

# Financial Ratio Analysis and Stock Price Performance of Islamic Banks Listed on the Indonesia Stock Exchange

Original Article

Wartoyo Wartoyo<sup>1\*</sup>, Reisyah Zahra Munichlakhofa<sup>2</sup>, Makmuri Ahdi<sup>3</sup>

<sup>1-3</sup>UIN Siber Syekh Nurjati Cirebon, Indonesia

Email: <sup>1)</sup> [wartoyo@syekhnurjati.ac.id](mailto:wartoyo@syekhnurjati.ac.id), <sup>2)</sup> [reisyazahra022@gmail.com](mailto:reisyazahra022@gmail.com), <sup>3)</sup> [makmuriyadi@syekhnurjati.ac.id](mailto:makmuriyadi@syekhnurjati.ac.id)

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## Abstract

The rapid growth of Islamic banking in Indonesia has intensified interest in understanding the financial factors that drive market valuation and investor decision-making. This study aims to analyze the influence of Return on Assets (ROA), Financing to Deposit Ratio (FDR), and Operational Costs to Operational Income (BOPO) on stock prices in Sharia Commercial Banks (BUS) listed on the Indonesia Stock Exchange (IDX) for the 2021-2024 period. Using a quantitative approach and panel data regression analysis through the Eviews 13 software, this study samples 4 Sharia banks (BTPN Syariah, Bank Aladin Syariah, Bank Panin Dubai Syariah, and Bank Mega Syariah). The results show that partially, Return on Assets (X1) has a positive and significant effect on stock prices with a probability of 0.0007, confirming that profitability is the main attraction for investors. Meanwhile, partially Financing to Deposit Ratio (X2) does not affect stock prices with a probability of 0.3176, indicating that the market tends to be neutral towards the volume of fund distribution and prioritizes liquidity safety aspects. Furthermore, Operational Costs to Operating Income (X3) has a positive and significant effect on stock prices with a probability of 0.0037. This finding shows a unique phenomenon in which the market actually appreciates the increase in operational costs as a form of strategic investment by banks in digital technology transformation to strengthen long-term competitiveness.

**Keywords:** Financing to Deposit Ratio (FDR), Operating Expenses to Operating Income Ratio (BOPO), Return on Assets (ROA), Share Price.

## 1. Introduction

The proliferation of Islamic financial establishments in Indonesia over recent years has exhibited a remarkable and unparalleled trajectory of acceleration. Predicated upon a compendium disseminated by the Financial Services Authority (OJK), the accretion of Islamic banking assets persists in an upward continuum, which is indicative of an increasingly entrenched degree of public erudition and fiduciary confidence in the riba-proscribed fiscal apparatus. Notwithstanding, beneath the veneer of this asset augmentation, Islamic banking finds itself confronted with labyrinthine macroeconomic predicaments, most conspicuously in the endeavor to perpetuate the equilibrium of its financial soundness so as to remain consequential and alluring in the discernment of prospective stakeholders and capitulants within the capital marketplace (Kurniawan et al., 2024).

The role of banks in stabilizing the national economy cannot be ignored. In its function as a financial intermediation institution, banks are tasked with linking individuals or entities that have a financial surplus with individuals or entities that need funds. This process is carried out by collecting money obtained by the community through financial services, such



as savings accounts, checking accounts or deposits, then reallocated to the community through various types of financing (Prasetyandari, 2021).

National economic stability is not only supported by banking performance, but also by dynamics in the capital market sector. Financial markets play a crucial role in supporting economic progress, as they serve as a forum for companies to obtain funds and for investors to make profits. One of the instruments that is in high demand in the capital market is stocks. Stock prices describe how much the stock market is worth and are a benchmark of performance that investors pay close attention to. Therefore, it is important to understand the elements that affect the stock price, which is good for the management of the company as well as for the financiers (Rahma et al., 2021).

Equity valuations constitute the quintessential manifestation of a corporation's intrinsic worth and serve as an indispensable yardstick through which discerning capitulants appraise the prospective trajectories of a banking institution. Throughout the 2021–2024 temporal interval, the share valuations of Sharia Commercial Banks (BUS) have undergone conspicuously pronounced vicissitudes, attributable in considerable measure to the transitional epoch of fiscal recuperation succeeding the COVID-19 contagion. These oscillations in equity valuation are not solely circumscribed by prevailing global economic exigencies, but are profoundly contingent upon the periodically promulgated financial statement disclosures disseminated by the respective banking establishments themselves (Purwaningsih & Trianti, 2022).

One of the preeminent indices to which capitulants accord meticulous scrutiny is Return on Assets (ROA). This ratio delineates the aptitude of banking stewardship in judiciously optimizing all proprietary assets toward the generation of net pecuniary yield. Concomitantly, Return on Assets (ROA) is likewise employed as an evaluative instrument for appraising both the deficiencies and preponderances of a corporate entity through the rigorous interrogation of financial ratio diagnostics (Indah et al., 2024). Return on Assets (ROA) shows the extent to which management can manage the assets it owns. The greater the value of the Return on Assets (ROA), the better it shows the bank's ability to generate profits. In addition, the liquidity aspect is also very important in supporting the bank's ability to generate profits (Usman et al., 2024).

