Opportunity Set, Liquidity, Stock Return, Inflation As A Moderator, Investment Risk, Investment

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Abstract: This study aims to analyze the influence of liquidity, investment risks, and opportunities on stock return, with Inflation as a moderator. This study was a quantitative study involving panel data methods. In this study, data processing and population studies using Eviews software which consists of companies in the banking sector listed on the Indonesia Stock Exchange. This study found that investment risk has no impact on equity returns, the level of investment opportunity is locked into equity returns, liquidity has a significant negative effect on equity returns, and Inflation affects the ratio of investment risk to equity returns was found to have the potential to increase Inflation weakens the relationship between investment opportunities and equity returns. In contrast, Inflation can strengthen the relationship between liquidity and equity returns. It is hoped that further researchers will be able to include these variables in such an investigation.

Keywords: Investment Risk; Distinct Investment Opportunities; Liquidity; Inflation; Stock Returns.

Abstrak: Penelitian ini bertujuan untuk menganalisis pengaruh likuiditas terhadap risiko investasi, peluang return saham dengan inflasi sebagai moderator. Penelitian ini merupakan penelitian kuantitatif yang melibatkan metode data panel. Pada penelitian ini pengolahan data dan studi populasi menggunakan software Eviews yang terdiri dari perusahaan-perusahaan di bidang perbankan yang terdaftar di Bursa Efek Indonesia. Studi ini menemukan bahwa risiko investasi tidak berdampak pada pengembalian ekuitas, tingkat peluang investasi terkunci ke pengembalian ekuitas, likuiditas memiliki dampak negatif yang signifikan terhadap pengembalian ekuitas, dan inflasi mempengaruhi rasio risiko investasi terhadap pengembalian ekuitas ditemukan memiliki berpotensi meningkat Inflasi memperlemah hubungan antara peluang investasi dan pengembalian ekuitas, sedangkan inflasi dapat memperkuat hubungan antara likuiditas dan pengembalian ekuitas. Diharapkan peneliti selanjutnya dapat memasukkan variabel-variabel tersebut sebagai bahan pertimbangan dalam melakukan penelitian tersebut.

Kata Kunci: Risiko Investasi; Peluang Investasi Yang Berbeda; Likuiditas; Inflasi; Pengembalian Saham.

INTRODUCTION

Numerous countries are still experiencing economic hardships as the Covid-19 pandemic continues to rage. According to the International Monetary Fund (IMF), 95 countries worldwide have experienced a global economic crisis and are expected to have negative economic growth. The loss of US$12 trillion or Rp168,000 trillion (14,000 rupiah exchange rate) was caused by the coronavirus worldwide (Warta Ekonomi, 2020).

Investors often consider the composite stock index a benchmark when buying stocks. This index combines several indices of all listed stocks on the Indonesia Stock Exchange. Hence, investors must grasp the concept of synthetic stock indexes before making any investment choices. The composite stock index measures publicly traded companies, and
understanding market conditions is essential for investors to make wise stock market investments.

The Composite Stock Index (JCI) showed a 70 per cent growth from 2015 to 2019, as seen in the figure above. However, the Composite Stock Index is volatile and has high-risk and high-reward characteristics. Although huge profits can be earned in the capital markets, they also come with significant risks. Several elements, including indicators like gross domestic product (GDP), Inflation, interest rates, the value of the local currency (rupiah exchange rate), global economic conditions (such as currency indices), global commodity prices, gender dynamics, and the political stability of a nation, have the potential to influence the performance of the stock market. Inflation can increase business costs, reducing profit margins and leading to a decline in stock prices. As many companies in the capital markets have experienced, JCI's performance can also be affected by these factors.

Many people view banks as essential institutions due to their significant role in the community's economic life. As intermediaries, banks play a crucial role in financing, custody, and borrowing, ultimately enriching people's lives. According to (Setiawan, 2020), banks contribute significantly to a country's economy. According to Banking Law No. 10 of 1998, a bank is characterized as an institution that collects funds from the general public through deposits and channels them back to the public through loans or other organized means to enhance the quality of life for many individuals.

Capital markets refer to markets where various long-term financial instruments, such as bonds, stocks (shares), mutual funds, and other tradable derivative instruments, are traded. They provide a means for companies and institutions, such as governments, to raise funds and investors to invest in those instruments.

The capital market has two functions: first, to provide businesses with funding from financiers (investors), and second, to use the generated funds for business growth, expansion, increasing working capital, and other purposes. Therefore, the capital market plays a significant role in a nation's economic health (Zulfiqar and Si, 2016). Debt securities (bonds), mutual funds, and stocks are a few examples of long-term and short-term investment instruments that can be traded on the capital market. As per Capital Market Law No. 8 of 1995, the capital market is broadly described as the range of activities encompassing the issuance and trading of securities, public companies involved in issuing those securities, and the institutions and professions associated with securities.

Investment is one means for individuals and organizations to increase and preserve their wealth. It can be defined as a commitment to use a specific amount of money or other resources in the present with the expectation of receiving benefits in the future (Ilham, 2020). Individuals who engage in investment activities are referred to as investors. Investing is closely associated with various activities related to the cultivation of money in alternative assets, such as real assets like gold, land, and property, as well as financial assets like stocks and bonds.

Regarding the capital market, investor activity is the ability to purchase, hold, and sell shares on the IDX at a specific time (Ilham, 2020). These investors' decisions are based on the information they attain through an evaluation conducted by the investor. According to (Bodie et al., 2019), there are two methods investors can use to evaluate performance: technical analysis and fundamental analysis. In fundamental analysis, investors must assess the value and performance of a firm by analyzing its characteristics. This outcome will ascertain the worth of a company's assets, enabling investors to make informed
decisions about allocating their funds to the most lucrative investment vehicle available, by the opinion expressed by (Brigham and Houston, 2019) regarding the Signalling theory, which states that a company's actions can send signals to investors regarding how these signals can provide both positive and negative information that will influence an investor's investment decisions.

