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Economic Analysis of Initial Returns: The Impact of Stock Price, Offering Value, and Firm Age at Bank BCA (2020–2023)

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Abstract:

Banking stocks have consistently delivered substantial profits for investors, particularly throughout 2023. According to data from the Financial Services Authority (OJK) in 2020, Indonesian banking assets reached IDR 9,333 trillion, equivalent to 59.5% of the country's Gross Domestic Product (GDP), highlighting the sector's significant role in national economic growth. Furthermore, Kontan *(2023) reported that Bank Central Asia (BCA) was among the top-performing banking issuers, achieving a total stock return of 12.60% in 2023. This study aims to analyze the economic and financial factors—specifically the quantity of stock prices, stock offering values, and company age—that influence initial stock returns. Using a multiple linear regression model, the findings reveal that the quantity of stock prices has a significant negative effect on initial returns. In contrast, the stock offering value and the age of the company do not exhibit a significant individual impact. However, collectively, these variables—representing key economic indicators—have a significant joint effect on the initial return of Bank BCA. The study contributes to the broader understanding of how financial metrics and firm characteristics affect investment performance in the banking sector, especially in emerging markets like Indonesia.*

Keywords: *Banking Sector; Stock Returns; Initial Return; Economic Indicators; Financial Performance*

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1. Introduction

The capital market plays a vital role in driving economic development by providing companies access to essential funds for their operational and investment activities (Beck & Levine, 2004; Levine & Zervos, 1998). Through instruments such as stocks, bonds, mutual funds, and derivatives, the capital market enables investors to allocate their funds strategically to earn returns. Among these, stocks are a popular choice due to their potential for high capital gains (Sharpe, 1964; Lintner, 1965; Fama & French, 1992). Investors generally seek shares of companies with strong reputations, sound

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fundamentals, and the potential to generate positive returns, both in the short and long term (Chen, Roll, & Ross, 1986).

In recent years, the banking sector has stood out as a highly attractive investment destination. Notably, Bank Central Asia (BCA), as one of Indonesia's largest private banks, has consistently offered high stock returns. In 2023, BCA recorded a 12.60% total return on its shares, reflecting investor confidence and the bank's solid financial performance. This aligns with findings by Isa, Leha, and Mohamed (2021), who emphasized the resilience and appeal of Indonesian bank stocks amid macroeconomic changes. The Financial Services Authority (OJK) has also highlighted the banking sector's contribution to GDP, reinforcing its strategic role in the national economy (Laduna & Sun'an, 2018; Khairiyah & Agustin, 2021).

Despite global economic uncertainties, including the COVID-19 pandemic, the Indonesian banking sector remained resilient (Zuhroh, Rofik, & Echchabi, 2021). While many industries struggled with financial volatility, major banking stocks such as BCA, BBRI, and BMRI managed to sustain their market value and even reach all-time highs. This mirrors similar resilience observed in global banking sectors, as discussed by Mokni and Youssef (2020), and Alsharif and Sahabuddin (2024), where macroeconomic stress did not significantly impair bank stock returns. These developments indicate investor optimism and market strength, especially among large-cap bank issuers. However, price fluctuations across the period suggest the influence of multiple internal and external factors on initial returns, supporting the arguments made by Flannery and Protopapadakis (2002) and Mishkin (1996).

Previous studies have examined various determinants of stock performance, including firm size, profitability, and macroeconomic indicators (Jamaludin, Ismail, & Manaf, 2017; Kandir, 2008; Rahman & Uddin, 2009). However, few have explored the joint impact of stock price quantity, stock offering value, and company age on initial returns in emerging markets like Indonesia. Research often isolates these variables or treats them independently, without considering their interactive effects—an approach that limits contextual understanding (Demirgüç-Kunt & Maksimovic, 1998; Claessens & Laeven, 2003).

Additionally, studies typically overlook how offer price setting and company age—as a proxy for investor trust and operational maturity—affect early stock performance, particularly during periods of heightened uncertainty such as the pandemic and post-pandemic recovery (Ross, 1976; Rajan & Zingales, 1998). Moreover, flagship banks like BCA possess unique structural advantages and market dynamics that are not easily generalizable to other firms or sectors (Bessler & Opfer, 2004).

Given these gaps, this study aims to analyze the influence of stock price quantity, stock offering value, and company age on the initial return of Bank BCA over the period from January 2020 to December 2023. The goal is to provide new insights into how firm-level indicators affect early investor gains, especially in the context of a high-performing and systemically important bank. This research builds on the foundation laid by King and Levine (1993) in connecting financial institutions to

broader economic development, and seeks to contribute to both academic literature and practical investment strategies tailored to emerging markets.