An empirical inquiry into the repercussions of Return on Assets (ROA) upon equity valuations corroborated that ROA exerts an affirmative and statistically consequential impingement upon prevailing share prices (Sari, 2021). This phenomenon transpires by virtue of the circumstance that an elevated rate of pecuniary remuneration rendered by a corporate entity renders it considerably more alluring to prospective capitulants. Consequently, the greater the magnitude of Return on Assets (ROA), which functions as a barometer of fiscal efficacy, the more substantial the lucrative yield engendered by the underlying assets. Corroborating scholarship has likewise been undertaken and substantiated that ROA exerts an affirmative and statistically cogent bearing upon equity valuations, insofar as considerable profitability portends the bestowal of remunerative dividend disbursements (Anwar, 2020; Dewi & Suwarno, 2022).

There are Islamic commercial banks that have an unhealthy Return on Assets (ROA) below Bank Indonesia's standard, which is 1.5%. This can be seen from the lowest value of Return on Assets (ROA) which reached -10.85% experienced by Bank Aladin Syariah (BANK) in the fourth quarter of 2022, as well as a negative value of -6.72% at Bank Panin Dubai Syariah (PNBS) in the fourth quarter of 2021. The Return on Asset (ROA) value, which is well below Bank Indonesia's minimum standard (1.5%), indicates that banks are experiencing significant operational losses, which are generally due to high investment costs of digital infrastructure

and loss reserves. This phenomenon is an important point in the study to see if investors continue to respond positively to stock prices even though the bank's profitability is in an unhealthy condition. Overall, this situation indicates that a number of Sharia Commercial Banks (BUS) have not fully utilized their assets to make a profit.

Nevertheless, pecuniary profitability does not subsist in isolation without due consideration of the intermediation function incumbent upon Islamic banking establishments. The Financing to Deposit Ratio (FDR) emerges as a diagnostic ratio to gauge the extent to which banking institutions are capable of channeling third-party depository funds (DPK) into productive financing disbursements. The high FDR indicates that banks are very active in carrying out their intermediation functions, but on the other hand also carry higher liquidity risks if they are not managed carefully by management (Suratnoaji, 2016).

According to the banking health regulations set by Bank Indonesia, the Financing to Deposit Ratio (FDR) for Islamic banks should be between 80%-90% or it can reach 95%-98% for fund optimization, but the upper limit of liquidity risk appears above 100%. However, there are still Sharia Commercial Banks (BUS) with a Financing to Deposit Ratio (FDR) that is outside this ideal limit. There are 2 Sharia Commercial Banks (BUS) listed on the Indonesia Stock Exchange with unhealthy and unhealthy Financing to Deposit Ratio (FDR), among which Bank Aladin Syariah recorded the highest ratio of 173.27% in the fourth quarter of 2022 and remained at a high figure (158.41%) until the second quarter of 2023, while Bank Panin Dubai Syariah throughout 2021 consistently recorded an FDR above 100%, ranging from 107.56% to 118.94%. This can also indicate that the funds that have been collected have not been managed properly to meet financing needs. The high Financing to Deposit Ratio (FDR) figure shows that the total financing is much more than existing third-party funds, so it has the potential to cause liquidity issues because banks have to find other ways to cover the shortfall of funds with higher costs.

Research conducted found that FDRs had no significant effect on stock prices, as investors tended to focus more on the quality of the asset rather than the quantity of financing disbursed. Meanwhile, in his study, it was found that there was a significant influence, especially on banks that have large core capital, because the volume of financing is considered as the engine of future profits (Fitriani et al., 2022; Lubis et al., 2024).

Supplementary to pecuniary profitability and liquidity, operational efficacy, as proxied through the Operational Expenditure to Operational Revenue ratio (BOPO), constitutes another pivotal variable of considerable consequence. Theoretically, the more attenuated the BOPO coefficient, the more judicious and expedient the banking institution shall prove in the stewardship of its commercial undertakings. However, the phenomenon in the 2021-2024 period shows a unique thing, where Islamic banking makes large operational expenditures to strengthen information technology infrastructure to face the digitalization era (Chen, 2021).

Pursuant to the regulatory stipulations promulgated by Bank Indonesia, the BOPO ratio connotes a commendable degree of operational efficacy provided its magnitude remains below the 96% threshold. Notwithstanding, there persist certain Sharia Commercial Banks (BUS) that continue to register an inordinately elevated Operational Expenditure to Operational Revenue (BOPO) coefficient. There are 2 Sharia Commercial Banks (BUS) listed on the Indonesia Stock Exchange with unhealthy Operating Costs to Operating Income (BOPO), including Bank Aladin Syariah from 2021 to the fourth quarter of 2024. In 2021, the BOPO ratio showed an increasing trend in each quarter, peaking at 428.4% in the fourth quarter. Entering 2022, this figure is still very high, although it began to show a gradual decline from 497.13% in the first quarter to 354.75% at the end of the year. This trend of efficiency improvement continues in 2023 and 2024, where the BOPO figure was successfully

suppressed to reach a low level of 109.29% in the fourth quarter of 2024. This indicates that there are efforts to restructure the bank's operational performance over time.

