

Analysis of Financial Ratios that Relate to Market Value of Listed Companies that have Announced the Results of their Sustainable Stock Assessment, SET ESG Ratings 2023

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Abstract:- This research aims to study financial ratios. Agricultural and food industry groups, consumer products, financial businesses Industrial products Real estate and construction, resources, services, and technology industry groups and study financial ratios that have a relationship with market value of listed companies that have announced the results of the SET ESG Ratings 2023 sustainable stock assessment, companies listed on the Stock Exchange of Thailand that have been announced the results of the SET ESG Ratings 2023 sustainable stock assessment as of (November 6, 2023) that are ranked AAA and AA and have continuous ESG assessment from 2020 to 2022 only. A total of 3 years, 60 companies, separated into 8 industry groups, totaling 180 samples, including data from financial statements. Annual report and Form 56-1. The received data is analyzed statistically according to the research objectives with a ready-made program. The statistics used to analyze the data are descriptive statistics, namely the average, quantitative statistics such as the analysis of the Pearson correlation coefficient. and Multiple Regression Analysis.

➤ Major Findings

Working capital ratio (CR) and book price per share ratio (BV) found that the working capital ratio (CR) was equal to .217, which is at a positive value. The results can be interpreted as The working capital ratio (CR) is related to the book price per share (BV) ratio and is related in the same direction. Return on assets ratio (ROA) and book price per share ratio (BV) found that the return on assets ratio (ROA) was equal to .246, which is at a positive value. The results can be interpreted as Return on assets ratio (ROA) is related to the book price per share (BV) ratio and is related in the same direction. and net profit margin (NPM) and book price per share ratio (BV), it was found that the net profit margin (NPM) was equal to .311, which is at a positive value. The results can be interpreted as Net profit margin (NPM) is related to book price per share (BV) ratio and is significantly related in the same direction at the 0.05 level.

Keywords:- Financial Ratios; Market Value; Sustainable Stocks.

I. INTRODUCTION

In the past, the first behavior of buying and selling goods was “Create investment opportunities with SET ESG Ratings” (SET ESG Ratings, Business Development Center for Sustainability) for the choice of investors, investing in sustainable stocks is one option that can create returns and meet the needs of investors. Each group of investors requires different returns. But it cannot be denied that the returns that investors want are sustainable and stable in the future, and today's business operations cannot focus on success alone. Because the world is facing various crises, whether it be environmental problems inclement weather Including the problem of inequality in society that is starting to widen. Importantly, all such problems are caused by human hands. So in order to save this world We all have to help each other. The private sector has also changed its business practices to focus on the environment. and be more socially responsible (Thairath. 2023). And since 2015, the Stock Exchange of Thailand has organized “List of sustainable stocks THSI (Thailand Sustainability Investment)” which are stocks of listed companies that operate sustainably by taking into account the environment. Have social responsibility and has management in accordance with the principles of corporate governance (Environmental, Social and Governance: ESG) as another option for investors to use as information for making investment decisions” (SET ESG Ratings, Business Development Center for Sustainability) In terms of investors, Sustainable investing (Sustainable Investing) is an investment method that takes into account ESG factors in portfolio selection and investment management. The Thaipat Institute stated that the use of ESG factors in the analysis to make investment decisions. Together with considering the Risk-Return Profile in general, it will also allow investors to better predict the future performance of the company. which is beneficial to the investors themselves In terms of helping to create increased returns (Alpha) and reducing price fluctuations (Beta) of securities in the investment portfolio. It also makes that investment Helping to create impact to change the world (Real World Impact) in a better way as well. Thaipat Institute has created the Thaipat ESG Index or Thaipat ESG Index for use as an index to compare investment returns (Benchmark Index)) and can be used as a reference index for investing (Investable Index) in various financial products by calculating total returns using data from the base date of the ESG Thaipat Index (30 June 2015).) until June 11, 2019 compared with the Stock Exchange Total Return

Index (SET TRI), SET100 Total Return Index (SET100 TRI) and SET50 Total Return Index (SET50 TRI), it was found that the ESG Total Return Index Thaiptat gives a return of 32.69%, while SET TRI gives a return of 26.09%, SET100 TRI gives a return of 26.48% and SET50 TRI gives a return of 27.18% (Association of Thai Securities Companies, online, searched on on March 28, 2024)

Investing requires information that is relevant to decision making and one of them is Financial statements published according to each accounting period Makes it known the results of operations and also shows the efficiency of business management. and various financial tools that help analyze financial information such as liquidity ratios Profitability ratio Efficiency ratio in asset management Market value ratio Those ratios can show efficiency in operations. According to a study by Sophon Bunthanomwong (2015), it was found that efficiency in operations (Total asset turnover rate, trade receivable turnover rate, inventory turnover rate and trade payable turnover rate) and profit margin (gross profit margin, operating profit margin and net profit margin) of the business. Financial ratios are a tool that shows the relationship between various data in the financial statements, indicating the financial position, liquidity, and operating results. and the ability to make profits of the business Executives can know the past management potential. Lead to changes in operational strategies that will reduce risks and create appropriate returns for the stakeholders of that business. As well as being able to continue competing in the future, and Orathai Yuboon (2020) found that the profitability ratio measured by the total asset return rate has the same effect on the market value of securities. Investors must use financial ratios to help analyze financial information from financial statements. And in addition, investment selection also plays an important role, such as Investing in stocks, therefore, the Stock Exchange of Thailand has prepared “List of sustainable stocks THSI (Thailand Sustainability) Investment)” as another option for investors to use as information for making investment decisions. by the Stock Exchange Has created the SETESG Index sustainability index by selecting companies that have Evaluation results of sustainable stocks SET ESG Ratings from the latest year that have been traded on the stock exchange for at least 6 months, have a market capitalization of not less than 5,000 million baht, have a proportion of small securities holders (free-float) of not less than 20 percent. of paid-up capital and the number of shares traded is not less than 0.5 percent of the number of registered shares of the company. for at least 9 out of 12 months (SET ESG Ratings, Business Development Center for Sustainability) SET ESG Ratings rankings are divided into 4 levels: AAA (total score 90-100) AA (total score 80-89) A (Overall score 65-79) and BBB (Total score 50-64)

Therefore, from the study, the researcher saw the importance and therefore studied the financial ratios that have a relationship with market value. of listed companies that have announced the results of their sustainable stock assessment, SET ESG Ratings 2023, using financial invitation rates. and market value. Conduct a study with the objective of studying financial ratios. Agricultural and food

industry groups, consumer products, financial businesses Industrial products Real estate and construction, resources, services, and technology industry groups and study financial ratios that have a relationship with market value of listed companies that have announced the results of the SET ESG Ratings 2023 sustainable stock assessment and the benefits they will receive as basic information for comparing the ESG performance of each listed company. and used for analysis Stock valuation and providing investment advice

A. Research Objective

To study financial ratios Industry group Agriculture and food industry Industry group Consumer products Industry group financial business Industry group Industrial products Industry group Real estate and construction Industry groups, resources, industry groups, services, and technology industries of listed companies that have announced the results of the SET ESG Ratings 2023 sustainable stock assessment.