Investors should comprehensively review a company's prevailing situation to deliver the highest possible return rate. To give an ideal degree of return, investors must completely study a stock's factual characteristics and the conditions that can affect the stock. In this situation, investors might examine with a fundamental approach, with top-down analysis, also known as a macro-micro scheme, one of the most common fundamental analysis techniques.

When choosing a stock, investors value issuing the company the stock. Considering fundamental analysis, such as business performance, and technical analysis, such as stock price, we will make the optimal investment according to the plan. The investment opportunity set as an index in this research is a combination of business growth called market value. The stock price is a reliable gauge of a company's performance since it encapsulates its historical achievements and future potential.

According to Woolridge (Abdullah, 2017), stock prices reflect not only company performance information but also information from the market. A price-based proxy is based on the difference between the company's assets and market values. Banks demonstrate enhanced efficiency and stability in their operations. Existing literature has presented multiple prior studies, including the work of (Abobakr, 2017), that indicate a positive correlation between board size and the performance of banks.

According to (Hartono, 2022), the postponement of consumption is currently incorporated into assets or productive manufacturing processes whose results for future consumption might be considered an investment. Generally speaking, an investor will take on some risk to get the desired rate of return. Investors are more likely to put money into a project if they think they will earn a healthy return (Sihaloho, 2017).

Returns on stocks are a consideration that investors consider while investing. The term "return" refers to the profit made from an investment (Mahardika and Juliprijanto, 2022). This choice might define whether the corporation will choose an adverse or a risky course of action based on stock returns and risk. Therefore, stock returns are essential for the evaluation of potential investors in a company. Consequently, investors must know the factors influencing it, such as investment risk, liquidity, Inflation, and the Investment Opportunity Set.

From 2009 to 2012, market risk exerted a substantial and favourable impact on stock returns for food and beverage manufacturing companies listed on the IDX. Conversely, financial risk displayed a positive influence that was statistically insignificant, while business risk demonstrated a negative effect that was also statistically insignificant (Prasetyani and Isroah, 2016). For stocks (Afriyani, 2018) finds a positive and statistically significant impact from Investment Opportunity Set, a negative and statistically significant effect from business size, and a positive and statistically insignificant impact from investment risk. (Djalil et al., 2017) Found that during the period from 2010-2014, the stock returns of manufacturing businesses listed on the IDX were significantly affected by the Investment Opportunity Set as proxied by MBVA but not by financial leverage, company size, or real activity.
Similar to these results, (Sitepu et al., 2020) reported that applying the CAPM approach revealed a notable and statistically significant positive influence of investment or market risk on stock returns in the context of food and beverage companies listed on the Indonesia Stock Exchange. If the investment risk is higher, the company's stock return during the research year will also be higher. Nonetheless, research (Nazariah, 2020) indicates that systematic risks do not affect the return on shares of manufacturing businesses in the garment and textile industry sector listed on the Indonesia Stock Exchange between 2013 to 2017.

The metric employed in this research is the price-to-earnings ratio (P/E ratio). Fundamental and technical analysis are commonly used when analyzing stock investments. This study examined fundamental analysis by looking at financial performance indicators, namely liquidity. Investors highly value the liquidity of a company's shares, seeking to capitalize on short-term trading opportunities. Liquidity refers to a company's ability to meet its immediate debt repayment obligations promptly. However, this emphasis on liquidity does not necessarily contribute to the stability of banks.

In addition to internal factors such as firm fundamentals using the liquidity ratio, technical analysis using investment opportunities, and risk management at the time of investment, this study also examines Inflation as an external factor. Conditions of Inflation lead to an increase in the expense of living, mainly if there is no accompanying income increase.

Investing in shares of publicly listed companies is considered risky, as domestic and foreign factors highly influence these investments. These factors give rise to two types of risks for investors: systematic and unsystematic. Systematic risk represents the lowest level of risk that can be achieved for a portfolio by diversifying it across many randomly selected assets. On the other hand, unsystematic risk refers to risks specific to a particular company, such as labour strikes or natural disasters that may impact the company's operations.

Investors need to analyze the factors impacting the company's condition when investing in stocks. This allows investors to assess the company's growth and development prospects. Making the right investment choice requires careful consideration of the associated risks and desired level of return to avoid making any mistakes. It is worth noting that investments with higher rates of return typically carry higher risks (Chania et al., 2021).

Investors can utilize asset valuation methods to analyze and measure potential returns. The fluctuations in stock returns, driven by changes in macroeconomic factors, necessitate careful consideration of the expected return on investments. Macroeconomic factors provide an overall picture of the economy, which aids investors in gathering information and making informed investment decisions to maximize stock returns. Unstable economic conditions can result in fluctuations in stock returns, both positive and negative (Gusni and Riantani, 2017). In the banking sub-sector, companies have exhibited unfavourable results, with stock returns showing fluctuating average values between 2015 and 2021. However, these fluctuations do not necessarily correspond to changes in macroeconomic factors (Sahdiah and Komara, 2022).

This study examines the use of moderating variables to assess whether a specific moderating variable (z) can strengthen the relationship between the independent variable (x) and the dependent variable (y). Inflation is the chosen moderating variable in this study.
Previous research conducted by (Wahyuni and Lukiaestuti, 2019) has explored the relationship between Inflation and moderating variables.

