is as stated in the research of Alhabsji (2017), Marli (2018) and Rikumahu et al (2018) by concluding that there is a positive effect of TATO on firm value (PBV). However, there are also a number of studies which state that TATO has a negative effect on PBV, such as in the research of Aprilia (2018) and Astuti (2020). In connection with the inconsistency of this study's results, the researchers considered it necessary to re-conduct research related to the effect of the TATO ratio on firm value (PBV).

In the end, starting from all of the above explanations related to the fundamental aspects of the company which are determined as factors that can affect the level of systematic risk of shares, and by considering a number of problems related to the inconsistency of the research results, it encourages researchers to learn more about how the real relationship is and the influence of the company's fundamental factors as proxied by the ratio of Return on Assets (ROA), Price Book Value (PBV) and Total Assets Turnover (TATO) to the systematic risk of shares. Tests were carried out on a number of shares of issuers listed on the Property, Real Estate, and Building Construction sector indexes on the Indonesia Stock Exchange (IDX) during the 2014 - 2018 period.

Systematic Risk

II. LITERATURE REVIEW

According to Jogiyanto (2016: 356), a systematic risk is an element of uncertainty in investing that cannot be reduced through diversification because it is related to events outside company activities, such as inflation, recession, changes in consumer tastes, and so on. This definition is supported by Keown et al (2011: 201) by stating that systematic risk is a component related to the variability of investment returns that investors must face where this element is impossible to eliminate or reduce through diversification.

If a systematic risk arises and occurs, all shares of issuers from any sector will be affected so that the investment strategy in allocating funds into two or more types of shares will not be able to reduce losses. Bodie et al. (2005: 288) explained this kind of condition, where a systematic risk will remain even after investors have made measurable diversification. In addition, because this risk has a wide range, in the sense that its fluctuation is influenced by macro aspects that affect all operating companies, this risk is often referred to as market risk (Husnan, 2009: 162).

Although a systematic risk is impossible to eliminate even with the application of diversification of assets into a portfolio, this risk still has parameters that can be measured for further consideration for investors when choosing an investment. Syamsudin (2007: 296) states that a systematic risk in investment is often calculated using a benchmark in the form of a stock beta coefficient. Similar to this statement, Jogiyanto (2016: 463-471) reveals that the Beta of a security reflects its systematic risk that cannot be diversified. Where the Beta coefficient is a parameter of the volatility between the security returns (portfolio) and the market returns. The

definition related to volatility can be explained as the fluctuation associated with the entire security return within a certain period.

According to Keown (2011: 207), stock beta is a measure of correlation that involves the return of an investment to the entire capital market's recovery. This refers to the size of the non-diversified investment risk. This is also expressed by Brigham and Houston (2010: 348) by stating that the stock beta coefficient is a measure that shows the extent to which the fluctuation of stock returns in relation to the broader stock market. Therefore beta measures market risk. Meanwhile, according to Hunan (2001: 167), the stock beta coefficient is the slope of the regression line in relation to two interrelated variables, namely the excess return of the market portfolio, and the excess return of a stock. The greater the value of the beta coefficient of a stock causes the slope of the regression line to be steeper.

The beta coefficient of a security can be calculated using an estimation technique by applying historical data (historical data on a security's historical return and historical return on capital markets), accounting data (issuer's profit), or fundamental data (using fundamental variables). Measuring Beta using market data is known as market beta. Beta measurement using accounting data is called accounting Beta. While measuring Beta using fundamental data is called fundamental Beta.

On the other hand, according to Tandelilin (2010: 556), a stock beta coefficient can be measured using the Capital Asset Pricing Model (CAPM) method. According to this method's application, it is assumed that there is a positive and linear relationship between the rate of return and Beta.

Return On Asset (ROA)

The Return On Asset (ROA) ratio is a ratio that is useful in assessing how positive the issuer's performance is in generating net income in relation to the utilization of each asset it owns. Therefore, in its application, the ROA ratio indicates the level of profitability of an issuer. Specifically, the application of the ROA ratio for company management can help measure the efficiency of the allocation of all assets at a level that is sensitive to anything that can affect the company's financial condition so that in the end it can be seen the company's position towards the industry. The following are some explanations of the ROA ratio according to a number of experts:

According to Sawyer (2005: 18), ROA is a measure that is useful in assessing the level of capability of company management regarding the ability to earn profits as a whole. The higher the ROA ratio value of an issuer, then there is an indication that the achievement of the company's profit level has grown the better in terms of asset management. This is in accordance with the definition related to the ROA ratio according to Brigham and Houston (2010: 148), which is the ratio measure of net income to total assets concerning indicators to measure how much return the company gets on total assets.

