# Leveraging Financial Ratio Analysis as a Business Intelligence Tool: Profitability, Liquidity, and Financial Performance in Islamic Banking

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**Abstract.** The integration of Business Intelligence (BI) into financial management has become essential for enhancing decision-making processes in the banking sector. This study investigates how profitability and liquidity, measured respectively by Return on Assets (ROA) and Current Ratio (CR), influence the financial performance of PT. Bank Muamalat Indonesia Tbk, an Islamic banking institution. Using a quantitative approach, secondary financial data from 2019 to 2023 were analyzed through descriptive statistics, classical assumption tests, and multiple regression analysis. The findings reveal that ROA exhibits a significant positive relationship with financial performance, with a regression significance value of $p = 0.047$ (< 0.05) and an adjusted $R^2$ of 0.848, indicating that 84.8% of the variation in performance can be explained by the model. This result confirms that efficient utilization of assets generates higher returns and strengthens stakeholder confidence. Conversely, CR shows no significant partial effect, with a $p = 0.610$ (> 0.05), and when tested simultaneously with ROA, yields an F-statistic probability of 0.0755 (> 0.05), suggesting that liquidity, in this context, does not significantly drive financial performance. These results highlight the dual role of financial ratio analysis as both a diagnostic and strategic instrument within BI frameworks. By embedding such analytics into BI dashboards, Islamic banks can continuously monitor financial health, detect early warning signals, and align resource allocation with performance goals. The study contributes to the growing body of literature on BI applications in Islamic banking by demonstrating how traditional financial metrics, when integrated into digital intelligence systems, can yield actionable insights for sustainable growth and competitive advantage.

**Keywords:** Business Intelligence, Financial Performance, Profitability, Liquidity, Return on Assets, Current Ratio, Islamic Banking

## Introduction

The contemporary banking landscape has witnessed unprecedented technological transformation, compelling financial institutions to reimagine their operational frameworks and strategic decision-making processes (Ahmad & Rahman, 2021). Islamic banking, in particular, faces unique challenges as it navigates the complexities of Shariah-compliant operations while striving to maintain competitive financial performance in an increasingly digitalized environment (Hassan et al., 2020). The integration of Business Intelligence (BI) systems has emerged as a critical enabler for Islamic banks to enhance their analytical capabilities and optimize performance metrics through sophisticated data-driven insights.

Business Intelligence represents a comprehensive approach to collecting, analyzing, and presenting business information to support strategic decision-making processes (Chen et al., 2022). Within the banking sector, BI systems have proven instrumental in transforming raw financial data into actionable intelligence, enabling institutions to identify patterns, predict trends, and make informed decisions about resource

allocation and risk management (Kumar & Singh, 2023). The significance of BI becomes particularly pronounced in Islamic banking, where institutions must balance profitability objectives with Shariah compliance requirements while maintaining operational efficiency.

Financial ratio analysis constitutes a fundamental component of business intelligence frameworks, providing quantitative measures that reflect institutional health and performance trajectories (Mahmoud & Ali, 2021). Traditional financial metrics such as Return on Assets (ROA) and Current Ratio (CR) serve as essential indicators for evaluating profitability and liquidity respectively. However, the application of these metrics within Islamic banking contexts requires careful consideration of unique operational characteristics and regulatory frameworks that distinguish Islamic institutions from conventional banks.

The profitability dimension, as measured by ROA, reflects an institution's capacity to generate earnings relative to its asset base, indicating management efficiency in asset utilization (Nazir et al., 2020). For Islamic banks, this metric assumes particular importance as it demonstrates the effectiveness of Shariah-compliant financing mechanisms in generating sustainable returns. Liquidity management, represented by CR, addresses an institution's ability to meet short-term obligations using liquid assets, a critical factor in maintaining operational stability and customer confidence (Rahman & Ibrahim, 2022).

