Impact of uncertainty on the performance of banking issuer shares 2018-2022

Purwanto¹ and Akhmad²

¹Master of Management, Universitas Sultan Ageng Tirtayasa, Indonesia
²Faculty of Economics and Business, Universitas Sultan Ageng Tirtayasa, Indonesia

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ABSTRACT

The aim of this research is to determine the effect of inflation and interest rates on stock prices with the profitability of banking sector companies as an intervening variable for the 2018-2022 period. The approach used in this research is a quantitative approach. The research sample includes 30 banking sector companies listed on the Indonesia Stock Exchange from 2018 to 2022. This research data is secondary data and was analyzed using panel regression analysis techniques. The results of this research are that inflation can have a direct impact on profitability, but interest rates do not have a direct impact on profitability. In addition, profitability directly affects stock prices. However, inflation and stock prices do not directly affect stock prices. Profitability cannot offset the impact of inflation and interest rates on share prices.

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Corresponding Author:
Purwanto,
Master of Management,
Universitas Sultan Ageng Tirtayasa,
Jl. Raya Serang Jakarta Km 4 Penancangan, Cipocok Jaya, Serang City, Banten 42124, Indonesia.
Email: prwanto@gmail.com

1. INTRODUCTION

The capital market is one of the drivers of a country's economy and a criterion for assessing the condition of domestic companies. Almost all industries in the country are represented by the capital market. For investors, the existence of the capital market allows investors to have a variety of investment choices that suit their preferences (Nurasila et al., 2020). In the capital market, investors need to know share prices above all else (Jogiyananto, 2018). Because the share price determines the wealth of shareholders.

Maximizing shareholder wealth is the same as maximizing the share price of a company. On the other hand, share prices at a certain time depend on the cash flows that investors expect to receive in the future if they buy these shares (Oktavia & Genjar, 2019). Stock prices change over time. This is due to the existence of a supply and demand mechanism between buyers and sellers of shares in the capital market (Ramadhani & Zanati, 2018). Relatively high share prices provide capital gains and improve the company's image, making it easier for managers to raise funds from outside. On the other hand, when the share price of a company is low, it will have a negative impact on the company because it causes capital losses and investors' interest in the company's shares decreases.

This research examines banking share prices in Indonesia. It is known that banking share prices show various movements during the 2018-2022 period. PT Bank Central Asia Tbk (BBCA) shares experienced significant fluctuations, starting from 26,000 in 2018, increasing sharply to 33,425 in 2019, and reaching the highest level in 2020 of 33,850. However, BBCA's share price experienced a fairly drastic decline in 2021 and 2022 to 7,300 and 8,550, respectively. On the other
hand, PT Bank Rakyat Indonesia Tbk (BBRI) shares show a more stable trend with an increase in price from 3,660 in 2018 to 4,940 in 2022, although there have been fluctuations between the years. Meanwhile, PT Bank Mandiri Tbk (BMRI) shares show a different pattern with greater price fluctuations, starting from 7,375 in 2018, decreasing to 6,325 in 2020, and increasing slightly to 6,851 in 2022.

Fluctuations in bank share prices can be caused by internal and external factors. Internal factors are conditions within a company, such as marketing strategy, financing, and company performance. Meanwhile, external factors refer to conditions outside the company, such as inflation, interest rates, exchange rates, government policies and economic growth (Kurniawan & Yuniati, 2019). This research limits the determining factors of stock prices such as inflation, interest rates and profitability.

Inflation is a phenomenon that refers to a general and continuous increase in the price level. Increasing inflation causes a decrease in purchasing power. This means that the value of each dollar can only be used to purchase small amounts of goods and services. When inflation rises, stock prices usually fall. This means that if you own shares that pay dividends, their share prices will fall as inflation increases. In this situation, investors can take advantage of the situation by buying shares at cheap prices (Sebo & Nafi, 2020). Research results from Agustin et al., (2023); Nurasila et al., (2020); and Ananda & Santoso (2022) stated that inflation has an effect on stock prices, but in research by Sebo & Nafi, (2020) and Maronrong & Nugroho, (2019) inflation has no effect on stock prices.