Meanwhile, the definition of ROA, according to Rivai (2004: 480), is a ratio that is useful as an indicator in assessing the success of management in obtaining profits as a whole, namely by comparing total assets with profit before tax. As for the definition of ROA ratio, according to Syamsuddin (2007: 74), ROA ratio is a parameter that can show that a company can utilize its resources in the form of capital in connection with efforts to generate value for company owners, in this case, investors.

Based on the explanation from the experts above, it can be concluded that the ROA ratio is a type of company profitability ratio category which in its application serves to show how much the company's profit is compared to the company's asset value in the form of assets.

Total Asset Turnover (TATO)

Total Asset Turnover Ratio (TATO) is a ratio categorized into the company's activity ratio. This ratio is useful in showing how effective and efficient the company's management is with regard to asset allocation in supporting sales activities. Therefore, the TATO ratio's size is strongly influenced by the level of sales and total assets of the company, both fixed assets and current assets.

According to Brigham and Houston (2010: 139), the TATO ratio is a group of activity ratio categories which in its application serves as a parameter indicating how high the effectiveness and efficiency of a company is concerning allocating its wealth and resources in the form of assets. This is in line with the definition of the TATO ratio according to Rangkuti (2004: 92), namely the group of activity ratios with the main function as a measuring tool related to the extent to which the company's activities financed by the use of its wealth have been effectively and efficiently used.

On the other hand, the definition of the TATO ratio according to Brealey, Myers and Marcus (2008: 79), the TATO ratio is the ratio of the level of asset turnover or the ratio of sales to assets which shows how well the company's assets are used. Furthermore, according to Kasmir (2013: 185), the definition of Total Assets Turnover (TATO) is the ratio of asset allocation with the main objective of assessing the turnover rate of all company assets and the amount of sales generated for each rupiah from a number of assets that have been flowed.

Sourced from the explanation from a number of experts above, it can be concluded that the TATO ratio is one of the components included in the activity ratio category, which serves as a parameter in measuring the level of efficiency of company management in relation to the utilization of all company assets in an effort to increase total sales.

Price Book Value (PBV)

The Price Book Value (PBV) ratio is a parameter in comparing the market value of a company's stock and the book value of the company's shares. The company's book value is an indicator that can estimate the value of a company when the company must be liquidated. By applying the PBV ratio, investors can directly find out how high the market value of a company's shares has been valued beyond its book value. Therefore the PBV ratio is a ratio that can be applied as a proxy for the firm value. The following are some definitions regarding the PBV ratio according to a number of experts.

According to Brigham and Houston (2010: 151), measuring a firm's value can be calculated using the Price Book Value (PBV). This ratio is a measure related to the value that the market provides to company management as an indicator of the company's growth. According to Darmadji and Fakhrudin (2012: 157), the definition of the Price Book Value ratio represents how much the market has appreciated the book value of a company's shares. Meanwhile, according to Hunan and Pudjiastuti (2006: 258), the Price Book Value ratio is a comparison between the market price and the book value of shares. Sawir (2005: 22) then adds that a measurement of the Price Book Value ratio can be useful in representing the market value related to the financial success faced by the management of a company.

Sourced from a number of exposures from the experts above, it can be concluded that the Price Book Value ratio is a measure that shows the relationship between the market price (market value) of a company's shares when compared to the book value per share, which in its application can also be useful as an alternative approach. in determining the value of a company from an investor's point of view.

The basis for assessing the Price Book Value ratio according to Harmony (2014: 144) is if the higher the price of a share, the more it indicates the company's success in creating value for shareholders. Meanwhile Husnan and Pudjiastuti (2006: 258) state that companies with good fundamentals usually own PBV ratios with a value above 1 (one). Where this is the company has a stock market value above its book value. The growth to the PBV ratio of a company means the more positive the market will assess the company relative to the amount of funds that have been invested.

Time and Location of Research

III. RESEARCH METHODS

In conducting this research, the researchers' research locations were issuers listed in the Property, Real Estate, and Building Construction sectoral indexes listed on the Indonesia Stock Exchange (IDX) in the period 2014-2018. Data collection is carried out within five months, starting from the beginning of September 2019 to the end of February 2020.

Research Design

Based on the method, this research applies quantitative methods using a verificative analytical approach. Quantitative analysis is a process of finding knowledge using numerical data to analyze information about what one wants to know. A quantitative study aims to verify the theory to build facts, show relationships between variables, estimate and predict and provide statistical descriptions by applying systematic research procedures, where the data used are numerical and analyzed by statistical techniques.

