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RESILIENT BANKING IN UNCERTAIN TIMES: A COMPARATIVE PROFITABILITY ANALYSIS OF BSI AND BTN IN SUPPORTING AN INCLUSIVE ASEAN ECONOMY

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Abstract

This study aims to conduct a comparative analysis of profitability between *PT Bank Syariah Indonesia Tbk (BSI)* and *PT Bank Tabungan Negara (Persero) Tbk (BTN)* during the 2021–2023 period. It evaluates seven profitability ratios as Operating Profit Margin, Net Profit Margin, Return on Assets, Return on Equity, Return on Investment, Return on Sales, and Earnings per Share, to assess the financial efficiency and managerial effectiveness of state-owned banks operating under fundamentally different systems: Islamic and conventional banking. Adopting a positivist quantitative paradigm, the study uses a comparative approach based on secondary data from audited financial statements. Descriptive statistics, normality tests, and the *Independent Samples T-Test* are applied in SPSS 31 to determine whether significant differences in the two banks' profitability indicators. Empirical results reveal that BSI consistently outperforms BTN in most profitability measures, particularly OPM, NPM, ROA, ROI, and ROS, reflecting stronger cost efficiency and operational management. BTN, however, records higher Earnings per Share, suggesting greater shareholder value generation. The *t-test* confirms statistically significant differences in five of the seven indicators ($p < 0.01$), supporting the Efficiency Structure Theory as an explanatory framework.
These findings emphasize the importance of cost control, digital transformation, and post-merger integration for enhancing Islamic bank profitability. Regulators and policymakers should promote efficiency-driven policies to sustain financial competitiveness across both banking models. This research provides novel, post- merger evidence on comparative profitability within Indonesia's dual banking system. It enriches the Islamic banking literature by empirically validating the relevance of efficiency-based theories in emerging markets.

Keywords: *Comparative banking performance; Efficiency structure theory; Independent samples t-test; Financial performance analysis; Sharia-compliant finance.*

INTRODUCTION

Southeast Asia is navigating a period of heightened global uncertainty driven by post-pandemic adjustments, geopolitical shifts, inflationary pressures, and rapid technological disruptions. Indonesia's banking sector plays a pivotal role in advancing this agenda, particularly as the country strengthens financial inclusion and accelerates sustainable development targets under the Sustainable Development Goals (SDGs), notably SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation, and Infrastructure), and SDG 16 (Strong Institutions). Within this landscape, state-owned banks (BUMN) have emerged as key institutions driving financial stability and inclusive economic growth. Their ability to adapt and remain resilient has become central to Indonesia's contribution to a more integrated and shock-resistant ASEAN economy (World Bank, 2024).

Over the past three years, Indonesia's banking industry has undergone a profound transformation amidst digital acceleration, monetary tightening, and structural reforms in the Islamic finance sector. Bank Tabungan Negara (BTN), a conventional bank specializing in housing finance, and Bank Syariah Indonesia (BSI), formed through the 2021 consolidation of three state-owned Islamic banks, represent two fundamentally different financial architectures, interest-based versus asset-backed profit-sharing. These contrasting operational systems provide a unique empirical setting for evaluating how dual banking can support agility and resilience in uncertain economic conditions. As BUMN banks, both BTN and BSI are entrusted with balancing profitability, risk management, and public mandates, making a comparative assessment essential for understanding their managerial effectiveness and long-term sustainability in the post-merger Islamic banking era.

Profitability serves as a core measure of financial effectiveness, reflecting the banks' ability to deploy assets, equity, and investment structures to generate stable returns. This study employs seven key indicators Operating Profit Margin (OPM), Net Profit Margin (NPM), Return on Assets (ROA), Return on Equity (ROE), Return on Investment (ROI), Return on Sales (ROS), and Earnings Per Share (EPS) to capture the multidimensional nature of financial performance. These ratios not only signal efficiency and cost structure but also represent broader institutional capacity in supporting financial inclusion and resilience, in line with ASEAN's regional priorities. Preliminary financial disclosures from both banks show positive profit trajectories between 2021 and 2023 (BTN, 2024; BSI, 2024), yet the fluctuations in their profitability ratios indicate notable differences in operational flexibility, risk-sharing mechanisms, and revenue composition. Understanding these variations is essential for assessing how each model contributes to Indonesia's broader financial stability objectives.

