The Effect of Inflation Levels on Stock Underpricing Decisions in Companies Conducting Initial Public Offerings in Indonesia

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Abstract

This study aims to analyze the effect of inflation rates on stock underpricing decisions in companies conducting Initial Public Offerings (IPOs) on the Indonesia Stock Exchange during the period 2020 to 2024. This study uses a quantitative approach with a simple linear regression analysis method. The sample for this study consisted of 30 companies conducting IPOs during the observation period, with secondary data obtained from financial reports, company prospectuses, and Indonesia Stock Exchange publications. The results show that the inflation rate has a positive and significant effect on the level of underpricing. The results found that the inflation rate has an effect of 0.228 with a significance value of 0.003 <0.05. This explains that 22.8% of the factors influencing underpricing decisions in companies are inflation rates, but 77.2% are influenced by other factors such as interest rates, exchange rates, and market sentiment.

Keywords*: *Inflation, Underpricing, Initial Public Offering

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Introduction

Macroeconomic stability is a crucial factor in maintaining investor confidence in a country (Novriyant et al., 2025). Variables such as inflation, interest rates, and exchange rates are closely linked to the investment climate and capital market dynamics. The capital market serves not only as a means of raising funds for companies but also as a reflection of national economic health. When macroeconomic conditions experience instability, investor reactions are often reflected in stock price movements, including those recently released through an Initial Public Offering (IPO). According to Law No. 8 of 1995 concerning Capital Markets, an IPO is defined as a securities offering activity carried out by an issuer to sell securities to the public based on procedures stipulated in this Law and its implementing regulations (Hadi, 2019). Furthermore, an IPO is the process by which a company offers its shares to the public for the first time as a strategic step in expanding its capital structure (Ayuwardani & Isroah, 2018). A common phenomenon in this process is underpricing, which refers to a situation where the initial public offering price is lower than the market price on the first day of trading (Dwijaya & Cahyadi, 2021). Underpricing issues indicate an information gap and differing perceptions of value among issuers, underwriters, and investors. Data from the Indonesian Stock Exchange shows that the majority of companies conducting IPOs in recent years experienced price increases on the first day of trading. This indicates that underpricing remains a significant phenomenon in the Indonesian capital market (PwC Indonesia, 2024).

Inflation is an economic indicator that plays a significant role in macroeconomic stability. Bank Indonesia defines inflation as a general and persistent increase in the prices of goods and services over a specific period (Sekarsari et al., 2024). Inflation can impact people's purchasing power, companies' production costs, and investors' return expectations. High inflation rates are often accompanied by tightening monetary policy, rising interest rates, and rising investment risk premiums. Therefore, the inflation rate has an indirect impact on capital market activity, including stock pricing decisions during an IPO.

The inflation phenomenon in Indonesia from 2020 to 2024 exhibits very interesting dynamics. Based on data from the Central Statistics Agency (BPS), annual inflation in 2020 was recorded at 1.68% and increased in 2022 to 5.51% before finally declining in 2023 to 2.61% (BPS, 2024). This fluctuation occurred due to various factors, such as rising energy prices, changes in global food prices, and the impact of fiscal and monetary excesses following the COVID-19 pandemic. Although inflation returned to control in 2024, high price pressures in the previous period have created economic uncertainty that has impacted investment preferences and stock strategies of new issuers.

High inflation can reduce investor interest in risky instruments because the expected real return becomes lower. In the context of an IPO, this encourages companies and underwriters to offer relatively low share prices to attract investors. This strategy, while intended to expedite the initial offering process, can lead to underpricing. Conversely, when inflation is stable, companies tend to have greater confidence in setting share prices closer to fair value. Thus, the inflation rate can be a significant determinant in explaining variations in underpricing levels across periods.

Several previous studies have yielded mixed results regarding the relationship between inflation and stock underpricing. Some studies show a positive effect on underpricing (Baig et al., 2022), while others find an insignificant or even negative relationship (Isynuwardhana & Febryan, 2022). This inconsistency in results highlights an interesting research gap that merits further investigation, particularly in the context of the Indonesian capital market, which has unique characteristics dominated by retail investors and relatively high levels of market volatility.

