



Determinants of Investment Risk on Stock Performance in the Food and Beverage Industry in the Indonesian Capital Market

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ABSTRACT

This study aims to determine the influence of investment risk on stock prices in food and beverage sub-sector manufacturing companies listed on the Indonesian Stock Exchange in 2018-2022. The population of this study were food and beverage sub-sector companies listed on the Indonesian Stock Exchange in 2018-2022. The sampling technique used purposive sampling and obtained a sample of 55 observational data from 11 companies. Methods of data collection using documentation technique. Research data were analyzed using the regression data panel method. The result showed that the market risk variable had an insignificant positive effect on stock prices, the business risk variable had a significant negative effect on stock prices and the financial risk variable had a significant negative effect on stock prices. While simultaneously the independent variables have a significant influence on stock prices.

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INTRODUCTION

The phenomenon of rising and falling share prices can be influenced by internal company factors and external factors. Share price movements will continue to be monitored by investors because share prices will influence the profits that will be obtained. The higher the share price of a company, the higher the value of the company. Shares are an attractive alternative for investors as an investment object and are one of the most popular financial market instruments. Investors first assess the shares they will choose so that they provide optimal profits in the future.

Investors do not know for certain the results they will obtain from the investments they make in the capital market (Paramitasari, 2011). Such circumstances mean that investors face risks in the investments they make. Hartono (2014) stated that risk is often associated with irregularities or deviations from the outcomes received and those expected. Steps that can be taken by investors are to carry out calculations in selecting and determining the portfolio. The behavior pattern of investors on the stock exchange in buying and selling securities or securities is also an important consideration. Another thing is to consider the possible risks that will be faced in determining the portfolio.

Risk is divided into two, namely systematic risk and unsystematic risk. The part of security risk that cannot be eliminated by forming a portfolio is called systematic risk, while the part of security risk that can be eliminated by forming a well-diversified portfolio is called unsystematic risk (Hartono 2014). Systematic risk is also usually called market risk where risk occurs due to events outside the company (Bodie, et. al).

The Ministry of Industry noted that the performance of the food and beverage industry during the 2015-2019 period grew an average of 8.16% or above the average growth of the non-oil and gas processing

industry of 4.69%. In the midst of the impact of the pandemic, throughout the fourth quarter of 2020, there was a contraction in non-oil and gas industry growth of 2.52%. However, the food and beverage industry was still able to grow positively by 1.58% in 2020 (Kemenperin.go.id). The food and beverage industry is one of the sub-sectors that is under pressure in 2020. The Covid-19 pandemic is said to have suppressed people's purchasing power. The food and beverage industry contributes up to 23.8% of GDP. Nevertheless, shares in the food and beverage sector still have potential in the future, where 70% of people are of productive age and have high levels of consumption. . This means that the food and beverage sector is one of the sectors that continues to experience development and tends to be popular with investors.

That the average closing share price in food and beverage companies from 2017 to 2021 experienced fluctuations. Where from 2017 to 2019 there was an increase, share prices from 2017 to 2018 increased by IDR 458. From 2018 to 2019 there was an increase of IDR 246. From 2019 to 2020 there was a decrease of IDR 475. Meanwhile, from 2020 to 2021 there was a decrease of IDR 511. The average share price growth in 2018-2022 is IDR 4,481. Stock price fluctuations are influenced by many factors such as company financial performance, supply and demand, interest rates, risk levels, inflation rates, government policies, politics and security of a country.

This research is important to carry out because several previous studies obtained different results. Research conducted by Maulana (2017) shows that systematic risk has no significant effect on stock prices, while research by Astuty (2017) shows that market risk has an effect on stock prices. Research conducted by Hidayah et al (2019) shows that business risk does not have a significant effect on share prices. Research conducted by Maulita (2020) shows that financial risk has no effect on stock prices. Previous research shows that the relationship between investment risk and stock prices still shows different results, so further research needs to be carried out in order to prove the influence between variables.

LITERATURE REVIEW

Theoretical study

The capital market is a means of funding for companies and other institutions (for example government) and as a means for investment activities. Thus, the capital market facilitates various facilities and infrastructure for buying and selling activities and other related activities. Financial instruments traded on the capital market are long-term instruments (terms of more than one year) such as shares, bonds, warrants, rights, mutual funds and various derivative instruments such as options, futures, etc. (Arifardhani, 2020).

According to Sunariyah (2011): "The capital market is an organized financial system, which includes commercial banks and all intermediary institutions in the financial sector, as well as all securities in circulation. Meanwhile, in a narrow sense, the capital market is a market (a place in the form of a building) that is prepared for trading shares, bonds and other types of securities using the services of securities brokers.

According to Usman (2011): "Capital Market is defined as trading in long-term financial instruments (securities), both based on own capital (stock) and debt (bonds), whether issued by the government (public authorities) or by companies private (private sector). " According to Fahmi & Hadi (2011): "The capital market is a place where various parties, especially companies, sell shares and bonds with the aim that the proceeds from these sales will later be used as additional funds or to strengthen company funds."

Investment

Investment is a commitment of a certain amount of funds or other resources made at this time, with the aim of obtaining a certain amount of profit in the future. The term investment can be related to various types of activities (Tandelilin, 2017). In other words, investment is a commitment to sacrifice current consumption with the aim of increasing consumption in the future. Investment can relate to investing a certain amount of funds in real assets (land, gold, houses) or in financial assets (deposits, shares, bonds and other securities) (Artaya et al., 2014).

Understanding Risk

In investment activities in the capital market, risk will always be inherent in it. Risk is often defined as the deviation between what is expected and what becomes reality. Risk can be interpreted as a form of uncertainty about a situation that will occur in the future with decisions taken based on various current considerations. (Fahmi, 2014). According to Kasidi (2010), risk is the possibility of deviation from expectations which could result in losses. According to Brigham and Houston (2010), risk is "the chance that an unfavorable event will occur."

Risk can also be considered as an obstacle/hindrance to achieving a goal. In other words, risk is a possibility that has the potential to have a negative impact on the goals you want to achieve. Risk can be interpreted as the possibility of a difference between the actual return and the expected return (E(R)) (Fahmi, 2015). In the concept of investment management, risk is defined as the possibility of experiencing a loss, which is usually measured in terms of the probability that some outcome will occur that moves in the range

of very good (for example, the assets double) to very bad (for example, the assets are not worth the same once) (Gumanti, 2011).

