

Investment in Malaysian Stock Market and the Inflation Rate

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Received: 26.11.2023 • Accepted: 04.01.2024 • Published: 06.02.2024 • Final Version: 06.02.2024

Abstract: The increasing concern on the rising inflation rate in Malaysia had motivated the need for the study on the investment return for the Malaysian stock market to compare against the inflation rate in Malaysia. The study had reflected towards the literature review to identify the potential pattern for the study creating the expectations to observe the positive correlation between the inflation rate and the portfolio return of the stock investment as well as the higher KLSE market index growth rate over the inflation rate in the country. With this, the resign design through the quantitative method had been introduced with reference to the application of the correlation analysis and regression analysis to test for the hypothesis for the study. In addition, the comparative analysis will be used as part of the quantitative analysis to understand the potential difference in the inflation rate against the KLSE market index growth rate. The outcome for the quantitative findings had concluded that there is very weak negative correlation being observed between the two variables, but the regression analysis failed to show any significant in the relationship between the two variables disagreeing with the previous studies. On the other hand, the KLSE market index growth had been significantly higher than the inflation rate in Malaysia suggesting that the stock investment in Malaysia could be beneficial for the investors to beat the inflation rate in Malaysia. With this, the objective of the study is being achieved with the suggestion towards the potential future research study being proposed for the future researchers.

Keywords: Market index; Inflation rate; KLSE; Stock investment; Malaysia.

1. Introduction

As rising living costs, including the prices of goods and services, become the public's primary concern (Salisu et al., 2014), concerns about inflation and the consumer price index (CPI) have gained popularity. To counteract the inflation and CPI growth over time, people would look for various investment opportunities. The investment's main objective is to outperform the country's inflation rate in order to prevent a reduction in the time value of money. Because the investment was intended to

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increase the investor's wealth over time by growing over time, this ensures that the investor does not lose the investment money as a result of inflation (Arnold and Auer, 2015). It is acknowledged that the central bank-based risk-free rate of investment will provide the bare minimum rate of return that will represent the investment return on the investor population's lowest level of risk.

In order to increase an individual's wealth over time, investors actively seek out alternatives to invest in opportunities to earn more than inflation. As a result, the ability to beat inflation has remained a question for investors. Investments will play the role of making up for the decline in money value brought on by the time value of money. With this, the stock market will seem to be the best method of investing because it will include all of the stocks of large corporations, giving investors the desired return on investment (ROI) (Kwofie & Ansah, 2018). Because most businesses are likely to experience long-term growth, investing in the stock market has the advantage of generally positive market growth.

The study's clear issue statement focused on investors' concerns about making wise investment choices to offset the impact of inflation on rising consumption costs of goods and services (Desfiandi, Desfiandi, & Ali, 2017). The goal of investing was to maintain a person's financial worth over time in order to prevent them from losing it due to the time value of money. Despite the strong advice to invest, there is no clear guidance for investors on the preferred investment option that will help to generate higher rates of return in order to counteract the nation's rising inflation. For those with investment expertise, the significance of portfolio investments has demonstrated the lower risk of return for investors, supporting the idea of investing in a variety of different stocks on the stock exchange (Salisu et al., 2020). The portfolio of stock investments will therefore be compared to the country's inflation rate in order to ascertain their potential to relieve investors of the pressure of inflation.

The goal of this study is to understand how investing in the stock market will pan out over time as inflation rises. This will help to determine whether the choice to invest in a well-diversified portfolio will help to provide portfolio returns that are higher than the country's inflation rate (Yusuf, Ichsan, and Suparmin, 2021). The KLSE market indexes will be used to determine the target setting based on the performance of the overall stock movement. The study will compare the average growth of stock performance to the inflation rate in the US over the previous trend using the consumer price index (CPI) as the baseline.

The goal of the study, which is to investigate the effect of stock portfolio investment performance on the evolution of inflation in Malaysia over time, was thus established. The results of the study should be used to verify the accuracy of the information and determine whether stock portfolio investments can generate positive returns that outperform rising inflation over the long term. The literature review's gap will be substantially filled by doing this. Additionally, the research results are a crucial resource for investors when deciding whether to buy stocks on the KLSE stock markets.