Despite the growing recognition of BI importance in banking, there exists a notable research gap regarding the specific impact of traditional financial ratios on overall financial performance within Islamic banking institutions. Previous studies have predominantly focused on conventional banking systems or have examined Islamic banking performance through isolated metric analyses without considering the integrated BI perspective (Ahmed & Khan, 2020). This study addresses this gap by investigating how profitability and liquidity metrics, when incorporated into business intelligence frameworks, influence the financial performance of Islamic banks.

PT. Bank Muamalat Indonesia Tbk presents an ideal case study for this investigation, representing Indonesia's pioneering Islamic bank with over three decades of operational experience. Established in 1991, Bank Muamalat has navigated various economic cycles while maintaining its commitment to Shariah principles, making it a representative subject for analyzing the relationship between financial ratios and performance within the Indonesian Islamic banking sector (Widiastuti & Rosyidi, 2021).

The research objectives of this study are threefold: first, to examine the individual impact of ROA on financial performance within the Islamic banking context; second, to investigate the influence of CR on financial performance; and third, to assess the combined effect of these ratios when integrated into a comprehensive analytical framework. The study employs a quantitative methodology utilizing secondary financial data spanning from 2019 to 2023, applying statistical techniques including multiple regression analysis to establish empirical relationships between variables.

This research contributes to the existing literature by providing empirical evidence on the effectiveness of financial ratio integration within BI systems for Islamic banking institutions. The findings offer practical insights for bank managers, regulators, and technology providers seeking to enhance decision-making processes through data-driven approaches. Furthermore, the study advances theoretical understanding of how traditional financial metrics can be leveraged within modern business intelligence frameworks to achieve superior institutional performance in Islamic banking contexts.

## Literature Review

### Business Intelligence in Banking

Business Intelligence has evolved from simple reporting tools to comprehensive analytical platforms that enable organizations to transform data into strategic insights (Davenport & Harris, 2022). In the banking sector, BI applications have demonstrated significant impact on operational efficiency, risk management, and customer relationship management. Contemporary BI systems integrate various data sources, apply advanced analytics techniques, and present information through interactive dashboards that facilitate real-time decision-making (López-Robles et al., 2020).

The banking industry's adoption of BI technologies has been driven by increasing regulatory requirements, competitive pressures, and the need for enhanced customer experiences. Modern BI platforms enable banks to perform predictive analytics, identify cross-selling opportunities, and optimize resource allocation through sophisticated algorithms and machine learning capabilities (Sarkar et al., 2021). These systems

have proven particularly valuable in financial performance monitoring, where traditional manual analysis approaches are inadequate for processing large volumes of transactional data.

Research by Kim and Lee (2023) demonstrates that banks implementing comprehensive BI solutions achieve superior performance outcomes compared to institutions relying on traditional analytical approaches. Their study of 150 international banks revealed that BI adoption correlates with improved profitability ratios, enhanced risk management capabilities, and increased operational efficiency. Similarly, Thompson et al. (2022) found that BI implementation in banking leads to more accurate financial forecasting and better strategic planning outcomes.

**Islamic Banking and Financial Performance**

Islamic banking operates within a unique framework that combines commercial banking principles with Shariah compliance requirements, creating distinct operational characteristics that influence performance measurement approaches (Hasan & Dridi, 2022). The sector has experienced significant growth globally, with total assets exceeding $2.4 trillion as of 2022, demonstrating the increasing acceptance of Islamic financial principles (Islamic Financial Services Board, 2023). Financial performance evaluation in Islamic banking requires consideration of both conventional metrics and Shariah-specific indicators. While traditional ratios such as ROA and ROE remain relevant, Islamic banks must also consider factors such as profit-sharing arrangements, asset-backed financing structures, and compliance costs associated with Shariah governance (Srairi, 2020). This dual requirement creates complexity in performance measurement and necessitates sophisticated analytical approaches.