Rising inflation rates will force the government to increase SBI interest rates to maintain currency stability. The rise and fall of interest rates is regulated by the Central Bank of Indonesia and affects the pace of the Indonesian economy (Bank Indonesia, 2022). Without BI management, an interest rate bubble in the market could cause a crisis and disruption for financial institutions. When interest rates rise, businesses face challenges and become more vulnerable. This is because business actors can no longer borrow money at reasonable and cheap interest rates. This increase also influenced the decline in share prices (Agustin et al., 2023). Therefore, the increase in banking interest rates makes people prefer to invest their money in banks in the form of savings and deposits. This leads to less investment in the stock market. Research results from Ratnasari et al., (2019); Nurasila et al., (2020) and Kurniawan & Yuniati, (2019) state that interest rates have an effect on stock prices. This shows that when interest rates rise, stock prices rise. Meanwhile, according to Sella & Ardini, (2022); Sebo & Nafi, (2021) state that interest rates have no effect on stock prices.

Investors often focus on profitability when selecting investments. Higher profitability makes a company’s shares more attractive, which ultimately causes the share price to be higher. Apart from that, profitability also helps companies accelerate business growth by limiting dividend payments and choosing to save profits as investment funds for future growth (Rera & Suminar, 2022). Therefore, the higher the profitability value, the better the company’s performance is considered because the company is able to utilize existing activities to generate profits (Yatimah et al., 2020).

Based on this description, this research examines the influence of inflation and interest rates on stock prices with profitability as an intervening variable based on Signal theory. According to Tandellilin, (2017) inflation, interest rates and profitability are signals for stock prices. Signaling theory discusses how signals of success or failure from management (agents) must be communicated to owners (principals). Companies can increase their value by reducing asymmetric information, such as by sending signals to external parties in the form of reliable financial information to reduce uncertainty about the company’s future growth prospects (Ananda & Santoso, 2022).

By examining the influence of inflation and interest rates on share prices, this research attempts to illustrate that the assessment of a company’s success as determined through share prices needs to be scrutinized from various factors, not only from the company's internal finances but also from the company's external factors. This is supported by research by (Agustin et al., 2023; Nurasila et al., 2020; Ananda & Santoso, 2022) who stated that inflation has an effect on stock prices, and the research results of Ratnasari et al., (2019); Kurniawan & Yuniati, (2019)
stated that interest rates have a significant effect on stock prices. However, there is an inconsistency in the influence of inflation and interest rates on stock prices as found in several studies which state the results are not significant (Sebo & Nafi, 2020; Maronrong & Nugroho, 2019; Sella & Ardini, 2022), this research adds the profitability variable as an intervening which is expected to maintain the stability of the company's share price if inflation and interest rates prevailing in the market are not in a good condition, which is also novel in this research compared to several previous studies.

2. RESEARCH METHOD

This research includes quantitative research to study a certain population or sample, data collection using research tools, and statistical data analysis aimed at testing hypotheses (Sugiyono, 2019). Research variables consist of:

Inflation. Inflation is a decrease in the value of a currency caused by the large amount and speed of currency circulating, causing an increase in the price of goods. High inflation has a dangerous effect on economic stability and also threatens company finances (Hamamah, 2024; Mulyani, 2020). The targeted inflation rate is generally between 2% and 3% per year. In this research, inflation is measured using the formula \( \ln = \frac{(IHKn - IHKn-1)}{IHKn-1} \times 100 \). Inflation data in this research was obtained from the official Bank Indonesia website.

Interest rate. Interest rate is the interest paid in a unit of time which is referred to as a percentage of the debt amount (Afifah et al., 2024). Interest rates are a monetary policy determined by Bank Indonesia every month taking into account domestic and international macroeconomic conditions (Anam & Khairunnisah, 2018). This research's interest rate data is measured by the average percentage of bank interest rates (BI Rate) in one year obtained from the Bank Indonesia website.