Then Bank Panin Dubai in 2021 showed a much more stable ratio in the range of 98.91% to 99.54% in the first three quarters. However, PNBS experienced a drastic surge in the fourth quarter of 2021 to reach 202.74%, which indicates an unhealthy increase in operational costs at the end of the period. The condition of BOPO, which is in the Unhealthy category, shows the inability of management to control the company's cost burden, both in terms of labor costs, promotions, and technological infrastructure. Theoretically, the high BOPO figure is a bad signal for the market because it reflects poor efficiency governance that can threaten the sustainability of the company's profits (Kholis et al., 2022).

A review of previous research on BOPO shows contradictory results. and found that BOPO had a positive effect on stock prices, indicating that the market appreciated the operational costs incurred for expansion and innovation. On the other hand, it shows insignificant results in certain banking sectors, which indicates that cost efficiency is not always a major consideration for investors in the short term (Alsharif, 2021; Nugroho & Rachmaniyah, 2020; Wijono et al., 2023).

Massive digital transformations, such as the use of QRIS and mobile banking applications, have forced Islamic banks to significantly increase their operational costs. This creates an anomaly in this study, where even though BOPO has increased, the share prices of several Islamic banks are still in demand by investors. This phenomenon is interesting to study more deeply because it shows a paradigm shift in investors who are starting to see operational costs as a long-term strategic investment, not just a burden to reduce profits (Saron, 2019).

The difference in research results from previous researchers and the dynamics of Islamic banking after the pandemic are strong reasons for conducting this research. Most of the previous research was conducted in the pre-pandemic period or during the pandemic, so the results of the research in the 2021-2024 recovery phase will make a new contribution to the Islamic accounting and banking literature in Indonesia, especially in understanding the behavior of capital market investors (Wartoyo et al., 2025).

## 2. Literature Review

### 2.1. Return on Asset (ROA) and Stock Price

Return on Asset (ROA) constitutes a profitability metric that gauges a corporate entity's aptitude in engendering pecuniary yield from its aggregate asset base. Consonant with signaling theory, an elevated ROA transmits auspicious intimations of robust fiscal soundness to prospective capitulants, which correspondingly precipitates heightened demand for the institution's equity and propels an upward trajectory in its valuation. Sundry empirical investigations have corroborated a statistically cogent and affirmative nexus between ROA and share price, intimating that establishments endowed with superior asset profitability are predisposed to command more appreciable esteem within the capital marketplace.

### 2.2. Financing to Deposit Ratio (FDR) and Stock Price

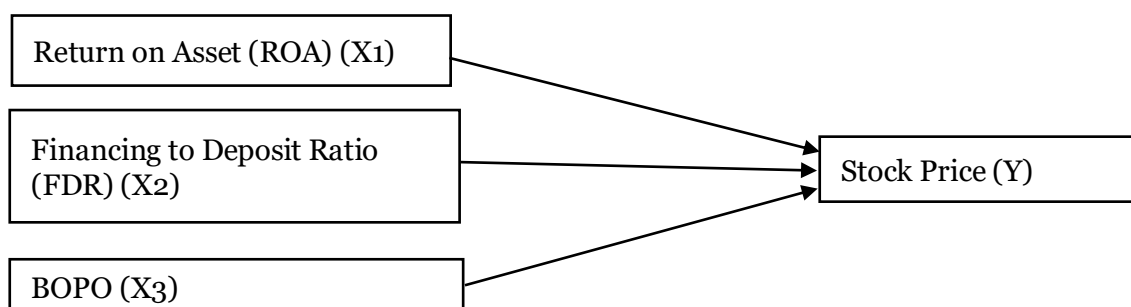
Financing to Deposit Ratio (FDR) is a liquidity indicator specific to Islamic banking that reflects the proportion of third-party funds channeled as financing. A higher FDR indicates more aggressive financing activity, which can signal growth potential and improve investor confidence, thereby positively influencing stock price. However, excessively high FDR levels may raise liquidity risk concerns among investors, potentially dampening stock price performance. Prior studies have shown mixed results, with the direction of the effect

depending largely on the prevailing economic conditions and the bank's overall risk management.

### 2.3. BOPO and Stock Price

BOPO, or the operational efficiency ratio (*Beban Operasional terhadap Pendapatan Operasional*), measures the proportion of operational costs relative to operational income. A lower BOPO ratio reflects greater operational efficiency, which is associated with improved profitability and stronger financial health. From an investor's perspective, an efficient bank is considered a lower-risk investment, which tends to positively influence stock price. Empirical evidence generally supports a negative relationship between BOPO and stock price, meaning that as operational inefficiency increases, stock price tends to decline.

### 2.4. Research Framework



**Figure 1. Research Model Framework**

Collectively, these three variables (ROA, FDR, and BOPO) represent key dimensions of banking performance, namely profitability, liquidity, and operational efficiency, all of which are fundamental determinants of investor valuation. The framework adopted in this study aligns with the CAMEL framework and prior literature in Islamic banking research, which consistently identifies financial ratio indicators as significant predictors of stock price movement.