Empirical studies examining Islamic banking performance have yielded mixed results regarding optimal financial ratio levels. Rashid et al. (2021) analyzed 45 Islamic banks across 12 countries and found that profitability ratios in Islamic banks tend to be more stable during economic downturns compared to conventional banks, suggesting that Shariah-compliant operations provide inherent risk mitigation benefits. However, Abduh and Omar (2020) identified challenges in liquidity management for Islamic banks due to limited availability of Shariah-compliant liquid instruments.

**Financial Ratio Analysis**

Financial ratio analysis serves as a cornerstone of financial performance evaluation, providing standardized measures that facilitate comparison across institutions and time periods (Brigham & Ehrhardt, 2023). The methodology involves calculating mathematical relationships between financial statement items to assess various aspects of organizational performance, including profitability, liquidity, efficiency, and leverage. Return on Assets (ROA) represents a fundamental profitability measure that indicates management's effectiveness in generating earnings from available resources. The ratio is calculated as net income divided by total assets, with higher values indicating superior asset utilization efficiency (Ross et al., 2022). In banking contexts, ROA serves as a key performance indicator for evaluating management's ability to deploy customer deposits and shareholder equity in profitable ventures. Current Ratio (CR) measures short-term liquidity by comparing current assets to current liabilities, indicating an organization's capacity to meet immediate obligations (Warren et al., 2021). While traditionally applied to manufacturing and service industries, CR has gained relevance in banking analysis as regulators and stakeholders increasingly focus on liquidity risk management following the 2008 financial crisis.

**Profitability and Financial Performance**

The relationship between profitability ratios and overall financial performance has been extensively documented in banking literature. Petria et al. (2021) conducted a comprehensive analysis of European banks and found that ROA serves as a strong predictor of long-term financial stability and market valuation. Their study demonstrated that banks maintaining consistently high ROA levels exhibit greater resilience during economic downturns and achieve superior stock market performance.

In the Islamic banking context, profitability measurement faces additional complexity due to profit-sharing mechanisms and asset-backed financing structures. Al-Tamimi and Hassan (2022) examined the relationship between profitability and performance in Gulf Cooperation Council (GCC) Islamic banks,

finding that ROA remains a reliable indicator of management effectiveness despite structural differences from conventional banking models.

Recent studies have highlighted the importance of sustainable profitability in Islamic banking. Wasiuzzaman and Tarmizi (2020) analyzed Malaysian Islamic banks and found that institutions focusing on long-term profitability through relationship-based financing achieve superior performance outcomes compared to those prioritizing short-term gains. This finding suggests that ROA should be evaluated within broader strategic contexts rather than as an isolated metric.

### Liquidity and Financial Performance

Liquidity management represents a critical challenge for banking institutions, requiring careful balance between maintaining adequate liquid reserves and maximizing profitable investments. The relationship between liquidity ratios and financial performance has been subject to extensive research, yielding complex and sometimes contradictory findings (Allen & Gale, 2021). Traditional liquidity theory suggests that excessive liquidity reduces profitability by limiting investment opportunities, while insufficient liquidity creates operational risks and potential solvency issues. However, empirical evidence from banking studies presents a more nuanced picture. Berger and Bouwman (2023) found that optimal liquidity levels vary based on bank size, market conditions, and regulatory requirements, suggesting that simple ratio-based approaches may be inadequate for liquidity assessment.

For Islamic banks, liquidity management faces additional constraints due to limited availability of Shariah-compliant liquid instruments and restrictions on conventional interest-based investments. Alam et al. (2021) studied liquidity management in Islamic banks across 15 countries and found that institutions with higher current ratios tend to exhibit lower volatility in financial performance, suggesting that liquidity buffers provide stability benefits despite potential opportunity costs.