To study financial ratios that have a relationship with market value. of listed companies that have announced the results of their sustainable stock assessment, SET ESG Ratings 2023

B. Research Framework

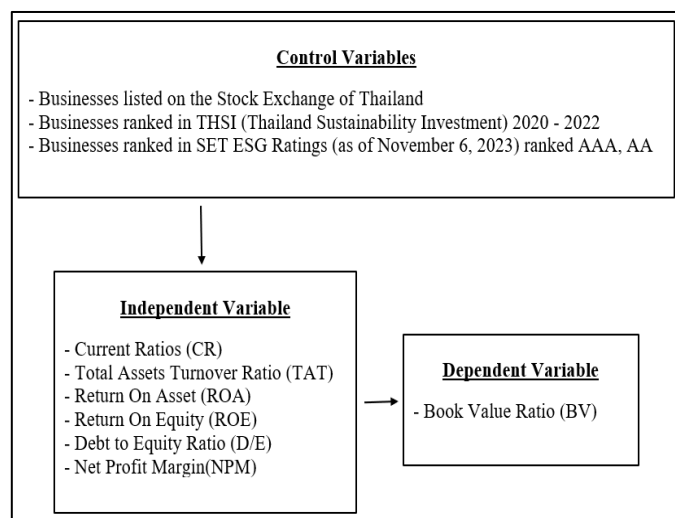


Fig.1 Research framework

II. LITERATURE REVIEW

C. ESG Concept

ESG is an abbreviation for Environmental, (Environment), Social (Society) and Governance (Good Governance). In the environmental dimension, the efficient use of resources is considered. Including the restoration of the natural environment affected by business operations. Social aspect will consider human resource management in a fair and equitable manner. The well-being of society both inside and outside the company and principles of good governance Good corporate governance will be considered. There are clear risk management guidelines. Anti-fraud and corruption, with ESG being three important factors that investors consider when evaluating the sustainability and ethical implications of investing in a business or company.

The Financial Times has established The meaning of ESG is a term used in the capital market by investors to evaluate a company's performance. and to know the future performance of the company (Association of Thai Securities Companies, online, accessed on 28 March 2024)

Sustainable business operations (Niphapan Poonsathiansap, 2024) means that a company conducts business with consideration to profit growth. Along with the development of the environment, society and good governance. Also known as “ESG” which has 3 elements:

- Environment means Environmental management Focus on efficient use of resources and preserve the natural environment affected by the company's business operations
- Society (Social) means Social management Human resources are managed fairly and equally, taking care of the safety and occupational health of employees. Including having good relationships with surrounding communities.
- Governance (Governance) means Governance management Through good corporate governance policy Anti-corruption, operations are transparent. and take care of the interests of the company's stakeholders

SET ESG Ratings is assessed from listed companies that voluntarily participate in the sustainability assessment conducted by the Stock Exchange. The assessment will cover questions in the ESG dimension. The assessment will be reviewed annually to reflect the sustainability context and trends. (Sustainability Trends) that are changing both internationally and nationally.

D. Benefits of SET ESG Ratings

➤ Listed companies

- Use the sustainable stock assessment form as a tool for improving and developing ESG operations.
- Consider the results of sustainable stock assessments to improve ESG performance by comparing with the industry.
- Create opportunities for listed companies to gain attention and be accepted by investors and other stakeholders in order to enhance their competitiveness and access to capital.
- Investors and analysts
- ✓ This is preliminary information to be used to compare the ESG performance of each listed company.
- ✓ Used for analysis Stock valuation and providing investment advice
- ✓ It is basic information for developing investment products.
- ✓ Use it as basic information for following up and creating participation to encourage companies to consider ESG issues. However, investors need to study and consider financial information. Including additional information in making investment decisions.

➤ Stock Exchange of Thailand Industry Group

The Stock Exchange of Thailand has organized the structure of industry groups (Industry Group) and business categories (Sector) of listed companies. So that companies that operate similar businesses will be in the same category. This will allow investors to

compare information between listed companies and use it to make appropriate investment decisions. The grouping guidelines have the following principles:

- Can clearly reflect the type of business of the listed company. and can be compared with industry groupings and business categories in foreign countries.
- Definition and meaning of each industry group or business category. Able to cover and support business types of listed companies conducting new types of business. and is expected to be registered in the future

➤ 8 industrial groups consist of (Pantip Yangklan, 2023)

- Agriculture and Food Industry: Businesses related to cultivation, forestry, livestock production, agricultural product processing, and food and beverage production, consisting of the agricultural business category. (Agribusiness) and Food & Beverage (Food & Beverage)
- Consumer Products: Business related to the production or distributor of various consumer products, both essential and luxury products, consisting of fashion category, household and office products category (Home & Office). Products) and the personal care and medical supplies category (Personal Products)
- Financials: An industry that involves providing various types of financial services, consisting of Banking, Finance & Securities, and Insurance.
- Industrial products (Industrials) Business involving the production and distribution of general raw materials that can be used in many industries. primary or intermediate products Various tools and machines that are further used in various manufacturing industries, including the automotive industry, consisting of the Automotive category, the Petrochemicals & Chemicals category, the Industrial Materials & Machine category, and the Packaging category. Packaging, paper and printing materials category (Paper & Printing Materials) and steel category (Steel)
- Real estate and construction (Property & Construction), an industry group related to manufacturers of construction materials. Real estate developer and manager Including construction and engineering services, consisting of construction materials category (Construction Materials), Property Development category and Property Fund category.
- Resources (Resources) business involves seeking or managing various resources, such as producing and allocating energy fuels and mining, etc., consisting of the Energy & Utilities category and the Mining category.
- Services (Services) Businesses in various service fields except financial services and information or technology services. or is a service that is already classified in another industry group or business category, consisting of the Medical category (Health Care Services), the Media and Publishing category (Media & Publishing), the Special Services category (Professional Services), Commerce category, Tourism & Leisure category, and Transportation and Logistics category. (Transportation & Logistics)
- Technology (Technology) business related to technology products It is a primary product. Intermediate or final and includes information and communication technology service providers, consisting of the electronic components category and the information and communication technology category (Information & Communication Technology).