## 3. Methods

This investigation employs a quantitative epistemological framework wherein data procurement is effectuated through documentary scrutiny of the financial statements of Sharia Commercial Banks spanning the 2021–2024 temporal interval, sourced from the Indonesia Stock Exchange (IDX) and pertinent authoritative repositories. The research populace encompassed 4 sharia banking institutions, wherein specimen delineation was executed through saturated sampling methodology, culminating in an aggregate of 64 observational units. The collated data were subsequently interrogated employing panel data regression methodology with the facilitation of Eviews 13 software to corroborate the interrelational bearing amongst the variables under deliberation.

The methodological apparatus deployed in this inquiry is predicated upon a panel data-based paradigm. Panel data regression constitutes an analytical modality that amalgamates data in the configuration of time series alongside cross-sectional strata. Panel data regression interrogation is characteristically employed to synthesize data delineated in perpetual succession across manifold temporal intervals. Among the salient merits of deploying panel data regression analysis is its proclivity to accommodate the heterogeneous discrepancies manifesting across individual cross-sectional units, whilst concurrently furnishing more

copious and substantive informational yield in contradistinction to rudimentary time series examination. Time series data encompasses observations derived from a singular entity traversing a designated temporal continuum, whereas cross-sectional data comprises a multiplicity of entities circumscribed within a stipulated period (Indrasari & Yulianto, 2025).

The categorical provenance of data in this inquiry is of a secondary disposition. Consonant with Sugiyono's postulation, secondary data pertains to intelligence procured through tertiary intermediaries bearing a proximate affiliation with the investigation, or alternatively through repositories that do not directly furnish the data within the immediate process of collection. This process usually involves other people or documents, such as books, journal articles, and documentation such as audio recordings and photos as evidence that this research was actually carried out using secondary data in the study (Sugiyono, 2017). Return on Asset (ROA), Financing to Deposit Ratio (FDR), and Operating Costs to Operating Income (BOPO) data from the financial statements of Islamic commercial bank companies published by the OJK within the period the last 4 years, namely 2021-2024. Stock price data is sourced from Yahoo Finance and each bank's financial statements. Based on the theory and research model carried out, as well as some of the research results that have been explained earlier, the framework of thought can be compiled as follows.

## 4. Results and Discussion

### 4.1. Research Results

The data interrogation methodologies deployed in this inquiry encompass descriptive statistical scrutiny, stationarity diagnostics, and panel data regression model selection examinations, comprising the Chow Test, Hausman Test, and Lagrange Multiplier Test. Subsequent thereto, classical assumption diagnostics were administered, culminating in hypothesis corroboration through t-test examination and the coefficient of determination. This sequential analytical compendium is contrived to empirically substantiate the bearing of independent variables comprising Return on Asset (ROA), Financing to Deposit Ratio (FDR), and Operational Expenditure to Operational Revenue (BOPO) upon Share Valuation as the contingent variable.

#### 4.1.1. Descriptive Statistical Analysis Results

Descriptive statistical scrutiny is employed to furnish a comprehensive delineation of the characteristic attributes of the research data, encompassing minimum, maximum, arithmetic mean, median, standard deviation, and aggregate summation values.

**Table 1. Results of Descriptive Statistical Data Analysis**

	Y	X1	X2	X3
Mean	1504.516	2.003281	85.45219	116.3670
Median	1537.500	1.825000	90.52000	77.15500
Maximum	3580.000	11.57000	173.2700	497.1300
Minimum	50.00000	-10.85000	0.000000	56.81000
Std. Dev	1077.060	5.357321	31.90988	93.46333
Observations	64	64	64	64

Source: the author's data processing results using EViews 13

Based on Table 1, variable Y (Stock Price) has an average value (mean) of stock prices from the four Islamic banks that are sampled is IDR 1,504.51. The maximum price of Y (Share Price) is IDR 3,580 at Bank BTPN Syariah in the 4th quarter of 2021. Meanwhile, the

minimum price is IDR 50 at Bank Panin Dubai Syariah in the 4th quarter of 2024. The standard deviation value of variable Y (Stock Price) was obtained at 1,077.06.

The independent variables in this inquiry encompass Return on Assets (ROA), Financing to Deposit Ratio (FDR), and Operational Expenditure to Operational Revenue (BOPO). Return on Assets (ROA), designated as variable X1, yielded an arithmetic mean of 2.00%, connoting that for every Rp100 of aggregate assets administered by the banking institution, a net pecuniary yield of Rp2 is engendered. This mean magnitude situates the profitability disposition of the specimen banks within the commendably salubrious categorization. The maximum magnitude of variable X1 (ROA) is registered at 11.57000, whilst the minimum magnitude of variable X1 (ROA) is documented at -10.85000, attributable precisely to Bank Aladin Syariah in the fourth quarter of 2022. Correspondingly, the standard deviation pertaining to variable X1 was ascertained at 5.357321.

Variable X2 (FDR) obtained an average value of 85.45219 or equivalent to 85.45%, indicating that the sample was in the healthy category. The maximum value of X2 (FDR) is 173.2700 or equivalent to 173.27% at Bank Aladin Syariah in the 4th quarter of 2022 and the minimum value of the variable X2 (FDR) is 0.000000. Then, the standard deviation on the X2 variable (FDR) is 31.90988.