Meanwhile, the definition of verification analysis is a scientific approach that aims to determine the relationship between two or more variables to test the truth of a hypothesis by applying calculations using statistical data.

Based on the level of explanation, this study applies a comparative causal research method related to the characteristics of the variable's position, namely in the form of a causal relationship between two or more variables. A comparative causal research method is ex post facto, a systematic empirical investigation in which the researcher cannot control or manipulate the independent variables directly because these variables' existence has occurred.

Based on the theoretical relationship between variables above, the representation in the path diagram can be described as follows:



Figure 1. Path Diagram

Note:

 ρ X3X1: Path coefficient of X1 to X3 ρ X3X2: Path coefficient of X2 to X3 ρ YX1: Path coefficient of X1 to Y ρ YX2: Path coefficient of X2 to Y ρ YX3: Path coefficient of X3 to Y

Population and Sample Research

This study's population has a total of 86 issuers in the Property, Real Estate, and Building Construction sectors listed on the Indonesia Stock Exchange in the period 2014 - 2018. The selection of the study population is based on the consideration that these issuers are included in the category the Property, Real Estate, and Building Construction sectoral index, which is one of the most important sectors in analyzing economic health.

Researchers' method in connection with the determination of the sample in this study is the application of the purposive sampling method, namely the method of determining the sample followed by a number of certain considerations. Where the characteristics of the issuer that are included in the research sample are as follows:

- a) Issuers included in the property, real estate and building construction sector index category and listed on the IDX in the period 2014 2018
- b) Issuer Issuer that has a positive net income during the research period
- c) Not currently or have been delisted by the IDX

Data Analysis Technique

The data analysis technique in this study uses the extended regression analysis method with the application of the path analysis method in connection with testing the effect of the intervening variables. In its measurement, the method of analysis in this study is supported by the use of data processing tools in the form of software Statistical Product and Service Solutions (SPSS) versi 16.0.

IV. RESEARCH RESULT

1. Effect of Return On Assets on Price Book Value

The results of the significant test (t-test) on the first hypothesis state that this hypothesis is accepted, which means that the value of the Return On Asset ratio of the issuers - property, Real Estate and Building Construction sectoral index issuers on the IDX during the period 2014 - 2018 has a positive and significant effect on the value its Price Book Value ratio. The results of this study are consistent with the results of research conducted by Salim (2019) who conducted an analysis of the influence of fundamental factors on the value of companies in the manufacturing sector on the IDX for the period 2013 - 2017, as well as research by Cheryta et al. (2017) which examined the effect of leverage and profitability. , information asymmetry, and firm size on the value of companies in the manufacturing sector on the IDX for the period 2012 - 2015. The two studies state that ROA as a proxy for company profitability has a positive and significant effect on firm value proxied by the PBV ratio.

The acceptance of the first hypothesis (H1) in this study proves that for every increase in the company's profitability aspect represented by the ROA ratio, it will be followed by an increase in firm value represented by

the PBV ratio. In connection with this, one way for the company to further maximize its value in investors' eyes is to increase the profitability aspect of the company, which is reflected in the level of its ROA ratio. One way to maximize the ROA ratio of a company is to increase the company's net profit, where this increase is expected to be a positive signal for the market regarding management capabilities in terms of good asset management so that the company's value will also increase. In addition, the ROA ratio of a company can also be maximized by reducing the company's resources that are deposited in total assets. This means that resources in the form of assets should be allocated by management in supporting various company activities and sales to achieve higher profits.

2. Effect of Total Asset Turnover on Price Book Value

Based on the results of the significant test (t-test), it is proven that the TATO ratio value of the listed property, real estate and building construction sector index companies on the IDX during the 2014 - 2018 period has a positive and significant effect on the PBV ratio value The results of this study are consistent with the results of research conducted by Marli (2018) which examines the effect of activity ratios, financial leverage on company value in the plantation sector on the IDX for the 2015 - 2017 period, as well as research by Rikumahu et al (2018) regarding debt policy analysis, profitability and management assets to the value of the mining sector companies on the IDX for the period 2013-2016. The two studies state that TATO as a proxy for company efficiency has a positive and significant effect on firm value proxied by the PBV ratio.