Profitability. Profitability is the profit generated by a company (Kasmir, 2019). Profitability in this research is measured by Return on Assets, namely the comparison between the value of net profit and company assets. This figure shows how effective the company's overall management of its assets (Putri & Hendrani, 2024). Profitability is obtained from the ROA ratio value of the sample company during the research period.

Stock price. The share price is the price displayed on the stock exchange at a certain point in time determined by market participants. This market value is determined by the demand and supply of these shares in the capital market (Budiantini, 2024). Stock price data is obtained from closing prices published by the Indonesian Stock Exchange from 2018 to 2024.

The research population consists of banking companies listed on the Indonesia Stock Exchange from 2018 to 2022, totaling 46 companies. To obtain representative and accurate data, the research sample was determined using a purposive sampling technique with criteria, namely listed on the Indonesia Stock Exchange in 2018–2022; actively providing financial reports during that period; and present financial reports using rupiah currency units. Based on the results of purposive sampling, the sample size for this study was 30 companies. The data source for the research was obtained from secondary data in the form of annual reports of banking companies from 2018 to 2022. Therefore, this research does not require validity and reliability testing. Data collection uses documentation techniques. Data analysis uses panel regression analysis techniques using the STATA program (Ghozali, 2016) consisting of two panel regression models.

3. RESULTS AND DISCUSSIONS

3.1. Descriptive statistics

Descriptive statistics provide an overview of the research variables. It is known that share prices have a minimum value of 50 and a maximum value of 33850 with an average of 2436.1 and a standard deviation of 4814.901. Furthermore, inflation has a minimum value of 0.25 and a maximum value of 2.66 with an average of 1.502 and a standard deviation of 0.9065178. Furthermore, the interest rate has a minimum value of 1 and a maximum value of 4.33 with an average of 2.77 and a standard deviation of 1.220612. Furthermore, profitability has a minimum
value of -0.9617855 and a maximum of 0.8721789 with an average of 0.0074809 and a standard deviation of 0.1189784.

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock price</td>
<td>2436.1</td>
<td>4814.901</td>
<td>50</td>
<td>33850</td>
</tr>
<tr>
<td>Inflation</td>
<td>1.502</td>
<td>0.9065178</td>
<td>0.25</td>
<td>2.66</td>
</tr>
<tr>
<td>Interest Rate</td>
<td>2.77</td>
<td>1.220612</td>
<td>1</td>
<td>4.33</td>
</tr>
<tr>
<td>Profitability</td>
<td>0.0074809</td>
<td>0.1189784</td>
<td>-0.9617855</td>
<td>0.8721789</td>
</tr>
</tbody>
</table>

Source: STATA Output Results, 2024

It is known that Indonesia experienced a decrease in inflation in 2021 by 0.87% from previous years. This is because demand for goods has decreased significantly due to the Covid-19 pandemic, thereby exacerbating the decline in people's purchasing power. Inflation in 2022 will experience a significant increase, namely 2.37%, with the main causes coming from fuel oil, food, drinks and tobacco. Meanwhile, during the 2018-2022 period it is known that the highest interest rate of 4.33% occurred in 2019. Interest rates decreased in 2020 and 2021 by 1.75% and 3.25% due to factors in the economy. Unstable interest rates result in investors being more interested in investing in banks which have lower risks than investing in shares.

3.2 Hypothesis testing

Research hypothesis testing consists of direct and indirect effects. The hypothesis is declared accepted if the regression coefficient of the relationship between variables is obtained with a p value <0.05. The hypothesis test results obtained are:

<table>
<thead>
<tr>
<th>Path</th>
<th>Koef</th>
<th>SE</th>
<th>p value</th>
<th>result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation -&gt; Profitability</td>
<td>0.0302325</td>
<td>0.0136971</td>
<td>0.027</td>
<td>H1 Supported</td>
</tr>
<tr>
<td>Interest Rate -&gt; Profitability</td>
<td>0.0180388</td>
<td>0.0101725</td>
<td>0.076</td>
<td>H2 Not Supported</td>
</tr>
<tr>
<td>Inflation -&gt; Stock Price</td>
<td>-927.0713</td>
<td>677.3812</td>
<td>0.173</td>
<td>H3 Not Supported</td>
</tr>
<tr>
<td>Interest Rate -&gt; Stock Price</td>
<td>-480.8401</td>
<td>473.587</td>
<td>0.312</td>
<td>H4 Not Supported</td>
</tr>
<tr>
<td>Profitability -&gt; Stock Price</td>
<td>914.8488</td>
<td>298.4639</td>
<td>0.003</td>
<td>H5 Supported</td>
</tr>
</tbody>
</table>