Globally, empirical evidence on the profitability and resilience of Islamic versus conventional banks remains mixed. Recent studies highlight that Islamic banks often demonstrate stronger stability during crises due to their asset-backed structures (Ghouse et al., 2022; Elnahass et al., 2021), while other research finds minimal or inconsistent profitability differences across banking models (Khan & Saba, 2022). In contrast, Khalil and Siddiqui (2019) reported no significant differences in ROA and ROE between the two models in Pakistan, while Almutairi (2022) Almutairi (2022) reports substantial profitability divergence in Gulf banking markets, underscoring that performance is highly context-dependent. These contradictory international findings reinforce the need for a context-specific comparative analysis within Indonesia, especially in the ASEAN framework, where the dual banking system serves as both an economic stabilizer and a driver of sustainable development. This study fills that research gap by empirically examining whether structural differences between BTN and BSI translate into measurable profitability disparities, thereby offering insights into how Indonesia's banking system can support a more agile, inclusive, and resilient ASEAN economy.

Islamic banks utilize margins from sale and purchase agreements and profit-sharing proportions as their main sources of income, while conventional banks rely on interest rate differentials as their primary revenue component. An interesting paradox to examine in depth is that even though Bank BTN has a more massive asset scale with total assets reaching IDR 438.75 trillion compared to Bank BSI, which has assets worth IDR 353.62 trillion in 2023, Bank BSI managed to record superior net profits of IDR 7.59 trillion compared to IDR 4.53 trillion achieved by Bank BTN, an indication that implies a disparity in operational efficiency between the two banking models.

Within Indonesia's ongoing economic transformation and Islamic financial integration, there remains a lack of empirical clarity regarding how managerial effectiveness differs between conventional and Islamic state-owned banks. BTN and BSI occupy strategic positions as representatives of two distinct financial paradigms, interest-based and sharia-compliant profit-sharing. Although both institutions have demonstrated positive profit growth during 2021–2023, a systematic and comprehensive comparison of their seven profitability indicators has not yet been explored in the academic literature. Differences in asset composition, financing strategies, and revenue models may contribute to variations in key profitability ratios, *Operating Profit Margin*, *Net Profit Margin*, *Return on Assets*, *Return on Equity*, *Return on Investment*, *Return on Sales*, and *Earnings Per Share*. An empirical comparison of these metrics is essential to evaluate whether BSI's Islamic model has achieved comparable or superior profitability performance relative to BTN's conventional model. Moreover, this comparison provides valuable insights into the effectiveness of financial management within state-owned banks operating under fundamentally different operational systems during the post-pandemic and post-merger periods (2021–2023).

The primary objective of this study is to conduct a comprehensive comparative analysis of the profitability performance between *Bank Tabungan Negara (BTN)* and *Bank Syariah Indonesia (BSI)*, two state- owned banks operating under fundamentally different financial systems conventional and Islamic. Specifically. From a theoretical perspective, this study enriches the empirical literature on comparative financial performance by integrating a multi-ratio profitability framework encompassing seven key indicators. While prior international studies (e.g., Ghouse et al., 2022; Khalil & Siddiqui, 2019; Almutairi, 2022) have focused primarily on limited measures such as ROA and ROE, the present research expands the analytical scope by including OPM, NPM, ROI, ROS, and EPS to capture a more holistic view of financial efficiency and managerial performance. From a practical perspective, the findings are expected to provide valuable insights for policymakers, regulators, and bank executives in formulating strategies to enhance financial performance. For regulators such as the Financial Services Authority (OJK), the study can inform evidence-based policies for improving competitiveness, transparency, and governance in both Islamic and conventional state-owned banks. Moreover, the results can serve as a benchmark for evaluating the progress of Indonesia's Islamic banking transformation agenda, especially in measuring whether the merger of BSI has effectively strengthened financial performance in comparison to conventional peers. This aligns with Indonesia's broader vision of developing a resilient and inclusive dual banking system that supports sustainable economic growth.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

1. Concept of Profitability in Banking Performance

Profitability serves as a key measure of a bank's financial health, efficiency, and long-term sustainability. It reflects the effectiveness of management in allocating resources to generate income relative to expenses, assets, or equity. In banking, profitability is often used to evaluate how well institutions manage risks, control costs, and create value for shareholders. According to *Athanasoglou et al. (2008)*, profitability is influenced by internal factors such as capital adequacy, management quality, and cost efficiency, as well as external factors like macroeconomic conditions and market competition.

To capture the multidimensional nature of profitability, researchers and financial analysts employ various ratios. This study utilizes seven profitability measures: *Operating Profit Margin (OPM)*, *Net Profit Margin (NPM)*, *Return on Assets (ROA)*, *Return on Equity (ROE)*, *Return on Investment (ROI)*, *Return on Sales (ROS)*, and *Earnings Per Share (EPS)*. Collectively, these indicators provide a comprehensive evaluation of a bank's operational performance and its capacity to generate returns from both internal and external resources. While OPM and NPM reflect operational efficiency, ROA, ROE, and ROI measure return effectiveness from assets, equity, and investment perspectives, whereas ROS and EPS indicate sales-based profitability and investor-oriented performance.

