CHAPTER 1 : INTRODUCTION

1.1 Background

The stock market has grown in importance and now plays a critical role in economic development, driving capital formation and sustaining economic growth. The stock market is critical for economic growth because it facilitates the flow of capital for profitable investment possibilities. Investors can select investment products with varying rates of return and risk measures through the capital market, whilst issuers can raise long-term financing through the capital market to support company sustainability. Because the capital market represents an alternative long-term funding source for businesses, it is projected to boost economic activity. As a result, the firm may function on a greater scale, increasing its profits and the overall wealth of the community.

Investors must consider factors that cannot be isolated from the aspects that affect the stock market itself while making capital market investments. Today, the world is witnessing the effects of globalization as well as a revolution in information and technology. Because globalization, in turn, generates symptoms of the unification of all nations' economy, resulting in a country having interdependence with other countries. Globalization's economic influence is followed by economic liberalization. This implies that in today's global market, any investor may invest from anywhere in the world (Wondabio, 2006).

The fast and increasingly interconnected growth of global financial markets has come from globalization. As a result, financial market indicators react fast to changes. This increases the occurrence of financial sector activities which does not regard national boundaries, hence increasing interactions among stock exchanges around the world. This interaction implies that the link between the degree of return and risk will be tested in a global environment. The openness of a country to foreign investment has resulted in possibilities for foreign investors to diversify worldwide, indicating that the capital market has been integrated.

A fully integrated capital market means that there are no barriers to owning securities in any capital market, and there are also no barriers to capital inflow or capital outflow. Integrated capital markets lead to a lower cost of capital. Since the risk that is relevant to foreign investors is only the risk that cannot be eliminated by diversification, the larger the share of total risk that is eliminated by diversification, the more attractive international diversification is to foreign investors. The smaller the risk borne by foreign investors, the lower the cost of capital. Lowering the cost of capital will make the investment more profitable.

One of the features of stock prices is that over a long period of time they tend to move together and follow a general trend. It is hoped that the integrated capital market index in these markets will display the same trend. The joint movement between security prices shows the integration of the stock market. This joint movement implies that one market will help predict the earnings of the other market. According to (Clark & Berko, 1996) in purchasing securities, investors make their decisions based on market movements, which can be identified statistically by the correlation between foreign investment and market returns that occurred in previous periods.

Increasing the number of investors or the flow of foreign investment will be able to boost the demand and liquidity of stock market shares, resulting in an increase in the capital market index (Clark and Berko, 1997). Furthermore, an integrated capital market will result in a reduced cost of capital, and because investors will bear less risk, the expected return will be lower. However, as a country's capital market becomes more interconnected, the correlation level of profits rises. Investors participate in financial markets that are not yet completely integrated, such as capital markets in developing market economies, to maximize the benefits of diversification for international investors. Diversification is done to maximize expected return while minimizing risk. International diversification leads to an increase in the size of the base. The growth of the base is caused by an increase in the number of investors participating in developing-country or emerging-market capital markets (Clark and Berko, 1997). According to Clark and Berko (1997), the increase in the number of foreign investment had a favorable influence on stock returns in the Mexican capital market. Then, Reis et al. (2008) explain in the market Brazilian capital using the VAR model that foreign exchange investment flows have a favorable influence on domestic stock market returns.

The fundamental principle in investing, particularly in stocks, is calculating the risk and return of securities by taking into account external variables such as economic trends and worldwide reference sector prices, as well as internal conditions such as the company's financial statements (Sutrisno, 2016). The greater the risk, the greater the profit, and vice versa. Estimating risk and reward is a difficult task for market players. Investors, regulators, asset managers, and financial analysts are then interested in asset valuation models in order to make capital market investment decisions (Acaravci & Karaomer, 2017). They must consider volatility while making selections of securities. The more the volatility, the greater the price changes, whether rising or falling, and the higher the risks to reward ratio. Investors seeking substantial returns must be prepared for the occurrence of a major risk or a high-risk, high-return situation.