According to Halim (2005), if it is related to investor preferences for risk, risk can be divided into three, namely: first, risk seeker. Usually this type of investor is aggressive and speculative in making investment decisions because they know that the relationship between return and risk is positive. , secondly, investors who are risk neutral (risk neutral) are investors who will ask for the same increase in return for every increase in risk. This type of investor is generally quite flexible and is prudent in making investment decisions. Third, risk averters are investors who prefer to take investments with lower risk. Usually this type of investor tends to consider their investment decisions carefully and in a planned manner.

In the context of modern investment analysis, risk according to Jones (2004) which is identified as the cause of variations in the rate of return is categorized into two types, namely: first Systematic Risk, this risk is a risk where the variability of the total return of an investment is directly related to changes in the market or overall economic conditions. This risk will affect securities and cannot be avoided by investors even by diversifying. More specifically, this risk is important for all investors. Second, Unsystematic Risk, this risk is a risk where the variability of the total return of an investment is not related to the variability of market changes as a whole. This risk is unique to a security and is directly related to factors such as business risk, financial risk, and liquidity risk.

The relevant risk considered by investors in making investment decisions is systematic risk, because investors can eliminate non-systematic risks through forming an investment portfolio. Meanwhile, systematic risk cannot be avoided because it has the characteristic that its influence is relatively the same on all shares in the market, so this risk is also called market risk (Syahyunan, 2013).

In financial literature, systematic risk is often expressed as Beta. The greater the beta of a security, the greater the sensitivity of the security's return to changes in market returns (Syahyunan, 2013). Beta shows the relationship (movement) between shares and the market (shares as a whole) (Fahmi, 2012). In discussing the Single Index Model, CAPM, APT, and various models applied to beta are always used. Beta is defined as systematic stock risk (Fahmi, 2012). According to Jogiyanto (2014), beta is a measure of the volatility of a security or portfolio's return on market returns. The beta of the *i*th security measures the volatility of the return of the *i*th security with market returns. Portfolio beta measures the volatility of portfolio returns with market returns. Thus, beta is a measure of the systematic risk of a security or portfolio relative to market risk.

Volatility can be defined as fluctuations in the returns of a security or portfolio within a certain time period (Jogiyanto, 2010). If fluctuations in security or portfolio returns statistically follow fluctuations in market returns, then the beta of the security or portfolio is said to be worth 1. Because fluctuations are also a measure of risk, a beta of 1 indicates that the systematic risk of a security or portfolio is equal to market risk. Beta equal to 1 also indicates that market returns move up (down) by the same magnitude following market returns. A beta value of 1 indicates that if the market return changes by *x* percent, on average the security or portfolio return will also change by *x* percent.

Estimating Beta

The beta of a security can be calculated using estimation techniques that use historical data. Beta calculated based on historical data can then be used to estimate future beta. Empirical evidence shows that historical beta is able to provide information about future beta (Elton and Gruber in Jogiyanto (2010).

Market Beta

Market beta can be estimated by collecting historical values of returns from securities and returns from the market over a certain period. Assuming that the relationship between security returns and market returns is linear, beta can be estimated manually by plotting a line between the return points or using regression techniques. Beta can be calculated using regression techniques using the CAPM model

A security that has a beta coefficient equal to one means that if the market index rises by 10%, the market price of the security will tend to increase by 10%. On the other hand, if the market index falls by 15%, the market price of securities will tend to fall by 15%. The market price of a security that has a beta coefficient equal to one tends to move or change following market changes perfectly.

Meanwhile, for securities that have a beta coefficient of 0.5, the market price of the security will tend to move half times the market change. Thus, the beta coefficient which measures the effect of market changes on a security can be found by regressing the security's profit level with the portfolio's efficient market profit level. The beta coefficient obtained by regressing a stock's past returns with market returns is called historical beta. Meanwhile, the beta coefficient can also be found by regressing accounting returns with market returns. The resulting beta coefficient is called accounting beta.

Business Risk

Business risk according to Brigham and Houston (2014) "Business risk is the single most important determinant of capital structure, and it represents the amount of risk that is inherent in the firm's operations

even if it uses no debt financing." Business risk is defined as the single main determinant of capital structure, and it represents the amount of risk inherent in a company's operations even if it does not use debt financing. Business risk according to Ratri and Ari (2017) "Business risk is the risk of a company when it is unable to cover its operational costs and is influenced by the stability of income and costs. Companies with high business risk tend to avoid funding using debt compared to companies with lower business risk."

According to Gitman (2012) "Business risk as the risk to the firm of being unable to cover its operating costs. In general, the greater the firm's operating leverage-the use of fixed operating costs the higher its business risk". It can be concluded that business risk is a risk for the company because it cannot cover its operational costs. In general, the greater the company's operating leverage, the use of fixed operating costs, the higher the business risk.

According to Yunita and Tony Seno (2018), the definition of business risk is as follows: "Business risk is one of the risks to company assets that will be faced if the company uses debt that is too high due to the burden of borrowing costs carried out by the company.", The level of business risk of a company can be seen by calculating the Degree of Operating Leverage (DOL). According to Gitman (2015), operating leverage is as follows: "The potential use of fixed operating costs to magnify the effect of changes in sales on the firm's EBIT."

According to Yunita and Tony Seno (2018) the indicator used to calculate business risk is the Basic Earning Power Ratio (BEPR). The size of the business risk determined from the total assets owned by the company can be determined by calculating the Basic Earning Power Ratio (BEPR). According to Wimelda and Aan Marlinah (2013) business risk is calculated by the standard deviation of monthly stock returns for a year.

Financial Risk

Financial risk is an example of unsystematic risk posed by a company. Financial risks will arise when a company decides to use debt as a source of financing. Companies will bear greater financial risks if they use an increasingly large proportion of debt (Ekananda, 2019). According to Brigham and Houston (2011) financial risk is an increase in the risk borne by shareholders above the company's business risk resulting from the use of financial leverage. Financial leverage is created by a company's amount of debt.

The parameters used to measure the high and low financial risk of a company can be shown using the Debt-to-Equity Ratio (DER). Debt to Equity Ratio is a debt ratio that shows the extent to which the company is financed by debt. Debt to Equity Ratio is calculated simply by dividing the company's total debt by shareholder equity (Horne et al., 2005). The DER formula is (Brealy, 2001 in Michell Suharli, 2005) is Total Debt divided by total Equity.