The X3 variable (BOPO) obtained an average value of 116.3670 or equivalent to 116.36% which is included in the unhealthy category. The maximum value of the X3 variable (BOPO) is 497.1300, equivalent to 497.13% of Bank Aladin Syariah in the 3rd quarter of 2022 and the minimum value of the X3 variable (BOPO) is 56.81000. Then, the standard deviation on the X3 variable was obtained as 93.46333.

#### 4.1.2. Stationarity Test

The stationarity test is to check whether the mean and variance of the data remain constant over time, as well as whether the coincidence between two or more time-series data depends solely on the time interval between two or more of those periods. In this study, the stationarity test was carried out using the unit root testing method Augmented Dickey-Fuller (ADF) (Armeina & Alam, 2019).

Predicated upon the outcomes of the unit root examination, all variables encompassed within this inquiry, both contingent and independent in disposition, were ascertained to be non-stationary at the level stratum. This is corroborated by a probability coefficient surpassing the stipulated significance threshold of 5% (0.05). In order to redress these conditions, the diagnostic interrogation was extended to the first difference stratum. The resultant analysis at this echelon reveals that all research variables, namely X1 (ROA), X2 (FDR), X3 (BOPO), and Y (Share Valuation), yield probability coefficients falling beneath the 0.05 demarcation. Consequently, all research data has attained stationarity at the first difference stratum.

#### 4.1.3. Panel Data Model Selection Test

##### a. Chow Test

The Chow test constitutes a methodological apparatus contrived to ascertain the most apposite panel data regression model for deployment, specifically adjudicating between the Common Effect Model (CEM) and the Fixed Effect Model (FEM) in the estimation of panel data (Basuki, 2021).

Ho = Common Effect Model (CEM) if the probability coefficient exceeds 0.05

H1 = Fixed Effect Model (FEM) if the probability coefficient falls beneath 0.05

Predicated upon the resultant findings of the analysis, the probability magnitude of the cross-section F was ascertained at 0.0000, whilst the cross-section chi-square value was

likewise registered at 0.0000. Considering that both magnitudes are subordinate to the stipulated significance threshold of 0.05, H1 is consequently ratified. Thus, the most judicious and congruous model to be enlisted is the Fixed Effect Model (FEM).

**b. Hausman Test**

The Hausman test constitutes a methodological instrument employed to adjudicate which model proves more congruous between the Random Effects Model (REM) and the Fixed Effects Model (FEM) in the computation of panel data.

Ho = Random Effect Model (REM) if the probability coefficient surpasses 0.05

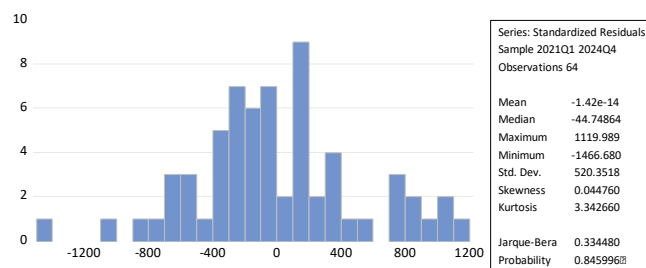
H1 = Fixed Effect Model (FEM) if the probability coefficient falls beneath 0.05

Predicated upon the resultant findings of the analysis, the probability magnitude of the cross-section random was ascertained at 0.0000. Given that this magnitude is subordinate to the stipulated significance threshold of 0.05, H1 is consequently ratified. Thus, the most judicious and congruous model to be enlisted is the Fixed Effect Model (FEM), whereupon the administration of the Lagrange Multiplier (LM) test is rendered superfluous.

**4.1.4. Classical Assumption Test**

**A. Normality Test**

The normality examination constitutes an indispensable prerequisite that must be satisfactorily fulfilled within the regression analytical framework. In this inquiry, it was administered through the Jarque-Bera methodology to corroborate whether the residual distribution of the regression model has duly conformed to the normality postulation.



**Figure 2. Normality Test Results**

Source: the author's data processing results using eviews 13

As delineated in Figure 2, the outcomes of the normality examination employing the Jarque-Bera methodology yield a statistical significance magnitude of 0.845996, which surpasses the 0.05 threshold. It may therefore be conclusively inferred that this regression model adheres to a normal distributional configuration. Consequently, this regression model is adjudged to be valid and methodologically tenable for deployment in subsequent hypothesis interrogation, given that the aggregate observational data comprising 64 specimen units has been ascertained to conform to a normal distributional pattern.

**B. Multicollinearity Test**

A multicollinearity test is required before starting panel regression model estimation, Multicollinearity occurs when several independent variables in the model have a very strong relationship or correlation with each other. This can make the parameter estimation results inconsistent and reduce the level of detail of the analysis obtained.

**Table 2. Multicollinearity Test Results**

	<b>X1 (LENGTH)</b>	<b>X2 (FDR)</b>	<b>X3 (BOPO)</b>
X1 (LENGTH)	1.000000	0.142980	-0.684333
X2 (FDR)	0.142980	1.000000	-0.471219
X3 (BOPO)	-0.684333	-0.471219	1.000000

Source: the author's data processing results using EViews 13

Table 2, it shows that the regression model does not experience correlation problems between independent variables. This can be seen from the value of the correlation coefficient between variables (X1, X2, and X3) which are all lower than 0.80 or 0.90. The largest correlation value found between X1 and X3 is -0.684333, which is still within the specified tolerance limit. From these results, it can be concluded that there are no significant symptoms of multicollinearity in this study model.