2. Theoretical Background

The Influence of Stock Price Quantity on Initial Return

The quantity of stock offered by a company during its Initial Public Offering (IPO) plays a critical role in determining the level of initial return. A higher quantity of shares made available to the public may influence investor perception regarding the firm's growth potential and accessibility. This is aligned with previous studies that found a significant relationship between share quantity and IPO initial return, as the volume of shares can indicate a firm's capital needs and market strategy (Demirgüç-Kunt & Maksimovic, 1998; Jamaludin, Ismail, & Manaf, 2017). Moreover, excessive supply may lower scarcity value, potentially dampening early investor enthusiasm, while a well-balanced offering can trigger greater demand and drive up early returns (Chen, Roll, & Ross, 1986; Beck & Levine, 2004).

Hypothesis 1 (H1): *Stock price quantity has a significant effect on the initial return of BCA during the IPO period.*

The Influence of Stock Offering Value on Initial Return

The value of the stock offering also significantly influences the initial return. A larger offering value tends to increase investor expectations regarding the company's financial performance and long-term strategy (Claessens & Laeven, 2003; King & Levine, 1993). When firms raise substantial funds during the IPO, it is often interpreted as a signal of strong investor demand and confidence in the firm's fundamentals. This, in turn, creates a positive momentum in early trading days. Prior research supports that offering size is directly associated with pricing efficiency and early gains (Flannery & Protopapadakis, 2002; Ross, 1976).

Hypothesis 2 (H2): *Stock offering value has a significant effect on the initial return of BCA during the IPO period.*

The Influence of Company Age on Initial Return

Older firms are generally perceived as more experienced and trustworthy by investors. These firms often have established operational histories, making them appear less risky compared to younger companies. As such, company age can influence investor decisions during IPOs, potentially resulting in higher initial returns (Lintner, 1965; Levine & Zervos, 1998). However, some studies argue that while firm age may contribute to long-term returns, its effect on initial return is not always significant (Fama & French, 1992; Mokni & Youssef, 2020). Particularly in volatile market periods, investor behavior may be more influenced by recent financial metrics than by longevity alone (Sharpe, 1964; Bessler & Opfer, 2004).

Hypothesis 3 (H3): *Company age has a significant effect on the initial return of BCA during the IPO period.*