Financial statement analysis (Chantana Wattanakanchana 2016). Is the process of finding facts about financial status and operating results. Evaluate the operations of a particular business from the financial statements of that business, as well as bring such facts into consideration for further decision-making as work related to evaluation. and interpreting information from financial statements prepared by accountants to find out the facts about how stable the financial position of that business is and its operating results. How is the operation? Satisfactory or not? It allows executives to know the weak points and strong points of the business. The weak points allow the business to correct its shortcomings. and can benefit from the strengths of the business in order to effectively plan and control the business's finances.

Financial statement analysis means the process of using principles and experiences to explain the financial statements of a particular business to determine its true financial position and operating results, and using the results to make decisions. Rin Bunnun and colleagues (cited in Suphannika Sanpakaew 2023) said that financial statement analysis cannot use only principles alone in the analysis. Must rely on the experience of the analyst to make the analysis accurate and reliable. And financial analysis is important in running a business. Because it is considered a device. It will reflect the efficiency of business management from using assets to create value and Apisada Kanchanarom (2023) said that financial statement analysis Can be divided into 5 main categories, including ratios for liquidity analysis Ratios for analyzing debt repayment ability Ratios for Profitability Analysis Ratios for analyzing operational efficiency.

Financial statement analysis (Paweena Saeju, 2020) in order to know financial strengths and weaknesses. of the business in various aspects according to the needs of the analyst The main principle is comparison. This will allow you to know where in the business there are problems that need to be fixed and improved. And where the business is strong is considered a competitive advantage. There are 3 types of comparison of financial statements as follows:

- Comparison with historical data of the business To be informed of the development or The changes in the business have progressed or worsened in what areas? And be careful whether the businesses are in the same normal situation or not in order to make comparisons. If the situations are different, they cannot be compared.
- 2Comparison with competing businesses To know the competitiveness and potential of the company compared to competitors in what order. By comparing the financial statements of only one year. between the business and its competitors or compare going back many years, which can be done But various conditions such as size and type of business should be taken into account. Are they similar or similar? Are the business structures similar? If there are too many differences, comparing financial statements cannot be done.
- Comparison with industry averages It is a good criteria and quite popular. This is because the average of the industry in which the business operates is used. Can be used as a standard in The comparison is pretty good. Because using the average helps reduce some of the bias in the data. But the problem encountered is the inability to find complete and complete information on companies in the same industry. Even though it can be applied It may require quite a lot of resources in terms of

time, personnel, and funds. which may not be worth it for small businesses

Current assets ratio (Current Ratio) expresses the rate of ability to convert assets into money to be used to repay short-term debts. If the result is greater than 1, it indicates that the business's current assets are sufficient to pay off short-term liabilities. The business has flexibility in repaying short-term debt. But if the result is less than 1, it means that the business has more current debt than current assets. It may result in problems in repaying this debt in the short term. What is a good current assets ratio? 2:1 and from the study of Khwannapa Seksiri, Somjai Bunmuenwai and Thanapon Wimun-at (2018), it was found that the working capital ratio (CR) is related to the price of securities. Statistically significant ($P < 0.01$) and has a ratio that is related to stock prices and Watchthanaphong Yodraj and Pantip Yangklan (2021) found that the working capital ratio is related to the ability to make a profit. Also, Sophon Bunthanomwong. (2015) found a relationship between financial ratios that show operational efficiency. (Total asset turnover rate, trade receivable turnover rate, inventory turnover rate and trade payable turnover rate) and profit margin (gross profit margin, operating profit margin and net profit margin) of a business. Financial ratios are a tool that shows the relationship between various data in the financial statements, indicating the financial position, liquidity, and operating results. and the ability to make profits of the business Executives can know the past management potential. Lead to changes in operational strategies that will reduce risks and create appropriate returns for the stakeholders of that business. as well as being able to continue competing in the future and Manora Rangsimavarangkun (2020) found that The working capital ratio has no relationship with the rate of return from investing in securities. Supawan Sujaree (2021) studied and found that The working capital ratio (CR) influences the market price to book value (P/BV) ratio in the opposite direction. But the inventory turnover rate (IT), debtor turnover rate (AR) and creditor turnover rate (AP) have no influence on the market price to book value (P/BV) ratio.

Return On Assets (ROA) is a ratio used to measure the ability of a business to utilize its assets to create profit. This ratio is considered a measure of efficiency in using assets. The total of the business divided by the rate of return on total assets is high compared to the average rate of return on total assets of the industry. It shows that the business has high efficiency in using total assets. The higher this ratio, the better. Sophon Bunthanomwong. (2015) said that the ratio shows the ability of the company to generate income from all assets that the company invests. The higher this ratio, it shows the efficiency of the business's asset management. From the research results it was found that Total assets turnover rate is positively related to gross profit margin. with operating profit margin And with the net profit rate, that is, when the company uses machinery or other assets to produce products that can be sold quickly. Causes increased sales or income It gives the company an opportunity to earn more profits, and according to a study by Natida Munthongjad (2019), it was found that the ratio of net profit to total assets (ROA) is related in the same direction as the rate of return on the difference between security prices. at the significance level of 0.05 because when the business has the ability to manage or use assets that generate high profits and the study of Kulnan Noramat (2022). Results of the study: Profitability ratio has no relationship with stock prices. Statistically significant at the alpha level equal to .05 and Wariya Suwaphinyopas and Daranee Uechanajit (2013) also found that the rate of return on assets has a positive impact on

the market price to book value ratio. And the gross profit rate has a negative impact on the dividend yield at the significance level of 0.05 and Oratai Yuboon (2020) found that the rate of return on total assets And the rate of return on shareholders' equity is also significantly related to the market capitalization at 0.01, and Sunisa Chewemajae (2017) found that the rate of ability to make a profit, ROA, has Effects on changes in the share price difference of Kasikorn Bank Public Company Limited.

Return on Equity (ROE) is a ratio that shows the ability to make profits from shareholders' equity. This ratio has a higher value. The trend improves or maintains the consistency of this high return. That means being able to grow and compete in the market. Including being attentive to creating returns for shareholders From the study of Wariya Suwaphinyopas and Daranee Uechanajit (2013), it was found that the rate of return on equity has a positive impact on the market price to book value ratio at the significance level of 0.01.

