# The Effect of Profitability (ROA) And Liquidity (CR) on Firm Value (PBY) (Study at One of The Selected Airlines on the IDX)

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#### **ABSTRACT**

This study aims to assess the impact of Profitability and Liquidity on the valuation of PT Indonesia Air Asia Tbk from 2017 to 2021. The present study falls under the category of quantitative research. The population under study comprises the financial statements of PT Indonesia Air Asia Tbk. The sample utilized in this study is derived from PT Indonesia Air Asia Tbk's quarterly financial report, employing a time series design sampling technique. The data collection techniques employed in this study involve using financial reports available on the official website of the Indonesia Stock Exchange, specifically www.idx.co.id. The employed analytical methodology is multiple linear analysis.

The findings indicate no significant positive relationship between Profitability and Firm Value, as evidenced by a t-count value of 0.142 and a significance value of 0.889, more significant than the threshold of 0.05. However, Liquidity has a significant positive impact on Firm Value, as indicated by a t-count of 3.446 and a significance value of 0.003, which is less than the threshold of 0.05. Furthermore, when both Profitability and Liquidity are considered together, they significantly positively influence Firm Value, with a significance value of 0.003 and an R square of 49.6%.

The research findings propose that corporations consider the comprehensive market and industry conditions when developing their business strategies. Ongoing assessment of the organization's fiscal performance is imperative in order to discern prospective enhancements and address potential challenges that may manifest in the future. By comprehending the impact of Return on Assets (ROA) and Capital Ratio (CR) on Price-to-Book Value (PBV), organizations can formulate more suitable business strategies and prioritize the attainment of sustainable growth and enhancement of corporate value.

Keywords: Profitability, Liquidity and Company Value

## INTRODUCTION

The COVID-19 pandemic has substantially impacted the aviation industry in Indonesia. Numerous airlines have encountered financial insolvency in light of the ongoing pandemic, exemplified by the impending bankruptcy of Philippine Airlines. It is noteworthy Indonesian airlines were previously engaged in a competitive environment characterized by lowcost ticket offerings, resulting in a decline in the viability of numerous airlines. Due to the limited number of airlines, the aviation industry faced a significant risk of financial insolvency. Subsequently, the airline management endeavored to identify remedies to restore ticket prices to a distribution conforming to the standard curve.

As the competition waned, ticket prices reverted to a more moderate level, eliciting discontent among consumers who had previously benefited from affordable ticket prices. Protests emerged not solely from air transportation consumers but also from various sectors, including hotels and restaurants. Furthermore, allegations of airlines participating in oligopolistic practices and establishing ticket prices considered harmful to the economy's circulation also surfaced.

Before resolving the situation, the COVID-19 pandemic exacerbated the scenario, leading to a multitude of exceptional challenges encountered

by nearly all airlines. Despite the prevailing difficulties, the domestic airlines operating in Indonesia continue to exhibit substantial potential for fostering the growth and advancement of the aviation industry within the nation. This phenomenon instills a sense of optimism and promise for the aviation business. Cargo and charter transport operations are subject to health protocols, requiring passengers to provide evidence of a COVID-free health history through PCR testing or other specified prerequisites.

Although the availability of inexpensive ticket fares presents advantageous prospects, it is essential to note that there are still specific prerequisites that must be fulfilled to partake in certain flights. These prerequisites often incur substantial expenses nearly equivalent to the cost of the tickets themselves. Moreover, the everevolving realm of the capital market has encountered obstacles, notably the rise of influencers and auto-rejects in specific stocks and promising sectors that necessitate investors' comprehension, such as the aviation industry.

The presence of the capital market in Indonesia holds significant importance for companies, as issuing shares on the stock exchange serves as an enticing factor for potential investors to allocate their resources toward the company. This condition, in turn, facilitates the provision of funds necessary for the company's operational endeavors. The capital market in Indonesia plays a crucial role in

fostering economic development by promoting investment opportunities and facilitating the process of going public to attract potential investors.

Within the capital market, the Price-to-Book Value (PBV) assumes a critical role as a metric utilized by investors and stakeholders to evaluate the performance and stability of a company. A more excellent PBV value signifies a favorable perception of the company's prospects and operational performance by the market, rendering it more appealing to investors and consequently leading to an increase in stock prices.

The onset of 2019 witnessed a catastrophic event that profoundly impacted the global economy, resulting in a significant number of corporate insolvencies due to the pandemic. PT. Indonesia Air Asia, a company that operates in the aviation industry, has been significantly affected by the COVID-19 pandemic. In the fourth quarter of 2020, the company incurred substantial losses totaling RM2.44 billion, equivalent to approximately Rp 8.5 trillion. The worldwide decline in revenue by 92% resulted in a contraction of the global economy by -2.07% in the entirety of 2020, accompanied by a quarterly decrease of 2.19% in the fourth quarter of the same year.