Conceptual Framework

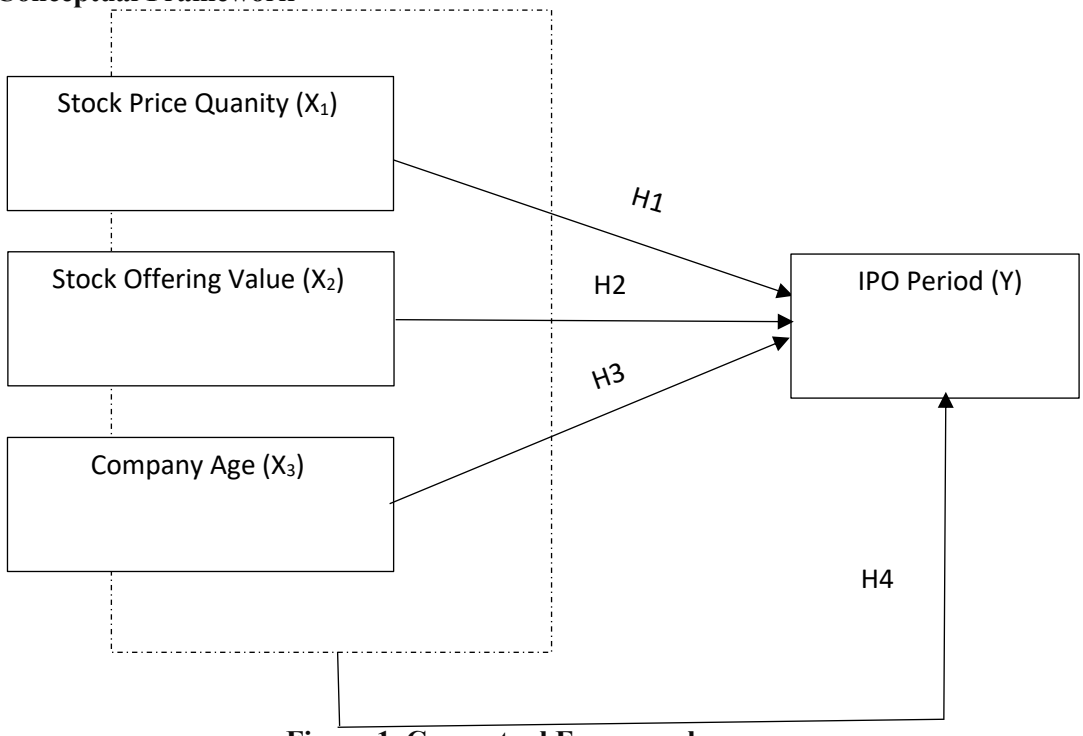

Figure 1. Conseptual Framework

3. Methodology

This research employs an **analytical approach** using a **quantitative method**, which focuses on testing the validity of hypotheses through numerical data.

Type of Research

The study uses a **quantitative analytical approach**, aiming to validate hypotheses through data analysis and statistical testing.

Population and Sample

The **population** of this study includes **Bank BCA** as listed on the **Indonesia Stock Exchange (IDX)** from **2020 to 2023**. The **sample** was selected using **purposive sampling**, a technique where specific criteria are used to choose data relevant to the research objectives.

Data Collection Techniques

Data were collected through:

1. **Observation**, as defined by Sugiyono (2018), which involves structured monitoring of variables.
2. **Documentation**, involving the collection and analysis of secondary data such as company reports, IPO prospectuses, and data from official online sources like the **IDX** and financial websites.

Data Types and Sources

The data are **secondary**, gathered from company annual reports, published IPO prospectuses, and credible financial platforms such as the **Indonesia Stock**

Exchange (IDX).

Variable Identification and Operational Definitions

Table 1. Operational Variable

No	Variable	Operational Definition	Indicator	Scale
1	Stock Price Quantity (X1)	Number of stock prices traded within a specific period at Bank BCA	Daily stock price volume	Ratio
2	Stock Offering Value (X2)	Total value of stock offered by BCA during the study period	Total IPO proceeds (Rp)	Ratio
3	Company Age (X3)	Time since the company was founded	Company establishment year	Ratio
4	Initial Return (Y)	Return earned by investors based on price difference on first trading day after IPO	Price difference (Closing - IPO price)	Ratio

Classical Assumption Tests

Before analysis, several tests were conducted to ensure data validity:

Normality Test: To check if data distribution is normal (significance > 0.05) (Ghozali, 2018).

Multicollinearity Test: Tolerance > 0.10 and VIF < 10 indicate no multicollinearity (Ghozali, 2018).

Heteroskedasticity Test: Patternless and random scatter indicates no heteroskedasticity.

Autocorrelation Test: Durbin-Watson table is used; values between du and (4 - du) indicate no autocorrelation.

Data Analysis Method

The regression equation used is:

$$\mathbf{Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e}$$

Where:

- Y = Initial Return
- α = Constant
- β_1–β_3 = Regression Coefficients
- X_1 = Stock Price Quantity
- X_2 = Stock Offering Value
- X_3 = Company Age
- e = Error Term

Hypothesis Testing

Partial Test (t-test): If significance < 0.05, the independent variable has a significant individual effect.

Simultaneous Test (F-test): If significance < 0.05, independent variables collectively affect the dependent variable (Ghozali, 2018).

Coefficient of Determination (R^2)

According to Ghozali (2018), R^2 explains how much of the variance in the dependent variable can be explained by the independent variables in the model.

4. Empirical Findings/Result

Descriptive Statistical Analysis

Descriptive statistics aim to summarize and explain the characteristics of the collected data, using values such as minimum, maximum, mean, and standard deviation. In this study, 82 data points were analyzed. For the variable *Stock Price (X1)*, values ranged from a minimum of 3.52 to a maximum of 5.62, with a mean of 4.53 and a standard deviation of 0.682. For *Stock Offering Value (X2)*, the minimum was 1.68 and the maximum was 3.80, with a mean of 2.62 and standard deviation of 0.764. *Firm Age (X3)* ranged between 13,384.13 and 14,572.26 days, with a mean of 14,152.38 and a standard deviation of 379.12. Finally, the *Initial Return (Y)* ranged from 0.01 to 7.67, with an average of 2.43 and a standard deviation of 1.99.

Classical Assumption Tests

Before conducting regression analysis, several classical assumption tests were performed to ensure the validity of the regression model.

Normality Test

The normality test was conducted to determine whether the residuals of the regression model were normally distributed. Using the Kolmogorov-Smirnov (K-S) test, the results showed an Asymp. Sig value of 0.063, which is greater than 0.05. This indicates that the data is normally distributed, and therefore meets the normality assumption.