2. Literature review

The prior knowledge derived from concepts in finance and economics gave a clear indication that the role of investment will help investors achieve greater wealth while relieving pressure on the nation's inflation rate. The common mistake made by people, according to Jareno, Ferrer, and Miroslavova (2016), is choosing not to invest, which causes money to depreciate over time. As a result, the investment return will be able to outperform the inflation rate. This is because of the time value of money concept, which will eventually lead to a similar amount of money being recognized for a lower value in the future. Because of this, investors frequently create a portfolio investment that will enable the money to grow over time through the investment, ensuring that the growth of the money and wealth is correlated with the nation's rising inflation (Nkoro and Uko, 2016). Additionally, according to Yusuf, Ichsan, and Suparmin (2021), the creation of a portfolio was planned to raise investors' return on risk, which is viewed as the best way to protect against rising inflation.

Antonakakis, Gupta, and Tiwari (2017) found that using a portfolio investing strategy typically produced positive results because portfolio returns had a higher propensity to record a positive return for investors even during times of recession. The ability of portfolio investments to diversify risk in investment portfolios and offer investors stable returns has thus been demonstrated. A consistent return that will eventually make up for the declining value of money can combat rising inflation. Salisu and others. (2020) emphasized that, despite the fact that portfolio investments might not maximize the potential return on investment rate, they will still offer a steady and consistent return that is sufficient to satisfy the time value of money progression.

On the basis of prior knowledge, earlier publications had argued that stock investments were the best types of investments because stock performance is typically favorable, particularly during periods of economic boom (Kwofie & Ansah, 2018). Corporate performance was frequently impacted by the state of the economy, which was reflected in stock performance for the stock exchange. Stock market performance is anticipated to have a favorable correlation with economic growth because the economic environment is changing over time as indicated by GDP growth (Tiwari et al., 2015). As a result, investing in a stock portfolio gave the impression that the value would increase dramatically over time. Because of this, when investors compare investment wealth to the country's inflation rate, the growth of their stock portfolio investments will typically outpace that of the overall inflation rate (Salisu, Raheem, & Ndako, 2020). Additionally, while portfolio investments in the stock market are expected to produce positive returns due to their diversification during a recession, the inflation rate is likely to decline (Costamagna, 2015).

The current study is likely to find a significant positive correlation between the market index performance representing stock portfolio investment and the country's inflation rate (Desfiandi, Desfiandi & Ali, 2017), drawing on the findings of the previous study to help it reach the expected result. As previously advised, the investment in a stock portfolio will perform better than an increase

in inflation rate when compared to the performance of the market index in this study. Below is the written version of the hypothesis, which will be examined in relation to the data from the study's empirical tests.

H1: There is positive correlation and relationship between the inflation rate against the market index performance.

H2: The growth rate for the market index performance will be significantly higher than the inflation rate of the country

3. Methodology

The research strategy for this study will be centered on the use of the quantitative method, in which the study will use numerical data to give accurate measurement in the study's conclusions and findings (Sharela, 2016). The advantages of using the quantitative analysis method were clear because, unlike the qualitative analysis method, where the statistical output will serve as strong evidence for the achievement in the study's outcome, the quantitative analysis method allows for the availability of data input for proper measurement, allowing for a more precise and objective definition of the empirical evidence. Additionally, the quantitative study will improve the vast data set of the study, improving the coverage of the study's target population (Sekaran and Bougie, 2016). According to the hypothesis presented in the literature review section, the deductive reasoning method will be applied. The previous study's logical methodology will be compared to the current study's findings to determine whether there are any similarities or differences in how the study's results and conclusion were arrived at (Cooper & Schindler, 2014). Regarding the scope of the study on historical data for the growth of both the KLSE market index performance and Malaysia's inflation rate, the study will be based on the timeline period as defined by the study to understand the emerging pattern and trend of the data movement within the specific period.

The clear target of the research's data study was Malaysia's economy and stock market, with the data study based on the Bursa Malaysia stock exchange. The KLSE market index will be taken into consideration when comparing the movement of the data for the country's inflation rate based on CPI growth. The study will concentrate on the past trend of 20 years of historical data to cover the boom and recession over time, including the timeline of the 2008 financial crisis in the US economy.

Next, we'll talk about the quantitative data analysis, which will be the main factor influencing the study's conclusions and findings. In order to ascertain the direction of the correlation as well as the impact of inflation on the performance of the KLSE market index in the stock exchange, the quantitative study will use both correlation and regression analysis (Sekaran & Bogie, 2016). The correlation analysis will be used to determine whether there is a meaningfully positive or negative relationship between the two study variables (Apuke, 2017). Whereas, within the context of the study's research design, regression analysis will become a crucial regression model to examine whether there

is a meaningful relationship between the independent and dependent variables (Sekaran & Bogie, 2016). To better understand the potential impact of portfolio investments in relation to the nation's rising CPI and inflation rate, the average increase for the market index and inflation will also be taken into consideration. Prior to drawing a conclusion about the major contribution to the study's findings, the results will then be compared to earlier hypotheses learned from earlier studies.