Share

Shares (stock) according to (Fahmi, 2015) are proof of ownership of capital/funds in a company. Shares in the form of paper clearly state the nominal value, company name and are followed by the rights and obligations explained to each holder. According to Tandelilin (2001), shares are divided into preferred shares and ordinary shares. Shares are known for their characteristics of having a high rate of return and are accompanied by high risks, meaning shares are securities that provide profit opportunities and have high risk potential. Shares allow investors to obtain high rates of return or capital gains in a short time.

According to Darmadji and Fakhruddin (2011) share prices are the prices that occur on the stock exchange floor at a certain time, share prices can change up or down in a matter of time very quickly, either within minutes or seconds. This happens because of the demand and supply of shares in the capital market. Meanwhile, according to Agus Harjito and Martono (2013), "A company's share price is a reflection of investment decisions, funding (including dividend policy) and asset management".

In general, the decision to buy or sell shares is determined by a comparison between the estimated intrinsic value and the market price (Abdul Halim, 2013). If the market price is greater than the intrinsic value, then the shares are worth selling, because they are undervalued. For market players, it is best to keep shares, because there is a big possibility that in the future there will be a surge in share prices.

Signal Theory (Signaling Theory)

Signaling theory is a theory that discusses the rise and fall of prices in the market. So, it will have an influence on investor decisions. Investors' responses to positive and negative signals will greatly influence market conditions, they will react in various ways in response to these signals, such as hunting for shares to sell or taking action in the form of inaction such as wait and see or wait and see first for new developments. then take action. And to understand, the wait and see decision is not something bad or wrong, but it is seen as an investor's reaction to avoid the emergence of greater risks due to market factors that have not provided benefits or are in their favor (Fahmi, 2014).

Companies that have good quality will deliberately provide signals to the market, so that potential investors are expected to be able to distinguish between good and bad quality companies. When conducting a

public offering, potential investors cannot fully differentiate between good and bad quality companies. Therefore, issuers and underwriters deliberately provide signals to the market (Sumarso, 2003).

Information Asymmetry Theory (Asymmetry Information Theory)

Information asymmetry is a condition where one party has more information than another party. Information asymmetry has a real effect on financial and financial decisions (Atmaja, 2008). Asymmetry theory says that parties related to a company do not have the same information. Regarding the company's prospects and risks, certain parties have better information than other parties. Managers usually have better information than outside parties (such as investors). Because of this, it can be said that there is information asymmetry between managers and investors. Investors who feel they have less information will try to interpret the manager's behavior (Hanafi, 2005).

According to Hanafi (2005) there is information asymmetry between managers and outside parties. Managers have more complete information about the condition of the company compared to outsiders. When the share price shows too high a value (overvalue), managers will tend to issue shares (taking advantage of the high price). These financial reports are important for external users because this group is in a state of greatest uncertainty (Ali, 2002). Internal users have direct contact with the entity or company and are aware of significant events that occur, so their level of dependence on accounting information is not as great as internal users. This situation will trigger the emergence of a condition known as information asymmetry, namely a condition where there is an imbalance in the acquisition of information between management as the provider of information (prepaper) and shareholders and stakeholders in general as users of information (users).

According to (Scott, 2000), there are two types of information asymmetry, namely: first, Adverse selection, namely that managers and other insiders usually know more about the condition and prospects of the company than outside investors. And information about facts that might influence the decisions to be taken by shareholders is not communicated to shareholders, secondly, Moral Hazard, namely that the activities carried out by a manager are not fully known by shareholders or lenders. So managers can take actions outside the shareholders' knowledge that violate the contract and in fact ethically or normatively may not be feasible.

Empirical Study

Research conducted by Astuty (2017) with the research title "The Influence of Fundamental Factors and Systematic Risk to Stock Prices on Companies Listed in the Indonesian Stock Exchange". In this study, the data analysis model used is the test panel data regression (pool) which is a combination of cross section with the timeseries data. The results of this study indicated that simultaneously there was significant influence between the Price Earnings Ratio (PER), Earning per Share (EPS), Net Profit Margin (NPM), Price to Book Value (PBV), and Systematic Risk on stock prices on companies listed in LQ45 Index 2011-2015. Partially, Price Earnings Ratio (PER), Earning per Share (EPS), Net Profit Margin (NPM), Price to Book Value (PBV), and Systematic Risks have a significant effect on stock prices.

Research conducted by Maulana (2017) with the research title "Analysis of Fundamental Factors and Systematic Risk of Share Prices in Property and Real Estate Sector Companies on the Indonesian Stock Exchange". The data studied were 22 property and real estate companies on the Indonesia Stock Exchange from 2011 to 2014. The analysis technique used was multiple linear regression analysis. The research results show that the return on equity and price book value variables partially have a significant effect on stock prices, while the debt equity ratio and beta partially do not have a significant effect on stock prices.

Research conducted by Massau et al. (2019) with the research title "Credit Risk and Market Risk Analysis of LQ 45 Banking Sector Share Prices on the Indonesian Stock Exchange for the 2014-2019 Period". The type of research used is Quantitative, namely data that uses Classical Assumptions and Multiple Linear Regression Analysis. The research results show that Credit Risk has a significant positive effect on Stock Prices. Test results show that Market Risk does not have a significant effect on Stock Prices.

Research conducted by Hidayah et al. (2019) with the research title "Business Risk, Institutional Ownership, Capital Structure and Profitability on Retail Company Share Prices". This quantitative research uses secondary data in the form of annual financial report documents from 25 companies in 2012-2018 with a sampling technique using purposive sampling. The research results simultaneously show that business risk, institutional ownership, capital structure and profitability influence stock prices. The partial research results show that business risk has no effect on stock prices, while institutional ownership, capital structure and profitability have a significant positive effect on stock prices.

Research conducted by Apriaty & Karhab (2019) with the research title "The Influence of Systematic Risk and Earning Per Share (Eps) on Share Prices in Pharmaceutical Companies Listed on the Indonesian Stock Exchange". This research is quantitative research. The data collection technique is to use purposive sampling. The population in the object is to take 6 samples from 10 registered companies. This research technique uses multiple regression analysis, classical assumption testing and hypothesis testing with the F

test (simultaneous test), t test (partial test), multiple coefficients of determination and correlation analysis. This research shows that systematic risk and Earning Per Share (EPS) simultaneously have a significant influence on share prices. Systematic risk and Earning Per Share (EPS) together are able to explain the rise and fall of share prices. Earning Per Share (EPS) has a more dominant and significant influence on share prices with the largest contribution to share prices.