Inflation as a moderating variable is justified by its impact on a company's financial performance and its influence on economic conditions. This aligns with the findings of (Sari, 2019), who proposed that elevated inflation rates are commonly linked to an overheated state of the economy. Consequently, there is a decline in product demand, leading to reduced company revenue. High inflation rates also contribute to decreased company profitability due to increased production costs and reduced currency purchasing power. As a result of declining profitability, dividends paid to shareholders may reduce or even eliminated. As a result, the company may experience a waning investor interest, leading to diminished demand for its shares and subsequently causing a decline in share prices.

The findings of this study hold valuable implications for various stakeholders, particularly for companies. Company management can leverage information on investment opportunities and the appropriate portfolio strategy for future interests. This knowledge can guide them in formulating suitable investment policies and selecting additional sources of capital to optimize overall company performance. Several factors, including the fundamental structure, investment opportunities, investment risk, and liquidity, influence the fluctuations in stock prices of banking companies. It is, therefore, crucial for company management to sustain sales growth and maintain a healthy fundamental position, aiming for stability or growth. This approach will attract increased investments from shareholders and result in stable or even increased stock returns for the company.

Considering the close relationship between Inflation and economic conditions, the authors of this study have included Inflation as a moderating variable. Inflation significantly affects investment risk, opportunities, liquidity, and company stock returns. By incorporating Inflation as a moderating variable, the study sheds light on these interconnections and their impact on companies’ financial performance.

THEORETICAL REVIEW

**Investment Risk.** In every investment decision, investors consistently strive to mitigate many risks, encompassing both short-term and long-term perspectives. The fluctuations in diverse micro- and macroeconomic circumstances necessitate investors to determine their course of action and devise strategies to sustain anticipated returns. Risk is always the most crucial barometer for analyzing whether an investment will be made, as all investment decisions are strongly related to risk. The role of a risk analyst involves evaluating and examining risks pertaining to financial and investment choices (Adisetiawan, 2017). Regarding the impact of investment risk on stock returns, findings from (Idrus et al., 2017) indicate that market risk has a noteworthy and statistically significant positive effect on stock returns. Conversely, financial risk demonstrates a positive influence that lacks statistical significance, while business risk displays a negative impact that is also statistically insignificant.

By the principles of capital market theory, a positive correlation exists between investment risk and expected return. As stated (Tandelilin, 2017), higher risks are generally associated with higher expected returns, while lower risks are associated with lower expected returns. However, it is essential to note that changes in investment risk do
not always correspond to changes in stock returns. Increases or decreases in investment risk may or may not be accompanied by changes in stock returns. This implies that various factors influence stock returns in addition to investment risk.

This observation suggests that investors do not solely rely on investment risk as a normative measure when making investment decisions. In investing, investors often overlook the risk value (beta) when investing in shares of companies listed on the Indonesia Stock Exchange (IDX). This indicates that investors emphasize the company's reputation, success, and internal and external considerations (including risk) when selecting stocks for investment.

**H1:** It is hypothesized that investment risk impacts stock returns.

**Investment opportunity set.** Regarding the impact of the investment opportunity set on stock returns, (Isnania and Wahidahwati, 2018) found that the variables MBVA and EPS exert a positive and statistically significant influence on stock returns, while MBVE demonstrates a negative and statistically insignificant impact on stock returns. Moreover, (Kusumawati and Safiq, 2019) indicate that factors affecting the investment opportunity set can enhance the effect of the investment opportunity set on stock returns.

According to (Purwitajati and Putram, 2016), both external (macroeconomic) factors and internal (company-specific) factors (which represent the company's success) affect the price of a stock. A company's performance can also be gauged through its value, which is shaped by the stock market value influenced by investment opportunities. As revealed by (Kusumawati and Safiq, 2019), an organization's investment prospects can be summarized by looking at its Investment Opportunity Set (IOS). The collection of investment opportunities illustrates the company's capacity to capitalize on growth chances.

The company's internal stakeholders (management) and external parties (investors, creditors, etc.) have a vested interest in seeing the business expand and succeed. The potential for investors to profit from the company's growth is likely to rise as the company grows. The company's expansion is a beneficial potential for investors because the investment is expected to generate substantial returns in the future. The market will respond to growing companies, and investment possibilities proxied by diverse investment opportunity set values represent growth opportunities. The value of IOS can be determined by combining several proxies that indicate the value of existing assets, such as the book value of assets and equity and the value of future growth potential for a firm. The Investment Opportunity Set (IOS) or set of investment options affects how managers, owners, investors, and creditors perceive a company.

**H2:** It is hypothesized that there is an impact of the Investment Opportunity Set (IOS) on stock returns.

**Liquidity.** A company's liquidity is manifested by its capacity to meet immediate (short-term) debt obligations using its current assets. The company's ability to fulfill these short-term commitments can be evaluated by assessing its level of liquidity. This study used the cash ratio to measure the liquidity ratio.

According to (Lalithchandra, 2021), liquidity refers to the capability of a company to fulfill its immediate short-term obligations. To meet primary requirements, the company's executives need to exercise wise discretion when utilizing the company's
resources while also diligently handling any potential risks that may arise within the organization. Management often uses liquidity assessments to assess a company's ability to pay future short-term obligations.

As a result of the decline in liquidity, the company will be unable to meet its short-term obligations, discouraging potential investors and reducing the demand for its shares. As a result of the drop in the company's shares, the stock price has fallen, and the returns on investment in the stock have also decreased. The explanation explains how liquidity plays a role in determining stock returns.

The effect of liquidity on stock returns has been shown by (Tarmizi et al., 2018) that the Current Ratio (CRCR) and Net Profit Margin (NPM) have a negative and significant effect on stock returns. Quick Ratio (QRQR) and Return On Equity (ROE) positively and significantly impact stock returns. According to (Kurniawan and Ghasarma, 2016), The results of this study show that the direct influence of CRCR and DER is not significant on stock returns, while TAT has a significant effect on stock returns.