2. Comparative Studies Between Islamic and Conventional Banks

Empirical studies comparing Islamic and conventional banks often reveal nuanced differences in profitability outcomes, driven by structural and operational dissimilarities. *Khalil and Siddiqui (2019)*, in their comparative analysis of Pakistani banks, found no significant difference in ROA and ROE between Islamic and conventional institutions, suggesting that both banking systems had achieved similar levels of financial efficiency. However, *Ghouse et al. (2022)* demonstrated that Islamic banks displayed greater financial stability but lower profitability compared to conventional banks during the COVID-19 crisis, due to conservative risk- taking and limited income diversification.

Similarly, *Almutairi (2022)* examined Kuwaiti banks and reported significant profitability differences between the two banking types, attributing the gap to variations in funding structures and the cost of capital. On the other hand, *Elnahass et al. (2021)* found that Islamic banks exhibited stronger resilience in maintaining ROA and ROE ratios during economic downturns, primarily due to asset-backed financing and ethical investment portfolios. Collectively, these studies underscore that profitability performance may not depend solely on financial scale but also on the operational philosophy and efficiency of management in responding to market dynamics.

In the Indonesian context, comparative research remains limited despite the rapid growth of Islamic finance. *Wibowo and Syaichu (2013)* identified that Islamic banks tend to maintain stable profitability through lower exposure to interest rate volatility, while *Rahman and Rochman (2021)* found that conventional banks generally outperform Islamic banks in terms of return ratios, largely due to differences in liquidity management and income sources. These mixed findings justify the need for a more extensive comparative analysis focusing on state-owned banks, particularly BTN and BSI, over the post-merger period.

3. Theoretical Framework

The theoretical foundation of this study is established upon the Efficiency Structure Theory and Profitability Theory, which collectively explain how managerial efficiency and operational structures influence profitability outcomes, and is complemented by the Dual Banking Model Framework that characterizes Indonesia's financial system. Together, these theories explain the mechanisms through which operational efficiency, financial structure, and institutional orientation influence the profitability performance of Islamic and conventional banks.

3.1. The Efficiency Structure Theory,

The EST proposed by *Berger (1995)* posits that firms with superior management efficiency achieve higher profitability through better cost control and optimal use of resources. In the context of banking, this implies that both BTN and BSI's profitability levels depend largely on how effectively they manage operational expenses, asset allocation, and risk exposure.

In the context of Indonesia's state-owned banks, PT Bank Syariah Indonesia (BSI) represents an institution that has potentially realized both forms of efficiency through post-merger consolidation. Following its merger in 2021, BSI leveraged scale advantages, unified digital infrastructure, and standardized operational frameworks factors empirically proven to improve cost-to-income ratios and operational profitability (Elnahass, Kabir, & Trinh, 2021). Recent international studies support this theoretical logic. For instance, Mensi et al. (2022) found that Islamic banks in emerging economies often demonstrate higher cost efficiency due to prudent risk management and asset-backed financing models. Similarly, Sobol et al. (2023) confirmed that banks with effective cost control and technology-driven operational systems consistently outperform less efficient counterparts, irrespective of ownership structure. Thus, the EST provides a robust conceptual lens to interpret why BSI's superior profitability ratios (OPM, NPM, ROA, ROS) may stem from enhanced managerial efficiency rather than mere market power or asset size.

3.2 Profitability Theory

The Profitability Theory extends the discussion by explaining how financial performance arises from the effective interaction between revenue generation, asset utilization, and equity leverage. According to Rose and Hudgins (2013), profitability is a function of both internal management efficiency (e.g., cost control, credit management) and external market factors (e.g., interest rate environment, macroeconomic stability). Under this framework, the Return on Assets (ROA) and Return on Equity (ROE) serve as key indicators of how efficiently a bank transforms resources into earnings. In this study, the comparable ROE between BSI and BTN, despite BSI's superior ROA, suggests that capital structure plays a moderating role in determining shareholder- level returns. This is consistent with Hussain and Hassan (2022), who argue that profitability differentiation in Islamic and conventional banks often reflects differences in leverage policy and capital adequacy rather than fundamental inefficiency.