Research conducted by Maulita (2020) with the research title "The Influence of Profitability and Financial Risk on Share Prices (Causal Study at PT XL Axiata Tbk)". This research uses quantitative research. The data used in this research is secondary data published by the Indonesian Stock Exchange in the form of an Annual Report. The population in this study was PT. XL Axiata Tbk. The sample in this research is the Financial Report of PT. XL Axiata Tbk for the 2007-2017 period. The research results show that profitability has a significant effect on stock prices, and financial risk does not have a significant effect on stock prices. The research results show that profitability and financial risk simultaneously have a significant effect on stock prices.

Research conducted by Alifatussalimah & Sujud (2020) with the research title "The Influence of ROA, NPM, DER, and EPS on Share Prices of Plantation Subsector Companies on the Indonesian Stock Exchange". By using the purposive sampling method, five samples of companies were obtained that met the specified criteria. The results of research conducted using the multiple linear regression analysis method show that ROA and DER partially have a negative and significant effect on stock prices, NPM has no significant effect on stock prices, and EPS has a positive and significant effect on stock prices.

Research conducted by Fitri & Agustin (2020) with the research title "The Influence of Accrual Quality and Market Risk on Stock Price Synchrony (Empirical Study of LQ45 Companies Listed on the Indonesian Stock Exchange in 2016-2018)". The data sampling method used is a purposive sampling method based on certain criteria. In this research, 24 company samples were obtained. Hypothesis testing uses multiple linear regression analysis. The results prove that the quality of accruals has no significant effect on stock price synchrony and market risk has a negative effect on stock price synchrony.

Research conducted by Nailufaroh et al. (2021) with the research title "Profitability and Financial Risk on Sharia Stock Prices with Inflation as an Intervening Variable". The population in this study are manufacturing companies listed on the Jakarta Islamic Index for 2012-2017. The sampling technique used was purposive sampling, namely a total of 36 companies according to the criteria. The data used is from the annual financial reports published by the company. The data analysis technique used is path analysis. The research results show that the first path is where profitability directly has no effect on sharia stock prices, whereas the financial risk variable directly affects sharia stock prices. In the second path, neither profitability (return on investment) nor financial risk through inflation (indirectly) has an effect on Sharia stocks.

Research conducted by Pebrianti et al. (2022) with the research title "The Influence of Company Risk, Profitability on Share Prices and Value of Banking Companies Listed on the IDX". The sample in this research was 31 banking companies listed on the IDX in 2018-2020. Sampling was carried out by purposive sampling and using PLS (Partial Least Square). The results show that company risk has no effect on stock prices, profitability has a positive effect on stock prices, company risk has no effect on company value, profitability has a significant and positive effect on company value, stock prices have a positive and significant effect on company value, company risk has no effect on company value through share prices and profitability influences company value through share prices.

Market risk is the risk where the variability of an investment's total return is directly related to changes in market or overall economic conditions. This risk will affect securities and cannot be avoided by investors even by diversifying. To be clear, this risk applies to all investors. In research conducted by Astuty (2017) stated that market risk has a significant effect on stock prices.

Business risk is the risk or level of uncertainty related to income and the ability of an investment to pay a certain amount of return (interest, principal, dividends) to investors (Gitman, 2010). In research conducted by Rahayu & Irawati (2022) states that business risk significant effect on share prices

Financial risk is an increase in the risk borne by shareholders above the company's business risk resulting from the use of financial leverage. (Brigham & Houston, 2011), in research conducted by Nailufaroh et al., (2021) stated that financial risk has a significant effect on stock prices.

RESEARCH METHODS

Research paradigm

According to Sugiyono (2019), in quantitative/positivistic research, which is based on the assumption that a symptom can be classified, and the relationship between symptoms is causal (cause and effect), researchers can conduct research by focusing on only a few variables. The pattern of relationships between the variables to be studied is hereinafter referred to as the research paradigm.

Types of Research

This type of research is verification research, meaning that looking at the influence/relationship of variables on the object being studied is more causal in nature. So, in this research there are independent variables and dependent variables. These variables are then sought to see how much influence the independent variable has on the dependent variable.

This type of research is descriptive research that explains in detail the role of the Hospital supervisory board and human resource development on the quality of service at the Tora Belo Regional General Hospital, Sigi Regency, Central Sulawesi Province. The descriptive approach in this research was used to develop concepts and collect facts and did not conduct hypothesis testing (Creswell, 2009). The research location was carried out at the Regional Hospital, Tora Belo, Sigi Regency. The technique for determining informants in this research used purposive sampling. Purposive sampling determines respondents or informants based on certain criteria (Siregar, 2010). Data collection carried out in the research used triangulation techniques. Data processing focuses on data obtained through interviews and other documents. Data analysis was carried out during data collection in the field and after all data was collected using interactive model analysis techniques. Data analysis takes place simultaneously and is carried out at the same time as the data collection process with a flow of stages: data collection, data reduction, data display, and conclusion or verification (conclusion drawing verifying).

Location and Time of Research

The location of the research to be carried out is the Indonesian Stock Exchange via the website (www.idx.co.id). The researcher took the food and beverage sub-sector companies as objects with the observation years 2017 to 2021.

Population and Sample

Population is a generalization area consisting of: objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn (Sugiyono, 2019). The population used in this research is all manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange during the 2018-2022 period. The population in this study was 26 companies.

The sample is part of the number and characteristics of the population (Sugiyono, 2019). Sampling in this research used the purposive sampling method. Purposive sampling is a technique for determining samples with certain considerations. The criteria for companies that will be used as samples in the research are as follows: (1) Food and beverage sub-sector manufacturing companies that are consistently listed on the Indonesia Stock Exchange in 2018-2022, (2) Companies that have published complete financial reports during the research year (2018-2022), (3) Data on consecutive closing stock prices in 2018-2022, (4) Companies that did not experience losses during the research year (2018-2022), based on 26 food and beverage sub-sector manufacturing companies listed on the Stock Exchange the Indonesian effect for 2018-2022 was used as a population, so a selected sample size of 11 companies was obtained. Meanwhile, the remaining 15 companies did not meet the specified sample criteria.