Net profit margin Net profit margin shows the efficiency of a company's operations in making a profit after all costs and income taxes have been deducted. The higher this ratio, the better. Supawan Sujaree (2021) said that financial ratios show the operating efficiency of the business and the ability of the executives. By comparing the sales and net profits of the business during the accounting period.

Market price to book value ratio (P/BV Ratio) means the comparative ratio of the market price of common stocks to the book value of 1 common share according to the latest financial statement of the issuing company. This ratio tells you how many times the stock price at that time is higher than the book value. If it is high, it means that general investors in the market expect that Such companies have high growth potential while also representing a high level of risk. The findings of Rasamee Srilawong (2018) found that the market price to book value (P/BV) ratio has an impact on security prices in the same direction as security prices. Real estate and construction industry group in the MAI Stock Exchange at a confidence level of 95% and Kwannapa Seksiri, Somjai Bunmuenwai and Thanapon Wimoon-at (2018) found that the ratio of market value to book value per share (P/BV) is a ratio that is related to the security price.

E. Restrictions on Using Financial Ratios

- Financial ratios are obtained from the analysis of financial statements, which are numbers that have occurred in the past. Although studying a company's financial ratios continuously for many years can make it possible to predict future trends, But this does not mean that it will actually happen in the future because there are many other external factors that are important variables affecting the business's performance. Therefore, in addition to analyzing financial statements, You should study and predict trends in other factors in making decisions, such as economic conditions and industry trends. Legal requirements, prices, exchange rates or interest rates, etc.
- Comparing financial ratios of various companies, those companies should use accounting methods. accounting period Asset valuation policy And depreciation in the same way would be a good comparison. In reality, this is difficult because each business uses different accounting methods.

- The ratio obtained by comparing items in the statement of financial position recorded at a point in time with items in the income statement recorded for an accounting period of 1 year. Calculations should therefore use items in the statement of financial position in weighted numbers. Average the beginning of the year and the end of the year to give a clear meaning.
- Considering financial ratios, it is not necessary to use all ratios in the analysis. But you can choose to use certain ratios which are suitable for the purpose of analysis. But you should consider covering all types of financial ratios so that you can analyze all aspects together before deciding to invest.

From the study, the researcher knows the importance of Financial ratios include debt ratios. Working capital ratio Quick working capital ratio and debt to equity ratio Profitability consists of the rate of return on assets. Rate of return on equity and net profit margin Market value consists of earnings per share, price per share/net earnings per share. and price to book value of shares Therefore, it was used as a variable for the study.

III. RESEARCH METHODOLOGY

Population used in this research is a company registered on the Stock Exchange of Thailand that have been announced the results of sustainable stock assessment SET ESG Ratings 2023 from 2020 to 2022, a total of 3 years, totaling 195 companies.

The sample group for this research was companies listed on the Stock Exchange of Thailand. that have been announced the results of the SET ESG Ratings 2023 sustainable stock assessment as of (November 6, 2023) that have been ranked AAA and AA and have continued ESG assessments from 2020 to 2022. only, a total of 3 years, 60 companies, separated into 8 industry groups as follows:

- Industry group Agriculture and food industry 5 companies
- Industry group Consumer products 1 company
- Industry group financial business 7 companies
- Industry group Industrial products 5 companies
- Industry group Real estate and construction 10 companies
- Industrial Resource Group 18 companies
- Service Industry Group: 10 companies
- Technology Industry Group 4 companies

A total of 60 companies, totaling 180 samples.

The tools used for the study are Data were collected from secondary sources, namely financial statements, annual reports, and Form 56-1 displayed on the Stock Exchange of Thailand website from 2020 to 2022, a total of 3 periods. Accounts from 60 companies, totaling 180 samples, data were collected. and interpret the data, consisting of financial referral rates, namely working capital ratio (CR), total asset turnover ratio (TAT), return on assets ratio (ROA), return on equity ratio (ROE), debt-to-equity ratio. Equity (DE), Net Profit Margin (NPM) and Market Value are the Book Price per Share (BV) ratio.

The statistics used to analyze the data are descriptive statistics, namely the mean. Quantitative statistics include the analysis of the Pearson correlation coefficient. and multiple regression analysis.

IV. RESULTS

Objective 1. Ratio analysis Industry group Agriculture and food industry with descriptive statistics found that the average working capital rate (CR) in 2020 was 2.3920 and continued to increase to 2.6140 and 2.7120 in 2021 and 2022. Total asset turnover ratio (TAT) average of 2020 is 1.1520 and continues to increase to 1.2000 and 1.2120 in 2021 and 2022. The average return on assets (ROA) ratio of 2020 is at 0.6320 and continues to increase to 0.6400 and 0.7600 in the year. 2021 and 2022, the average return on equity ratio (ROE) in 2020 was 15.8020 and continued to decrease to 15.5460 and 8.8540 in 2021 and 2022. Debt to equity ratio (DE) The average of 2020 is 19.6160 and continues to decrease to 18.8740 and 10.6800 in 2021 and 2022. The average net profit rate (NPM) of 2020 is 29.2280 and continues to increase to 33.4700 and 36.2880 in 2021 and 2022 and the average book price per share (BV) ratio in 2020 was 13.0760 and continued to decrease to 11.6800 and 6.4220 in 2021 and 2022.

In conclusion, the agricultural and food industry group's working capital ratio (CR), total asset turnover ratio (TAT), return on assets ratio (ROA) and net profit margin (NPM) have continually increased. As for the return on assets ratio, Shareholders' equity (ROE), debt-to-equity ratio (DE), and book value-to-share ratio (BV) continued to decline.

Ratio analysis Industry group Consumer products With descriptive statistics, it was found that the average working capital rate (CR) in 2020 was 0.8700 and increased to 1.0600 in 2021 and decreased in 2022 at 0.9500. Total asset turnover ratio (TAT) average in 2020. was at 0.7100 in 2021, decreased to 0.6600 and increased to 0.8700 in 2022. Return on assets (ROA) ratio, average in 2020 was 2.0900 and continued to decrease to 1.9200 and 1.9100 in 2021 and 2021. 2022 Return on Equity Ratio (ROE) average in 2020 was 10.3000, in 2021 it decreased to 4.1500 and increased to 4.6100 in 2022. Debt to Equity Ratio (DE) average. of 2020 is at 14.4500 and continues to decrease to 6.4000 and 5.9300 in 2021 and 2022. The average net profit rate (NPM) of 2020 is 22.7900 and continues to increase to 24.9400 and 30.7400 in 2021 and 2022 and the average book price per share (BV) ratio in 2020 is 7.4100 and continues to decrease to 2.7200 and 2.3300 in 2021 and 2022.