Furthermore, the higher Earnings per Share (EPS) observed in BTN aligns with the Shareholder Value Maximization Hypothesis, wherein conventional banks prioritize dividend distribution and equity returns as measures of profitability (Khan & Saba, 2022). Conversely, Islamic banks such as BSI may prioritize asset quality and stability, focusing on long-term profit sustainability through asset-backed and risk-sharing mechanisms.

3.3 Dual Banking Model Framework

Indonesia's dual banking system, institutionalized since the early 2000s, allows Sharia-compliant and conventional banking institutions to coexist under a unified regulatory environment (Bank Indonesia, 2023). This framework supports parallel financial intermediation, where both systems operate under distinct principles interest-free, asset-based transactions in Islamic banking versus interest-bearing, debt-based mechanisms in conventional banking.

The Dual Banking Model (DBM) provides a theoretical context for understanding how structural and operational heterogeneity affects profitability. According to Alqahtani and Mayes (2022), Islamic banks' reliance on profit-and-loss sharing instruments (*mudarabah*, *musyarakah*) tends to generate lower volatility and more stable returns, especially during economic downturns. Conversely, conventional banks' exposure to interest rate risk and leverage-based income often results in higher short-term profits but greater cyclicality. Empirical findings from Ghouse et al. (2022) and Abdelsalam & Elghuweel (2023) further confirm that Islamic banks' focus on real-asset financing contributes to superior operational margins and lower default risk, thereby enhancing long-term profitability resilience. This framework is especially relevant for Indonesia, where state- owned Islamic banking (represented by BSI) plays an increasingly strategic role in national economic inclusion, supporting the Indonesian Sharia Economy Roadmap 2045 (OJK, 2023).

Integrating these three theoretical perspectives provides a comprehensive framework for this study. The Efficiency Structure Theory elucidates the role of managerial and scale efficiency in profitability enhancement; the Profitability Theory explains how capital utilization and cost management interact to generate financial returns; and the Dual Banking Model Framework contextualizes these mechanisms within Indonesia's coexisting Islamic–conventional financial landscape. Together, these theories predict that Islamic banks (e.g., BSI), through efficient operations and prudent financing structures, should demonstrate higher profitability ratios reflecting operational efficiency, while conventional banks (e.g., BTN) may excel in shareholder-based indicators such as EPS due to equity structure advantages. The empirical results of this study validate this theoretical synthesis, affirming that profitability differences are fundamentally shaped by efficiency, financial structure, and institutional orientation within Indonesia's dual banking system.

METHODOLOGY

3.1 Research Paradigm and Design

This study adopts a positivist paradigm with a quantitative approach, focusing on empirically measurable financial data to ensure objectivity, replicability, and evidence-based interpretation. The positivist stance assumes that financial phenomena, such as profitability performance, can be observed, quantified, and statistically tested to derive valid generalizations. Accordingly, this research employs a comparative research design, which aims to identify, measure, and interpret differences in profitability performance between PT Bank Syariah Indonesia Tbk and PT Bank Tabungan Negara (Persero) Tbk over the period 2021–2023.

3.2 Population and Sampling

The research population consists of all state-owned banks (BUMN) operating in Indonesia, both Islamic and conventional, during the 2021–2023 period. Based on these criteria, Bank Syariah Indonesia (BSI) is selected as the Islamic banking representative and Bank Tabungan Negara (BTN) as the conventional banking representative. Both institutions exhibit comparable market scope and are subject to similar macroeconomic and regulatory environments, ensuring a valid and reliable comparative analysis.

3.3 Data Type and Collection Procedures

This research exclusively utilizes secondary data obtained from three systematic sources:

1. Documentary study, Collection of quarterly and annual financial statements from 2021 to 2023 accessed via the official websites of BSI, BTN, and the Indonesia Stock Exchange (IDX), serving as the primary empirical dataset.
2. Literature review, Compilation of theoretical and empirical references from academic journals, research reports, and books that establish the conceptual and analytical framework for profitability performance in banking.
3. Supplementary data tracking, Internet-based information. All data were cross-validated for consistency and completeness to ensure analytical rigor and replicability.

3.4 Variables and Measurement

The dependent variables of this study consist of seven profitability ratios representing the multidimensional effectiveness of financial management and operational performance:

1. Operating Profit Margin (OPM) = Operating Profit / Total Revenue
2. Net Profit Margin (NPM) = Net Profit / Total Revenue

3. Return on Assets (ROA) = Net Profit / Total Assets
4. Return on Equity (ROE) = Net Profit / Total Equity
5. Return on Investment (ROI) = Net Profit / Total Investment
6. Return on Sales (ROS) = Operating Profit / Net Sales
7. Earnings per Share (EPS) = Net Profit / Number of Outstanding Shares

These ratios collectively capture efficiency, asset utilization, capital productivity, and shareholder value creation. All indicators are computed using standardized banking formulas regulated by Bank Indonesia (BI) and the Financial Services Authority (OJK) to ensure compliance and comparability.

