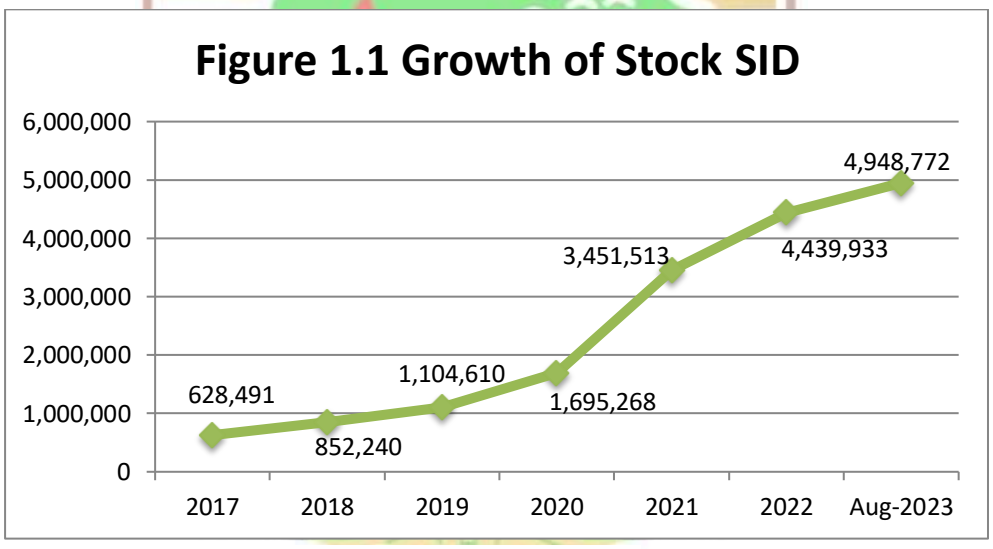
CHAPTER I

INTRODUCTION

1.1 Backgrounds

The development of information and technologies is one of the factors that can increase investor interest in conducting good and stable investment activities. Currently, investors have easy access to stock transactions because they can be done anywhere and anytime using devices that can access the internet. The high public interest in investing in stocks is reflected in the increasing number of stock investors. Single Investor Identification (SID) is the identity of an investor to conduct all transactions in capital markets, the growth of stocks SID from 2017 to August 2023 can be seen in the figure below.



Source : www.ksei.co.id (Data processed, 2023)

The growth in the number of stock SIDs continued to increase in 2017 by 628,491 stock SIDs and increased by 35.60% in the following year to 852,240 stock SIDs in 2018, an increase in stock SIDs in 2019 by 29.61% to 1.10 million stock SIDs. The biggest increase occurred during the pandemic period, namely the period 2020 to 2021, the number of SID shares increased by

103.60% from 1.69 million SID shares in 2020 to 3.45 million SID in 2021. In 2022, it increased by 28.64% to 4.44 million SID shares and continued to increase until August 2023 by 11.46% to 4.95 million SID shares. The growth in the numbers of SID shares in capital markets increased by an average of 41.78% each year from 2017 to August 2023.

The number of companies listed on the IDX make investors and potential investors confused in choosing the right company to buy their shares. To make it easier for investors to invest in capital markets, the Indonesia Stock Exchange created a stock index, one of which is the IDX30 Index.

The IDX30 Index is an index that measures the price performance of 30 stocks that have high liquidity and big market capitalization and are supported by good company fundamentals. The IDX30 Index was launched on March 23, 2012, the purpose of the IDX30 Index is to facilitate investors in narrowing their choices when they want to invest in stocks that are liquid and have a large market capitalization. The stocks traded are stocks on the IDX that are selected twice a year in January and July.

Investors realize that every investment made to get a return contains the consequences of risk. Returns is one of the factors that motivate investors to invest and is a reward for the investor's courage to bear the investment risk carried out (Jogiyanto Hartono, 2017). The relationship between the level of risk and the expected returns is a positive relationship, meaning that the greater the risk of a security, the greater the expected returns (high yield means high risk), and vice versa (Rose Mario, 2012).

Investors are generally risk averse but want maximum return (Alexander Kempf, 2012). To maximize the expected returns with a certain level of risk,

investors usually get around by doing a stocks portfolio. One way to reduce the risk of stocks investments can be done by diversifying the portfolio, namely by combining various stocks in its investment by placing a number of funds in various investments alternatives that are negatively correlated so that funds can generate optimal returns (Abidin et al., 2004).

The optimal portfolio formation required is to form an efficient portfolio. An efficient portfolio is a portfolio that provides the greatest expected returns with a certain risk or provides the smallest risk with a certain expected returns (Jogiyanto Hartono, 2017). This efficient portfolio can be determined by choosing a certain level of expected returns then minimizing the risk or by determining a certain level of risk then maximizing the expected returns. While the optimal portfolio is a portfolio that an investor chooses from the many choices that exist in a collection of efficient portfolios.

Determining the optimal portfolio is something that is very important for investors. The optimal portfolio will produce optimal returns with moderate risk that can be accounted for. The problem that often occurs is that investors face uncertainty when they have to choose stocks to be formed into a portfolio of their choice. It depends on the risk preferences of the investors themselves. Investors are faced with many combinations of stocks in their portfolios. In the end, the investor must decide which portfolio to choose. A rational investor will certainly choose the optimal portfolio (Jogiyanto Hartono, 2017).