**H3:** There is a belief that the presence of liquidity impacts the returns of stocks.

**Inflation.** Economists may have varying definitions of Inflation but share a common foundation. It refers to a consistent and continuous rise in prices. Inflation represents the overall and lasting inclination to elevate the price level. It is not considered Inflation if the price increase is limited to one or two specific goods unless it extends to and subsequently raises the prices of a majority of other goods. Price increases due to seasonal factors (e.g., towards Great Days anniversaries) or price increases that occur only once (and have no other impact) are not called Inflation (Kalalo, 2016).

Inflation as a moderating factor influences the relationship between investment risk and stock returns. (Wijayani and Hermuningsih, 2020) The size of a bank can moderate the connection between credit risk and stock returns, market risk and stock returns, liquidity risk and stock returns, and capital risk and share returns. According to (Nurlaelasari et al., 2021), Systematic risks and profitability do not mediate the effect of Inflation on stock returns.

**H4:** It is suspected that there is an influence of investment risk on stock returns with Inflation as a moderation variable.

**Stock Returns.** Return on equity is the profit a financier makes on an investment made (Budiharjo, 2018). Within the framework of capital market theory, the return signifies the earnings that an investor acquires from a publicly traded stock in the capital market. It is important to note that stock exchanges only sometimes guarantee consistent returns for investors. Nonetheless, specific elements within stock returns enable investors to generate profits, namely dividends, bonus stocks, and capital gains. These return components can be categorized into current income and capital gains. Current income refers to the profits from regular payments such as interest on deposits, bond interest, and similar sources.

Referred to as current income, the earnings received typically exist as readily accessible cash or cash equivalents. This allows for swift utilization of the funds. For instance, bond coupon interest is paid out in demand deposits or checks, which can be
promptly cashed. On the other hand, stock dividends, paid out in the form of shares, can be converted into cash by selling the received shares (Budiharjo, 2018).

The second component of return is known as capital gains. Essentially, this refers to the profit obtained by selling an investment at a price higher than its purchase price. It signifies the difference between the selling price and the initial purchase price of the investment. It is important to note that not all investment vehicles offer capital gains or losses as a return component. The realization of capital gains heavily relies on the market price of the respective investment vehicle. If an investment vehicle is actively traded in the market, its value can fluctuate, leading to potential capital gains or losses. Investments such as bonds and stocks are examples of assets that can provide capital gains. In contrast, investments like certificates of deposit and savings typically do not offer capital gains as a return component.

Effect of Investment Opportunity Set on stock returns with Inflation as a moderation variable According to (Geovanni, 2020), the Investment Opportunity Set with the Market Book Value Equity (MV/BE) ratio has a positive effect on stock returns, while the size of the company as a control variable does not affect stock returns.

**H5:** It is suspected that the Investment Opportunity Set (IOS) influences stock returns with Inflation as a moderation variable.

Signalling theory and Inflation are closely related, as high inflation rates can diminish a currency's purchasing power and lead to increased production and operational costs, ultimately reducing company profitability. This trend, if sustained, can have a detrimental effect on the overall economic conditions. As the company's profitability declines, the dividends paid to shareholders may decrease or be eliminated. This information signals investors, indicating that investing in companies experiencing such circumstances may not be favourable or advisable.

Previous research conducted by (Hertina, 2018) and (Ningsih and Waspada, 2018) states that Inflation increases the cost of goods produced and the administrative costs borne by companies (Hertina, 2018; Ningsih and Waspada, 2018). Even if a company can generate high sales, it may not contribute to greater profits, which inevitably affects the dividends to investors. In conditions of high Inflation, investors are more inclined to wait and observe the policies implemented by the government to address the inflation problem before taking the next step.

A ratio that measures a company's ability to cover its short-term or immediate obligations is known as the Current Ratio (CRCR). This ratio compares current assets to current debt. A low current ratio indicates liquidity issues (Nuraeni et al., 2021). Conversely, an excessively high current ratio is not favourable as it suggests idle funds that can impact company profits. When the value of this ratio is profitable, investors perceive the company's credibility positively (Nurwiyati et al., 2021). The effect of liquidity on stock returns with Inflation as a moderation variable was revealed (Nastiti, 2019), and the current ratio positively affects stock returns. The debt-to-equity ratio does not affect stock returns. Return on equity can moderate the relationship between the current ratio and the debt-to-equity ratio to the return on shares in the company.

**H6:** It is suspected that there is an effect of liquidity on stock returns with Inflation as a moderation variable.
This study focuses on Inflation in moderation and the relation between investment risks, investment opportunities and liquidity on stock return. Figure 1 provides a presentation of the conceptual model in its entirety.

![Figure 1. Research Design](image)

**METHODS**

**Research Samples.** Selection of samples for research using the purposive sampling method based on specific criteria, including companies listed on the Indonesia Stock Exchange in the banking sector which have released financial statements for the 2015-2020 period and published sustainability reports (2015 to 2020). Based on the established criteria, a sample was obtained from 19 banking companies listed on the Indonesian stock exchange meeting the standards mentioned earlier (this data is for a year). One hundred fourteen examples of financial statements of banking companies listed on the Indonesia Stock Exchange will be used for six years. The source of the data obtained by the researcher comes from the Stock Exchange website. Meanwhile, data collection was carried out using observation, documentation, and literature studies.