3.5 Data Analysis Techniques

The data analysis procedure integrates descriptive and inferential statistical methods to capture both the structural characteristics and the significance of profitability differentials.

1. Descriptive Statistics, were computed to characterize profitability distribution across both banks. Results reveal that BSI demonstrates higher profitability in almost all indicators
2. Normality Test, The Shapiro–Wilk Test
3. Comparative Test (Hypothesis Testing), The Independent Samples t-Test with Mann-Whitney was employed to examine mean differences between BSI and BTN for each profitability ratio.

All statistical analyses were performed using SPSS 31 for Windows, ensuring reliability, reproducibility, and compliance with international quantitative research standards.

3.6 Validity and Reliability Considerations

To ensure methodological rigor, multiple validation strategies were implemented:

- Triangulation of data sources (financial reports, regulatory statistics, and literature)
- Operational consistency in ratio calculations was maintained following Bank Indonesia's *Financial Ratio Standard Guidelines (2023)*.
- Normality and homogeneity tests were conducted before hypothesis testing to ensure parametric assumptions were satisfied.
- Cross-year consistency checks (2021–2023) ensured temporal validity

RESULT AND DISCUSSION

4.1 Descriptive Statistical Findings

The descriptive statistical results demonstrate that PT Bank Syariah Indonesia (BSI) consistently outperformed PT Bank Tabungan Negara (BTN) across most profitability indicators during the 2021–2023 observation period. The mean values of BSI's Operating Profit Margin (29.26%), Net Profit Margin (21.62%), Return on Assets (0.91%), Return on Equity (8.78%), Return on Investment (4.44%), and Return on Sales (29.20%) were substantially higher than BTN's respective averages of 14.20%, 10.75%, 0.44%, 7.23%, 3.51%,
and 13.85%.

The only exception was Earnings per Share (EPS), where BTN recorded a superior mean of Rp150.35 per share, significantly exceeding BSI's Rp54.42 per share. This suggests that, despite BSI's operational efficiency and margin superiority, BTN benefits from a more favourable capital structure and shareholding composition, enabling higher distributable income per share. These descriptive patterns reflect a dual tendency within Indonesia's banking landscape: Islamic banks achieving stronger operational profitability through efficiency and cost discipline, while conventional banks generate higher shareholder returns via equity optimization and leverage management.

4.2 Normality and Inferential Test Results

The Shapiro–Wilk normality test confirmed that all profitability indicators were normally distributed ($p > 0.05$), validating the application of parametric analysis through the Independent Samples t-Test.

Subsequent inferential testing revealed significant performance differences between the two banks. The Operating Profit Margin ($p < 0.001$; $t = -10.113$), Net Profit Margin ($p < 0.001$; $t = -8.612$), Return on Assets ($p = 0.0026$; $t = -3.390$), and Return on Sales ($p < 0.001$; $t = -10.045$) displayed statistically significant disparities, confirming that BSI's profitability advantage is not incidental but structurally embedded in its operational model. Conversely, Return on Equity (p = 0.303) and Return on Investment (p = 0.331) did not show statistically significant differences, implying performance convergence in equity-based profitability between both institutions. Lastly, Earnings per Share ($p < 0.001$; $t = 3.896$) demonstrated a significant difference in favor of BTN, underscoring the effect of capital structure optimization and share-based income distribution typical in conventional banks. Based on the test results presented in the table, all profitability ratio indicators in both banking institutions are normally distributed. Thus, further testing of Operating Profit Margin, Net Profit Margin, Return on Assets, Return on Equity, Return on Investment, Return on Sales, and Earnings Per Share can be methodologically conducted through the application of parametric statistical tests using the Independent Sample T-Test.

4.3. Independent Sample T-Test

The results of the Independent Sample T-Test indicate a significant difference in financial performance between Bank BTN and Bank BSI in several key financial ratios. Operating Profit Margin shows very strong significance (p < 0.001) with a t-statistic of -10.113. Similarly, the Net Profit Margin shows a very significant difference ($p < 0.001$) with a t-statistic of -8.612. Return on Assets also shows a significant difference with a p- value of 0.0026 and t = -3.390. Conversely, Return on Equity and Return on Investment did not show statistically significant differences, with p-values of 0.303 and 0.331, respectively, supported by t-statistics close to zero and relatively large standard errors. Furthermore, Return on Sales again shows a high significance of difference (p < 0.001) with a t-statistic of -10.045 and finally, Earning per Share also shows a statistically significant difference (p < 0.001) with a positive t-statistic of 3.896.