**C. Heteroscedasticity Test**

Heteroscedasticity denotes a circumstance wherein the magnitude of the error term within a model lacks uniformity across each observational datum. In the Glejser heteroscedasticity diagnostic, should the significance coefficient surpass the 0.05 demarcation, no symptomatic manifestations of heteroscedasticity are discerned. Conversely, should the significance coefficient fall beneath the 0.05 threshold, symptomatic manifestations of heteroscedasticity are duly detected.

**Table 3. Heteroscedasticity Test Results**

<b>Heteroscedasticity Test</b>	<b>Statistics</b>	<b>Prob. Chi-Square</b>
Obs*R-squared	2.669092	0.4455

Source: the author's data processing results using eviews 13

Predicated upon Table 3, the resultant findings of the heteroscedasticity diagnostic administered through the Glejser methodology corroborate that the research model does not succumb to heteroscedasticity predicaments. This is discernible from the Chi-Square probability coefficient, which attains a magnitude of 0.4455. Given that this probability value surpasses the 0.05 demarcation, the null hypothesis is not ratified and the alternative hypothesis is consequently repudiated. From the outcomes of the regression interrogation, it may be conclusively inferred that the specimen data is devoid of any heteroscedasticity affliction.

**D. Autocorrelation Test**

A meritorious regression model is one that is emancipated from autocorrelation afflictions. The methodology deployed to discern the presence or absence of autocorrelation may be effectuated through the Breusch-Godfrey Serial Correlation LM Test. The adjudication is predicated upon the Chi-Square probability coefficient (Obs R-squared), wherein should the magnitude surpass 0.05, the model is deemed unencumbered by autocorrelation, whilst a magnitude falling beneath 0.05 connotes the manifestation of autocorrelation within the regression model.

**Table 4. Autocorrelation Test Results**

<b>Breusch-Godfrey Serial Correlation LM Test:</b>	<b>Statistics</b>	<b>Prob. Chi-Square(2)</b>
Obs*R-squared	5.687795	0.0582

Source: data processing results using eviews 13

Predicated upon Table 4, the resultant findings of the autocorrelation diagnostic yield a Probability Chi-Square magnitude of 0.0582, which surpasses the 0.05 demarcation. Consequently, it may be conclusively inferred that the regression model is devoid of any symptomatic manifestations of autocorrelation.

#### 4.1.5. Hypothesis Testing

##### A. Partial Test (T Test)

The inaugural statistical examination is the partial diagnostic (t-test), which is employed to ascertain whether an individual independent variable exerts a statistically consequential bearing upon the contingent variable. Should the significance coefficient of the t-test (Sig. t) fall beneath the stipulated significance echelon (alpha) of 0.05, the null hypothesis is consequently repudiated, connoting that the independent variable genuinely impinges upon the contingent variable in a substantively discernible manner. The adjudicative criteria governing the partial examination are as follows (Wau et al., 2022):

- a. If  $t \text{ statistic} > t \text{ table}$  or  $p\text{-value} < 0.05$ , then  $H_1$  is accepted or  $H_0$  is rejected. This means stating that independent variables have a significant influence individually on dependent variables.
- b. If  $t \text{ statistic} < t \text{ of the table}$  or  $p\text{-value} > 0.05$ , then  $H_1$  is rejected or  $H_0$  is accepted. This means stating that independent variables do not have a significant influence individually on dependent variables.

**Table 5. Partial Test Results**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	938.2387	434.9676	2.157031	0.0352
X1	136.6873	38.20951	3.577313	0.0007
X2	-2.917888	2.894170	-1.008195	0.3176
X3	4.655904	1.538172	3.026906	0.0037

Source: the author's data processing results using EViews 13

Predicated upon Table 5, the resultant findings of the t-test administered upon variable X1 (ROA) reveal that the t-statistic of 3.577313 surpasses the t-table magnitude of 1.670649, whilst the probability coefficient of 0.0007 falls beneath the 0.05 demarcation. It may therefore be conclusively inferred that  $H_1$  is ratified, connoting that the ROA variable exerts an affirmative and statistically consequential impingement upon share valuation. The resultant findings of the t-test administered upon variable X2 (FDR) reveal that the t-statistic of -1.008195 is subordinate to the t-table magnitude of 1.670649, and the probability coefficient of 0.3176 surpasses the 0.05 threshold. It may consequently be inferred that  $H_2$  is repudiated, connoting that the FDR variable bears an adverse yet statistically inconsequential bearing upon share valuation; in other words, X2 (FDR) exerts no discernible impingement upon equity valuations. Subsequently, the resultant findings of the t-test administered upon the BOPO variable reveal that the t-statistic of 3.026906 surpasses the t-table magnitude of 1.670649, whilst the probability coefficient of 0.0037 falls beneath the 0.05 demarcation. It may therefore be conclusively inferred that  $H_3$  is ratified, connoting that the BOPO variable exerts an affirmative and statistically consequential impingement upon share valuation.