**Dependent Variable: Stock Return.** Stock return is capital gain (loss) which is the difference between the current closing price and the stock price (closing price) of the previous period, which uses monthly data from January to December on average to obtain an annual closing price expressed in percentage terms of companies that belong to the banking sector.

\[
\text{Stock Return} = \frac{P_c - P_{c-1}}{P_{c-1}} \times 100
\]

(1)

**Independent Variable.** Independent variables include Investment Risk, Set of Investment Opportunities, and Liquidity.

**Investment Risk.** There is an element of risk and uncertainty involved in the process of investing. The investment outcome the investor made is something other than something that can be predicted with absolute precision. When situations are way, investors do more than anticipate investors. Suppose investors are simply interested in profits. If investors
plan to make a lot of money from their investments, they must be willing to take on many risks (Hikmah et al., 2021).

**Set of Investment Opportunities.** According to (Brigham and Houston, 2018), the corporation may pay no dividends for one year. This is due to the company's need for capital to fund favourable investment possibilities. However, the company will pay a high dividend the next year due to unfavourable investment opportunities. Thus, there is no need to retain a substantial amount of capital. The variable set of investment opportunities employs the capital expenditure measurement to measure asset value (CAPBVA).

\[
\text{CAPBVA} = \frac{T}{A} \left( \frac{N - C}{A} \right)_{0}^{T} \text{ for } n = 1, 2, \ldots \ldots (2)
\]

**Liquidity.** Liquidity pertains to a company's capacity to fulfil its obligations and settle its short-term debts. When a company can pay off its short-term liabilities upon maturity, it is considered a liquid entity. In contrast, the absence of such power signifies a lack of liquidity. To effectively meet its short-term obligations, a company must maintain a favourable level of accessible cash or other current assets that can be readily converted into cash (Hery, 2018). One commonly employed measure to gauge a company's ability to meet its immediate short-term obligations is the current ratio (CRCR). The current ratio quantifies a company's capability to satisfy its short-term obligations by utilizing its total current assets.

\[
C = \frac{C}{L} \text{ ............................................................. (3)}
\]

**Moderation Variables:** Inflation. Inflation is the tendency for the overall cost of goods and services to rise during a given period. Inflation can be attributed to a circumstance if three components are present. The first requirement is a price increase, even though it has decreased and increased in the past. Second, a general or natural price increase has occurred, and not only for a single commodity (Dwihapsari et al., 2021). In contrast to the work by (Ismanto and Pebruary, 2021), the authors employed a moderation regression model (moderated regression analysis) in Eviews, version 9.

**RESULTS**

**Descriptive Analysis Results.** As stated by (Ghozali, 2016), descriptive statistics offer a summary or depiction of data, showcasing essential information such as the minimum and maximum values, average value (mean), and standard deviation. The forthcoming analysis will present a descriptive overview, shown in Table 1, to provide an overall understanding.
Table 1. Descriptive Statistical Data

<table>
<thead>
<tr>
<th></th>
<th>Investment Risk</th>
<th>Set of Investment Opportunities</th>
<th>Liquidity</th>
<th>Inflation</th>
<th>Stock Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4838.384</td>
<td>1.680</td>
<td>90.084</td>
<td>7901.079</td>
<td>7.079</td>
</tr>
<tr>
<td>Maximum</td>
<td>2.640</td>
<td>5.100</td>
<td>163.100</td>
<td>95339.000</td>
<td>93.070</td>
</tr>
<tr>
<td>Minimum</td>
<td>18.820</td>
<td>0.270</td>
<td>55.350</td>
<td>310.000</td>
<td>1.680</td>
</tr>
<tr>
<td>Std. Dev</td>
<td>2.570</td>
<td>7.570</td>
<td>11.704</td>
<td>13706.470</td>
<td>14.322</td>
</tr>
<tr>
<td>Observations</td>
<td>114</td>
<td>114</td>
<td>114</td>
<td>114</td>
<td>114</td>
</tr>
</tbody>
</table>

Source: Eviews Data Panel Regression Output 9.0, 2021

Table 1 shows it can be seen that the average value (mean) of the independent variable investment risk has an average of 48383.384 with a standard deviation of 2.570. A standard deviation smaller than the mean indicates the distribution of a small data variable or the absence of a large enough gap between the lowest and highest investment risks.

The independent variable Investment Opportunity Set averages 1.680 with a standard deviation 7.570. A standard deviation greater than the mean indicates the spread of a large data variable or a considerable gap between the lowest and highest Investment Opportunity Set.

The independent liquidity variable averages 90.084 with a standard deviation of 11.704. A standard deviation smaller than the mean indicates the spread of a small data variable or the absence of a sufficiently large gap between the lowest and highest liquidity.

The Inflation moderating variable averages 7901.079 with a standard deviation of 13706.470. A standard deviation greater than the mean indicates the spread of a large data variable or a considerable gap between the lowest and highest Inflation.

The dependent variable return on shares is valued at 7.079 with a standard deviation 14.322. A standard deviation greater than the mean indicates a large data variable's spread or a considerable gap between the lowest and highest stock returns.

Coefficient of Determination. The coefficient of determination quantifies the proportion of the combined impact of independent variables on the dependent variable. An adjusted R-squared is employed to assess the adequacy of fit or the appropriateness of multiple linear lines involving various independent variables. The results of testing the coefficient of determination are:

Table 2. Coefficient of Determination Test

<table>
<thead>
<tr>
<th></th>
<th>Mean dependent var</th>
<th>SD dependent var</th>
<th>Akaike info criterion</th>
<th>Schwarz criterion</th>
<th>Hannan-Quinn criteria</th>
<th>Durbin-Watson stat</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.554</td>
<td></td>
<td></td>
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<tr>
<td>Adjusted R-squared</td>
<td>0.427</td>
<td></td>
<td></td>
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<tr>
<td>SE of regression</td>
<td>10.833</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>10,326.380</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log-likelihood</td>
<td>-4.381</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Eviews Data Panel Regression Output 9.0, 2021

Table 2 shows it can be seen that the Adjusted R-squared value is 0.427 of Investment Risk, Investment Opportunity Set, Liquidity, and Inflation jointly or
simultaneously affect Stock Returns. At the same time, the remaining 0.573 is influenced by other factors not studied in this study.