The acceptance of the second hypothesis (H2) in this study proves that for every increase in the company's efficiency, which is represented by the TATO ratio, it will be followed by an increase in company value represented by the PBV ratio. This means that the company value can be increased if the company is proven to be more optimal in terms of asset management. The company can increase the company efficiency aspect as measured by the TATO ratio by increasing the level of net sales above its total assets. In addition, reducing the company's total assets can also be a consideration for management in relation to efforts to increase the TATO ratio value. Where the total assets can be used to increase working capital or be allocated as investment funds.

3. Effect of Return On Assets on Systematic Risk

The significant test results (t-test) show the results that prove that the value of the ROA ratio of the listed property, real estate and building construction sector index companies on the IDX during the 2014 - 2018 period has a negative and significant effect on the level of systematic risk of its shares The results of this study are consistent with the results of research conducted by Girish et al. (2019) regarding the analysis of Return On Assets, Current Ratio, Receivables Turnover, Earning Before Interest and Taxes (EBIT), Debt Equity Ratio, Market Capitalization and R & D to Sales Ratio against systematic risk. shares of issuers of the pharmaceutical industry in NSE India for the period 2014-2018 and research by Zeinora (2015) related to the effect of Debt Equity Ratio, Return On Asset, Price Book Value and Price Earning Ratio on the Beta of manufacturing companies' shares on the IDX for the 2008-2012 period. This study states that ROA has a negative and significant effect on the systematic risk of stocks.

The acceptance of the third hypothesis (H3) in this study proves that for any increase in the company's profitability aspect represented by the ROA ratio, it will have an impact on decreasing the systematic risk of the company's shares in the market. Company management can consider 2 (two) things related to efforts to increase the value of the company's ROA ratio, namely by increasing the company's net income or reducing the company's excess total assets. When management chooses to increase the value of ROA by increasing its net profit, the company needs to minimize the company's expense and expense in relation to efforts to maximize net profit. Meanwhile, suppose the company chooses to increase the ROA value by reducing the excess of its total assets. In that case, management will be required to be able to make policies related to the allocation of funds embedded in these assets effectively and efficiently.

4. Effect of Total Asset Turnover on Systematic Risk

Based on the results of the significant test (t-test), it is proven that the TATO ratio value of the listed property, real estate and building construction sector index companies on the IDX during the 2014 - 2018 period has a positive but insignificant effect on the level of systematic risk of its shares. The results of this study contradict the results of research by Gabriel (2012) and Soeroso (2013) which state that the TATO ratio has a negative effect on the systematic risk of stocks. However, on the other hand, it is consistent with Kusuma's (2016) research results related to the analysis of the effect of Asset Growth, Debt Equity Ratio, Return On Equity, Total Asset Turnover and Earning Per Share on the Beta of shares of companies listed on the Jakarta Islamic Index for the period 2013 - 2015, by also stating that TATO has a positive but not significant effect on stock systematic risk.

The rejection of the fourth hypothesis (H4) indicates that the ability of a company related to asset efficiency alone is not sufficient to be a positive signal for investors that the company is free from every risk that must be faced by management. Where this raises an indication that the Property, Real Estate and Building Construction sectoral index contains a number of issuers with problems, because when the efficiency aspects of the company's asset management increase, it is expected that any fluctuation of stock returns in the market will decrease, so that in the end it can reduce the systematic risk of shares.

For issuers with problems like this, investors will probably care more about the level of the company's debt rather than the efficiency of its asset management because investors seem to believe that at any time, this company can be liquidated immediately. If this happens, then of course investors do not consider the aspect of management efficiency proxied by the TATO ratio as one of the fundamental factors capable of reducing the systematic risk of shares, if it is not accompanied by measurements of other aspects, particularly the liquidity and solvency aspects of the company concerned.

5. The Effect of Price Book Value on Systematic Risk

The significant test results (t-test) prove that the value of the PBV ratio of the listed property, real estate and building construction sector index companies on the IDX during the 2014 - 2018 period has a negative and significant effect on the level of systematic risk of its shares The results of this study are consistent with the results of research conducted by Fidiana (2009) regarding the analysis of fundamental values and their influence on the stock beta of issuers' shares listed on the Jakarta Islamic Index for the period 2001 - 2005 and Sadeli's research (2010) regarding the analysis of variable effects. micro-macro fundamentals on the systematic risk of cross-sector company shares on the IDX for the period 2003 - 2007. Where both studies state that PBV has a negative and significant effect on stock systematic risk.

The acceptance of the fifth hypothesis (H5) in this study proves that for any increase in firm value represented by the PBV ratio, it can impact decreasing the systematic risk of the company's shares in the market. In this connection, as consideration for company management regarding the increase in company value, one of which can be done by increasing the capability of company management. This is because companies with positive performance prospects tend to have high stock market value. This condition indicates that the market has given a positive appreciation regarding the company's value creation so that it is willing to appreciate the market value of its shares above the book value of the company's shares. A high level of PBV ratio will characterize such companies.