DISCUSSION

4.4. Theoretical Interpretation of Findings

The findings strongly support the Efficiency Structure Theory (Berger, 1995), which posits that profitability advantages stem from superior cost management and operational efficiency rather than market power alone. BSI's consistently higher OPM, NPM, and ROA confirm that Islamic banking operations anchored in asset-backed financing and risk-sharing mechanisms promote financial discipline and cost efficiency. These results align with Mensi et al. (2022) and Elnahass et al. (2021), who found that Islamic banks exhibit higher cost efficiency and profitability stability in emerging markets, particularly in post-merger and post-crisis contexts. BSI's merger in 2021 created scale economies, streamlined IT infrastructure, and reduced duplication costs, thereby enhancing operational leverage.

In contrast, BTN's higher EPS corroborates Profitability Theory (Rose & Hudgins, 2013), suggesting that capital structure and financial leverage significantly affect shareholder-level returns. BTN's emphasis on interest-based lending and mortgage-focused portfolios results in higher immediate earnings per share, though often accompanied by greater cyclical sensitivity and higher credit risk exposure. The Dual Banking Model Framework (Alqahtani & Mayes, 2022) further contextualizes these results. Within Indonesia's hybrid banking system, BSI represents a prudence-oriented model emphasizing sustainable, asset-linked profitability, while BTN reflects a traditional return-maximizing model that prioritizes short-term equity gains. This duality is not contradictory but complementary both banks cater to distinct market segments and risk-return expectations under the same regulatory ecosystem.

From a theoretical standpoint, the findings reinforce and extend the applicability of three major frameworks in contemporary banking research:

1. Efficiency Structure Theory (EST) The superior profitability of BSI validates the hypothesis that cost efficiency and managerial effectiveness are central to financial performance, regardless of ownership or banking type (Berger, 1995; Mensi et al., 2022).
2. Profitability Theory The results illustrate that profitability is shaped not only by revenue generation but also by capital allocation and asset utilization, explaining the differential patterns between Islamic and conventional banks (Rose & Hudgins, 2013; Hussain & Hassan, 2022).
3. Dual Banking Model Framework The Indonesian context demonstrates that both Islamic and conventional banking systems can coexist competitively under unified regulation, where Sharia-

compliant models may achieve comparable or even higher operational profitability (Alqahtani & Mayes, 2022; Ghouse et al., 2022).

These theoretical contributions provide new evidence from a post-merger, emerging-market context, enriching the literature on comparative financial performance and efficiency in mixed banking systems. The Maqashid Shariah perspective extends the profitability concept beyond financial return, framing it as an instrument for achieving *falah* (holistic well-being). Thus, for Bank Syariah Indonesia, profitability indicators such as *Return on Sales (ROS)* and *Return on Investment (ROI)* not only signify efficiency but also reflect Shariah- compliant value creation that aligns with distributive equity and societal impact (Dusuki & Abdullah, 2007; Haniffa & Hudaib, 2019). In contrast, BTN's conventional framework anchors profitability within shareholder value maximization, consistent with the neoclassical paradigm of financial performance.

4.5. Empirical and Industrial Contextualization

Empirically, BSI's post-merger transformation has yielded tangible efficiency improvements. According to OJK (2023) and Bank Indonesia (2023), BSI's cost-to-income ratio (CIR) declined from 78% in 2021 to 66% in 2023, reflecting the realization of merger synergies and digital integration. This operational streamlining is directly linked to the significant margin expansion observed in this study. On the other hand, BTN's performance reflects the structural challenges of conventional mortgage-based banking. The institution's profitability remains tied to interest rate volatility, funding costs, and housing loan quality factors that constrained its ROA and ROE growth despite strong EPS performance.

These findings resonate with Ghouse et al. (2022) and Abdelsalam & Elghuweel (2023), who observed that Islamic banks' asset-based models tend to yield more stable margins and lower non-performing financing (NPF) ratios, particularly in economies with robust Sharia governance frameworks like Indonesia and Malaysia. Moreover, the Indonesian government's Sharia Economy Roadmap 2045 (OJK, 2023) projects that Islamic banks will increasingly rival conventional banks in profitability and market penetration by leveraging digital banking, halal ecosystem integration, and sustainable finance initiatives. The empirical results of this study where BSI's profitability exceeds BTN's across five of seven indicators provide early quantitative evidence supporting this macroeconomic projection.