##### B. Coefficient of Determination Test (R2)

The coefficient of determination examination ( $R^2$ ) is deployed to quantify the magnitude of the model's aptitude in elucidating the contingent variable. The coefficient of determination value is circumscribed between zero and one ( $0 < R^2 < 1$ ). An attenuated  $R^2$  magnitude connotes that the capacity of the independent variables to explicate the contingent

variable is considerably constrained, owing to an inherent deficiency within R2, namely its susceptibility to bias in proportion to the enumeration of independent variables incorporated within the model. Each supplementary addition of a singular variable precipitates an incremental augmentation in R2, irrespective of whether the variable exerts a statistically consequential bearing upon the contingent variable. Consequently, in this inquiry, the adjusted R2 was enlisted as the preeminent evaluative metric. Should the adjusted R2 magnitude approximate unity (1), the more commendable and efficacious the model's aptitude in elucidating the contingent variable.

**Table 6. Determination Coefficient Test Results**

Remarks	Value
R-squared	0.766593
Adjusted R-squared	0.742023

Source: the results of the researcher's data processing using EViews 13

Predicated upon Table 6, the resultant findings of the coefficient of determination examination reveal that the Adjusted R-squared magnitude attained is 0.742023. This figure intimates that 74.20% of the variation or fluctuation manifesting within the contingent variable (Share Valuation) is collectively explicable through the independent variables, namely ROA, FDR, and BOPO. Concurrently, the residual 25.80% (100% - 74.20%) constitutes variation attributable to extraneous factors or variables beyond the circumscription of the incumbent research model that remain unidentified within the prevailing analytical framework. The considerable proximity of the Adjusted R-squared magnitude to unity (1) is reflective of the model's commendable aptitude in faithfully representing the empirical data pertaining to equity valuation oscillations throughout the observational interval.

#### 4.2. Discussion

The resultant findings of statistical interrogation upon the Return on Assets (ROA) variable corroborate that Return on Assets (ROA) exerts an affirmative and statistically consequential impingement upon share valuation, substantiating that pecuniary profitability constitutes the preeminent determinant of corporate worth. These empirical findings intimate that an elevated Return on Assets (ROA) magnitude is emblematic of the triumphant stewardship of Sharia Commercial Bank administration in deploying productive assets with judicious efficacy. In Islamic bank operations, most of the assets come from the distribution of profit-sharing and buying and selling financing, such as *mudharabah*, *musyarakah*, and *murabahah*. The bank's ability to manage public funds through these instruments will result in maximum margins and profit sharing, which contributes to an increase in the company's overall net profit.

Consistent net profit growth will provide certainty for shareholders as part of that profit will be distributed as dividends. The expectation of dividends is what attracts investors to invest in the bank. In accordance with the law of supply and demand in the capital market, the high interest and demand from investors to own profit-generating bank shares will lead to an increase in the stock price in the market.

Information on a strong Return on Assets (ROA) serves as a management communication tool to reduce information asymmetry in the market. Investors respond to these signals of financial health by increasing demand for stocks, which are in accordance with the laws of the market, driving up stock prices. A clear example can be seen in BTPN Syariah, which is able to maintain market confidence through profit stability from the sharia micro segment.

The resultant findings of this inquiry are consonant with the scholarship undertaken by Dewi and Suwarno (2022), which corroborates that Return on Assets (ROA) exerts a statistically consequential affirmative bearing upon share valuations. This is attributable to ROA's function as a profitability barometer, reflecting the judiciousness of asset utilization efficacy. Furthermore, the investigation by Anwar (2020) likewise documented analogous empirical findings, wherein an elevated ROA augmented the fiduciary conviction of rationally-disposed capitulants. Notwithstanding, these findings stand in contradistinction to those of Sari (2021), who ascertained that ROA exerts an adverse impingement upon share valuations, ostensibly attributable to contextual discrepancies inherent within non-financial corporate establishments. In the context of Islamic banks, these results are consistent with Saputra (2022), which identifies ROA as a strong predictor of stock prices on the Indonesia Stock Exchange.

The resultant findings of statistical interrogation upon the Financing to Deposit Ratio (FDR) variable corroborate that the Financing to Deposit Ratio (FDR) exerts no discernible impingement upon share valuations. These empirical findings intimate that oscillations in the financing disbursement ratio of Islamic banking establishments do not directly precipitate consequential repercussions upon equity valuations within the bourse. Capitulants tend to accord diminished scrutiny toward vicissitudes in the disbursement ratio (FDR), as they predominantly orient their deliberative attention toward asset quality and net pecuniary yield (ROA) rather than the sheer quantum of funds disbursed. Currently, investors in the Islamic capital market are more cautious after the pandemic. Investors are aware that an overly high FDR can increase revenues, but it also increases the risk of default and liquidity crises. For example, the stock price of a sample bank tends to be stable even though its FDR ratio is rising. Investors don't immediately buy stocks when banks distribute a lot of financing, because investors want to see the financing become real profit.

Changes in the FDR ratio do not directly affect the stock price. The share price of Islamic banks is currently more stable and is not too affected by FDR fluctuations. Investors have more complex judgments and don't just look at one aspect. Investors consider a variety of factors before making an investment decision. In some cases, investors prefer to wait until the financing is completely liquid into real profit. For investors, incoming installments are more valuable than outgoing loans. This shows that investors have clear priorities in assessing the performance of Islamic banks.