**Hypothesis Testing.** Hypothesis testing in this study was carried out with Moderated Regression Analysis (MRA). **Table 3** presents the results of the regression coefficient analysis, which indicates that the Investment Opportunity Set variable has no effect on Stock Returns. This is demonstrated by the MRA test results, which show that the coefficient of the Investment Opportunity Set variable is 1.100. Still, the p-value of the Investment Opportunity Set variable is greater than 0.05 and, therefore, not statistically significant.

**Table 3. Hypothesis Test Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Risk</td>
<td>-1.320</td>
<td>7.240</td>
<td>-1.824</td>
<td>0.071</td>
</tr>
<tr>
<td>Set of Investment Opportunities</td>
<td>1.100</td>
<td>2.080</td>
<td>0.529</td>
<td>0.597</td>
</tr>
<tr>
<td>Log (Liquidity)</td>
<td>-35.929</td>
<td>9.810</td>
<td>3.662</td>
<td>0.000</td>
</tr>
<tr>
<td>Log (Inflation)</td>
<td>3.550</td>
<td>1.624</td>
<td>2.185</td>
<td>0.031</td>
</tr>
<tr>
<td>Investment Risk * Inflation</td>
<td>5.370</td>
<td>2.310</td>
<td>2.325</td>
<td>0.022</td>
</tr>
<tr>
<td>Set of Investment Opportunities * Inflation</td>
<td>7.910</td>
<td>1.910</td>
<td>4.441</td>
<td>0.067</td>
</tr>
<tr>
<td>Liquidity * Inflation</td>
<td>5.290</td>
<td>2.330</td>
<td>2.274</td>
<td>0.025</td>
</tr>
<tr>
<td>C</td>
<td>193.579</td>
<td>48.203</td>
<td>4.015</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Eviews Data Panel Regression Output 9.0, 2021

**DISCUSSION**

The stock market gives people another option for their capital. Investors used only to put money into houses and cars, but now they also put money into the stock market and the banking system. Stocks are a highly sought-after financial instrument. When investors buy a company's stock, they expect a return on investment (ROI) equal to the amount invested. A positive return, or profit, is the outcome of an investment. Capital gains or dividends for stock investments and interest income from debt securities indicate rising investor and shareholder happiness. The value of a security is closely linked to the success of the underlying company, which in turn is affected by macroeconomic and industry trends.

The results of testing with regression analysis of panel data showed that investment risk had no influence and was not significant on stock returns. This result differed from the opinion of (Idrus et al., 2017). Whenever investors make investment decisions, their primary objective is to mitigate the multitude of risks that arise, encompassing both short-term and long-term risks. Changes in various micro and macroeconomic circumstances prompt the emergence of diverse situations, compelling investors to determine the necessary actions and strategies that will enable them to achieve the anticipated returns. Likewise, these findings also reject the results of the research carried out (Sitepu, 2022)

Any choice an investor makes that involves the future is riddled with doubt and, as a result, carries some degree of risk. Every investor and potential investor must fully grasp the risks involved. Before making a decision, a rational investor must examine at least two factors: the projected return and the risk associated with each investment possibility, although the magnitude of the risk varies by investment type.

Market risk, which will ultimately affect the industry's performance in each sector, is one of the factors that investors who will purchase stocks should consider. In addition, investors must be tuned to market conditions to make the best investment decisions and
maximize future profits. Investing losses can be minimized if investors are attentive to annual market risks because systematic risk has the most substantial association with high returns. Consequently, a high amount of risk will also offer a high rate of return (high risk – high return).

Given that rational investors will try to reduce the risks they take when making investments (risk averse), investors will typically diversify through the creation of portfolios, which makes this sort of risk meaningless in gauging risk in securities investments (unsystematic risk). Consequently, the sole risk that holds significance and signifies the peril associated with investing in securities is the unavoidable risk, represented by the beta (β) symbol.

The capital market hypothesis highlights the association between investment risk and rate of return (stock return). The market risk and return connection is linear and unidirectional. This explains that the higher the risk, the higher the return on investment. However, the lower the risk, the lower the expected return for investors.

The test results with the regression analysis of panel data showed that the Investment Opportunity Set had no influence and was not significant on stock returns. This indicates that the ups and downs in the value of the investment opportunity set have no effect on investors' decisions on the company's share price. The results of this study showed that although there was an increase in the company's value, there was no positive response from the market to the value. Stock returns in this study are derived from price changes so that the company's market valuation strongly influences stock prices. In fundamental analysis, the company's assessment is not only the study of the internal side of the company but also the analysis of the macro environment that affects the company's performance and industry analysis. These results support the findings performed by (Isnania and Wahidahwati, 2018).

Unfortunately, these findings provide less evidence for the trade-off theory. This theory helps explain why organizations with many investment opportunities also typically have a high degree of debt. Because companies believe that the cost of debt can be utilized to reduce their tax liability, but debt can also result in bankruptcy fees. Investment-opportunity-possessing businesses would undoubtedly use debt to the maximum extent possible to maximize their financial returns.

The study findings reveal that the company's capital structure strategy during the research year could have been more crucial to its investment prospects or growth. This also suggests that the company places less emphasis on accounting practices when making decisions about its capital structure. These other elements include sales stability, asset structure, operating leverage, taxes, profitability, market conditions, management attitudes, financial flexibility, and internal firm conditions.