4.6. Comparative Reflection with Previous Studies

The results of this research are broadly consistent with prior international studies that examined profitability differentials between Islamic and conventional banks. Mensi et al. (2022) found that Islamic banks in Southeast Asia outperform conventional peers in operational profitability due to cost efficiency and lower credit risk. Hussain and Hassan (2022) highlighted that differences in ROE are often non-significant, as capital structure variations neutralize efficiency gains mirroring this study's findings on ROE and ROI convergence. Sobol et al. (2023) emphasized that digital transformation and efficiency-driven restructuring significantly enhance profitability margins, particularly for state-linked banks aligning with BSI's post-merger trajectory. Conversely, Khan and Saba (2022) noted that conventional banks retain higher shareholder profitability (EPS) due to dividend-based incentives and equity distribution practices, again consistent with the BTN case.

Thus, this study extends the empirical literature by providing country-specific, post-merger comparative evidence within Indonesia's dual banking context, contributing new insight into how structural differences translate into profitability outcomes.

In summary, the empirical evidence confirms that Islamic banking (BSI) has achieved superior profitability performance relative to its conventional counterpart (BTN) across most operational indicators, validating the predictions of the Efficiency Structure Theory and Dual Banking Model Framework. While BTN remains ahead in EPS, indicating higher shareholder-level returns, this strength is offset by lower efficiency ratios and higher cost burdens. The results suggest that Islamic banks can achieve sustainable profitability without reliance on interest-based instruments, provided that scale efficiency, cost discipline, and technology adoption are strategically managed.

These findings carry significant implications for policymakers, suggesting that the convergence of profitability performance between Islamic and conventional state-owned banks is achievable through structural and operational modernization. For practitioners, the results reinforce the importance of digital transformation, efficient cost management, and capital optimization as levers for enhancing profitability across both banking systems.

CONCLUSION

This study provides a comprehensive comparative analysis of profitability performance between PT Bank Syariah Indonesia Tbk (BSI) and PT Bank Tabungan Negara (Persero) Tbk (BTN) over the period 2021– 2023, utilizing seven key profitability ratios Operating Profit Margin, Net Profit Margin, Return on Assets, Return on Equity, Return on Investment, Return on Sales, and Earnings per Share. Employing a positivist quantitative approach and Independent Samples t-Test, the study offers empirical insights into how operational systems, efficiency structures, and financial strategies shape profitability outcomes within Indonesia's dual banking system.

The results demonstrate that BSI significantly outperformed BTN in most profitability indicators (OPM, NPM, ROA, ROI, ROS), confirming the Efficiency Structure Theory, which emphasizes the role of managerial and operational efficiency in profitability enhancement. BSI's superior performance reflects post- merger synergies, digital integration, and asset-based financing mechanisms that support higher efficiency and cost discipline.

In contrast, BTN recorded a higher Earnings per Share, indicating that capital structure optimization and equity concentration remain the primary drivers of shareholder returns in conventional banking. Meanwhile, ROE and ROI differences were statistically insignificant, suggesting convergence in equity-based profitability between both institutions. Collectively, these findings affirm that Islamic banking when managed with scale efficiency and technological innovation can match or even exceed the profitability of conventional banking institutions while maintaining prudential and ethical financial practices.

The findings have several practical implications for bank management, policymakers, and regulators:

1. For Bank Management – Islamic and conventional banks should prioritize cost efficiency, digital transformation, and operational scalability as the key levers for sustainable profitability. BSI's experience shows that post-merger integration and technology-based cost optimization can substantially enhance financial performance. BTN, conversely, can leverage its capital strength to diversify revenue streams and mitigate reliance on interest-based lending.
2. For Regulators (OJK and Bank Indonesia) – The results suggest that the regulatory framework should incentivize efficiency and digital innovation rather than focusing solely on size or market share. Policies that promote technological adoption, risk-based supervision, and green finance alignment will further support profitability convergence between Islamic and conventional state-owned banks.

The comparative analysis of BTN and BSI demonstrates that both state-owned banks successfully maintained positive profitability growth during 2021–2023 despite heightened global uncertainty, rising interest rate volatility, and the structural adjustments of Indonesia's post-pandemic recovery. The distinct operational models, interest-based for BTN and profit-sharing for BSI, produced noticeable variations across key profitability ratios, reflecting differences in managerial strategies, cost structures, and risk-management approaches. These findings underscore that the resilience and inclusiveness of Indonesia's banking sector rely not only on asset expansion but also on the adoption of agile financial strategies that strengthen stability and adaptability, in line with ASEAN's vision of building a robust and inclusive regional economy. Within the broader framework of the Sustainable Development Goals (particularly SDG 8, SDG 9, and SDG 16), this study affirms that reinforcing both conventional and Islamic banking systems is essential to promoting financial inclusion, supporting sustainable economic growth, and enabling Indonesia and the ASEAN region to rise together amid ongoing global uncertainties.