Because of the presence of the global capital market, international investors can participate in many nations not only through direct investment, but also by purchasing securities listed on the stock exchange. Each country has a composite stock value index that includes the country's stock value as well as the stock value of several industries or sectors. The index provides as a gauge of a country's capital market as well as a comparison of performance indicators. However, if each nation creates its own capital market index using different calculations and methods, it will be difficult to compare the indexes (Zaretta, 2015).

The stock price index is a measure or reflection of the movement of stock prices. The index is one of the parameters that investors use while investing in the capital market, particularly in stocks. Many variables can influence the Stock Index, including changes in central bank interest rates, global economic conditions, global oil prices, global gold prices, a country's political stability, and others (Blanchard, 2017).

On a global scale, Morgan Stanley Capital International's index may be used as a proxy for the world capital market index. The index is based on stock performance in 23 nations with established capital markets, including 15 European countries as well as Australia, Hong Kong, Japan, Malaysia, New Zealand, Singapore, Canada, and the United States. The index is also constructed in such a way that it is internationally comparable, and investors frequently utilize it (Reis et al., 2008).

1.2 Research Scope

1.2.1 MSCI All Country World Index (ACWI)

This paper will focus on MSCI Index as the benchmark of stock prices. MSCI World is a market capitalization weighted stock market index of companies worldwide. It is administered by MSCI, previously Morgan Stanley Capital International, and serves as a generic benchmark for stock funds that seek to reflect a large part of the global market. The index consists of equities from all of the world's developed markets, as defined by MSCI. The index include equities from 23 nations but excludes stocks from developing countries and frontier economies, making it less global than its name implies. The MSCI All Country World Index (ACWI), a comparable index, contains stocks from both developed and developing nations.

Figure 1. Cumulative Index Performance-Gross Returns (USD) (Mar 2007 – Mar 2022)

Source : https://www.msci.com/

The graph for the performance of three main MSCI flagship indexes are presented above. Based on the graph, the MSCI World index exceeded the performance of other two indexes.

Investing worldwide is one of the most effective ways for investors to diversify their portfolios. Investors can reduce firm-specific risk (unsystematic risk) by holding numerous companies with low correlation in the same market, but systematic risk remains. Adding foreign shares to a portfolio can help to diversify it and decrease systematic risk. As a result, investors and portfolio managers look for investment possibilities in other nations. International diversification is only possible if a country's domestic capital market is open to international investors.

The openness of a country to foreign investment flows allows foreign investors to diversify worldwide while also demonstrating an interconnected capital market (Zaretta, 2015). MSCI ACWI is regarded by market players as a critical component for worldwide investing. The MSCI ACWI is frequently used as a benchmark for assessing the performance of a global stock portfolio, particularly for passive investing. A portfolio manager can compare the portfolio's performance and volatility to that of the index.