In this study, the research models used are CAPM and Singles Index Models. The Capital Assets Pricing Models can minimize errors that occur when investing, grouping efficient (undervalued) and inefficient (overvalued) stocks can provide information to investors when making investment decisions

to buy and sell stocks and the Singles Index Models (SIM) is a model developed by Wiliam Sharpe (1963) which can be use to simplify calculation in the Markowitz models by providing the input parameters needed in calculation of the Markowitz models. In addition, the singles index models can also be used to calculate the expected returns and portfolio risk (Jogiyanto Hartono, 2017).

Optimal portfolio analysis with a single index model requires a number of calculation procedures through a number of data as input about the portfolio structure. Analysis of securities is done by comparing the excess returns to beta (ERB) of each shares with its Cut-off point (C*). Excess returns to beta is the excess returns over the risk-free rates of returns on other assets and the cut-off point (C*) itself is nothing but the largest value of various candidate stocks obtained from the comparison between the variance of market returns and the sensitivity of individual stock returns to stocks error variance. Stocks that have ERB bigger than C* are made portfolio candidates, and vice versa, namely C* bigger than ERB are not included in the portfolio (Jogiyanto Hartono, 2017). This is supported by Sartono and Setiawan (2006) who say that ERB calculations can produce better results in determining risk to return.

Previous research on the analysis of optimal portfolio formation with the CAPM and Singles Index Models (SIM) models was conducted by Ekantari and Widanaputra (2015) where this study used the LQ-45 Index in the results of this study showed that of the 20 LQ-45 stocks that continuously or at least 10 times appeared in the LQ-45 members, 5 optimal portfolio candidate stocks were obtained. There is no difference between the returns and risk of optimal portfolio candidates and non-candidates.

Investor rationality is measured by to what extent investors perform procedures for selecting stocks and the optimal portfolio formation from historical data on shares listed in the IDX30 Index. This issue could be sorted out through two methods, first by calculating CAPM to select shares that are included in undervalued or overvalued stocks and determine the optimal portfolio with the Singles Index Models, second by testing whether or not there is a difference between the returns and risk of shares that are in the candidate portfolio and shares that are not in the candidate portfolio. Based on the explanation above, the author is encouraged to conduct research entitled "Return and Risk Analysis in Determining Stock Investment Decisions (Study on Companies Listed on the IDX30 Index)".

1.2 Problem Statement

In accordance with the background that has been stated above, the problems identified in this study are as follows:

1. The increasing number of investors and public enthusiasm for investing in shares in stock markets is indicated by the increasing number of SIDs from 2017 to August 2023 with an average of 41.78% each year. SID shares increased by 103.60% from 1.69 million SID shares in 2020 to 3.45 million SID in 2021, and continued to increase by 28.64% in 2022 to 4.44 million SID and August 2023 increased by 11.46% to 4.95 million SID shares, this increase indicates that more and more investors want to invest in the capital market and of course this must be proportional to the knowledge in the implementation of their investment.
2. Investors realize that every investment made to get a return has risk consequences, so proper analysis is needed to overcome this.

3. Investors are faced with uncertainty when they have to choose stocks to be formed into a portfolio of their choice. Investors are faced with many combinations of stocks in their portfolios. In the end, they must decide which portfolio to choose.

In accordance with the background that has been stated above, the questions that will be discussed in this study are:

1. How is the grouping and investment decision of IDX30 Index stocks that are undervalued and overvalued for the period of Week 1 January 2017 - Week 5 August 2023 using Capital Assets Pricing Models?
2. Whether or not there is a difference among the return and risk between shares that are included in the candidate for the optimal portfolio and shares that are not included in the candidate for the optimal portfolio in the IDX30 Index for the period of Week 1 January 2017 - Week 5 August 2023?

1.3 Objectives of General Research

Based on the problem formulation that has been stated above, the objectives in this study are as follows:

1. To analyze the grouping and investment decisions of IDX30 Index stocks that are undervalued and overvalued in the period of Week 1 January 2017 - Week 5 August 2023 using Capital Assets Pricing Models.
2. To analyze whether or not the returns and risks between shares that are included in the candidate for the optimal portfolio and shares that are not included in the candidate for the optimal portfolio in the IDX30 Index for the period of Week 1 January 2017 - Week 5 August 2023.

1.4 Research Advantages

This research is expected to provide benefits for those in need. The following are some of the benefits of this research:

a. For Investors

This research is expected to help investors to find out the state of the company so that it can help in making investment decisions by paying attention to the level of risk and the level of return, especially for companies listed on the IDX30.

b. For Academics

This research is expected to help broaden and deepen understanding of Capital Assets Pricing Model (CAPM) which can be used as a basis for investment decision making and this research is expected to provide reference benefits for future researchers who will also use the same concept and research basis.

c. For Further Research

This research is expected to be used as a library reference and reference material for comparison for students who want to develop further research on the Capital Assets Pricing Models, especially in companies listed on the Indonesia Stock Exchanges.