Data Types and Sources

Quantitative data is data obtained in the form of numbers that can be calculated, which is related to the problem being studied in the form of numbers and can be used for further discussion. According to Sugiyono (2016), the data measurement scale in research is an agreement used to determine the length and shortness of the intervals in the measuring instrument, so that the measuring instrument used in the measurement will produce quantitative data.

The ratio scale is a measurement scale that shows the rank, distance, and comparison of the construct being measured. The ratio scale uses absolute values, thereby correcting the weaknesses of the interval scale which uses relative values (Sanusi, 2011). According to (Sujarweni, 2019) ratio data is numerical data in the real sense (not categories) and can be operated in mathematics. The difference with interval data is that ratio data has a zero point in the real sense.

The data source used in this research is secondary data. Secondary data is data obtained indirectly, in this case data that has been published, whether sourced from books, literature, archives, the internet as well as documents or other library sources. In this research, financial report data was obtained from the Indonesian Stock Exchange via the website (www.idx.co.id).

Techniques and Data Analysis

The technique used to collect data in this research is the documentation method, namely by collecting, recording and reviewing secondary data in the form of financial reports of Service Companies published on the IDX via IDX (Indonesian Stock Exchange) as well as from various supporting books, journals and other sources.

According to Sugiyono (2007), data analysis is the process of systematically searching and compiling data obtained from interviews, field notes and documentation by organizing data into categories, describing it into units, synthesizing it, arranging it into patterns. , choose what is important and what will be studied, and make conclusions so that they are easily understood by yourself and others.

The analysis used in this research is panel data which is a combination of time series and cross section data. Time series data is data collected over time on an individual, while cross section data is data collected over time on a large number of individuals (Mahulete, 2016). The data was processed using Eviews 12 statistical software. (Gujarati, 2012) explains several advantages of research using panel data regression research.

RESULT

Descriptive Statistical Analysis

This section describes the results of panel data from 11 samples of the food and beverage sub-sector listed on the Indonesia Stock Exchange which is a combination of time series and cross section data for the independent variables Investment Risk including Market Risk (RP), Business Risk (RB), and Risk Financial (RF), while the dependent variable is Share Price (HS). In this research, the variables used are Stock Returns, Market Risk, Business Risk and Financial Risk for 2018-2022.

Table 1. Descriptive Statistics

	HS	RP	RB	RF
Mean	4480.800	0.319059	0.044428	0.685074
Median	2420.000	0.259281	0.033463	0.640945
Maximum	16000.00	6.176046	0.207015	1.658416
Minimum	324.0000	-3.216526	0.007730	0.163544
Std. Dev.	4046.388	1.287102	0.044458	0.393755
Skewness	1.128214	1.261601	2.341373	0.431785
Kurtosis	3.456630	10.30418	8.488831	2.399802
Jarque-Bera Probability	12.14579 0.002304	136.8529 0.000000	119.2936 0.000000	2.534562 0.281596
Sum	246444.0	17.54822	2.443533	37.67909
Sum Sq. Dev.	8.84E+08	89.45805	0.106731	8.372305
Observations	55	55	55	55

Source: Processing results using Eviews 12

Based on the results of calculations and descriptive analysis, the following are the average value, maximum value, minimum value, probability and standard deviation over a period of 5 (five) years from 2018-2022. Calculation results from descriptive statistics, where the average value for share prices is 4,480,800, the maximum value is 16,000, the minimum value is 324, and the probability value is 0.002304, while the standard deviation is 4,046,388 (below the average), meaning the stock price has a low level of data variation. The average value for Market Risk is 0.319059, the maximum value is 6.176046, the minimum value is -3.216526, and the probability value is 0.000000, while the standard deviation is 1.261601 (below the average), meaning that market risk has a low level of data variation. The average value for Business Risk is 0.044428, the maximum value is 0.207015, the minimum value is 0.007730, and the probability value is 0.000000, while the standard deviation is 0.043203 (above the average), meaning that business risk has a high level of data variation. The average value for Financial Risk is 0.685074, the maximum value is 1.658416, the minimum value is 0.163544, and the probability value is 0.281596, while the standard deviation is 0.393755 (below the average), meaning that financial risk has a low level of data variation.

Selection of Panel Data Regression Model

Modeling using panel data regression techniques can use three alternative method approaches in processing. These approaches are the Common Effect Method, Fixed Effect Method, and Random Effect Method. Before estimating the model, it is necessary to select the best model that will be used to estimate panel data. The model selection went through several tests, namely the Chow Test which was used to select the Common Effect Method or Fixed Effect Method and the Hausman test to select the Fixed Effect Method or Random Effect Method. The following are the results of the Chow test and Hausman test:

Table 2. Chow Test Results

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	38.485928	(10,41)	0.0000
Cross-section Chi-square	128.729530	10	0.0000

Source: Eviews 12 panel data output results

Based on table 2, it shows that the results of the Chow test regarding model selection between the common effect method or fixed effect method obtained an F-count result of 38.485928 > F-table of 10.41 with the probability results in the cross section F showing a value of 0.0000 which means it is significant at the level significance 0.05. So the decision taken in this chow test is that HO is rejected and H1 is accepted (p-value <0.05)

Based on the results of the chow test above, the method chosen was to use the fixed effect method. However, this is not yet the final result of testing the best model. So it is necessary to look at the results of the Hausman test to choose a better model, between the fixed effect method or the random effect method. The following are the results of the Hausman test:

Table 3. Hausman Test Results

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	13.146221	3	0.0043

Source: Eviews 12 panel data output results

Based on table 3, it shows that the results of the Hausman test can be seen. The probability value in the random cross-section test shows a figure of 0.0043, which means it is significant with a significance level of 0.05. So the decision taken in the Hausman test is that HO is rejected and H1 is accepted (p-value <0.05), so the selection method that is considered good to use in this research is fixed effect

Panel Data Regression Analysis

The first hypothesis states that the independent variable has a simultaneous influence on the dependent variable in the food and beverage industry on the Indonesian Stock Exchange. The second and fourth hypotheses state that the independent variable has a partial influence on the dependent variable.