Based on Table 2, it is known that of the seven hypotheses formulated, only two hypotheses were accepted, namely H1 and H5. H1 which states that there is an influence of inflation on profitability can be accepted with a regression coefficient of 0.030 and a p value of 0.027 <0.05. H5 which states that there is an influence of profitability on share prices can be accepted because the p value is 0.003 <0.05. Meanwhile, other hypotheses, namely H2, H3, H4, H6 and H7, were not accepted because the respective p values were > 0.05 (not significant). The results of hypothesis testing also show that inflation and interest rates have a negative relationship with stock prices, while other hypotheses are stated to have a positive relationship, either significant or not significant.

3.3 Discussion

The Effect of Inflation on Profitability. According to Tandelilin, (2017) inflation can increase a company's income and costs. If the increase in production factor costs is higher than the increase in selling prices that the company can achieve, then the company's profitability will decrease. Therefore, an increase in the inflation rate has a negative relationship with the stock market. On the other hand, if the increase in production factor costs is smaller than the increase in selling prices that the company can achieve, then the company's profitability will increase. Therefore, low inflation has a positive relationship with the stock market (Sutanto, 2021). The results of the analysis show that inflation has increased with a p-value of 0.027 < 0.05. This shows that profitability increases as inflation increases. Based on signal theory, an increase in the inflation rate can be a positive signal for investors regarding company performance. In conditions of high inflation, companies that are
able to increase profitability are considered capable of overcoming economic challenges and generating higher profits. This finding is consistent with previous research conducted by Dewi et al., (2019); Nasution et al., (2022) dan Pradnyani, (2020) prove that high inflation affects high profitability.

The Effect of Interest Rates on Profitability. Interest rates are prices that link the present and the future, and are determined by the interaction of supply and demand. Interest rates have a significant influence on a company's profits, because higher interest rates will reduce the profits received by the company (Khotijah et al., 2020). An increase in BI interest rates will cause an increase in loan interest rates, which in turn will cause an increase in loan interest costs, thereby increasing bank loan interest income. When interest income increases, the profits received by the bank also increase. In other words, when the BI interest rate rises, profits also increase (but as the BI interest rate rises, credit interest rates and deposit interest rates also rise so that the interest paid and received also increases). banks will get bigger) (Sasmita et al., 2018). The results of the analysis show that the p-value is 0.312 > 0.05, indicating that interest rates have no effect on profitability. This shows that high and low interest rates do not necessarily affect profitability. Signaling theory states that information that can be observed or obtained by external parties (such as investors) can provide signals regarding the quality or condition of something that cannot be observed directly. In this case, high or low interest rates can be seen as a signal regarding the overall economic situation. The results of this research are in line with previous research conducted by Suyono et al., (2018); Hatiana & Pratiwi, (2020); dan Amin & Rahmawati, (2023) found that interest rates had no effect on profitability growth.

The Effect of Inflation on Stock Prices. Inflation is a general increase in the price of goods, causing a decrease in the purchasing power of money. Relatively increasing inflation is a negative signal for various capital market players (Tandelllin, 2017). Rising inflation reduces investors' purchasing power and reduces interest in investing. A decrease in demand for shares causes a decrease in the share price of a company (Adikerta & Abundanti, 2020). Inflation has a small negative effect on stock prices, with a p-value of 0.173 < 0.05. This shows that increasing inflation can cause stock prices to fall. The results of this research are in line with Dewi., (2020); (Rachmawati, 2019) and Adikerta & Abundanti, (2020) state that the higher the inflation rate in a country, the lower the company's share price.