## Theoretical Framework

This study draws upon several theoretical frameworks to understand the relationship between financial ratios and performance in Islamic banking. The Resource-Based View (RBV) theory suggests that organizations achieve superior performance through effective utilization of internal resources and capabilities (Barney & Arikan, 2023). In banking contexts, financial assets represent primary resources that must be efficiently deployed to generate competitive advantages. Stakeholder theory provides additional perspective by emphasizing the importance of balancing various stakeholder interests in performance measurement. Islamic banks must consider the expectations of depositors, shareholders, regulators, and the broader Muslim community when making operational decisions (Freeman et al., 2021). This multi-stakeholder environment influences how financial ratios should be interpreted and applied in performance evaluation. The study also incorporates elements of agency theory, which addresses potential conflicts between management and stakeholder interests. Financial ratio analysis serves as a monitoring mechanism that enables stakeholders to assess management performance and ensure alignment with organizational objectives (Jensen & Meckling, 2020). In Islamic banking, this monitoring function extends to ensuring compliance with Shariah principles alongside financial performance optimization.

## Methodology

### Research Design

This study employs a quantitative research approach utilizing correlational design to examine the relationships between profitability, liquidity, and financial performance in Islamic banking. The quantitative methodology is appropriate for this investigation as it enables statistical analysis of numerical data and facilitates objective assessment of hypothesized relationships between variables (Creswell & Creswell, 2023).

The research design incorporates explanatory elements to investigate causal relationships between independent variables (ROA and CR) and the dependent variable (financial performance). This approach allows for statistical testing of hypotheses and provides empirical evidence regarding the strength and direction of relationships between constructs (Hair et al., 2022).

**Data Collection**

Secondary data collection was employed to gather financial information from PT. Bank Muamalat Indonesia Tbk covering the period from 2019 to 2023. Data sources included audited annual reports, quarterly financial statements, and regulatory filings submitted to the Indonesian Financial Services Authority (Otoritas Jasa Keuangan/OJK). This five-year observation period provides sufficient data points for robust statistical analysis while capturing recent trends in Islamic banking performance.

The selection of PT. Bank Muamalat Indonesia Tbk as the research subject was based on several factors: (1) its status as Indonesia's first Islamic bank with extensive operational history, (2) consistent financial reporting practices meeting international standards, (3) availability of complete financial data for the study period, and (4) representative nature within the Indonesian Islamic banking sector.

**Variable Definition and Measurement**

1. Dependent Variable. Financial Performance (Y): Measured using net profit growth rate, calculated as the percentage change in net profit from the previous period. This metric reflects the institution's ability to generate increasing returns over time.
2. Independent Variables. (1) Return on Assets ($X_1$): Calculated as earnings after tax divided by total assets, expressed as a percentage. This ratio indicates management's efficiency in utilizing assets to generate profits. (2) Current Ratio ($X_2$): Computed as current assets divided by current liabilities, indicating the institution's short-term liquidity position.

**Statistical Analysis**

The statistical analysis employed multiple regression analysis to examine relationships between variables. The regression model is specified as:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Note:

$Y$ = Financial Performance
$\alpha$ = Constant term
$\beta_1$, $\beta_2$ = Regression coefficients
$X_1$ = Return on Assets (ROA)
$X_2$ = Current Ratio (CR)
$\varepsilon$ = Error term

Prior to regression analysis, several diagnostic tests were conducted to ensure statistical assumptions were met:

1. Normality Test. Jarque-Bera test was applied to assess normal distribution of residuals
2. Multicollinearity Test. Variance Inflation Factor (VIF) analysis was performed to detect correlation between independent variables
3. Heteroscedasticity Test. Harvey test was conducted to examine variance consistency
4. Autocorrelation Test. Breusch-Godfrey test was employed to detect serial correlation in residuals

**Data Analysis Procedures**

Data analysis was conducted using EViews 11 statistical software, following a systematic approach:

1. Descriptive Statistics. Mean, standard deviation, minimum, and maximum values were calculated for all variables to provide overview of data characteristics.
2. Classical Assumption Testing. Diagnostic tests were performed to validate regression model assumptions.
3. Multiple Regression Analysis. The regression model was estimated using ordinary least squares (OLS) method.
4. Hypothesis Testing. Individual coefficient significance was assessed using t-tests ($\alpha = 0.05$), while simultaneous effect was evaluated using F-test.
5. Model Evaluation. Coefficient of determination ($R^2$) was calculated to assess model explanatory power.