Therefore, this study aims to analyze the influence of inflation rates on stock underpricing decisions in companies conducting IPOs in Indonesia. The results are expected to provide theoretical contributions to the development of studies on the relationship between macroeconomic factors and capital market behavior, while also providing practical implications for market participants, issuer management, and policymakers in designing stock pricing strategies that adapt to national economic conditions.

Literature Review

2.1 Efficient Market Theory

The efficient market theory (EMH) posits that in a truly efficient market, security prices reflect all available information, so there is no systematic opportunity for investors to profit from public analysis. As Fama (1970) put it, "a market in which prices fully reflect all available information is called efficient" (Akerlof, 1970). Beechey, Gruen, & Vickery (2000) refined this understanding by stating that "asset prices in an efficient market 'fully reflect all available information,'" so the market is viewed as capable of processing information rationally. Meanwhile, a popular definition from Investopedia states that the EMH assumes "current market prices reflect all known information," making obtaining abnormal returns through analyzing public information extremely difficult.

2.2 Signal Theory

Signaling theory explains how companies send signals to the market through their policies, which are then perceived by investors as indicators of certain quality or risk (Marpaung et al., 2024). Spence (2002) explains that the information and labor market framework explains that signals in retrospect and the structure of market information can help explain how parties will continue to provide more information. Arora & Singh (2020) apply this concept to the capital market context by stating that "Underpricing as a positive signal in emerging markets" shows that issuers set relatively low initial prices to attract investors and as a signal that the company is optimistic that its share value will increase. Scott (2019) in his study of IPOs stated that a low initial price can be perceived as a signal to the market that the issuer has good prospects, thus increasing investor interest.

2.3 The Concept of Inflation

Inflation is simply defined as a continuous increase in prices in general (Simanungkalit, 2020). An initial price increase of just one or two items cannot be called inflation unless the increase in that item occurs widely so that it will result in increases in other items that are functionally related to the previous item (Salim & Purnamasari, 2021). Inflation is also mentioned as an economic phenomenon that occurs because prices generally experience a continuous increase in a country over a certain period of time (Pujadi, 2022). The factors that cause inflation are (1) excessive demand; (2) increased production costs; (3) wage increases; (4) international price fluctuations; and (5) differences between the amount of money circulating in the economy (Meiditambua et al., 2023).

2.4 Underpricing of Shares in IPOs

Underpricing is a phenomenon in which the initial public offering price of a company conducting an IPO is lower than the share price on the first day of trading on the secondary market. According to a study in Indonesia, underpricing is described as "a positive difference between the first-day secondary market share price and the initial public offering price" (Hadi & Atikah, 2024). More specifically, a study using Indonesian data from 2019–2023 stated that this phenomenon reflects "information asymmetry and market uncertainty regarding the real value of companies that have just gone public" (Septianita & Muslimin, 2024). The factors that most frequently cause underpricing are: (1) Information asymmetry; (2) The reputation of the underwriter; (3) The size and age of the company; (4) Internal financial conditions; (5) The structure of the stock offering; and (6) market conditions and macroeconomic factors (Darmawan & Bustaman, 2024).

Research Methodology

This study uses a quantitative approach to empirically test the effect of inflation on stock underpricing in companies conducting Initial Public Offerings (IPOs) in Indonesia. A quantitative approach was chosen because it allows for objective measurement of the relationship between variables based on statistically processed numerical data (Sugiyono, 2021). The data used are secondary data obtained from various official publication sources, such as the Indonesia Stock Exchange (IDX), the Financial Services Authority (OJK), and Bank Indonesia (BI). The data include information on initial public offering (IPO) prices, closing prices on the first trading day, and the national inflation rate. The observation period was set for 2020–2024, as this period represents the fluctuating economic conditions following the COVID-19 pandemic and reflects significant inflation dynamics and capital market performance (BPS, 2024).