In conclusion, it can be concluded that the ratio of consumer products industry groups The ratio of return on equity (ROE) and net profit margin (NPM) has increased continuously. and the return on assets (ROA), debt to equity (DE) and book price per share (BV) ratios continued to decrease. The working capital ratio (CR) and total asset turnover ratio (TAT) have changed during the year.

Ratio analysis Industry group financial business With descriptive statistics, it was found that the average working capital turnover rate (CR) of 2020 was 1.1686 and continued to increase to 1.1886 and 1.1900 in 2021 and 2022. The average total asset turnover ratio (TAT) of 2020 was at 0.0743 increased in 2021 to 0.0814 and decreased to 0.0771 in 2022. Return on assets (ROA) ratio, average in 2020 was 6.8757 and continued to decrease to 6.5071 and 6.4386 in 2021 and In 2022, the average return on

equity ratio (ROE) in 2020 was 3.1600 and continued to increase to 3.2500 and 3.4886 in 2021 and 2022. Debt to equity ratio (DE) value The average of 2020 is 9.9457 and continues to increase to 10.9700 and 11.3971 in 2021 and 2022. The average net profit rate (NPM) of 2020 is 74.7629 and continues to increase to 82.8400 and 87.7871 in 2021. and 2022 and the average book price per share (BV) ratio in 2020 was 4227.3829, increasing in 2021 at 5454.4614 and decreasing to 5130.6457 in 2022.

In conclusion, the ratio of financial business industry groups There was a continuous increase in the working capital ratio (CR), return on equity ratio (ROE), debt to equity ratio (DE), and net profit margin (NPM). and the total asset turnover ratio (TAT) and return on assets ratio (ROA) continued to decrease. The book price per share (BV) ratio has changed during the year.

Ratio analysis Industry group Industrial products With descriptive statistics, it was found that the average working capital rate (CR) in 2020 was 1.6860, decreased in 2021 to 1.6120 and increased to 1.6660 in 2022. Total asset turnover ratio (TAT), average of the year. 2020 is at 1.0200 and continues to increase to 1.2120 and 1.3200 in 2021 and 2022. The average return on assets (ROA) ratio in 2020 is 1.2220, increasing in 2021 to 1.3200 and decreasing in 2022. At 1.2620, the average return on equity ratio (ROE) in 2020 was 4.4060, increasing in 2021 at 10.5300 and decreasing in 2022 at 5.9720. Debt to equity ratio (DE) value The average of 2020 is 6.5200, increasing in 2021 at 18.4280 and decreasing in 2022 at 8.6140. The average net profit rate (NPM) of 2020 is 21.8800 and continues to increase to 24.9020 and 26.1000 in 2021. and 2022 and the average book price per share (BV) ratio in 2020 was 2.8340, increasing in 2021 at 6.7500 and decreasing to 3.7040 in 2022.

In conclusion, the Industrial Goods Industry Group's Total Asset Turnover Ratio (TAT) and Net Profit Margin (NPM) have continued to increase. and the working capital ratio (CR), return on assets ratio (ROA), return on equity ratio (ROE), debt to equity ratio (DE), and book price per share ratio (BV) are Changes during the year.

Ratio analysis Industry group Real estate and construction With descriptive statistics, it was found that the average working capital rate (CR) in 2020 was 1.9300, decreased in 2021 to 1.4960, and increased to 1.6930 in 2022. Total asset turnover ratio (TAT), average of the year. 2020 is at 0.4310 and continues to increase to 0.4440 and 0.4390 in 2021 and 2022. Return on assets (ROA) ratio, average in 2020 is 1.3630, continues to decrease at 1.3230 and 1.3010 in 2021 and 2022. The average return on equity ratio (ROE) in 2020 is 6.2810 and will continue to increase to 7.9210 and 8.1460 in 2021 and 2022. Debt to equity ratio (DE) average of Year 2020 is at 8.8830 and continues to increase to 12.4230 and 12.6490 in 2021 and 2022. The average net profit rate (NPM) of 2020 is 42.0040 and continues to increase to 48.2840 and 51.7460 in 2021 and 2020. 2022 and the average book price per share (BV) ratio in 2020 is 14.1800 and continues to increase to 18.5420 and 19.0160 in 2021 and 2022.

In summary, the real estate and construction industry group's ratios include total asset turnover ratio (TAT), return on equity ratio (ROE), debt to equity ratio (DE), net profit margin (NPM), and price ratio. Book value per share (BV) continued to increase

and the return on assets (ROA) ratio continued to decrease. The working capital rate (CR) has changed during the year.

Ratio analysis Resource industry group with descriptive statistics found that the average working capital rate (CR) in 2020 was 1.8072, increased in 2021 to 9.3378 and decreased to 1.5178 in 2022. Total assets turnover ratio (TAT) value The average in 2020 was 1.0906, decreased in 2021 to 0.8167, and increased to 1.0733 in 2022. The return on assets ratio (ROA) was 1.3644, increased in 2021 to 1.4772 and decreased slightly to 1.4739 in 2022. The average return on equity ratio (ROE) in 2020 was 4.5483 and continued to increase to 7.2022 and 7.8006 in 2021 and 2022. Debt to equity ratio (DE) The average of 2020 is 4.7883 and continues to increase to 9.9094 and 10.5661 in 2021 and 2022. The average net profit rate (NPM) of 2020 is 30.9994 and continues to increase to 33.9844 and 39.1828 in 2021 and 2022 and the average book price per share (BV) ratio in 2020 is 14.7961 and continues to increase to 14.8461 and 12.5550 in 2021 and 2022.

In conclusion, the resource industry group has a continuously increasing return on equity ratio (ROE), debt to equity ratio (DE), net profit margin (NPM), and working capital ratio (CR). Total asset turnover ratio (TAT), return on assets ratio (ROA), book price per share (BV) ratio have changed during the year.