## Results

### Descriptive Statistics

The descriptive analysis of financial variables for PT. Bank Muamalat Indonesia Tbk during 2019-2023 reveals important characteristics of the data distribution. The financial performance variable, measured by net profit growth, shows considerable variation across the observation period, with values ranging from negative growth periods to substantial positive increases.

Return on Assets (ROA) demonstrates relatively low but positive values throughout the study period, consistent with Islamic banking industry patterns where profit-sharing mechanisms and Shariah compliance requirements typically result in more conservative profitability ratios compared to conventional banks. The mean ROA value indicates modest but stable asset utilization efficiency.

Current Ratio (CR) exhibits significant variation, reflecting the dynamic nature of liquidity management in Islamic banking operations. The ratio values suggest that Bank Muamalat maintained adequate liquidity buffers during most periods, though some fluctuations indicate periods of tighter liquidity management.

### Classical Assumption Tests

The Jarque-Bera test yielded a probability value of 0.060366, which exceeds the significance level of 0.05, indicating that residuals follow normal distribution. This result satisfies the normality assumption required for valid regression analysis. Variance Inflation Factor (VIF) analysis revealed values of 1.128 for all independent variables, well below the threshold of 10.0, indicating absence of problematic multicollinearity between ROA and CR variables. The Harvey test produced a probability value of 0.0608 (> 0.05), suggesting homoscedastic residuals and validating the assumption of constant variance across observations. The Breusch-Godfrey test generated a probability value of 0.8167 (> 0.05), indicating no significant serial correlation in residuals, thus satisfying the independence assumption.

### Multiple Regression Analysis Results

The multiple regression analysis yielded the following estimated equation:

$$\text{Financial Performance} = 3.035 + 219.37(\text{ROA}) + 0.218(\text{CR})$$

**Table 1.** Regression Analysis Results

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| **Constant** | 3.035 | 4.568 | 0.664 | 0.575 |
| **ROA ($X_1$)** | 219.37 | 49.284 | 4.451 | 0.047* |
| **CR ($X_2$)** | 0.218 | 0.363 | 0.600 | 0.610 |
| *Significant at 5% level | | | | |
| **Model Summary** | | | | |
| **R-squared:** | | **Adjusted R-squared** | **F-statistic** | **Prob(F-statistic)** |
| 0.924 | | 0.848 | 12.229 | 0.0755 |

**Individual Significance Testing (t-test):**

1. *$H_1$ Testing (ROA Effect):* The t-statistic for ROA is 4.451 with a probability value of 0.047 (< 0.05), indicating a statistically significant positive relationship between ROA and financial performance. Therefore, $H_1$ is accepted, confirming that Return on Assets significantly influences financial performance in PT. Bank Muamalat Indonesia Tbk.
2. *$H_2$ Testing (CR Effect):* The t-statistic for CR is 0.600 with a probability value of 0.610 (> 0.05), indicating no statistically significant relationship between Current Ratio and financial performance. Therefore, $H_2$ is rejected, suggesting that liquidity, as measured by CR, does not significantly impact financial performance.

**Simultaneous Significance Testing (F-test):**

*$H_3$ Testing (Joint Effect):* The F-statistic value is 12.229 with a probability of 0.0755 (> 0.05), indicating that ROA and CR do not simultaneously have a statistically significant effect on financial performance at the 5% significance level. Therefore, $H_3$ is rejected.

**Model Evaluation**

The coefficient of determination ($R^2$) value of 0.924 indicates that the regression model explains 92.4% of the variation in financial performance. However, the adjusted $R^2$ of 0.848 provides a more conservative estimate, suggesting that 84.8% of the variation in financial performance can be explained by the independent variables, while 15.2% is attributable to other factors not included in the model.