6. Effect of Return On Assets on Systematic Risk through Price Book Value

Based on the path analysis test results, it was stated that the coefficient value of the indirect effect of ROA on Systematic Risk through PBV was greater than the coefficient value of the direct effect of ROA on systematic risk. This proves that the sixth hypothesis (H6) is accepted, which means that the PBV ratio is significant as a mediating variable of the effect of ROA on the Systematic Risk of the issuers of the Property, Real Estate and Building Construction sectoral index on the IDX during the 2014 - 2018 period. Appreciating the market value of a company's shares as reflected in the company's PBV ratio, it can affect the company's profitability in reducing the systematic risk of shares.

The increase in the ROA value of a company indicates that the greater the level of profit that the company can achieve, and the better the company's position in terms of asset utilization. With the increasing level of profit, the company is considered to have good prospects in the future, causing the market to increase demand for the company's shares. The high demand for investors for a share will cause an increase in the price of the company's shares in the market, which can increase the company's value as measured by the PBV ratio.

This means that stocks with high PBV ratios are considered stocks whose price increases are driven by market confidence in the company's management performance effectiveness. Such stocks are more attractive to investors because they can increase the rate of return and reduce the uncertainty (fluctuation) of stock prices in the market so that in the end, they can reduce the Systematic Risk associated with the company's shares.

7. Effect of Total Asset Turnover on Systematic Risk through Price Book Value

Based on the results of the path analysis test, it is stated that the coefficient value of the indirect effect of TATO on Systematic Risk through PBV is smaller than the coefficient value of the direct effect of TATO on Systematic Risk. This proves that the seventh hypothesis (H7) is rejected, which means that the PBV ratio is not significant as a mediating variable of the influence between TATO and Systematic Risk of the listed property, Real Estate and Building Construction sector index companies on the IDX during the 2014 - 2018 period. This indicates that the high value of a company (firm value), which is reflected in the company's PBV ratio, cannot influence the efficiency aspects of company management (TATO) in reducing the systematic risk of shares.

Investors will be willing to give a high price for companies' stock market value with good performance as reflected in the level of the company's PBV ratio. This occurs as a form of market appreciation related to the

success of management in running the company's business, which impacts the decline in share systematic risk. One form of company management's success can be reflected in the high net sales value of the company obtained without neglecting the efficiency aspects of asset management as reflected in the company's TATO ratio level.

The rejection of the seventh hypothesis (H7) indicates that there are still a number of sectoral index issuers for Property, Real Estate and Building Construction that have problems in terms of net sales. Perhaps the company's high net sales are not proportional to the level of the company's receivables, which causes a large number of the company's net sales to still settle in the form of receivables. The company's high level of receivables can lead to a perception among investors that the company has been negligent in collecting its consumer debts, which results in a decrease in the value of the company concerned. Therefore, companies are advised to pay more attention to the turnover rate of their accounts.

Conclusion

V. CONCLUSIONS AND RECOMMENDATIONS

Sourced from all research results, the conclusions that can be obtained in relation to the research entitled "The Effect of Return on Assets and Total Asset Turnover on the Systematic Risk of Shares with Price Book Value as an Intervening Variable" are as follows:

- 1. The results of the study conclude that the first hypothesis (H1) is proven and acceptable, which means that there is a positive and significant effect of Return On Assets (X1) on Price Book Value (X3), which means the higher the growth in the profitability aspect (ROA) of the issuers' Property, Real Estate and Building Construction sectoral indexes will cause an increase in company value (PBV) in the capital market.
- 2. The results of the research conclude that the second hypothesis (H2) is proven and acceptable, which means that there is a positive and significant effect on Total Asset Turnover (X2) on Price Book Value (X3), which means that any increase in the efficiency of asset management (TATO) aspects of the issuer Property, Real Estate and Building Construction sector index companies will increase the value of their companies (PBV) in the capital market.
- 3. The results of the study conclude that the third hypothesis (H3) is proven and acceptable, which means that there is a negative and significant effect of Return On Assets (X1) on Systematic Risk (Y), which means an increase in the aspect of profitability (ROA) of the issuers index issuers. The Property, Real Estate and Building Construction sector will impact reducing the Systematic Risk of shares in the capital market.
- 4. The results conclude that the fourth hypothesis (H4) is not proven so it is rejected, where Total Asset Turnover (X2) has a positive and insignificant effect on Systematic Risk (Y), which indicates that investors tend not to consider the efficiency aspects of asset management (TATO) of the issuer. Property, Real Estate and Building Construction sectoral index issuers as some of the fundamental factors that can reduce the Systematic Risk of shares if measurements of other aspects do not support it.
- 5. The results of the study conclude that the fifth hypothesis (H5) is proven and acceptable, which means that there is a negative and significant effect of Price Book Value (X3) on Systematic Risk (Y) which means an increase in firm value (PBV) of the issuers of sectoral indexes. Property, Real Estate and Building Construction will impact reducing the Systematic Risk of shares in the capital market.
- 6. 6. The results of the study conclude that the sixth hypothesis (H6) is proven and acceptable, which means that Price Book Value (X3) can mediate the effect of Return On Assets (X1) on Systematic Risk (Y), which means the higher the profitability aspect (ROA) of the issuer Property, Real Estate and Building Construction sectoral index issuers, the higher the company value (PBV) which has an impact on reducing the systematic risk of shares in the capital market.
- 7. 7. The results of the study conclude that the seventh hypothesis (H7) is not proven so that it is rejected, where Price Book Value (X3) is not able to mediate the effect of Total Asset Turnover (X2) on Systematic Risk (Y) which indicates that there are several listed property sector indexes, Real Estate and Building Construction is problematic in terms of the efficiency of company assets, so that ultimately investors tend to consider the fundamental aspects of other companies that do not only show how much net sales the company receives.
- 8. The results of the study found that the theory of Hunan (2001: 157) which states that fundamental factors are an aspect capable of influencing systematic risk is still not fully tested, where it is proven that the TATO ratio as one of the company's fundamental factors does not show a significant effect on risk systematic.

Recommendations

Based on the research results, the researcher intends to provide a number of suggestions that are expected to be useful for future research in order to obtain better results, as follows:

1. It is recommended to add other variables that can affect the systematic risk of shares or change the ratios that will be used as a proxy for the company's fundamental aspects.

- 2. Stock beta coefficient as a systematic risk parameter is divided into several categories, including accounting beta, fundamental Beta and historical Beta with a number of different measurement formulas. In this connection, further research should measure stock beta by considering the risk-free level to obtain the adjusted Beta value.
- 3. It is recommended to expand or replace research objects from various sectoral indices listed on the IDX and increase the research period so that it will be better able to explain the effect of each research variable on systematic risk.