In order to prove the hypothesis put forward in this research, we use a panel data regression analysis tool to measure market risk, business risk and financial risk on share prices in the food and beverage industry on the Indonesia Stock Exchange. The following are the results of panel data regression calculations from the research which can be seen in table 4.8:

Table 4. Panel Data Regression Results

Dependent Variable (Y)	Independent Variable (X)	Coefficient	t count	Sig.
Harga Saham (HS)	Risiko pasar (RP)	54.50278	0.363337	0.7182
	Business risk (RB)	-36300.00	-3.793219	0.0005
	Financial risk (RF)	-2100.312	-2.210735	0.0327
Constanta		7515.012	F count	41.13816
R-Square		0.928794	F table	2.79
Adjusted R-Square		0.906217	Sig.	0.000000
			t table	2.00758

Source: Processed by researchers

Based on table 4.8 above, the panel data regression equation from the research can be formulated as follows: $HS = 7515.012 + 54.50278 (RP) - 36300.00 (RB) - 2100.312 (RF)$.

Based on the constant value (7515.012), it shows that if market risk, business risk and financial risk are 0, then the share price of food and beverage companies on the Indonesian Stock Exchange is (7515.012). Apart from that, the market risk variable measured by beta (RP) has a coefficient of (54.50278), this means that for every change in RP of 1 while the others are considered constant, the share price increases by (54.50278). The business risk variable (RB) has a coefficient of (-36300.00). This means that for every change in RB of 1 while the others are considered constant, the share price will experience a decrease of (-

36300.00) and then the financial risk variable (RF) has a coefficient of (-2100.312) this means that every time the RF changes by 1 while the other variables are considered constant, the share price will decrease by (-2100.312).

Hypothesis Testing

Simultaneous test (F test) is a test to test the influence of independent variables simultaneously. If the significance level of the independent variable on the dependent variable is below 0.05, then it is said that the variable has a significant effect and vice versa, if it is above 0.05 then it is said that the variable is not significant. The following are the results of the F test in table 5:

Table 5. F Test Results

R-squared	0.928794	Mean dependent var	4480.800
Adjusted R-squared	0.906217	S.D. dependent var	4046.388
S.E. of regression	1239.167	Akaike info criterion	17.29760
Sum squared resid	62956980	Schwarz criterion	17.80855
Log likelihood	-461.6839	Hannan-Quinn criter.	17.49519
F-statistic	41.13816	Durbin-Watson stat	1.261612
Prob(F-statistic)	0.000000		

Source: Eviews 12 panel data output results

Based on the first hypothesis testing criteria, it is stated that market risk, business risk and financial risk simultaneously influence stock prices. In the F test table, the F-count is 41.13816 with probability (0.0000) < significance level (0.05), so the conclusion is that HO is rejected and H1 is accepted. It can be said that all variables, namely market risk, business risk and financial risk, which are included in the model simultaneously or simultaneously have a significant effect on the dependent variable, namely stock prices. From this statement it can be concluded that in this study the first hypothesis states that market risk, business risk and financial risk simultaneously influence the share prices of food and beverage companies on the Indonesian Stock Exchange.

The partial test (t test) is a test of each independent variable, namely market risk, business risk and financial risk on the dependent variable, namely share prices. The t test on the estimation function aims to draw conclusions regarding the influence of each independent variable on the dependent variable. The following t test results can be seen in table 6:

Table 6. t test results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7515.012	825.6485	9.101951	0.0000
RP	54.50278	150.0060	0.363337	0.7182
RB	-36300.00	9569.706	-3.793219	0.0005
RF	-2100.312	950.0512	-2.210735	0.0327

Source: Eviews 12 panel data output results

Based on the table above, it shows that the t test results have several conclusions, as follows: The second hypothesis shows that market risk partially has a significant effect on stock prices. In the t test table with the help of eviews 12, the t-count result is 0.36 with a significance level of 0.72 which is greater than the value of a (0.05). This means that market risk as measured by beta is not significant to stock prices. Meanwhile, in this research, market risk has a coefficient of 54.50278. This means that market risk has a positive effect on share prices. So with this statement it can be concluded that the market risk variable partially has a positive and insignificant effect on the share price variable in food and beverage companies on the Indonesia Stock Exchange during the 2018-2022 period. The positive sign on the coefficient indicates that in general increasing the market risk value will increase share prices.

The third hypothesis shows that business risk partially has a significant effect on stock prices. Based on the t test in the table above with the help of eviews 12, the calculated t-value is -3.79 with a significance level of 0.00 which is lower than the value of a (0.05). This means significant business risk to share prices. In this research, it can also be seen that business risk has a coefficient of -36300.00, this means that business risk has a negative effect on stock prices. So from this statement it can be concluded that the business risk variable partially has a negative and significant effect on share prices in food and beverage companies on the Indonesia Stock Exchange during the 2018-2022 period.

The fourth hypothesis states that financial risk partially has a significant effect on stock prices. In the t test table with the help of eviews 12, the calculated t-value is -2.21 with a significance level of 0.03 which is lower than a (0.05). This means significant financial risk to the share price. Based on the t test, it can also be seen that financial risk has a coefficient of -2100.312, this means that financial risk has a negative effect on stock prices. So from this statement it can be concluded that the financial risk variable partially has a

negative and significant effect on share prices in food and beverage companies on the Indonesia Stock Exchange for the 2018-2022 period.

The percentage influence of all independent variables on the dependent variable is shown by the magnitude of the coefficient of determination which can be seen from the Adjusted R-square value. If the Adjusted R-square is close to 1, then it can be said that the independent variables, namely market risk, business risk and financial risk, can explain the dependent variable, namely overall stock prices, and vice versa. The following are the Adjusted S-square values in table 7:

Table 7. Adjusted R-square values

R-squared	0.928794	Mean dependent var	4480.800
Adjusted R-squared	0.906217	S.D. dependent var	4046.388
S.E. of regression	1239.167	Akaike info criterion	17.29760
Sum squared resid	62956980	Schwarz criterion	17.80855
Log likelihood	-461.6839	Hannan-Quinn criter.	17.49519
F-statistic	41.13816	Durbin-Watson stat	1.261612
Prob(F-statistic)	0.000000		

Source: Eviews 12 panel data output results

Based on the table above, it shows that the coefficient of determination value adjusted by Adjusted S-square is 0.906, which means that all independent variables on changes in the value of the dependent variable are 90.6% and the remaining 9.4% is influenced by variables other than the independent variables used in the data regression. panel, such as company management, company external factors (government regulations, interest rates, inflation, rupiah exchange rate and unstable economic conditions).