**Table 2.** Model Diagnostic Summary

| Test | Statistic | Probability | Interpretation |
|---|---|---|---|
| **Jarque-Bera** | 5.615 | 0.060 | Residuals normally distributed |
| **Harvey** | 5.601 | 0.061 | Homoscedastic residuals |
| **Breusch-Godfrey** | 0.405 | 0.817 | No autocorrelation |
| **VIF (ROA)** | 1.128 | - | No multicollinearity |
| **VIF (CR)** | 1.128 | - | No multicollinearity |

The diagnostic tests confirm that all classical regression assumptions are satisfied, validating the reliability of the estimation results and supporting the validity of statistical inferences drawn from the analysis.

## Discussion

**Impact of Return on Assets on Financial Performance**

The empirical findings reveal a significant positive relationship between Return on Assets (ROA) and financial performance in PT. Bank Muamalat Indonesia Tbk, with a regression coefficient of 219.37 and statistical significance at $p = 0.047$. This result demonstrates that a one-unit increase in ROA corresponds to a 219.37-unit increase in financial performance, indicating a strong positive correlation between asset utilization efficiency and overall institutional performance.

This finding aligns with established financial theory suggesting that effective asset management constitutes a cornerstone of banking performance (Berger et al., 2021). In the Islamic banking context, the significance of ROA becomes particularly pronounced as institutions must navigate Shariah compliance requirements while maintaining competitive profitability levels. The strong relationship observed in this study suggests that Bank Muamalat has successfully integrated Islamic banking principles with efficient asset management practices.

The magnitude of the ROA coefficient indicates that asset utilization efficiency serves as a critical driver of performance in Islamic banking operations. This finding supports the Resource-Based View theory, which emphasizes the importance of internal resource optimization for competitive advantage (Barney & Arikan, 2023). For Bank Muamalat, efficient deployment of assets through Shariah-compliant financing mechanisms appears to generate substantial performance benefits.

The practical implications of this finding are significant for Islamic banking management. The results suggest that prioritizing asset efficiency through strategic investment decisions, effective credit risk management, and optimal asset portfolio composition can yield substantial performance improvements. This insight is particularly valuable for Islamic banks seeking to enhance competitiveness while maintaining religious compliance.

**Impact of Current Ratio on Financial Performance**

Contrary to traditional liquidity theory expectations, the study finds no statistically significant relationship between Current Ratio (CR) and financial performance, with a probability value of 0.610 (> 0.05). This result suggests that short-term liquidity management, as measured by CR, does not directly influence overall financial performance in the case of Bank Muamalat.

This finding challenges conventional wisdom regarding liquidity-performance relationships in banking. Traditional financial theory suggests that optimal liquidity levels should enhance performance by reducing funding costs and providing operational flexibility (Diamond & Dybvig, 2023). However, the absence of significant correlation in this study may reflect several unique characteristics of Islamic banking operations.

One potential explanation lies in the distinctive nature of Islamic banking liquidity management. Unlike conventional banks that can readily access interbank lending markets and various money market instruments, Islamic banks face constraints in liquidity management due to Shariah compliance requirements (Alam et al., 2021). This limitation may reduce the effectiveness of traditional liquidity ratios as performance predictors.

Additionally, the Islamic banking model emphasizes relationship-based financing and long-term partnerships rather than short-term transactional approaches. This focus may reduce the relative importance of short-term liquidity metrics in driving overall performance. The findings suggest that Bank Muamalat's performance is more closely tied to fundamental asset management capabilities than to liquidity optimization.

The lack of significant CR impact may also reflect the specific operational context of Indonesian Islamic banking, where regulatory frameworks and market conditions create unique liquidity dynamics. The Central Bank of Indonesia's supportive policies for Islamic banking development may have reduced liquidity-related performance pressures, allowing institutions to focus on other performance drivers.

**Simultaneous Effect and Business Intelligence Implications**

The simultaneous effect analysis reveals that ROA and CR together do not significantly influence financial performance at conventional significance levels ($p = 0.0755 > 0.05$). However, the high adjusted $R^2$ value of 0.848 indicates that the model explains 84.8% of performance variation, suggesting substantial explanatory power despite the lack of joint statistical significance.

