Comparative Analysis Of Roi Interest Rates And Inflation On Investment Decision-Making

Fetty Syariputri¹, M. Imam Sundarta², Yudiana³, Hikmatul Aliyah⁴, Rizkyllah⁵
Universitas Ibn Khaldun Bogor, Indonesia

Corresponding author: uqirizkyllah@gmail.com

Received: Jul 2023  Accepted: Aug 2023  Published: Dec 2023

Abstract

This research aims to analyze and determine the investment decisions that investors will make between the stock exchange or deposits at PT. Telekomunikasi Indonesia and Bank Mandiri for the period 2011 to 2015. The information contained in financial reports is very useful for parties such as investors, financial reports are used to help make investment decisions and to determine the development and progress of company activities. Investors' decisions are based on a comparison of Return on investment (ROI), Interest Rates, and Inflation. The research results stated that the level of Return On Investment (ROI) at PT. Telekomunikasi Indonesia was higher than Bank Mandiri over 5 years, which stated that investors were more interested in investing their funds in shares. The higher the return on investment value of a company, the higher the interest of investors in investing their funds in that company. Because the rate of return will be greater and greater interest will increase the share price.

Keywords : Return On Investment, Interest rate, Inflation

Introduction

An orderly, orderly and open capital market mechanism creates a more conducive environment for investors to make realistic decisions. The openness of the capital market in providing the information needed by investors will reduce the uncertainty they face in making investment decisions so that the possibility of distortion of the resource allocation process in the form of funds from investors will also be smaller. The capital market represents the economic condition of a country. The more advanced and developed a country's capital market, the more advanced and developed the country's economy, and vice versa. In this way, the capital market can be used to determine the extent to which a country's business environment is conducive.

The aim of all investments in various fields and types of companies is basically to carry out stock price analysis to select shares that can produce the best return and the smallest risk on the investment. To obtain returns, investors are faced with several risks, such as various possible errors in selecting shares, misinterpretation of the issuer's condition, modern market crisis conditions, and so on.

The information contained in financial reports is very useful for parties such as investors, they use financial reports to help make investment decisions such as selling, buying, or investing in shares. The high and low share prices are also a reflection of investment decisions, funding decisions, and asset management. A company's financial report is a tool for measuring management performance in managing the company. To see the level of effectiveness of the company's overall operations, investors can calculate the company's return on investment (ROI). ROI is a ratio that measures the level of return on investment that a company has made from the total funds invested in assets used for company operations, to generate profits.

Stock prices in a country are greatly influenced by macroeconomic conditions, namely interest rates and inflation. Fluctuations in foreign exchange rates will impact the company's cash flow. The cash flow of companies that spend a lot on exports will have a positive effect by weakening the value of the currency...
in which the company carries out its activities. The opposite applies to the cash flow of companies that import a lot. The interest rate is always used as a consideration or comparison material by investors before making investment decisions. If investing in shares will provide greater returns than investing in banks (deposits), then investors will be interested in buying shares. On the other hand, if the interest rate in banking is higher than the return on investment in shares, then investors prefer to save in the bank. Inflation affects company share prices, but not directly but through corporate profit taxes, that is, when inflation is high it will affect the company's share price.

Method

The research method used in this research is comparative analysis, this method. Includes all financial report data for the 2011-2015 period. The method used is the Descriptive Method which aims to determine several variables and create systematic, factual, and accurate descriptions, images, or paintings regarding the facts. The quantitative approach refers to a research methodology that is based on the philosophy of positivism, used to investigate a particular population or sample, by collecting data using research instruments, analyzing quantitative and statistical data, and aiming to test predetermined hypotheses.

Results and Discussion

The table shows that the benchmark interest rate (BI Rate) of Bank Indonesia experienced fluctuations from 2011 to 2015. Although relatively stable in the short term each year, there is a gradually increasing trend from year to year, except for 2012 which experienced a temporary decrease. The annual average BI Rate shows a significant increase from 2012 to 2014. Fluctuations in the BI Rate are influenced by economic factors and monetary policy, with tighter policies reflected in the increase in interest rates to control inflation or address certain economic pressures. This analysis provides insights for decision-makers in planning financial and investment strategies, as well as understanding Bank Indonesia's monetary policy in the context of changing economic conditions.