4. Empirical Findings

The Table 1 demonstrate the correlation analysis between the two variables as mentioned where the quantitative study as proposed had been targeted to understand the potential correlation between the inflation rate against the KLSE market index growth. The strength of the correlation will be assessed through the Pearson Coefficient Correlation which is ranged from -1 o 1 indicating the potential positive or negative correlation being exist between the two variables. Based on the statistical output in table 1, the Pearson Coefficient Correlation between the inflation rate against the KLSE market index growth had shown -0.12706 which indicate the presence of the very weak negative correlation between the two variables. In other words, the increase or decrease in the inflation rate in Malaysia will create the opposite impact towards the growth of the KLSE market index but did not fail significant impact towards the KLSE market index growth.

Table 1: Correlation Analysis

	<i>Inflation</i>	<i>KLSE Growth</i>
Inflation	1	-0.127055524
KLSE Growth	-0.127055524	1

The Table 2 had been demonstrating the regression analysis between the two variables which include the inflation rate against the KLSE market index growth where the purpose of the regression analysis will be used to test for the significant in the relationship between the two variables with the inflation rate being the independent variable against the KLSE market index growth as the dependent variable. Based on the regression output in Table 2, the p-value for the independent variable of the inflation rate had been observed achieving 0.51132 which is far above the tolerance rate of 5%. This will reflect the insufficient evidence to suggest the existence of the significant impact from the inflation rate towards the movement of the growth in the KLSE market index. Therefore, the outcome for the findings through the regression analysis had strongly reject the possibility of the inflation rate to contribute to the growth of the KLSE market index.

Table 2: Regression Analysis (Inflation Rate x KLSE Growth)

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.08520291	0.086706364	0.982660394	0.334498682
Inflation	-0.020916894	0.031425901	-0.665594103	0.511317175

The Table 3 had demonstrated the comparative analysis between the two variables including the inflation rate and the KLSE market index growth where the comparative analysis is being targeted to deliver the recognition on the discrepancies of the growth rate between the two variables. With reference to the outcome of the study, the comparative analysis had shown the higher return on the KLSE market index growth at 3.52% which is significantly higher than the inflation rate which showed the average growth of 2.39%. The difference between the growth rate had exceeded 1% which is considered as significant due to the small percentage of the return between two variables. With this, it is concluded that the investment return through the Malaysian stock portfolio is likely to generate greater return over the increasing inflation rate within the Malaysian economic.

Table 3: Average Growth (Inflation Rate x KLSE Growth)

<i>Year</i>	<i>Inflation</i>	<i>KLSE Growth</i>
1994	3.72%	-8.62%
1995	3.45%	1.49%
1996	3.49%	10.68%
1997	2.66%	-5.19%
1998	5.27%	-57.71%
1999	2.74%	78.01%
2000	1.53%	2.75%
2001	1.42%	-28.84%
2002	1.81%	22.34%
2003	1.09%	-4.62%
2004	1.42%	18.48%
2005	2.98%	8.35%
2006	3.61%	2.97%
2007	2.03%	48.07%
2008	5.44%	-12.39%
2009	0.58%	-9.38%
2010	1.62%	22.21%
2011	3.17%	20.17%
2012	1.66%	1.27%
2013	2.11%	10.91%
2014	3.14%	6.16%
2015	2.10%	-9.35%
2016	2.09%	-3.08%
2017	3.87%	6.63%
2018	0.88%	-4.09%
2019	0.66%	-1.15%
2020	-1.14%	-10.24%
2021	2.48%	2.11%
2022	3.38%	-5.77%
Average	2.39%	3.52%

For the research study to reach the conclusion of the current study, the outcome of the quantitative analysis had to provide the significant result and findings. The inflation rate and the expansion of the KLSE market index were found to have a very weak negative correlation. However, the regression analysis had revealed a lack of evidence to support the existence of a significant relationship between the inflation rate and the expansion of the KLSE market index. This would imply that the performance of the stock market on the KLSE won't be impacted by the rate of inflation. The hypothesis in H1 will be rejected as the null hypothesis will be accepted in its place due to the lack of evidence for a positive correlation and relationship between the inflation rate and the market index in the KLSE based on the historical trend over the previous 30 years.