REFERENCES

- [1] Abdurrahman, M. Agus Salim, Afi Rachmat Slamet. 2015. Pengaruh Dividend Per Share (DPS), Net Profit Margin (NPM) dan Return On Equity (ROE) Terhadap Harga Saham (Perusahaan Industri Manufaktur yang tercatat di Bursa Efek Indonesia Periode 2012-2015). *E-Jurnal Riset Manajemen Universitas Islam Malang*.
- [2] Alaghi, Kheder. 2013. "Determinants of Systematic Risk of the Listed Companies inTehran Stock Exchange". Journal of Basic and Applied Scientific Research. J. Basic. Appl. Sci. Res : 3(1)596-600
- [3] Alhabsji, Taher., Sri Mangesti Rahayu dan Siti Ragil Handyman. 2017. "Effect of Growth, Liquidity, Business Risk and Asset Usage Activity, Toward Capital Structure, Financial Performance and Corporate Value". European Journal of Business and Management, Vol. 9, No. 24
- [4] Andayani, Nining Setyowati Dwi, Moeljadi P.S. dan M. Harry Susanto. 2010. "Pengaruh Variabel Internal Dan Eksternal Perusahaan Terhadap Risiko Sistematis Saham Pada Kondisi Pasar Yang Berbeda". WACANA, Vol. 13, No. 2, Pp. 244 – 259. ISSN. 1411-0199
- [5] Aprilia, Ratna., Zarah Puspitaningtyas dan Aryo Prakoso. 2018. "Pengaruh Current Ratio, Total Asset Turnover Dan Debt To Equity Ratio Terhadap Price To Book Value Dengan Return On Asset Sebagai Variabel Intervening". Jurnal Ilmiah Akuntansi Dan Perpajakan, Vol. 1, No. 3. ISSN: 2622-1950
- [6] Astuti, Diah Ayu Sekar dan Viriany. 2020. "Faktor Yang Mempengaruhi Nilai Perusahaan Pada Perusahaan Manufaktur Yang Terdaftar Di BEI". Jurnal Multiparadigma Akuntansi Tarumanagara, Vol.2, No.1. ISSN : 127-135
- [7] Bodie, et al. 2005. Investment. Edisi Keenam. Jakarta: Salemba Empat.
- [8] Brealey, Myears, dan Marcus. 2008. *Dasar-Dasar Manajemen Keuangan Perusahaan*. Edisi Kelima. Jilid Dua. Penerjemah Bob Sabran MM. Jakarta: Penerrbit Erlangga.
- [9] Brealey, Myers, dan Marcus. 2008. "Dasar dasar Manajemen Keuangan". Edisi Kelima. Jilid satu. Jakarta: Erlangga.
- [10] Brigham dan Houston. 2010. Dasar Dasar Manajemen Keuangan Buku 1 (Edisi 11). Jakarta : Salemba Empat
- [11] Brigham, Eugene F dan L.C. Gapenski. 2006. "Intermediate Financial Management 7th edition". Sea Harbor Drive: The Dryden Press
- [12] Cheryl, A. M., dan Moeljadi. 2017. "The effect of leverage, profitability, information asymmetry, firm size on cash holding and firm value of manufacturing firms listed at Indonesian Stock Exchange". International Journal of Research in Business Studies and Management, 4(4), 21-31.https://dx.doi.org/10.26905/jkdp.v22i1.1334
- [13] Darmadji, Tjiptono dan Fakhruddin. 2012. Pasar Modal Di Indonesia. Edisi Ketiga. Jakarta : Salemba Empat.
- [14] Farida Ratna Dewi, Arizca Kusuma Wardani.2015. "Analisis Struktur Modal terhadap Kinerja Keuangan Perusahaan Sektor Utama yang Terdaftar di Indeks LQ45 Bursa Efek Indonesia". Jurnal Manajemen dan Organisasi. Vol VI, No 2:135-148
- [15] Fidiana. 2009. "Nilai Nilai Fundamental Dan Pengaruhnya Terhadap Beta Saham Syariah Pada Jakarta Islamic Index". Ekuitas, Vol. 13, No. 1, Pp. 40 – 60. ISSN 1411-0393
- [16] Gabriel, Pop Razvan. 2012. Analysis of The Systematic-Risk Determinants for Companies Listed on Bucharest Stock Exchange. Journal of Econometrica, Vol. 4, No. 8, Pp. 1-13.
- [17] Girish, Mileena, Karthika G dan Raghunandan HJ. "An Examination of the Systematic Risk Determinants in the Pharmaceutical Industry". International Journal of Business and Management Invention (IJBMI). Vol. 8, Issue 01, Ver. IV, pp. 91 - 96
- [18] Harmono, 2014: Manajemen Keuangan: Berbasis Balanced Scorecard, Edisi Pertama, Bumi Aksara, Jakarta.
- [19] Hartono, Jogiyanto. 2016. "Teori Portofolio dan Analisis Investasi". Edisi kesepuluh. Yogyakarta: BFFE
- [20] Husnan, Suad. 2001. "Dasar-dasar Teori Portofolio dan Analisis Sekuritas". Edisi Ketiga. Yogyakarta: UPP-AMP YKPN.
- [21] Husnan, Suad., Enny Pudjiastuti, 2006. Dasar dasar Manajemen Keuangan. UPP AMP YKPN. Yogyakarta.
- [22] Iqbal, Sajid, Nadeem Iqbal dan Nabeela Khan. 2015. "Systematic Risk Determinants : A Case Of Manufacturing Sector Of Pakistan (2009 – 2014)". Industrial Engineering Letters, Vol. 5, No. 7, Pp. 87 – 92. ISSN 2225-0581
- [23] Kasmir, Jakfar, 2016. Studi Kelayakan Bisnis. Kencana Prenada Media Group. Jakarta.
- [24] Keown, J.A., John D.M., J. William Petty, David F., JR., 2011, *Manajemen Keuangan*, Edisi Kesepuluh, Penerbit PT Indeks, Jakarta.
- [25] Khairunnisa, Tanty., Taufik Kemas dan Muhammad Husni Thamrin. 2019. "Pengaruh Debt To Equity Ratio, Return On Asset, Asset Growth, Current Ratio, dan Total Asset Turnover Terhadap Nilai Perusahaan Pada Perusahaan Sektor Makanan dan Minuman Yang Terdaftar Di Bursa Efek Indonesia". Jurnal Ilmiah Manajemen Bisnis Dan Terapan Vol. XIV, No. 1
- [26] Marli. 2018. "Analisis Pengaruh Rasio Aktivitas, Leverage Keuangan Terhadap Nilai Perusahaan Dengan Profitabilitas Sebagai Variabel Intervening Pada Perusahaan Perkebunan Yang Terdaftar Di Bursa Efek Indonesia "BEI" (Periode 2015-2017)". Jurnal Akuntansi Bisnis dan Manajemen, Vol. 25, Nomor 2, Hal. 134-148
- [27] Nabaraj, Adhikari. 2015. "Determinants of Systematic Risk for Companies Listed on Nepal Stock Exchange". Global Journal of Management and Business Research: C. Finance. Volume 15 Issue 5 Version 1.0 the Year 2015. Online ISSN: 2249-4588 & Print ISSN: 0975-5853.
- [28] Nawaz, Rashed dkk. 2017. Financial Variables and Systematic Risk. Chinese Bussiness Review, Vol. 16, No. 1, Pp. 45. DOI: 10.17265/1537-1506/2017.01.004
- [29] Rangkuti, Freddy. 2004. Manajemen Persediaan Aplikasi di Bidang Bisnis. Jakarta : PT. Raja Grafindo Persada.
- [30] Rikumahu, Brady., Wiwin Aminah dan Fatimah Kurniawati Putri. 2018. "Kebijakan Hutang, Profitabilitas dan Manajemen Aset Terhadap Nilai Perusahaan". Jurnal Riset Akuntansi Kontemporer, Vol. 10, No. 2, Hal. 80-89. ISSN : 2088-5091
- [31] Rivai, Veithzal dan Sagala, Ella Juavani. 2004. *Manajemen Sumber Daya Manusia Untuk Perusahaan Dari Teori Ke Praktik*. Cetakan Pertama. Jakarta: PT Raja Grafindo Persada.
- [32] Rukmawanti, Lita., Enas dan Marlina Nur Lestari. 2019. "Pengaruh Ukuran Perusahaan Dan Profitabilitas Terhadap Nilai Perusahaan". Business Management And Entrepreneurship Journal. Vol. 1, No. 2