<table>
<thead>
<tr>
<th>No</th>
<th>Month</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January</td>
<td>6.5</td>
<td>6.00</td>
<td>5.75</td>
<td>7.50</td>
<td>7.75</td>
</tr>
<tr>
<td>2</td>
<td>February</td>
<td>6.75</td>
<td>5.75</td>
<td>5.75</td>
<td>7.50</td>
<td>7.50</td>
</tr>
<tr>
<td>3</td>
<td>March</td>
<td>6.75</td>
<td>5.75</td>
<td>5.75</td>
<td>7.50</td>
<td>7.50</td>
</tr>
<tr>
<td>4</td>
<td>April</td>
<td>6.75</td>
<td>5.75</td>
<td>5.75</td>
<td>7.50</td>
<td>7.50</td>
</tr>
<tr>
<td>5</td>
<td>May</td>
<td>6.75</td>
<td>5.75</td>
<td>5.75</td>
<td>7.50</td>
<td>7.50</td>
</tr>
<tr>
<td>6</td>
<td>June</td>
<td>6.75</td>
<td>5.75</td>
<td>6.00</td>
<td>7.50</td>
<td>7.50</td>
</tr>
<tr>
<td>7</td>
<td>July</td>
<td>6.75</td>
<td>5.75</td>
<td>6.50</td>
<td>7.50</td>
<td>7.50</td>
</tr>
<tr>
<td>8</td>
<td>August</td>
<td>6.75</td>
<td>5.75</td>
<td>6.75</td>
<td>7.50</td>
<td>7.50</td>
</tr>
</tbody>
</table>
Interest post-tax = interest pre-tax x (100% - Tax)

The distinction between pre-tax and post-tax interest rates hinges on whether income tax has been subtracted from the interest earned or paid. Pre-tax interest rates do not incorporate taxes, while post-tax interest rates consider the deducted income tax. This differentiation is crucial for investors as it directly impacts the actual returns they receive. Post-tax rates provide a more accurate picture of the profitability of an investment, as they reflect the net income after taxes. Understanding these rates allows investors to make informed decisions regarding their investment strategies and goals.

Moreover, interest rates play a pivotal role in influencing investor behavior, particularly in the banking sector. When interest rates rise, bank stock prices typically experience declines. This trend arises from heightened borrowing costs for consumers and businesses, which can curtail lending and spending activities, ultimately affecting bank profitability. Consequently, investors may opt to sell bank stocks amidst concerns that rising interest rates could detrimentally impact the broader economy. Thus, fluctuations in interest rates serve as a critical factor that investors must carefully monitor and evaluate when making investment decisions.

In navigating the intricacies of the financial markets, investors must consider various indicators beyond interest rates. While interest rates can provide valuable insights into market dynamics, investors should also analyze other factors such as economic indicators, industry trends, and regulatory developments. Diversifying one's investment portfolio and staying informed about market conditions can help investors mitigate risks and capitalize on opportunities for long-term financial growth. By maintaining a comprehensive understanding of these factors, investors can make prudent investment decisions aligned with their financial objectives and risk tolerance levels.
It can be seen from the graph above that the ROI of Bank Mandiri is less than that of PT. Telekomunikasi Indonesia. The difference between the two serves as an indicator for investors in choosing the more attractive investment instrument the two, based on ROI. This difference in ROI provides valuable information for investors in assessing the relative performance and potential returns of each investment option. Investors typically seek higher ROI as it indicates better profitability and returns on investment. However, investors need to consider other factors beyond ROI, such as risk, industry trends, and company fundamentals, to make well-informed investment decisions.

Table 2. ROI PT Telekomunikasi Indonesia, Interest rates, and Inflation

<table>
<thead>
<tr>
<th>NO</th>
<th>Description</th>
<th>2011 (%)</th>
<th>2012 (%)</th>
<th>2013 (%)</th>
<th>2014 (%)</th>
<th>2015 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Return on investment</td>
<td>10.6</td>
<td>11.5</td>
<td>11.1</td>
<td>10.4</td>
<td>9.3</td>
</tr>
<tr>
<td>2</td>
<td>Interest rates</td>
<td>5.26</td>
<td>4.62</td>
<td>5.17</td>
<td>6.03</td>
<td>6.02</td>
</tr>
<tr>
<td>3</td>
<td>Inflation</td>
<td>5.38</td>
<td>4.28</td>
<td>6.97</td>
<td>6.42</td>
<td>6.38</td>
</tr>
</tbody>
</table>

The formula for calculating Return on Investment (ROI):

\[ \text{ROI} = \left( \frac{\text{Investment Cost}}{\text{Net Profit}} \right) \times 100\% \]

In this formula:
- Net Profit refers to the total income after subtracting costs.
- Investment Cost is the total cost incurred for the investment.

The ROI result is expressed as a percentage and indicates how effectively the investment generates profit relative to the initial investment cost. The higher the ROI value, the more profitable the investment.
Figure 3. The ROI of TLKM

The ROI of TLKM company during the period of 2011-2015 has shown a higher year-over-year (YoY) increase compared to the inflation rate and interest rates. This has a significant impact on investors in choosing investment instruments, as the goal of investment is to maintain the value of assets held to be stable or even increase. An investor will surely consider these factors.