The outcomes of the regression analysis conducted on panel data revealed a significant and negative relationship between liquidity and stock returns. This indicates that liquidity, measured by the current ratio, can demonstrate a company's capability to fulfil its short-term debt obligations. Companies with higher current ratio values positively impact both the company itself and its investors. Conversely, if the current ratio reflects a lower ability to pay off debts using current assets, it will have a negative impact on the company and its investors (Sululing and Sandangan, 2020). The findings of this study demonstrate that the current ratio exerts a negative influence on stock returns. In other words, many of the companies sampled by the survey can repay low short-term debt,
negatively affecting stock returns. These findings reject the results of (Parida, 2017) and support the conclusions of (Sululing and Sandangan, 2020).

The findings of this research are consistent with the signal theory, which claims that investors would get a signal to help them decide how to allocate their capital if a company makes information about itself publicly available in the form of an announcement. When the firm releases information about its Liquidity level, it should be able to send a favourable signal to the public when deciding whether to invest in the company, given that the company can pay its short-term commitments effectively. Nonetheless, this study demonstrates that liquidity influences investing decisions, as indicated by the number of Stock Returns affected.

The results demonstrated that Inflation has a negative and statistically significant impact on stock returns. This indicates that an increase in the price of goods and raw materials will raise manufacturing costs and the selling price of items, reducing demand and resulting in a decline in sales. This supports the quantity theory, which holds that product prices are proportionate to the amount of currency in circulation. According to this hypothesis, Inflation is produced by a single factor: a growth in the amount of money in circulation. Inflation has a negative impact on the Return on Shares of manufacturing companies since it raises production and operating expenses. As a result of this cost increase, the company's profitability will suffer, and fewer investors will want to buy its stock, lowering its price and return. This study's findings are consistent with prior research (Adyatmika and Wikuana, 2018; Suriyani and Sudiarta, 2018).

The findings confirmed that Inflation (an independent variable) has an insignificant negative influence on stock returns. The annual inflation rate is still considered moderate, according to the table. The findings of this study support the idea that Inflation has a negative impact on the stock returns of companies. This is exemplified by the previous research conducted by (Murhadi, 2019), which states that "there are several macroeconomic variables/indicators that influence the movement of stock returns, including Gross Domestic Product (GDP), interest rate/interest rate, inflation rate, and others." According to (Ilham et al., 2022), "increasing inflation causes the price of manufactured items to grow and decreases people's income, hence decreasing people's purchasing power". As such, Inflation, an external element, can increase the price of raw materials that become industrial staples and cause a decline in market demand, thereby preventing businesses from financing operational activities and paying dividends to investors. This can lead to decreased demand for various stocks, ultimately affecting the return on shares gained by shareholders of food and beverage subsector manufacturing companies listed on the Indonesian stock exchange.

The test results with regression analysis of panel data showed that Inflation could strengthen the relationship of investment risk to stock returns. This is not in line with (Tho’in and Prastiwi, 2019) opinion that Inflation is a tendency for prices to increase in general and continuously. A country's inflation rate will show investment risk and is also one of the indicators of a country's growth. This will significantly affect the behaviour of investors in carrying out investment activities. Inflation is one of the indicators that shows the development of a country's economy, so Inflation needs to be maintained at a certain level. These findings reject the results of (Ilman, 2018).

As an external component of the company, Inflation can also be used as a reference for forecasting returns. The inflation rate in one of the countries may present an investment risk and influence the investment behaviour of investors. High Inflation will affect the
price of staples, which will cause manufacturing costs to rise, affecting sales demand and potentially reducing corporate profitability, which will have a negative effect on expected returns. According to the previous explanation, Inflation will not only impact the return on investment for stocks, but it will also affect the fall in profitability and predicted returns for companies.

The test results with a regression analysis of panel data showed that Inflation could weaken the Investment Opportunity Set's relationship to stock returns. However, this result was different from the opinion (Fahlevi, 2019) that Inflation increases the company's revenue and costs; if the increase in production costs is higher than the increase in prices that can be enjoyed by the company, the company's profitability will fall, and vice versa if the cost of production is lower than the price enjoyed by the company (producer), then the company's profitability will increase. This finding rejects the results of (Suryati, 2019).

By the company's predictions or forecasts, it is predicted that the company would experience growth that is perpetually on the rise, as well as an increase in the value of its assets. The development of a company can reflect the value of assets already in existence, specifically in the form of the book value of assets and equity, as well as the value of prospects for growth that lie ahead for the organization.

The likelihood of a rising company having a reasonably high market valuation in comparison to its actual assets is suppressed by price proxies. Therefore, IOS by price indicates that the company's growth possibilities are reflected in the market price. Consequently, IOS by price indicates that the company's growth possibilities are reflected in the market price. The difference between market value and equity book value represents the company's future growth potential. This ratio describes an enterprise's capitalization. Investors can evaluate the company's capital management proficiency using this proxy. Assessing the company's ability to obtain and manage capital is essential for investors purchasing company shares. The greater the likelihood of growth for a corporation, the more effectively it may utilize its money in conducting business. The bigger the ratio value of this proxy, the greater its impact on the stock return value of the company.

Increases in stock returns can be expected when a company's IOS value is high because this indicates that the investment potential and long-term prospects are good and that investors are likely to be interested in purchasing company shares.

The test results with a regression analysis of panel data showed that Inflation could strengthen the liquidity relationship to stock returns. Company liquidity is the financial ability of a company to fulfil financial obligations at the time of being billed. A company that can meet its financial obligations when billed means that it is in a liquid state and vice versa. The liquidity ratio used in this study is the current ratio (CRCR). This result also follows (Ayuningrum et al., 2021).