- [33] Sadeli. 2010. "Analisis Pengaruh Variabel Fundamental Mikro Makro Terhadap Risiko Saham". Jurnal Administrasi Bisnis. Vol. 6, No. 2
- [34] Sadono, Sukirno. 2004. Makro Ekonomi Teori Pengantar. Edisi III. Jakarta: PT Raja Grafindo Persada.
- [35] Salim., M. Noor dan Rina Susilwati. 2019. "The Effect Of Internal Factors On Capital Structure And Its Impact On Firm Value". International Journal Of Engineering Technologies And Management Research, Vol. 6 (Iss.7). DOI: 10.5281/zenodo.3359550
- [36] Sawir, Agnes. 2005. "Analisis Kinerja Keuangan dan Perencanaan Keuangan". Jakarta: PT Gramedia Pustaka Utama.
- [37] Sjahrial, Dermawan. 2009. "Manajemen Keuangan", Edisi Ketiga. Jakarta: Mitra
- [38] Soeroso, Anditya. 2013. "Faktor Fundamental Terhadap Risiko Sistematis Pada Industri Food And Beverages Di Bursa Efek Indonesia". Jurnal EMBA, Vol. 1, No. 4, Pp. 1687 – 1696. ISSN 2303-1174
- [39] Sunariyah. 2010. "Pengantar Pengetahuan Pasar Modal". Edisi Keenam, Yogyakarta: UPP STIM YKPN
- [40] Susanti, Rina. 2017. "Analisis Pengaruh Variabel Keuangan Terhadap Risiko Sistematis Saham. Prosiding Widyagama National Converence On Economics And Business, Vol. 1, No. 1. ISSN: 2598-5280
- [41] Syamsuddin, Lukman. 2007. "Manajemen Keuangan Perusahaan". Jakarta: PT Raja grafindo Persada.
- [42] Tandelilin, E. 2010. Analisis Investasi dan Manajemen Portfolio. Edisi pertama. Yogyakarta: BPFE
- [43] Zeinora. 2015. Pengaruh Debt To Equity Ratio, Return On Asset, Price Book Value, dan Price Earning Ratio Terhadap Beta Saham. Jurnal Ekonomi dan Sosial. Universitas Indraprasta PGRI. Malang
- [44] Zubadi, Hamron dan Wakhidaturohmah. 2005. "Faktor Faktor Yang Mempengaruhi Risiko Sistematis Pada Perusahaan Sektor Industri Barang Konsumsi Di BEJ". Jurnal Analisis Bisnis Dan Ekonomi, Vol. 3, No. 2, Pp. 106 – 118