Ratio analysis Service industry group With descriptive statistics, it was found that the average working capital ratio (CR) in 2020 was at 0.9890, continuously decreasing to 0.8580 and remaining at 0.8150 in 2021 and 2022. Total asset turnover ratio (TAT), average of the year. 2020 is at 5.2700, decreases in 2021 at 4.9740 and increases to 5.3810 in 2022. Return on assets ratio (ROA) average in 2020 is at 1.9220, continuously decreasing at 1.8250 and is at 1.7990 in Year 2021 and 2022, the average return on equity ratio (ROE) of 2020 is 3.8570 and continues to increase to 5.7000 and 6.1350 in 2021 and 2022. Debt to equity ratio (DE) The average of 2020 is 5.2130 and continues to increase to 10.390 and 11.3890 in 2021 and 2022. Net profit margin (NPM) average of 2020 is 16.0820 and continues to increase to 18.2770 and 21.7400. in 2021 and 2022 and the average book price per share (BV) ratio in 2020 was 1.5290, increasing in 2021 at 8.6300 and decreasing in 2022 at 7.9100.

In conclusion, the service industry sector's return on equity ratio (ROE), debt to equity ratio (DE), and book price per share (BV) ratio are continuously increasing. and the working capital (CR) and return on assets (ROA) ratios continued to decrease. The total asset turnover ratio (TAT) and book price per share (BV) ratio have changed during the year.

Ratio analysis Technology Industry Group With descriptive statistics, it was found that the average working capital rate (CR) in 2020 was 2.8675, increasing in 2021 at 3.2625 and decreasing in 2022 at 2.2150. Total asset turnover ratio (TAT) average of 2020. It is at 0.4175, increasing in 2021 at 0.4200 and decreasing in 2022 at 0.4175. Return on assets ratio (ROA) average in 2020 is at 1.1325, continuously decreasing at 1.0275 and is at 0.9375 in the year. 2021 and 2022, the return on equity ratio (ROE) average in 2020 was 11.7800, decreased to 10.0425 in 2021 and increased to 10.5175 in 2022. Debt to equity ratio (DE) The average of

2020 is 20.4975 and continues to decrease to 17.4350 and 169475 in 2021 and 2022. Net profit margin (NPM) average of 2020 is 17.9675 and continues to increase to 19.2375 and 19.3750. in 2021 and 2022 and the average book price per share (BV) ratio in 2020 was 71.3950 and continued to increase to 78.8500 and 4331.0300 in 2021 and 2022.

In conclusion, the technology industry group's net profit margin (NPM) and book price per share (BV) ratio have continued to increase, and the return on assets (ROA) and debt to equity (DE) ratios have decreased. Continuously decreasing, while the working capital ratio (CR), total assets turnover ratio (TAT) and return on equity ratio (ROE) have changed during the year.

Table 1: Analysis of Multiple Regression Coefficients, Financial Ratios and Market Value.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	24.225	10.600		2.285	.023
CR	1.344	.406	.230	3.313	.001
TAT	-.233	.691	-.024	-.338	.736
ROA	5.248	2.731	.170	1.922	.056
ROE	-.076	1.674	-.007	-.046	.964
DE	-.181	.855	-.030	-.212	.833
NPM	.003	.001	.260	3.549	.000

R=.420^a, R Square=.176, Adjusted R Square=.148(R²), Std. Error of the Estimate=56.68668, F=6.175, Sig=.000^b
 a. Dependent Variable: BV
 b. Predictors: (Constant), NPM, DE, CR, TAT, ROA, ROE

Objective 2. Table 1 Analysis of multiple regression coefficients for financial factors. It was found that the results of the analysis of the primary variables Working Capital Ratio (CR) Total Asset Turnover Ratio (TAT) Return on Assets Ratio (ROA) Return on Equity Ratio (ROE) Debt to Equity Ratio (DE) Net Profit Margin (NPM)) and the book price per share ratio (BV) explains the results as follows. The financial factor is equal to 0.420 (R=.420a). The possibility of the forecast when all variables combined is equal to 0.176 (R Square=.176), meaning the primary variable used in the study is the working capital rate. (CR), Total Assets Turnover Ratio (TAT), Return on Assets Ratio (ROA), Return on Equity Ratio (ROE), Debt to Equity Ratio (DE), Net Profit Margin (NPM) and Ratio. Book price per share (BV) can explain the book price per share ratio by 17.6 percent, while the remaining 82.40 percent is due to the influence of other variables that were not studied. As for the estimated standard error of 56.69, it is based on the estimation of financial factors and the model deviation data.

The results of the multiple regression analysis found that Working capital ratio (CR), return on assets (ROA) and net profit margin (NPM) are significantly related to book price per share (BV) at the level of 0.05. Then, both variables were tested for their validity. Correlation between variables in which direction there is a relationship with the Correlate command. It is found that.

The relationship between the independent variable, working capital ratio (CR) and the dependent variable, book price per share ratio (BV), found that the working capital ratio (CR) was equal to .217, which is at a positive value. The results can be interpreted as The working capital ratio (CR) is related to the book price per share (BV) ratio and is related in the same direction.

The relationship between the independent variable, Return on Assets (ROA) and the dependent variable, Book Price per Share (BV), found that the Return on Assets (ROA) was equal to .246, which is at a positive value. The results can be interpreted as Return on assets ratio (ROA) is related to the book price per share (BV) ratio and is related in the same direction.

The relationship between the independent variable net profit rate (NPM) and the dependent variable, book price per share ratio (BV), found that the net profit rate (NPM) was equal to .311, which is at a positive value. The results can be interpreted as Net profit margin (NPM) is related to book price per share (BV) ratio and is related in the same direction.

V. DISCUSSION

From this study, the results can be discussed as follows.

Results from research Objective 1, working capital ratio (CR), found that the group has industries that have continuously increased in performance over the past 3 years, namely: Agro-industry and food industry group and financial business industry From the work of Pranom Khampha (2019), studied the causal relationship pattern of financial ratios and return on equity of listed companies on the list of sustainable stocks. It was found that liquidity ratios tend to continue to increase. Because It shows that the company's liquidity is at a good level. and the working capital ratio is also a comparative ratio between Short-term assets vs. short-term liabilities Shows that businesses in the service industry have sufficient cash or short-term assets that can be adequately converted into cash.