Multicollinearity Test

Multicollinearity refers to a condition in which independent variables are highly linearly related. This test was conducted using the tolerance and Variance Inflation Factor (VIF) values. The results showed that all independent variables had tolerance values greater than 0.10 and VIF values less than 10 (e.g., Stock Price had tolerance 0.864 and VIF 1.158), which indicates the absence of multicollinearity in the model.

Heteroscedasticity Test

The heteroscedasticity test was conducted using the Spearman correlation method. A significance value greater than 0.05 indicates that there is no heteroscedasticity. Based on the correlation table, all variables showed significance values above 0.05, confirming that heteroscedasticity is not present in the regression model.

Autocorrelation Test

The Durbin-Watson (DW) test was used to detect autocorrelation. With a DW value of 1.850, and the criteria range being 1.7446 < DW < 2.2554, the result falls within the accepted range, indicating no autocorrelation in the regression residuals. This confirms that the observations in the dataset are independent of each other over time.

Hypothesis Testing

Simultaneous Significance Test (F-Test)

The F-test is used to determine whether all the independent variables in the regression model simultaneously have a significant effect on the dependent variable. According to Ghozali (2016), the F-test assesses whether the independent variables jointly influence the dependent variable. The criteria for the F-test are as follows: if the calculated F-value is greater than the F-table value and the significance level is less than 0.05, it indicates a simultaneous significant effect.

Table 2. Simultaneous Significance Test (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.443	4	0.111	2.727	0.035
Residual	3.130	77	0.041		
Total	3.574	81			

Dependent Variable: Initial Return

Predictors: (Constant), Stock Price, Offering Price, Company Age

Source : Data Processed (2025)

Based on the table above, the F-statistic is 2.727, which is greater than the F-table value of 2.48, and the significance value is 0.035 (< 0.05). Therefore, it can be concluded that the independent variables simultaneously have a significant effect on the dependent variable. This indicates that stock price, offering price, and company age collectively influence the initial return.

Partial Significance Test (t-Test)

The t-test is used to determine whether each independent variable individually has a significant effect on the dependent variable. According to Ghozali (2016), the t-test measures the impact of one independent variable in explaining the dependent variable while holding the others constant.

Table 3. Partial Significance Test (t-Test Results)

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	0.379	1.826		0.208	0.836
Stock Price	-0.101	0.035	-0.327	-2.849	0.006
Offering Price	-0.022	0.060	-0.080	-0.368	0.714
Company Age	0.00843	0.000	0.015	0.069	0.945

Dependent Variable: Initial Return

Source : Data Processed (2025)

Interpretation:

1. **Stock Price:** The significance value is 0.006, which is less than 0.05. This indicates that stock price has a significant negative effect on initial return.

2. **Offering Price:** The significance value is 0.714, which is greater than 0.05. This means the offering price does not have a significant effect on the initial return.
3. **Company Age:** The significance value is 0.945, which is also greater than 0.05, indicating that company age does not significantly influence the initial return.

Coefficient of Determination (R^2 Analysis)

Table 4. Coefficient of Determination (R^2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.352	0.124	0.079	0.201622

Predictors: (Constant), Stock Price, Offering Price, Company Age
Dependent Variable: Initial Return
Source : Data Processed (2025)

Based on Table 4, the adjusted R square value is 0.079, indicating that the independent variables—stock price, offering price, and company age—explain 7.9% of the variance in the initial return. The remaining 92.1% is explained by other variables not included in this study.

5. Discussion

The findings of this study indicate that stock price levels exhibit a significant negative influence on initial returns for Bank BCA during the 2020–2023 period. This result aligns with the Capital Asset Pricing Model (CAPM) as proposed by Sharpe (1964) and extended by Fama and French (1992), both of whom argued that asset returns are systematically influenced by risk and investor expectations, which are often embedded in stock price movements. As such, elevated stock prices may be interpreted by investors as reflecting diminished potential for short-term gains, thereby reducing the initial return. Similar conclusions were drawn by Isa et al. (2021), who identified that fluctuations in banking stock prices in Indonesia are closely tied to investor sentiment and broader market conditions rather than isolated firm-level indicators. This observation also resonates with Ross's (1976) Arbitrage Pricing Theory, which posits that multiple economic forces simultaneously shape asset returns.