H1: There is positive correlation and relationship between the inflation rate against the market index performance.

Moving on to understand the growth rate performance the previous Table 3 had provide the data to understand the yearly average for the growth rate comparison between the inflation rate and KLSE market index based on the Malaysian economic and stock exchange market. The comparison had shown the significant differences in the average growths where the inflation rate had been significantly lower than the KLSE market index growth which suggest that a normal portfolio stock investment with Malaysian stocks will likely to create higher return to the investor overcoming the challenge of the rising inflation in Malaysian economy. This will result in the agreement with the second hypothesis as drawn below resulting the sufficient evidence to reject the null hypothesis and accepting the alternate hypothesis for the study.

H2: The growth rate for the market index performance will be significantly higher than the inflation rate of the country

Based on the outcome in the research findings, the results had showed the opposite suggestion from the initial study where the inflation and the stock market in Malaysia failed to show sufficient evidence to suggest the presence of the positive correlation between the two variables included for the study. In addition, the study also identified that there is no significant impact from the inflation rate in Malaysia in affecting the KLSE market index growth which indicates that there is no strong relevance between the inflation rate in the economy towards the impact in the investment return for the stock portfolio. This had drawn the attention to two major highlights where the first highlight would address the lack of similarity of the pattern and trend between the inflation rate and the KLSE market index growth where the very weak negative correlation detected between the two variables suggest there is no positive correlation as previous suggested in other concepts which bring the elimination of the investigation of the study towards the stock price behaviour using the inflation rate as the major reference. Moving into the second highlight, the absence of the significant relationship between the inflation rate against the KLSE market index growth had create the soldi evidence to point out the irrelevance between the two variables where the inflation rate and return for the Malaysians tock should be viewed differently by the investors.

Furthermore, the comparative analysis from the quantitative study had provide a significant reference to show the sufficient evidence to suggest the higher return through the Malaysian stock portfolio investment in outperforming the inflation rate in Malaysia. This had created the similar expectations and findings from the previous study where the purpose of investment had become clear to overcome the increasing prices to avoid losing out the purchasing power for the investors. This suggest that the investors should be wise to invest in the Malaysian stock market to preserve the purchasing power and wealth for the investors to stay afloat in the rising prices of goods and services in Malaysia. In other words, the Malaysian stock investment will be referred as worthwhile for the investors as a strategy to improve their investment return exceeding the inflation adjustment for the

5. Conclusion, limitations, and further research

The study's conclusions indicate that the relationship between the empirical data and the direction of the research objective serves the goals and purposes of the current study. Because the new knowledge generated by the research findings will act as a new reference for future academicians to use as a guide to pursue the extended research for the pertinent scope of study, it was believed that the current study would significantly contribute to academic study. The current study increases the potential interest that could lead to more pertinent research to examine the veracity of the idea of investment and inflation for the benefits of the field of expertise.

The limitations for the current study had been identified where the current research had provide the scope into the specific focus on the Malaysian economy and stock market where the study did not consider the potential difference from the foreign market. Malaysia as the developing country in the world will likely to share the potential discrepancies in the stock market performance as well as the inflation growth rate with other countries especially coming to the comparison against the developed countries which are more advanced in terms of the economic growth. Besides, the consideration of the portfolio management had been represented by the KLSE market index referred towards the representation of the stock investment where the consideration of the risk free rate, fixed deposit investment and corporate bonds yield is not included which provide the gap in the understanding of the portfolio return as portion of the investors will likely to invest in other financial securities other than the stock investment.

In addition, the study had been concentrating on stock market investments in Malaysia, including the Malaysian stock market and the KLSE market index. This will offer an additional suggestion where the study can concentrate on the potential study to be extended to create a stock portfolio using various international stocks where the portfolio can be including foreign stocks to test the potential diversification of the stocks from various nations to understand the comparison of the return on the portfolio against the inflation rate in Malaysia. It was important to understand this in order to fully appreciate the benefits of diversification because a portfolio's return on investment could be improved

by incorporating stocks or market index performance from different nations, allowing it to outperform inflation.

Furthermore, the study had been concentrated on the research for stock investments, which might not always turn out to be the preferred choice of investment. In order to understand the likelihood of the lower risk investment having the ability to cover the inflation rate for investors in Malaysia, the study can be expanded to compare stock market investments to other alternative investments like real estate and bonds instead of stock investments. The study's findings unquestionably offer investors a crucial point of reference that helps them comprehend and choose the best investments.

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