The COVID-19 pandemic has profoundly affected various aspects of society, including work, education, and overall economic activity. As a result, the Indonesian economy has

experienced a deceleration, subsequently impacting the country's aviation sector. The study centered on the utilization of the Price-to-Book Value (PBV) metric as a means of assessing the market value of a company. Investors who have allocated their funds to a company tend to perceive higher performance levels in companies with elevated PBV ratios. A more excellent PBV ratio signifies heightened market confidence in the company's prospects, resulting in augmented demand and subsequent upward pressure on stock prices.

The ever-evolving business and investment environment requires constant drive among economic actors to maximize company performance. In the present context, the strategic significance of Return on Assets (ROA) and Current Ratio (CR) lies in their ability to manage the trade-off between profitability and liquidity effectively. (Kusmawati et al., 2022; Wulandari et al., 2020) A high return on assets (ROA) indicates the effective utilization of assets in generating profits. In contrast, a solid current ratio (CR) reflects the company's capacity to meet its shortterm obligations quickly. (Aditia et al., 2021)

The research problem in this study is to assess the impact of profitability (return on assets) and liquidity (current ratio) on the company value (price-to-book value) of PT Indonesia Air Asia Tbk, based on existing phenomena and empirical studies mentioned in the background. The objective of this study is to

examine and assess the extent of the impact of profitability, as measured by return on assets (ROA), and liquidity, as measured by the current ratio (CR), on the valuation of PT Indonesia Air Asia Tbk, as indicated by the price-to-book value (PBV).

#### METHOD

This study employs quantitative methods and verification techniques. Descriptive research aims to ascertain the significance of an independent variable, whether it is a single variable or multiple variables, without engaging in comparisons or establishing connections with other variables. The verification method is a technique employed to assess the impact of multiple variables in order to test hypotheses through the application of mathematical computations.

The research focuses on the subject of population. lf an individual desires to comprehensively investigate all the constituent elements within a particular research domain, then said research can be classified as a population study. The population under investigation in this study refers to the valuation of the airlines belonging to the company on the IDX (Indonesia Stock Exchange). The sample is a subset of the population selected to accurately reflect the population being studied in terms of its number and characteristics. The study's sample

consists of a single company. The company under investigation is PT Indonesia Air Asia Tbk.

Moreover, the researcher employed the classical assumption test methodology when examining the collected sample data. The classical assumption refers to a set of hypothesis tests conducted to evaluate the viability of a regression model before conducting subsequent The tests conducted in this study encompass a normality test, a multicollinearity test, an autocorrelation test, and heteroscedasticity test. Researchers can establish the reliability and accuracy of the regression model employed in this study by conducting the conventional assumption test. This test enables the analysis of the association between Return on Assets (ROA) and Current Ratio (CR) with Firm Value.

The present study employed two distinct data analysis methods, specifically descriptive analysis and verification analysis. Descriptive analysis is a research method employed to analyze collected data by providing a detailed description of the data without aiming to draw overarching conclusions or generalizations. The process of presenting data descriptively involves the utilization of various visual aids such as tables, graphs, pie charts, and pictograms. Additionally, statistical measures such as mode calculations, calculations, deciles, mean percentiles, and distribution calculations are employed to provide а comprehensive

understanding of the data. These calculations determine the average values and present the data in a meaningful and informative manner. This study examines two independent variables: Return on Assets (ROA) and Current Ratio (CR).

Regarding the dependent variable, expressly referred to as Firm Value. The verification method is a statistical approach that examines the impact of multiple variables in order to test hypotheses through data calculations. Through the analysis process, it becomes evident to what extent the independent variables influence the dependent variable.

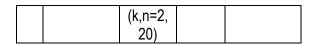
The methodology employed in this study involves utilizing multiple linear regression analysis as the verification technique. Through this analysis, scholars can comprehensively comprehend the correlation between Return on Assets (ROA) and Current Ratio (CR) with Firm Value. Furthermore. comprehensive examination of the Coefficient of Determination was conducted to assess the extent to which the independent variables, specifically Return on Assets (ROA) and Current Ratio (CR), account for the variability observed in Firm Value. The outcomes of this analysis will offer a more comprehensive understanding of the degree to which ROA (Return on Assets) and CR (Current Ratio) contribute to the determination of Company Value.