DISCUSSION

The Influence of Market Risk, Business Risk, and Financial Risk on Stock Prices

Based on the results of testing the first hypothesis (H1) in this research, it is proven that market risk, business risk and financial risk variables simultaneously have a significant effect on share prices in food and beverage sub-sector manufacturing companies in 2018-2022. From these results it can be concluded that the first hypothesis (H1) in this study is accepted. This means that the higher the investment risk in the company, the higher the share price and vice versa. So the research results support the research hypothesis, which states that investment risk has a positive and significant effect on share prices (the higher the investment risk, the higher the share price).

Share prices can be influenced by many factors. Factors that influence share prices are earnings per share (Earnings Per Share), interest rates, the amount of cash dividends given, the amount of profit from investments obtained by the company (Return on Assets) and the level of risk and return. Other factors that can influence stock price movements are external factors such as supply and demand, a country's inflation rate, tax levels, risk levels, and the level of capital market efficiency which can influence stock price movements.

Share prices in the market are the main concern of financial managers to provide prosperity to shareholders or share owners. In this research, it is stated that the higher the investment risk, the company's share price will increase, where if the risk in investing is high, the share returns that investors will receive will also be higher.

Investors' expectations of their investments are to obtain a level of return with a certain level of risk. This return is an indicator for increasing the prosperity of investors, including shareholders. Information regarding the announcement of stock returns of a business entity is very important information for investors when investing. A fairly high stock return reflects the good condition of a company and vice versa. The higher the stock returns offered, the greater the number of investors who are interested in investing in those shares. These results are in line with research conducted by (Mahardhika, 2018) which found that investment risk has an effect on stock prices.

The Influence of Market Risk on Stock Prices

Based on the results of testing the second hypothesis (H2) in this study, it is proven that the market risk variable has an insignificant positive effect on share prices in food and beverage companies in 2018-2022. From these results it can be concluded that the second hypothesis (H2) in this study is rejected. This means that the higher the market risk for the company, the higher the share price. So the research results do not support the research hypothesis, which states that market risk has a positive and significant effect on stock prices. Market risk (beta) is the risk related to market factors because it uses market return data. Beta measures the response of each security to market movements and does not directly reflect the characteristics (fundamentals) of the company. The company's internal policies do not correlate directly with market risk factors.

This risk is a risk that cannot be eliminated either by diversification and this risk is often related to

what is happening in the market. The higher the beta value, the higher the level of sensitivity of a stock to market changes. Investors need to carry out an analysis of stock beta as a consideration in making investment decisions. When investors think a stock will rise, the investor chooses shares that have a high beta so that the return they receive is also high. If investors think the stock will fall, the investor will choose shares with a small beta so that the share price decline is not too large.

The insignificant market risk on share prices can be caused, among other things, because not all investors like high levels of risk, investors in Indonesia tend to be careful in carrying out their investment activities, where this type of investor is classified as a risk averse investor type, meaning they will try to divide its investments with the minimum level of risk possible. Another reason that this type of investor prefers to carry out short-term stock transactions is that investors pay little or no attention and do not use information related to market risk as specific information in making investment decisions.

The results of this research are not in line with research conducted by (Maulana, 2017), (Massau et al., 2019), (Pebrianti et al., 2022) which found that market risk has no effect on stock prices, and research by (Fitri & Agustin, 2020) which found that market risk has a negative effect on stock price synchronicity.

The Influence of Business Risk on Stock Prices

Based on the results of testing the third hypothesis (H3) in this research, it is proven that the business risk variable has a negative and significant effect on share prices in food and beverage companies in 2016-2020. From these results it can be concluded that the third hypothesis (H3) in this study is rejected. This shows that a decrease in business risk will cause an increase in stock prices, while an increase in business risk will cause a decrease in stock prices. So the research results do not support the research hypothesis, which states that business risk has a positive and significant effect on stock prices (the higher the business risk, the higher the stock price).

The greater the company's debt, the greater the risk of bankruptcy that the company will bear, which will cause share prices to fall. This is caused by the greater the fixed interest expense that must be paid so that the company's risk will increase. Companies that are unable to predict how much profit they will make and the use of high debt will have an impact on the company's inability to handle increasing business risks.

Companies that have increased business risks will cause investors to hesitate to invest their funds in the company because the company has the threat of not being able to pay off its debts and the company's prospects will become less good in the eyes of investors because of the company's inability to provide prosperity for its shareholders. So investors will reduce demand for company shares, causing the company's share price on the market to decline. The results of this research are not in line with research conducted by (Hidayah et al., 2019) which found that business risk had no effect on stock prices.

The Effect of Financial Risk on Share Prices

Based on the results of testing the fourth hypothesis (H4) in this study, it is proven that the financial risk variable as measured by DER has a negative and significant effect on share prices in food and beverage companies in 2016-2020. From these results it can be concluded that the fourth hypothesis (H4) in this study is rejected. This shows that a decrease in DER will cause an increase in share prices, while an increase in DER will cause a decrease in share prices. So the research results do not support the research hypothesis, which states that financial risk has a positive and significant effect on stock prices (the higher the financial risk, the higher the stock price).

The high DER will reflect the high level of company financing that does not come from its own financial sources, but from creditors, which is a quite dangerous trend because it also reflects the company's high dependence on debt for its equity financing. As a result, Brigham and Houston (2010) explain that stock prices tend to decline with the higher risk of using debt. A low DER value indicates that the company has little risk, so it is preferred by investors because they feel that their interests will be better protected and guaranteed. As a result, the share price in question tends to increase.

The results of this research are in line with research conducted by (Alipatussalimah & Sujud, 2020) which found that DER had a negative and significant effect on stock prices. However, this research is not in line with research conducted by (Maulita, 2020) which found that financial risk does not have a significant effect on stock prices.

CONCLUSION

Investment risk consisting of market risk, business risk and financial risk simultaneously has a significant effect on share prices in food and beverage sub-sector manufacturing companies listed on the IDX for the 2018-2022 period.

Market risk partially has a positive and insignificant effect on share prices in food and beverage sub-sector manufacturing companies listed on the IDX for the 2018-2022 period.

Business risk partially has a negative and significant effect on share prices in food and beverage sub-

sector manufacturing companies listed on the IDX for the 2018-2022 period.

Financial risk partially has a negative and significant effect on share prices in food and beverage sub-sector manufacturing companies listed on the IDX for the 2018-2022 period.

SUGGESTION

For investors, apart from considering share prices before investing, investors should also consider and pay attention to and analyze information related to investment risks before investing in order to achieve optimal profits (returns).