Total asset turnover ratio (TAT) found that the group has industries whose operating results for the past 3 years have continuously increased, namely Agro-industry and food industry group Industrial product group and real estate and construction groups This ratio is a measure of the ratio comparing sales to total assets, showing the efficiency in using the assets that the business has. Businesses do not need a lot of assets to expand. And it is a ratio that shows the ability of the company to generate income from all assets that the company invests. The higher this ratio, it shows the efficiency of the business's asset management. From the research results it was found that Total assets turnover rate is positively related to gross profit margin. with operating profit margin and with the net profit rate (Sophon Bunthanomwong 2015)

The return on assets (ROA) ratio found that the group has industries whose operating results for the past 3 years have continued to increase are: Agricultural and Food Industry Group: This ratio is a financial ratio that shows the

ability of the business to efficiently use its assets to benefit the business's operations. By comparing the net profit with the total assets of the business in the accounting period. From the work of Pranom Khampha (2019), it was also found that the ratio of return on assets There is a slight downward trend. But there is still consistency.

The return on equity ratio (ROE) found that the group has industries whose performance over the past 3 years has continued to increase, namely: Consumer products industry group financial business industry Real estate and construction industry resource industry and service industry This ratio is the ratio that indicates the company's ability to bring shareholders' investments to profit or efficiency. Consistent with the work of Pranom Khampha (2019) and Kwannapa Seksiri (2018), the rate of return on shareholders' equity It is a ratio related to profitability, showing the wealth generated from an investment if the return on equity received is high. It will attract the attention of investors to increase their interest in investing in securities, resulting in the price of securities increasing according to investor demand.

Debt to equity ratio (DE) found that the group has industries whose performance over the past 3 years has continuously decreased, namely Agro-industry and food industry group Consumer products industry and technology industry It is a ratio that shows how many times a company's debt is compared to its shareholders' equity. The lower the value of this ratio, the better because it shows less debt compared to shareholders' equity. It shows that the industry group has efficient management. From the work of Pranom Khampha (2019), it was also found that the debt-to-equity ratio is greater than 1 and tends to continuously decrease until it is close to 1. It can be explained that this group of companies has a high total debt. Shareholders' Equity But there is a tendency for total liabilities to decrease close to equal to shareholders' equity.

Net Profit Margin (NPM) found that the group has industries whose performance over the past 3 years has continued to increase, namely: Agro-industry and food industry group Consumer products industry financial business industry Industrial goods industry Real estate and construction industry resource industry service industry and technology industry This ratio is (Supawan Sujaree 2021) a financial ratio that shows the operating efficiency of the business and the ability of the management. By comparing the sales and net profits of the business in the accounting period, meaning that if the net profit ratio increases, it will increase the rate of return on investment in securities.

The book price per share (BV) ratio found that the group has industries whose operating results for the past 3 years have continued to increase are: Real Estate and Construction Industry Group and the technology industry, which the book price per share ratio It is (Supawan Sujaree 2021) a financial ratio that compares the market price of common stocks to the book value of common stocks. The ratio of stock price to book value tells you how many times the stock price at that time is higher than the stock's book value. The higher the value, the better.

The results from research objective 2, working capital ratio (CR) and book price per share ratio (BV), found that the working capital ratio (CR) was equal to .217, which is at a positive value. The results can be interpreted as The working capital ratio (CR) is related to the book price per share (BV) ratio and is related in the same direction. This is not consistent with Kwannapa Seksiri (2018). The study found that the working capital ratio (CR) and the quick working capital ratio (QR) are related to stock prices. In the opposite direction and Manora Rangsimavarangkun (2020) found that the working capital rate was not related to the rate of return from investing in securities and Supawan Sujaree (2021) the results of the study revealed that The working capital ratio (CR) influences the market price to book value (P/BV) ratio in the opposite direction. But the inventory turnover rate (IT), debtor turnover rate (AR) and creditor turnover rate (AP) have no influence on the market price to book value ratio. (P/BV) as it may be a result of the working capital ratio. It is a ratio used to measure short-term debt repayment ability only.

Return on assets ratio (ROA) and book price per share ratio (BV) found that the return on assets ratio (ROA) was equal to .246, which is at a positive value. The results can be interpreted as Return on assets ratio (ROA) is related to the book price per share (BV) ratio and is related in the same direction. This is consistent with Chayada Chuangsang. (2020), who studied the relationship between profitability and profit quality of real estate and construction groups listed on the Stock Exchange of Thailand, found that in terms of return on assets (ROA) There is a relationship in the same direction with profit quality. In terms of market price to book value, it is significant at 0.01 or at the confidence level of 99% and is consistent with Wariya Suwapinyopas and Daranee Auchanajit (2013) who found that the rate of return on assets has a positive impact on Market price to book value ratio at the significance level 0.05 and consistent with Oratai Yuboon (2020), that rate of return means that the company has a tendency to go up or down when compared to Assets which measure the profitability of a company used in its operations, namely If a company has a low rate of return on common assets, it will have a low market capitalization as well. Similarly, if there is a high rate of return on total assets, it will cause the market capitalization to be high as well. And consistent with Sunisa Chewemajae (2017), it was found that the ROA profit ability rate has an effect on the change in share price spread of Kasikorn Bank Public Company Limited and not consistent with Piyanat. Kanchanarat (2021) found that the rate of return on assets has a negative relationship with the business value, that is, the higher the rate of return on assets, the more the business value will decrease. Because investors may view High rate of return on assets It is caused by the company borrowing money from creditors, not from capital. This high rate of return comes with a lot of debt as well. Therefore, a high rate of return on assets will cause the business value to decrease.

Net Profit Margin (NPM) and Book Price per Share Ratio (BV) found that the Net Profit Margin (NPM) was equal to .311, which is at a positive value. The results can be interpreted as Net profit margin (NPM) is related to book

price per share (BV) ratio and is related in the same direction. This is consistent with Piyanat Kanchanarat (2021) who found that the net profit rate has a positive relationship with business value, that is, the higher the net profit rate, the higher the business value will be. This is because the net profit margin is a ratio that indicates the company's ability to make profits. If the company has the ability to make high profits, it will make the company have a high profit rate. Net profit is the main factor in investors' decision making. When the net profit rate is higher As a result, the business value will also increase. and is not consistent with Rasamee Srilawong (2018), which found that the net profit ratio (NPM) is a financial ratio that looks at the ability to make a profit. However, the test results showed that this ratio was not related to the stock price. at the confidence level of 95% and is not consistent with Sunisa Chewemajae (2017) who found that NPM has no effect on the rate of change in the share price ratio of the banking group.