## RESULT and DISCUSSION

This study employs the classical assumption test to establish the reliability and accuracy of the multiple linear regression model utilized for analyzing the relationship between the independent variables, namely Profitability (measured by ROA) and Liquidity (measured by CR), and the dependent variable, Firm Value (measured by PBV). (Wulandari et al., 2020) The classical assumption test holds significance as it verifies the fulfillment of assumptions that underlie the regression model, thereby establishing the validity and reliability of the obtained analysis results.

Table 1. Classic assumption test

N o.	Items	Criteri a	Resu It	Decision
1.	Normality test	Kolmo gorov- Smirno v Test Sig value > 0,05	0,869	Normal
2.	Multicollin earity Test	Coeffic ients VIF 1 < > 10	X1= 1.476 X2= 1.476	Multicollin earity does not occur
3.	Heterosce dasticity Test	Scatter plot	Data meny ebar	Heterosce dasticity does not occur
4.	Autocorrel ation Test	Durbin Watso n by looking at Du and dl values.	1.313	There is no autocorrel ation



The findings presented in Table 1 indicate that the Kolmogorov-Smirnov test results demonstrate a normal distribution for both the dependent variable model and the independent variables mentioned above. The regression model employed demonstrates efficacy, as evidenced by asymptotic values in the table. The significance level (sig) of 0.869 is greater than the predetermined threshold of 0.05, indicating that the normality test is satisfied, and the data can be considered normally distributed.

The tolerance test results indicate that the independent variable exhibits a tolerance value 0.678, significantly more significant than the threshold of 0.10. This finding suggests the absence of multicollinearity for the ROA and CR variables. The VIF calculation results indicate that the values of the ROA and CR variables are 1.476, which is less than 10.00. Hence, based on the findings presented in the table, as mentioned earlier, the independent and dependent variables exhibit no issues in assessing multicollinearity.

The findings of this study suggest that the distribution of dots lacks a discernible pattern. Consequently, the scatterplot graph above provides evidence to support the conclusion that the regression model under investigation does not exhibit heteroscedasticity or demonstrates a low heteroscedasticity test. This result implies a

similarity in the variance of residuals across different observations. In order to ensure the continuity of this research, it can be asserted that the presence of heteroscedasticity is absent.

The Durbin-Watson statistic in this study is 1.313. Autocorrelation is a phenomenon that arises when there exists a correlation between the residuals of a particular observation and the residuals of preceding observations. This phenomenon could introduce inaccuracies in estimating the regression coefficients and undermine the validity of the analysis findings. Nevertheless, the Durbin-Watson statistic in this study yielded a value of 1.313, falling within the acceptable range of 2 ± (2/N), where N represents the total number of samples. This observation suggests that the regression model exhibits no autocorrelation, implying that the data can be independent.

The findings presented in Table 1 suggest that the regression model employed in this research is both valid and reliable in examining the association between Return on Assets (ROA) and Debt to Equity (DER) with firm value. The findings from the normality, tolerance, VIF, scatterplot, and Durbin-Watson tests indicate that there are no statistically significant issues, such as non-normal distribution, multicollinearity, heteroscedasticity, and autocorrelation, present in this regression model. Hence, the outcomes derived from the regression analysis can be deemed trustworthy and offer a precise

comprehension of the magnitude of the impact exerted by Return on Assets (ROA) and Debt-to-Equity Ratio (DER) on the valuation of chosen banking enterprises listed on the IDX (Indonesia Stock Exchange) within the timeframe spanning from 2016 to 2021.

Table 2. Multiple regression test results

No.	Varia ble	Unstand ardized Coefficie nts	t	Si g	Decis ion
	Const anta	-2.643	- 1.5 67	0.1 35	
1.	Retur n on Asset	0.823	0.1 42	0.8 89	Signifi cant
2.	Curre n Ratio	9.117	3.4 46	0.0 03	Signifi cant
R	0.704 a				
R Squ are	0.496	Error	0,504		

Based on the findings derived from the data presented in Table 2, it is possible to construct the multiple linear regression equation in the following manner:

$$Y = -2,643 + 0,823X1 - 9,117X2 + e$$

In instances where both Profitability (ROA) and Liquidity (CR) are zero, the mathematical representation of firm value (PBV) is consistently -2,643. The regression coefficient for profitability (ROA) is 0.823. This result implies that a 1% increase in profitability will result in a 0.823%

increase in the company's value, assuming that all other variables remain constant (ceteris paribus). The coefficient of liquidity regression (CR) is determined to be 9.117. This result implies that a 1% increase in profitability will result in a 9.117% increase in firm value under the assumption that all other variables remain constant (ceteris paribus). The coefficient magnitudes of the independent variables, Profitability (X1), represented by ROA, and Liquidity (X2), represented by CR, are examined about the dependent variable, firm value (Y), represented by PBV.