For companies, it is hoped that they will continue to take into account investment risks, namely market risk, business risk and financial risk so that they do not disrupt the continuity of the company's operational activities and will have a good or bad impact on investors' assessments of the company.

It is hoped that future researchers will be able to add variables, expand the cases and research years and expand the sample of companies so that more data is obtained and there is a large variety of data.

REFERENCES

- Alifatussalimah, & Sujud, A. (2020). Pengaru ROA, NPM,DER dan EPS Terhadap Harga Saham Perusahaan Subsektor Perkebunan Di Bursa Efek Indonesia. *Jurnal Manajemen*, 16(2), 13–28.
- Apriaty, R., & Karhab, R. S. (2019). Pengaruh Risiko Sistematis Dan Earning Per Share (Eps) Terhadap Harga Saham Pada Perusahaan Farmasi Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Ekonomi Dan Manajemen*, 13(2), 104–113.
- Arifardhani, Y. (2020). *Hukum Pasar Modal di Indonesia: Dalam Perkembangan (Edisi 1)*.
- Artaya, M., Purbawangsa, I. B. A., & Artini, L. G. S. (2014). Pengaruh Faktor Ekonomi Makro, Risiko Investasi Dan Kinerja Keuangan Terhadap Return Saham Perusahaan Di Bursa Efek Indonesia (Bei). *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana* 3.12 (2014) : 689-701, 12, 689–701.
- Astuty, P. (2017). The Influence of Fundamental Factors and Systematic Risk to Stock Prices on Companies Listed in the Indonesian Stock Exchange. *European Research Studies Journal*, 20(4), 230–240. <https://doi.org/10.35808/ersj/830>
- Brigham, & Houston. (2011). *Dasar-dasar Manajemen Keuangan*, Diterjemahkan oleh Wibowo. Salemba Empat.
- Ekananda, M. (2019). *Manajemen Investasi*. Erlangga.
- Fahmi, I. (2014). *Manajemen Risiko*. Alfabeta.
- Fahmi, I. (2015). *Manajemen Investasi: Teori dan Soal Jawab (Edisi 2)*. Salemba Empat.
- Fahmi, I., & Hadi, Y. L. (2011). *Teori Portofolio dan Analisis Investasi: Teori dan Soal Jawab*. Alfabeta.
- Fitri, L., & Agustin, H. (2020). Pengaruh Kualitas Akrual Dan Risiko Pasar Terhadap Sinkronitas Harga Saham. *Jurnal Eksplorasi Akuntansi*, 2(4), 3591–3609. <https://doi.org/10.24036/jea.v2i4.307>
- Gitman, L. J. (2010). *Principle Of Managerial Finance (12th ed)*. Pearson Education Inc.
- Gujarati, D. N. (2012). *Dasar-dasar Ekonometrika, Terjemahan Mangungsong, R.C (Edisi 5)*. Salemba Empat.
- Hidayah, N. E. F., Halimah, S. N., & Rahmawati. (2019). Risiko Bisnis , Kepemilikan Institusional , Struktur Modal Dan Profitabilitas Terhadap Harga Saham Perusahaan Ritel. *Prosiding SENDI*, 571–579.
- Horne, J. Van, Wachowicz, & John. (2005). *Prinsip-prinsip Manajemen Keuangan*, dialih bahasakan oleh Dewi Fitriyani dan Deny Arnos Kwary (Edisi 12). Salemba Empat.
- Jogiyanto. (2014). *Teori Portofolio dan Analisis Investasi (Edisi 8)*. BPFE.
- Mahulete, U. K. (2016). Pengaruh DAU dan PAD Terhadap Belanja Modal di Kabupaten/Kota Provinsi Maluku. Universitas Muhammadiyah Malang.
- Massau, A., Murni, S., & Tulung, J. (2019). Analisis Risiko Kredit Dan Risiko Pasar Terhadap Harga Saham Sektor Perbankan Lq 45 Di Bursa Efek Indonesia Periode 2014-2019 Credit Risk and Market Risk Analysis on Share Prices of the Banking Sector Lq 45 in the Indonesia Stock Exchange for the 2014-2019. *Emba*, 9(4), 983–991.
- Maulana, F. (2017). Analisis Faktor Fundamental dan Risiko Sistematis Terhadap Harga Saham Pada Perusahaan Sektor Property dan Real Estate di Bursa Efek Indonesia. *KINDAI*, Vol. 13, N, 113–122.
- Maulita, D. (2020). Pengaruh Profitabilitas dan Resiko Keuangan Terhadap Harga Saham (Studi Kausal Pada PT XI Axiata Tbk). *Jurnal Manajemen*, 10(2), 137–148. <https://doi.org/10.30656/jm.v10i2.2665>
- Nailufaroh, L., Jefri, U., & Febriyanti, F. (2021). Profitabilitas Dan Risiko Keuangan Terhadap Harga Saham Syariah Dengan Inflasi Sebagai Variabel Intervening. ... : *Jurnal Ilmiah Ilmu ...*, 2(1), 145–162.
- Pebrianti, N. P. A., Putra, I. G. C., & Santosa, M. E. S. (2022). Pengaruh Risiko Perusahaan, Profitabilitas terhadap Harga Saham dan Nilai Perusahaan Perbankan yang Terdaftar di BEI. *Jurnal Kharisma*, 4(2), 312–326.
- Sanusi, A. (2011). *Metodologi Penelitian Bisnis*. Salemba Empat.
- Silalahi. (2015). *Metode Penelitian Sosial Kuantitatif*. PT. Refrika Aditama.
- Sugiyono. (2016). *Metode Penelitian Kuantitatif Kualitatif dan R&D (Cetakan 23)*. Alfabeta.

- Sugiyono. (2019). *Metode Penelitian Kuantitatif Kualitatif dan R&D* (Cetakan 26). Alfabeta.
- Sujarweni, V. W. (2019). *Metodologi Penelitian Bisnis dan Ekonomi*. Pustakabarupress.
- Sunaryah. (2011). *Pengantar Pengetahuan Pasar Modal*. UPP STIM YKPN.
- Syahyunan. (2013). *Manajemen Keuangan*. USU Press.
- Usman, M. (2011). *Pasar Modal dan Pengembangan Dunia Usaha*. Alfabeta.
- Widarjono, A. (2007). *Ekonometrika: Teori dan Aplikasi untuk Ekonomi dan Bisnis* (Edisi Kedu). Ekonisia FE Universitas Islam Indonesia.