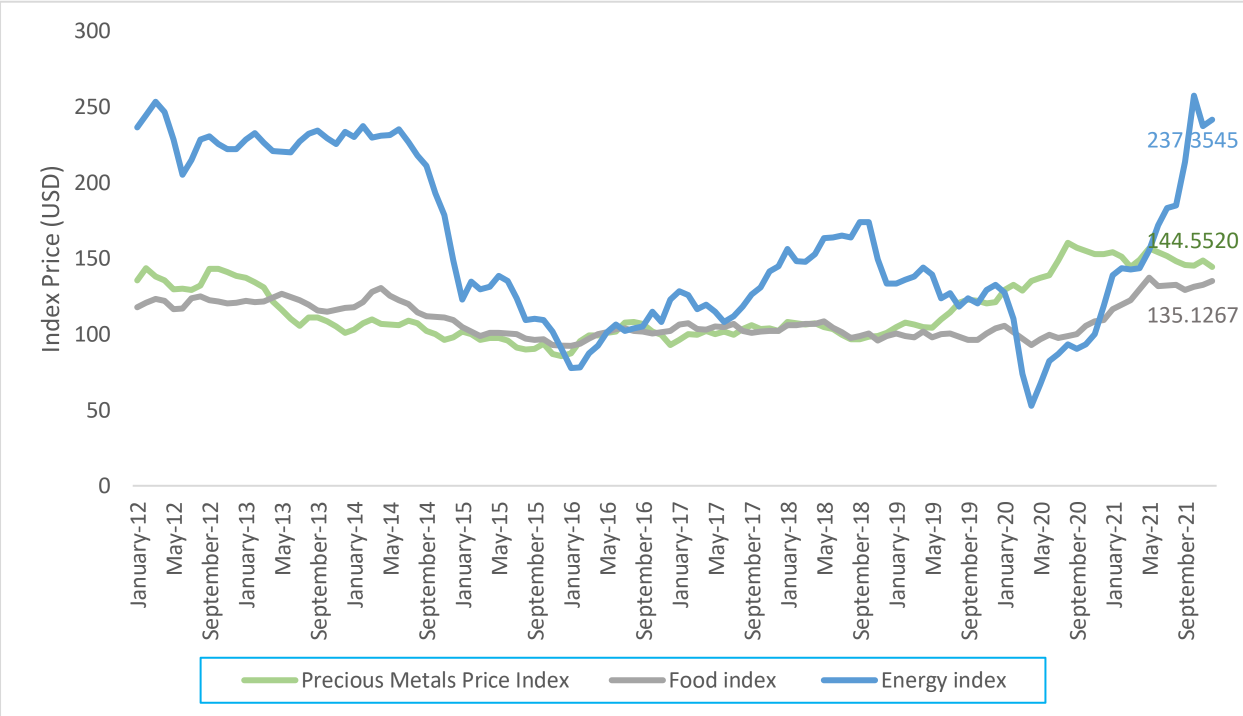
Following a market cap weighted equity benchmark appears to be an appealing option for passive investors to reap the equities risk premium. This is because few primary reasons. First, markets that are efficient. According to the Efficient Market Hypothesis (EMH), all public information is absorbed into stock prices. New information will also be reflected directly, and stock prices can be defined by a 'random walk.' As a result, beating the market on a consistent basis is impossible. Second reason involves low costs. The market capitalization index is a 'buy and hold' strategy with very low turnover and implementation costs. Third reason is the drawback of active management of portfolio. The market portfolio's return is, by definition, the average return of all investors. This indicates that, before transaction costs, active management will be a zero-sum game: one's gain is another's loss. Because costs are involved in maintaining equity portfolios, the zero-sum game becomes a 'minus-sum game.' It is extremely difficult to continuously surpass the market cap weighted benchmark with active management.

1.2.2 Commodity Index Prices

One of the main determinants of stock volatility and trends are commodity prices. The commodities market is an investment alternative to stocks, mutual funds, and bonds that investors might consider. As an investment, it has the potential to impact the price of the capital market as well as the return that investors will receive. Commodity markets in which most investors prefer to invest includes oil and gold. Investors interested in commodities can invest directly in the actual commodity or indirectly by acquiring shares in commodity firms, mutual funds, or exchange traded funds (ETFs). One of the most significant advantages of investing in commodities is that they tend to protect investors from the impacts of inflation. Commodity demand is often strong during periods of high inflation, which drives up prices.

Oil is one of the most traded commodities, and it is considered a high-risk commodity. Because of the significant need for oil in the global sector, fluctuations in oil prices would have an impact on the capital market. Benchmarks for worldwide oil prices include West Texas Intermediate (WTI) and Brent North Sea. Furthermore, gold is one of the most traded commodities. Gold has the following benefits as an investment instrument: it is not influenced by inflation, it has high liquidity levels, and there is no price interference by the government (Putra & Robiyanto, 2019). Agricultural commodities such as corn, soybeans, and wheat are critical to the food supply, resulting in the creation of a massive global commodities market to purchase and sell them. Individual agricultural commodities, on the other hand, are prone to extreme fluctuation due to variables such as weather, season, population, and others. To capture the weighted index of those commodities, this paper will use commodity price index data from IMF.

Figure 2. Primary Commodity Index Prices (USD) (Jan 2012-Dec 2021)



Source: https://data.imf.org/

Figure above shows the performance of the selected commodity price index from IMF database. Notable price movement and high volatility is found on energy index over the years.

This research project aims to study the overall effect of commodity price indices, that consists of precious metal index, food index, and energy index towards MSCI All Country World Index in 2012-2021.