Based on the summary of the calculation results presented in Table 4.10, it is evident that the coefficient of determination (R Square) is 0.496, equivalent to 49.6%. The current study utilizes an Adjusted R Square value of 0.437, corresponding to 43.7% in percentage terms. This result implies that the calculation of the multiple linear regression model, which determines the size of the dependent variable (firm value), is influenced by a combined contribution of 43.7% from all independent variables considered in this study. The remaining 50.4% contribution is attributed to variables that were not included in the analysis conducted in this research.

The results from comparing the F-count and F-table indicate that the F-count value of 8.363 is greater than the F-table value of 3.55. As a result, the alternative hypothesis (Ha) is accepted, while the null hypothesis (Ho) is rejected. The joint or

individual impact of Profitability (ROA) and Liquidity (CR) on firm value (PBV) is deemed significant. In addition, upon examining the significance level of the F test, it is observed that the value of 0.003 is less than the predetermined threshold of 0.05. Consequently, the null hypothesis (Ho) is rejected, and the alternative hypothesis (Ha) is accepted based on the decisions made. This result implies that the combination of Profitability and Liquidity impacts a firm's valuation.

The company's capacity to distribute dividends and consequently impact its overall value is directly influenced by the magnitude of its profits. Similarly to liquidity, the company is deemed capable of promptly fulfilling its short-term obligations and distributing higher dividends to its shareholders. This scenario has the potential to instill trust in prospective investors, thereby encouraging them to invest in the company to augment its value.

Based on the findings of this study, it is recommended that airline companies listed on the IDX should intensify their endeavors to enhance both profitability and liquidity. (Alonso-Conde & Rojo-Suárez, 2020; Cho et al., 2019) Organizations can allocate resources to projects that have the potential to enhance profitability and operational efficiency, thereby leading to improved return on assets (ROA). (Markonah et al., 2020; Samo & Murad, 2019) Furthermore, companies must uphold favorable liquidity levels

and effectively utilize financial resources to ensure the timely fulfillment of obligations and offer appealing dividends to shareholders. Through the enhancement of financial performance via these two factors, the organization can augment its corporate value and deliver advantages to stakeholders, encompassing shareholders and prospective investors. (., 2019; Hanrahan et al., 2018; Hoang et al., 2019)

Corporations must consistently consider market conditions and the broader industry landscape When enhancing Return on Assets (ROA) and Capital Ratio (CR). (Amoa-Gyarteng, 2021; Lu et al., 2020) The selection of an appropriate strategy should be tailored to the unique circumstances and requirements of the organization. (Abdelaziz et al., 2022; Jasmani, 2019) Furthermore, it is imperative to consistently monitor and assess the organization's financial performance to identify prospective enhancements and address potential challenges that may arise in subsequent periods. (Hoang et al., 2019)

#### CONCLUSION

Between 2016 and 2021, a research study was undertaken to examine the impact of Profitability (Return on Assets) and Liquidity (Current Ratio) on the Firm Value (Price-to-Book Value) of a specific airline company listed on the Indonesia

Stock Exchange (IDX). The primary objective of this study was to gain insights into the impact of two financial ratios on the valuation of a company while also offering a comprehensive assessment of the company's financial performance.

The findings of this research demonstrate that the variables of Profitability (Return on Assets) and Liquidity (Current Ratio) collectively exert a notable influence on a firm's valuation. The findings of this study indicate a positive relationship between profitability, liquidity, and Company Value, suggesting that an increase in Profitability and Liquidity is associated with an increase in Company Value. It is recommended that companies prioritize the optimal configuration of their capital structure, the capacity to generate profits, and the accessibility of funds to fulfill short-term obligations to enhance the company's value.

The findings of this study offer significant insights for airline management and relevant stakeholders. The prioritization of strategies to enhance profitability and liquidity is imperative for company management to augment the Price-to-Book Value (PBV) ratio. The enhancement of return on assets (ROA) can be achieved by augmentation of operational efficiency, revenue generation, and asset management. In the context of corporate operations, company liquidity can be enhanced through strategic optimization of financial resources.

The organization should enhance its endeavors to enhance its profitability. It is

imperative to contemplate strategies that have the potential to enhance revenue, operational efficiency, and asset management. Organizations can allocate resources and focus on projects that offer significant potential for generating a substantial rate of return. By doing so, they can effectively optimize resource utilization and enhance their return on assets (ROA). Companies must manage and sustain their liquidity effectively. Liquidity levels can be enhanced by optimizing financial resources, encompassing the management of debt and equity. It is imperative to exercise caution when utilizing debt to prevent excessive encumbrance of the company's financial obligations.

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