ROI, or Return on Investment, is a measure that depicts how effective an investment is in generating profits relative to the initial investment cost. Essentially, the higher the ROI, the more profitable the investment. In this context, when the ROI of TLKM company surpasses the inflation rate and interest rates, it indicates that investing in the company tends to yield greater profits than merely keeping money in a bank or other financial instruments with returns that are not commensurate with inflation or interest rates.

For investors, this becomes a crucial consideration as they want to ensure that their investments can preserve the value of their assets from the effects of inflation or currency depreciation. Therefore, investments that can generate ROI exceeding the inflation rate and interest rates will be more attractive to investors, as it signifies that the value of their investments can remain stable or even grow over time.

Table 2. ROI Bank Mandiri, Interest rates, and Inflation

<table>
<thead>
<tr>
<th>NO</th>
<th>Description</th>
<th>2011 (%)</th>
<th>2012 (%)</th>
<th>2013 (%)</th>
<th>2014 (%)</th>
<th>2015 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Return on investment</td>
<td>3.37</td>
<td>3.55</td>
<td>3.66</td>
<td>3.57</td>
<td>3.15</td>
</tr>
<tr>
<td>2</td>
<td>Interest rates</td>
<td>5.26</td>
<td>4.62</td>
<td>5.17</td>
<td>6.03</td>
<td>6.02</td>
</tr>
<tr>
<td>3</td>
<td>Inflation</td>
<td>5.38</td>
<td>4.28</td>
<td>6.97</td>
<td>6.42</td>
<td>6.38</td>
</tr>
</tbody>
</table>

The ROI of Bank Mandiri is lower than the interest rate and inflation rate, and this must be carefully considered by investors who use ROI as an investment indicator. Because the ROI of Bank Mandiri tends to be negative when compared to the indicators discussed here. In choosing investment instruments that are relatively stable or even profitable, investors must consider several indicators. ROI is just one part of
several indicators that can be used in choosing investment instruments.

![ROI of Bank Mandiri]

**Figure 4. ROI of Bank Mandiri**

ROI, or Return on investment, is a measure that depicts how effective an investment is in generating profits relative to the initial investment cost. When ROI is lower than the interest rate and inflation rate, it indicates that the investment cannot keep up with the growth of living costs or the returns that can be obtained from placing money in safer financial instruments such as bank deposits.

Investors should note that ROI is just one of many factors that should be considered in the investment decision-making process. Other factors such as investment risk, liquidity, company growth, and market conditions should also be thoroughly evaluated before making the right investment decisions. The results of this research that PT. Telekomunikasi Indonesia has a higher Return on investment (ROI) rate compared to Bank Mandiri over 5 years. Which states that investors are more interested in investing the funds they have in the form of shares rather than in the form of deposits.

**Conclusion**

From the above research, it can be concluded that PT Telekomunikasi Indonesia has a higher return on investment (ROI) compared to PT Bank Mandiri during the period of 2011-2015. This is an important consideration for investors who use ROI as one of the criteria in selecting investment instruments. From the investors' perspective, the tendency to choose PT Telekomunikasi Indonesia over PT Bank Mandiri is higher. This is due to the higher ROI of PT Telekomunikasi Indonesia, indicating a more profitable potential return on investment. The ROI of PT Bank Mandiri, although surplus, remains below the inflation and interest rates, indicating that the return on investment is not sufficient to counterbalance these economic factors. Overall, this comparison suggests that investing in PT Telekomunikasi Indonesia is more attractive for investors due to its higher potential return on investment and ability to overcome inflation and interest rates, whereas PT Bank Mandiri has a less favorable ROI in this regard. Therefore, for investors who consider ROI as a primary factor in investment decision-making, PT Telekomunikasi Indonesia may be the wiser choice.

Researchers suggest that investors should not rely solely on ROI as the sole indicator in evaluating a company's prospects. This is because the outlook of a company cannot be determined solely by looking at ROI. Many other indicators can be considered in choosing investment products, such as ROA (Return on Assets), ROE (Return on Equity), NPM (Net Profit Margin), Operating Profit, Debt to Equity ratio, and...
others. By considering various indicators, investors can obtain a more comprehensive picture of a company’s performance and long-term prospects. For example, ROA can provide information about a company’s efficiency in utilizing its assets, while ROE reflects the return on investment for shareholders. NPM and Operating Profit indicate the profitability and operational efficiency of the company, while the Debt-equity ratio indicates the level of debt usage in the company’s capital structure. By considering these various indicators together, investors can make more informed investment decisions and reduce unwanted investment risks. Therefore, it is recommended that investors broaden their analysis scope and not rely solely on a single indicator such as ROI in investment decision-making.

Reference


Website Bursa Efek Indonesia www.idx.co.id

Website Bank Indonesia www.bi.go.id