This value indicates that the exchange rate variable is independent and not a moderating variable between liquidity and stock returns. This is due to the fact that during the research period, the inflation rate was classed as moderate, with an average of less than 3 per cent. The company could still control it for a considerable time at a moderate inflation rate. Thus, it did not significantly impact the company's current assets. According to studies undertaken by (Putri, 2022); (Wahyuni and Lukistikuti, 2019); (Yuliana and Artati, 2022), inflation variables do not affect the relationship between liquidity and stock returns. In contrast to the research carried out by (Purnamasari and Japlani, 2020) and (Wahyuningsih, 2019), which states that Inflation can moderate the influence of liquidity on Pricing Theory (APT), which states that the rate of return is influenced by internal and
external factors of the company, this study finds that Inflation does not moderate the influence of liquidity.

The findings indicated that Inflation moderated the relationship between liquidity and banks' stock prices. Inflation will make it difficult for banks to distribute assets gathered from the community in the form of credit. In the meantime, high deposit interest rates result in increased third-party funds owned by banks. An increase in third-party funds with a fixed quantity of credit results in a low loan-to-deposit ratio, indicating that the bank is highly liquid. Investors will be more interested in purchasing bank stocks with a high degree of liquidity because they will feel more confident in the security of their investments. This will boost the return on banking stocks over time.

At a high level of Inflation, it can create a cost increase beginning with a rise in salaries, which is a significant component of production activity. Thus, it will affect raising production costs. An increase in the price of fuel oil and food is another element that can increase production expenses, and the resulting Inflation might make it difficult for companies to meet their short-term responsibilities. According to (Fahmi et al., 2019), when Inflation is steady and under control, businesses are more likely to generate profits according to their business plan's objectives. The purchase of these profits can assist the company in meeting its financial obligations.

Based on the conducted tests, it is evident that Inflation leads to a decrease in people's purchasing power, which consequently affects a company's sales and can result in reduced profits. When a company's performance is considered unfavourable, it can trigger fluctuations in stock returns, thereby impacting investors' returns. The amount of return received becomes uncertain rather than fixed, corresponding to the return obtained from investing in the company's shares. If a company incurs losses, investors will also experience capital losses in line with the risks associated with stock investments, particularly systematic risks arising from macroeconomic changes such as Inflation. Therefore, the level of Inflation, whether high or low, can either strengthen or weaken the stock returns of banking companies. Furthermore, an increase in the inflation rate can have either positive or negative impacts on the company.

According to research findings, an increasing number of individuals are becoming interested in investing, with equities being one of the most popular models. The public has a high demand for stock investment since it offers numerous potential benefits. Profits from investing in stocks are generated by price appreciation and dividends. The law of supply and demand drives the increase in stock prices, whereas dividends are derived from the company's profits. When it comes to investing, the bigger the possible profit, the greater the danger of loss; therefore, potential investors must be able to make critical considerations before participating in limiting the risk of current failures.

Investors can incur losses if they lack the necessary skills and expertise to invest in stocks. Sometimes, investors in the capital market are limited to the technical data of a store without further education, which reduces them to only buying and selling investors. In practice, investment decisions must be made with adequate information, such as stock market fundamentals, the profile and performance of the company, an introduction to the future of the industrial ecosystem, and other data.

In essence, the goal of any investment is to generate a financial return, which is certainly true of stock market investments, in which the purchase of a firm's shares is made with the expectation of a future financial gain. The difference between the selling price
and the purchase price of a stock is known as the stock return, and the higher the selling price is compared to the purchase price, the greater the return that investors will earn.

Because of the company's strong financial position, dividends can be sent to shareholders, resulting in higher stock returns for those who own the company's shares (capital gains and dividends). Financial ratio analysis provides a standard against which the current year's performance of a company may be compared with that of previous years and that of competitors. In addition, the organization's management uses financial ratios as a tool for decision-making.

CONCLUSION

The findings from the analysis and discussion of this study lead to several significant conclusions. Firstly, the study indicates that investment risk does not substantially affect stock returns. Similarly, an Investment Opportunity Set does not exhibit a notable impact on stock returns. However, the analysis reveals that liquidity plays a crucial role, negatively and significantly affecting stock returns. Additionally, the study suggests that Inflation can influence the relationship between various factors and stock returns. Specifically, Inflation has the potential to strengthen the association between investment risk and stock returns while weakening the connection between the Investment Opportunity Set and stock returns. Furthermore, Inflation can enhance the relationship between liquidity and stock returns.

When making investment decisions, investors are expected to analyze both company fundamentals and macroeconomic factors that can impact a company's financial performance to make the best investment decisions and maximize profits. With the help of this research, researchers hope that potential investors and the general public can increase their awareness and knowledge of investing by reviewing the company or object to be invested in. Investors and potential investors who engage in stock transactions on the Indonesia Stock Exchange, particularly in banking companies, should prioritize their attention towards evaluating changes in stock prices by considering the company's condition and other factors such as geopolitics. Company management needs to exercise selectivity to capitalize on investment opportunities for future gains, implementing fundamental policies such as asset restructuring, reducing capital expenditures, optimizing debt structure by selecting additional capital sources, and leveraging fiscal and monetary policies to enhance overall company performance. Likewise, the findings of this study may be used as a resource by the general public in their deliberations about financial investments.

This research still has limitations, and there are analysis results that contradict the theory. Therefore, it is hoped that future research can address these shortcomings by incorporating additional variables that can impact stock returns and by extending or adding observation periods to yield more robust results. Furthermore, since this research only focuses on the banking sector, it is advisable for further studies to explore how these findings apply to issuers in the banking sector, both domestically and internationally, over an extended timeframe in order to obtain more accurate and comprehensive results.
REFERENCES


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