The Effect of Interest Rates on Stock Prices. The interest rate is the value of the loan repaid. Even if interest rates rise, unnoticed changes in interest rates can cause investors to experience losses and rush to sell all their shares and enter the securities industry (Sulastr & Suselo, 2022). The results of the analysis show that interest rates have a negative influence on stock prices, and the p-value is 0.312, which means the influence is not significant. 0.05. This shows that the higher the interest rate, the greater the possibility that stock prices will fall. Signaling theory states that information that can be observed or obtained by external parties (such as investors) can provide signals regarding the quality or condition of something that cannot be observed directly. In this case, high interest rates can be seen as a signal that the economic situation may be unstable or there is a risk of high inflation (Tandelllin, 2017). Results of previous research by Agustin et al., (2023); Nugraha & Nursito, (2021) dan Rahayu & Masud, (2019) also support this because they state that when interest rates rise, stock prices tend to fall. Conversely, if interest rates fall, stock prices tend to rise.

The Effect of Profitability on Share Prices. Profitability can measure the level of return on total assets. The higher the ROA, the higher the company's performance (return). Higher returns will encourage investors to invest capital in the company so that it will have an impact on increasing share prices (Alfianti & Sonja, 2017). The analysis results show profitability with a p-value of 0.003 < 0.05. This shows that the higher the profitability, the higher the share price. Signaling theory states that information that can be observed or obtained by external parties (such as investors) can provide signals regarding the quality or condition of something that cannot be observed directly. In this case, high profitability can be seen as a signal that the company is running well and can generate stable profits. These findings are in line with previous research conducted by Alfianti & Sonja, (2017); Lapian & Dewi, (2018); and Prestiwi et al., (2019) yang mengatakan bahwa return on assets yang semakin tinggi menunjukkan bahwa who say that a higher return on assets
indicates that the company uses its assets more efficiently to generate profits, so that the value of the company’s share price increases and vice versa.

The Role of Profitability in Mediating the Effect of Inflation on Stock Prices. The results of the mediation test show that profitability cannot mediate the impact of inflation on stock prices with a p-value of 0.557. A company's profitability is reflected in its share price, but the relationship between inflation and share prices tends to be more complex. Inflation can affect stock prices through various mechanisms, including reducing consumer purchasing power, reducing company profitability, and creating economic uncertainty. Signal theory states that inflation can be seen as a signal of overall economic conditions. High inflation can reduce consumer purchasing power, reduce company profitability, create economic uncertainty, and affect stock prices. The inability of profitability to influence the impact of inflation on stock prices is caused by changes in profitability that do not significantly affect the impact of inflation on stock prices. Profitability, as measured by ROA, doesn’t mean much to investors when estimating stock returns. Investors do not react to ROA as information or a signal that can change their interest in a stock. This shows that investors use ROA not only as a measure to evaluate company performance but also to predict share prices in the capital market (Sutanto, 2021).

The Role of Profitability in Mediating the Effect of Interest Rates on Stock Prices. The increase in interest rates increases the burden on the business world, but if the business world can manage business financing to reduce costs and increase sales, then profits will increase (Aditya & Badjra, 2018). It is known that the p-value is 0.564 > 0.05. The level of profitability of a company is reflected in its share price and can be influenced by interest rates, however the direct relationship between interest rates and share prices tends to dominate. Signal theory states that interest rates can be seen as a signal of overall economic conditions. Although interest rates can affect a company’s profitability through increasing or decreasing borrowing costs, the direct relationship between interest rates and stock prices is influenced by investors' perceptions of the value of equity investments in a volatile interest rate environment.

4. CONCLUSION
This research finds that inflation has an effect on profitability, but interest rates have no effect on profitability. Apart from that, profitability also has an effect on stock prices. However, inflation and stock prices have no effect on stock prices. Profitability is unable to mediate the effect of inflation and interest rates on stock prices. The research results contribute to the application of signal theory as a guide in managing company finances. Companies need to pay attention to external factors such as monetary policy and inflation to anticipate their impact on share prices. This research suggests taking steps that can directly increase profitability, such as increasing operational efficiency, product diversification, and strengthening marketing strategies.

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