Conversely, the insignificance of the offering value's impact on initial returns suggests that investors may not regard offering prices as sufficient signals of firm performance or value. This is consistent with findings by Jamaludin et al. (2017) and Khairiyah and Agustin (2021), who observed that in various Southeast Asian markets, the effects of macroeconomic and firm-specific variables such as IPO offering prices tend to be subdued in the short term. Mishkin (1996) further supports this interpretation, asserting that in emerging markets, structural inefficiencies and investor behavior can weaken the predictive power of such financial indicators. The slight negative coefficient observed, although statistically insignificant, suggests a general investor tendency to discount offerings perceived as overvalued.

The study also found that the age of the firm does not significantly affect initial returns. This result is in accordance with Bessler and Opfer (2004), who concluded

that firm age is not a reliable determinant of stock performance in the banking sector, where market responses are more reactive to external economic conditions and policy shifts. Similarly, Mokni and Youssef (2020) found that in BRICS countries, banking stock returns were more sensitive to macroeconomic variables than to firm-specific characteristics, including longevity. Lintner (1965) also highlighted that investors prioritize growth potential and market risk over historical corporate existence when constructing investment portfolios.

Despite the absence of significant individual effects from offering value and firm age, the simultaneous influence of stock price, offering value, and firm age collectively demonstrates a significant relationship with initial return, as evidenced by the F-test. This observation corroborates the multifactor approach posited by Chen, Roll, and Ross (1986), which asserts that asset returns are jointly influenced by an array of interrelated variables. Flannery and Protopapadakis (2002) similarly found that macroeconomic aggregates, when evaluated collectively, provide more explanatory power than when considered in isolation. Such collective effects underscore the importance of adopting a systemic view of financial markets rather than relying solely on single-variable analysis.

Furthermore, these findings substantiate the broader theoretical frameworks outlined by Levine and Zervos (1998) and Claessens and Laeven (2003), who emphasized the interconnectedness between financial market development, banking performance, and economic growth. The interaction among stock markets, banking institutions, and regulatory environments plays a critical role in shaping investor behavior and market performance. Beck and Levine (2004) expanded this perspective by demonstrating that well-functioning financial systems, characterized by integrated capital and banking markets, foster economic expansion and more efficient allocation of capital. The research by Alsharif and Sahabuddin (2024), which explored the dynamic relationships between interest rates, foreign exchange, and bank stock returns, further reinforces the notion that banking returns are influenced by multifaceted interactions within financial systems. Likewise, Rahman and Uddin (2009) demonstrated how financial markets in South Asia are subject to complex interdependencies, reinforcing the validity of evaluating variables collectively. Studies by Laduna and Sun'an (2018) and Zuhroh et al. (2021) also suggest that bank stock performance is strongly shaped by macroeconomic stability, reinforcing the necessity of examining multiple interrelated variables in stock return analyses.

In conclusion, the findings provide empirical support for multifactor asset pricing models and underscore the need to consider both firm-specific and macro-level factors in understanding bank stock return behavior. The significant simultaneous effect of the independent variables on initial returns reinforces the complexity and integrative nature of financial markets, particularly in the banking sector.

6. Conclusions

This study concludes that stock price levels significantly and negatively affect the initial return of Bank BCA's shares during the 2020–2023 period. This suggests that higher stock prices may reduce the potential for short-term returns, likely due to investor perceptions of overvaluation or limited growth opportunity in the short term. On the other hand, the offering value and the age of the firm did not exhibit any statistically significant impact on the initial return, indicating that investors might consider these variables less relevant or already priced into market expectations. Nevertheless, when analyzed collectively, stock price, offering value, and firm age have a significant simultaneous influence on the initial return, highlighting the importance of considering a combination of variables rather than examining them in isolation. These findings are consistent with established asset pricing theories such as the Capital Asset Pricing Model, Arbitrage Pricing Theory, and empirical research emphasizing multifactor influences in financial markets.

Future research could expand the scope of this study by incorporating additional macroeconomic variables such as interest rates, inflation, exchange rates, or political risk indicators, as suggested by Alsharif and Sahabuddin (2024) and Mokni and Youssef (2020), to better understand the broader economic forces affecting banking stock returns. Further, applying different statistical methods such as panel data regression, time-series econometrics, or machine learning approaches may offer more robust insights. Researchers are also encouraged to conduct comparative studies across multiple banks or financial institutions in Indonesia or other emerging markets to assess the generalizability of these findings. Moreover, integrating behavioral finance aspects, such as investor sentiment and market psychology, may offer a more comprehensive understanding of the dynamics behind initial returns, particularly in the context of IPO or stock revaluation events.

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