This apparent contradiction between individual ROA significance and lack of joint significance likely reflects the dominant influence of ROA relative to CR in explaining performance variation. The strong individual effect of ROA overshadows the minimal contribution of CR, resulting in a joint effect that falls slightly below conventional significance thresholds.

From a Business Intelligence perspective, these findings have important implications for dashboard design and performance monitoring systems in Islamic banking. The results suggest that BI frameworks should prioritize ROA monitoring and analysis while treating liquidity metrics as secondary indicators. This hierarchy enables more focused resource allocation and strategic decision-making.

The high explanatory power of the model (84.8%) demonstrates the potential effectiveness of ratio-based BI systems in Islamic banking contexts. By incorporating ROA as a primary performance indicator within BI dashboards, Islamic banks can develop early warning systems and predictive analytics capabilities that support proactive management decisions.

**Theoretical and Practical Implications**

This study contributes to the growing literature on Islamic banking performance by providing empirical evidence of differential impacts between profitability and liquidity metrics. The findings support Resource-Based View theory while challenging traditional liquidity-performance relationships in Islamic banking contexts Rahmat & Ahman, 2025). The research extends understanding of Business Intelligence applications in Islamic banking by demonstrating how traditional financial ratios can be leveraged within modern analytical frameworks. The results suggest that BI systems should incorporate contextual factors unique to Islamic banking operations when designing performance monitoring capabilities.

For bank management, the findings indicate that strategic focus should emphasize asset utilization efficiency rather than liquidity optimization for performance enhancement. This insight suggests that investment in credit analysis capabilities, asset quality monitoring, and portfolio optimization may yield superior returns compared to liquidity management investments.

For BI system designers, the results recommend prioritizing ROA-based analytics and predictive models while treating liquidity metrics as supporting indicators. This approach enables more effective resource allocation and supports data-driven decision-making processes.

For regulators, the findings highlight the importance of asset quality supervision in Islamic banking oversight. The strong ROA-performance relationship suggests that regulatory frameworks focusing on asset management standards may be more effective than those emphasizing liquidity requirements alone.

## Conclusion

This study provides empirical evidence regarding the relationship between financial ratios and performance in Islamic banking, specifically examining the role of profitability and liquidity metrics within Business Intelligence frameworks. The investigation of PT. Bank Muamalat Indonesia Tbk reveals important insights that contribute to both theoretical understanding and practical applications in Islamic banking management.

From a Business Intelligence perspective, these findings have significant implications for system design and implementation in Islamic banking institutions. The results recommend prioritizing ROA-based analytics and monitoring capabilities while treating liquidity metrics as secondary indicators within BI dashboards and decision support systems. This hierarchy enables more effective resource allocation and supports data-driven strategic decision-making processes.

The study contributes to the growing literature on Islamic banking performance by providing empirical evidence of differential impacts between traditional financial ratios in religious banking contexts. The findings extend theoretical understanding while offering practical insights for bank managers, regulators, and technology providers seeking to enhance decision-making processes through analytical approaches.

The research demonstrates that traditional financial metrics, when properly integrated into modern Business Intelligence frameworks, can yield actionable insights for sustainable growth and competitive advantage in Islamic banking. By embedding such analytics into organizational systems, Islamic banks can continuously monitor financial health, detect early warning signals, and align resource allocation with performance objectives while maintaining Shariah compliance requirements.

Future research should expand this investigation to include multiple Islamic banking institutions across different markets to enhance generalizability. Additionally, incorporating Islamic banking-specific metrics and advanced analytical techniques could provide more sophisticated understanding of performance determinants in this growing sector.

The implications of this study extend beyond academic contribution to practical applications in Islamic banking management, regulatory oversight, and Business Intelligence system development, supporting the continued evolution and optimization of performance management practices in Islamic financial institutions.

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