VI. SUGGESTIONS FOR FURTHER RESEARCH

➤ *Suggestions*

From the study of financial ratios that have a relationship with market value. Of the listed companies that have announced the results of the SET ESG Ratings 2023 sustainable stock assessment, it was found that the working capital ratio Return on assets ratio and net profit margin have a relationship with Book price per share ratio And there is a relationship in the same direction. Therefore, investors should pay attention to the ratio because it is related to the market value. and can tell about the operations and management of the company as well As for the executives, they should analyze and manage the said ratio. Because the said rate affects the market value.

➤ *Suggestions for next research*

This study was a study of only a sample of those listed on the Stock Exchange of Thailand. that have been announced the results of the SET ESG Ratings 2023 sustainable stock assessment as of (November 6, 2023) that have been ranked AAA and AA and have continued ESG assessments from 2020 to 2022. only and study only the variables Working capital rate Total assets turnover ratio Return on assets ratio Return on Equity Ratio (ROE) Debt to Equity Ratio Net profit margin and book price per share ratio only, so other variables should be taken into consideration as well. for completeness of information and to benefit those who are interested

REFERENCES

- [1]. Pranom Khampha. (2019). Causal relationship model of financial ratios and return on equity of listed companies on the list of sustainable stocks. Journal of Accounting and Management Sarakham University. 11(4) 160-173
- [2]. Piyanat Kanchanarat. (2021). The relationship between financial ratios, cash flow, and enterprise value of companies listed on the stock exchange: A case study of countries in the development project group. Trilateral Economic Zone of Indonesia, Malaysia and Thailand. Master of Accountancy Thesis. Prince of Songkla University

- [3]. Chayada Chuangsang. (2020). The relationship between profitability and profit quality of real estate and construction groups listed on the Stock Exchange of Thailand. Independent research, Master of Accounting, Faculty of Accounting, Sripatum University.
- [4]. Kwannapa Seksiri, Somjai Bunmuenwai and Thanapon Wimun-at. (2018). The influence of financial ratios on the stock market price of companies listed on the Stock Exchange of Thailand: A case study of the service industry group. *Community Research Journal*.12(2). 71-84
- [5]. Rasamee Srilawong. (2018). A study of financial ratios that affect stock prices. A case study of the real estate and construction industry in the MAI Stock Exchange. Independent research, Bachelor of Business Administration. Faculty of Business Administration. Rajamangala University of Technology Krungthep
- [6]. Sophon Bunthanomwong. (2015). Relationship between profitability and asset management efficiency. Independent Research Master of Business Administration Faculty of Commerce and Accountancy. Thammasat University
- [7]. Wariya Suwaphinyopas and Daranee Auchanajit. (2013). The impact of profitability ratio and financial structure ratio on the security price and market value of listed companies in the Stock Exchange of Thailand, SET 50 group. *Public Administration Journal Suan Sunandha Rajabhat University*. 6(3). 747-763
- [8]. Suphawan Sujaree (2021) Liquidity ratios and profitability ratios that influence the market value ratio of the business's industrial product group. Listed on the Stock Exchange of Thailand. Independent research, Master of Accounting, Faculty of Accounting, Sripatum University.
- [9]. Manora Rangsimavarangkun (2020) Relationship between financial ratios and rates of return from investing in securities of companies listed on the Stock Exchange of Thailand, energy business group. and utilities
- [10]. Sunisa Chaewamajae (2017) The relationship between profitability and the rate of return from the share price difference of banks listed on the Stock Exchange of Thailand. Independent research, graduate school. Yala Rajabhat University
- [11]. Oratai Yubun. (2020). The influence of profitability ratios that affect the value of securities according to misprices in the COVID-19 crisis. of companies listed on the Stock Exchange of Thailand, group SET 50. Master of Accountancy Thesis College of Innovative Business Administration and Accounting. Dhurakij Pundit University
- [12]. Saranya Singwarat. (2019). Studying the influence of financial ratios on operational efficiency that affect the profitability of companies listed on the Stock Exchange of Thailand, SET 100 Group. Master of Accountancy Thesis. College of Innovative Business Administration and Accounting. Dhurakij Pundit University.
- [13]. Association of Thai Securities Companies. (2024). Capital Markets Note. (online) Retrieved on March 28, 2024 from http://www.asco.or.th/uploads/upfiles/files/ASCO%20article_ESG_ed.pdf.
- [14]. Dharmniti. (2020). Table summarizing financial ratios. (Online) Retrieved on 15 November 2023 from https://www.dst.co.th/index.php?option=com_content&view=article&id=3934:table-ratio-finance&catid=29&Itemid=180&lang=en
- [15]. Panthip Yangklan. (2023) Development and competencies of accountants that affect work effectiveness. of the Southern Accounting Office, the development and competencies of accountants that affect operational effectiveness of the Southern Accounting Office. *Journal of Public Administration Suan Sunandha Rajabhat University*. 6(2). 548-560
- [16]. Stock Exchange of Thailand. (2022) Industry group structure and business categories. (online). Accessed 15 March 2022 from <https://www.set.or.th/th/market/index/set/industry-sector-profile>
- [17]. Nipaphan Poonsathiansap (SCB). (2024). New investment method. Invest in sustainable stocks. Online retrieved on March 28, 2024 from <https://www.scb.co.th/th/personal-banking/stories/grow-your-wealth/sustainability-investment.html>
- [18]. Chantana Wattanakanjana. (2016). Comparative analysis of financial ratios of companies in the agricultural business category listed on the Stock Exchange of Thailand. *Siam Academic*. 16,27(2). 78-96
- [19]. Apisada Kanchanarom. (2023). Analysis of financial ratios to study the performance of airline business. *Rajamangala University of Technology Suvarnabhumi Journal of Liberal Arts*.5(2). 361-375
- [20]. Suphannika Sanpakaew and Natthanan Thonsrichailert. (2023). Analysis of factors affecting book value per share. Agricultural business category in the Stock Exchange of Thailand. *Journal of Innovation in Educational Management and Research*. 5(3). 583-594
- [21]. Paweena Saeju. (2020), Relationship between financial ratios and business value. of companies listed on the MAI Stock Exchange. Independent research: Sripatum University.
- [22]. Nathida Munthongjad. (2019). Studying the relationship between profitability and the rate of return from the difference in securities prices of companies in the food and beverage category listed on the stock exchange. (Independent research, Master of Accounting). University of the Thai Chamber of Commerce.
- [23]. Kulnan Noramat. (2022). Relationship between profitability indicators and securities prices of companies listed on the Stock Exchange of Thailand. Agriculture and Food Industry Group. Business Administration. Ramkhamhaeng University.