The population in this study is all companies conducting IPOs on the Indonesia Stock Exchange during the period 2020 to 2024. The sampling technique in this study uses purposive sampling with the following criteria:

1. Companies that conduct an IPO and are listed on the IDX during the observation period.
2. Have complete data regarding the stock offering price, first day closing price, and IPO prospectus.
3. Does not include companies operating in the financial sector

Based on the above criteria, we obtained a sample of 30 companies that met the requirements as samples in this study.

Results

This study aims to analyze the influence of the inflation rate on stock underpricing decisions in companies conducting initial public offerings (IPOs) in Indonesia. The sample in this study consisted of 30 companies conducting IPOs on the Indonesia Stock Exchange during the 2020-2024 period. Data were collected from official IDX reports, company prospectuses, and annual inflation publications from Bank Indonesia and the Central Statistics Agency. Observations indicate that during the study period, the average annual inflation rate in Indonesia ranged from 1.68% to 5.51%. Meanwhile, the average underpricing rate for IPO shares reached 24.7%, with significant variation across companies. This condition reflects capital market fluctuations that are sensitive to changes in macroeconomic indicators, especially inflation. The descriptive statistics for the research variables are presented in Table 1 as follows:

Table 1. Descriptive Statistics

Variables	Min	Max	Mean	STD
Inflation (X)	0,052	0,684	0,247	0,121
Underpricing (Y)	0,016	0,055	0,032	0,012

Source: Secondary data processed by researchers (2025)

The table above shows that stock underpricing varies significantly, with a standard deviation of 0.121. This indicates that underpricing in Indonesia varies across companies and is likely influenced by differences in fundamental characteristics and macroeconomic conditions at the time of the IPO.

Multiple linear regression analysis was used to test the effect of cash flow and accounts receivable turnover on liquidity. The results of the SPSS test are presented in Table 2 below:

Table 2. Multiple Linear Regression Results

Variables	Regression Coefficient	T Count	Sig.	Information
Constant	0,081	-	-	-

Inflation (X)	0,228	3,276	0,003	Significant
R2 = 0,447 F Count = 8,314 Sig = 0.000 Eligible Model				

Source: Processed data from SPSS 26 (2025)

Based on the results in table 2, the regression model formed is as follows:

$$Y= 0,0,081 + 0,228\ X +e$$

The results of the study indicate that the inflation rate has a significant and positive influence on stock underpricing decisions, with a coefficient value of 0.228 and a significance value of 0.003 <0.05. This means that the higher the inflation rate, the greater the likelihood that the company will set an IPO share price below fair value (underpriced). Rising inflation reflects economic instability and creates a higher risk perception among investors. To attract investors in these conditions, companies and underwriters tend to offer initial public offering prices lower than market value. This finding aligns with research conducted by Mayasari (2019) which explains that inflation has a positive influence on underpricing in the manufacturing sector in Indonesia. This is also supported by research conducted by Wenehen, Ekananda, & Safitri (2025) which explains that macroeconomic variables such as inflation can influence investor risk perceptions on initial public offering prices.

Conclusion

Based on the analysis of data from companies conducting IPOs on the Indonesia Stock Exchange during the 2020-2024 period, this study concludes that the inflation rate has a significant and positive effect on the level of stock underpricing. This means that the higher the inflation rate, the greater the tendency of companies to offer stock prices below fair value. This study provides an empirical contribution to the development of financial and capital market theory, particularly in strengthening the understanding of underpricing mechanisms in developing countries. The results indicate that macroeconomic variables such as inflation affect not only a company's fundamental value but also investors' risk perceptions. Therefore, underpricing analysis models in developing markets need to incorporate macroeconomic dimensions as significant external factors. Future research is expected to expand the scope by adding other variables such as benchmark interest rates, exchange rates, and market sentiment, which also have the potential to influence underpricing levels. Furthermore, the use of panel data analysis methods or a non-linear approach can provide more comprehensive results on the dynamics of the relationship between macroeconomic factors and stock price behavior in IPOs in Indonesia.

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