This inquiry is consonant with antecedent scholarship undertaken by Fitriani et al. (2022), which ascertained that FDR exerts no discernible impingement upon share valuations. This is ostensibly attributable to the predisposition of capitulants within the Indonesia Stock Exchange to accord greater precedence to profitability considerations over liquidity metrics, particularly within the contextual purview of Islamic banking establishments that frequently contend with the arduous exigencies of MSME financing disbursement. Thus, these results suggest that during the 2021-2024 period, liquidity signals were less dominant compared to profitability, possibly because volatile economic conditions made investors more conservative.

However, these findings contradict research on FDR, which shows that FDR has a significant effect on the stock prices of post-merger Islamic banks, as it reflects effective intermediation performance. Furthermore, studies by Lubis et al. (2024) and Saron (2021) also report that liquidity, as measured by FDR, affects stock returns. This is because higher liquidity risk encourages investors to demand higher returns.

The results of statistical testing on the variable Operating Costs to Operating Income (BOPO) show that Operating Costs to Operating Income (BOPO) have a positive and significant effect on stock prices. In theory, high operating costs should make the stock price

fall. However, investors now see high operational costs as a good investment to maintain competitiveness in the digital era. Investors know that if a bank is not willing to spend large fees on innovations such as QRIS, E-Wallet, and mobile banking, then it will lose out on competition with competitors. Therefore, high operational costs actually make investors interested in investing their capital, so that the stock price rises.

This can be clearly seen in Bank Aladin Syariah's strategy in the 1st quarter of 2022, the bank's operating costs are very high, which is 497.13%. These costs are not caused by management failures, but are used for productive expenses, such as the cost of training employees to be tech-savvy, the cost of digital marketing to acquire new customers, and the cost of maintaining servers and cloud infrastructure. Investors realize that if they want to withdraw their shares just because these fees are high, investors will miss out on opportunities when the bank is successful in the future. Instead, investors want to invest their capital because they see the potential for long-term growth. For the market, it is better for banks to spend big on digital innovation than to be cost-efficient but lose market share and become outdated.

This research is in line with Signal Theory, which explains that management can provide positive signals through voluntary disclosure, where high BOPO may be interpreted as a bank's commitment to digital innovation or expansion that increases investor confidence. The concept of stock prices is a reflection of operational performance. Research by supports this because efficiency that appears poor in ratio may actually support long-term growth (Asykarulloh et al., 2023).

This inquiry is consonant with antecedent scholarship undertaken by Nugroho and Rachmaniyah (2020), which ascertained that BOPO exerts a statistically consequential affirmative impingement upon share valuations, insofar as capitulants perceive operational efficacy as an indispensable barometer of productive capacity. Furthermore, a corroborating investigation by Alsharif (2021) likewise documented that BOPO exerts an affirmative bearing upon the equity performance of Saudi Arabian banking establishments, given that elevated operational expenditures are frequently construed as concomitant with technological infrastructure investments. However, research conducted by Fitriani et al. (2022) found that BOPO had a negative effect, and Wijono et al. (2023) found it to be insignificant, perhaps due to the different context of conventional banks. In Islamic banks, BOPO as an efficiency ratio should be below 96%, but these positive findings show that investors accept high BOPO as a growth signal, consistent with the 2021-2024 period marked by post-COVID-19 digital transformation.

## 5. Conclusion

Based on the results of the analysis and discussion that has been carried out, from an operational vantage point, an elevated Return on Assets (ROA) is emblematic of the triumphant stewardship of management in the judicious administration of productive assets. Through the provision of profit-sharing-based financing and buying and selling transactions such as Mudharabah, Musyarakah, and Murabahah. That way, banks can get optimal revenue margins. This success then creates expectations for a high dividend distribution. Ultimately, this increases the demand for stocks and drives up stock prices in the market. Changes in the ratio of financing disbursements are no longer the main factor in stock price movements. Investors prefer to be neutral on changes in financing disbursement ratios because they prioritize the security, liquidity, and quality of assets rather than only paying attention to the high amount of disbursement. This can be seen in the case of Bank Aladin Syariah in the fourth

quarter of 2022. Although the financing disbursement ratio increased very sharply to 173.27%, which in theory was considered very risky, Bank Aladin Syariah's share price remained stable and did not decrease.

This proves that today's market no longer uses conventional liquidity ratios as the only measure to assess a company's value. Investors tend to focus on long-term gains rather than on how quickly funds are disbursed, which could increase the risk of financial problems. So, when looking at liquidity measured with FDR, this is considered just additional information that is not influential enough to make the stock price change significantly. Investors no longer see the increase in bank operating costs or BOPO as an administrative waste, but rather as a strategic investment to support digital innovation. This includes the introduction of QRIS features, e-wallets, and human resources (HR) training to understand technology. The goal is to maintain the bank's competitiveness with competitors. Investors realize that high operational costs, as shown by Bank Aladin Syariah with a BOPO of 448.70%, are an important investment to build a robust digital ecosystem. Investors believe that these investments not only attract funds, but also make investors compete to get involved. This is because investors believe that banks that are able to adapt to technology will gain a much higher market share and stock value in the future. Investors are carefully seeing that this investment will bring huge profits in the future.

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