While the research provides robust empirical evidence, several limitations warrant consideration. Future studies should expand the sample to include multiple state and private banks, extend the observation horizon, and incorporate macroeconomic variables (e.g., inflation, GDP growth, interest rate dynamics) as control factors. Additionally, integrating panel data regression or structural equation modelling (SEM) could enhance causal inference and reveal interdependencies between efficiency, capital structure, and profitability. Future research might also explore digital transformation readiness and Sharia governance quality as mediating variables influencing profitability differentials between Islamic and conventional banks in emerging economies.

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Attachment

Table 1
Comparison of Bank BTN and Bank BSI Performance
During the 2021-2023

Parametesr	Bank BTN	Bank BSI
Business Focus	Housing finance (mortgages)	Sharia ecosystem & digitalization
Total Assets	Stable growth (IDR 371.87 trillion → IDR 438.75 trillion)	Rapid growth (IDR 265.28 trillion → IDR 353.62 trillion)
Profit Earnings	Moderate increase (IDR.3.03 trillion → IDR.4.53 trillion)	Significant increase (IDR 4.11 trillion → IDR 7.59 trillion)

Source: Data processed from the annual reports of Bank BTN and Bank BSI

Tabel 2
Statistic Descriptive Profitabilitas BTN and BSI
(2021-2023)

Uji Statistik Deskriptif						
Ratio	N	*Minimum*	*Maximum*	*Mean*	*Stand. Deviation*	*Coef. Varians*
OPM Bank BTN	12	10.38	16.96	14.1950	2.03159	14.30
OPM Bank BSI	12	23.07	35.93	29.2575	4.74250	16.21
NPM Bank BTN	12	7.35	12.80	10.7542	1.73494	16.13
NPM Bank BSI	12	16.22	27.03	21.6167	4.01036	18.55
ROA Bank BTN	12	0.17	0.80	0.4442	0.22105	49.77
ROA Bank BSI	12	0.32	1.61	0.9092	0.42064	46.27
ROE Bank BTN	12	2.90	11.75	7.2325	3.35243	46.35
ROE Bank BSI	12	3.30	14.72	8.7792	3.81521	43.46
ROI Bank BTN	12	1.05	8.50	3.5100	2.20630	62.86
ROI Bank BSI	12	1.42	8.01	4.4375	2.36275	53.25
ROS Bank BTN	12	9.96	16.22	13.8483	1.97791	14.28
ROS Bank BSI	12	22.77	35.97	29.1958	4.90899	16.81
EPS Bank BTN	12	57.07	287.54	150.3450	78.48310	52.20
EPS Bank BSI	12	9.24	123.65	54.4233	33.37821	61.33

Source: researh data (2025)

Table 3
Results of Descriptive Statistical Tests of Bank BTN and Bank BSI Profitability
Period 2021-2023

Normality Test							
Financial Institutions		Shapiro-Wilk					
		Statistik	Df	Sig.	St	Description	
Operating Profit Margin	Bank BTN	0.918	12	0.270	>0.05	Normal	
	Bank BSI	0.896	12	0.142	>0.05	Normal	
Net Profit Margin	Bank BTN	0.902	12	0.170	>0.05	Normal	
	Bank BSI	0.882	12	0.094	>0.05	Normal	
Return On Assets	Bank BTN	0.923	12	0.307	>0.05	Normal	
	Bank BSI	0.958	12	0.760	>0.05	Normal	
Return On Equity	Bank BTN	0.899	12	0.155	>0.05	Normal	
	Bank BSI	0.941	12	0.516	>0.05	Normal	
Return On Investment	Bank BTN	0.910	12	0.215	>0.05	Normal	
	Bank BSI	0.921	12	0.293	>0.05	Normal	
Return On Sale	Bank BTN	0.884	12	0.099	>0.05	Normal	
	Bank BSI	0.891	12	0.121	>0.05	Normal	
Earning Per Share	Bank BTN	0.929	12	0.374	>0.05	Normal	
	Bank BSI	0.963	12	0.827	>0.05	Normal	

Source: Research data (2025)

Table 4
Results of the Independent Sample T-Test for Profitability Ratios Bank BTN and Bank BSI
Period 2021-2023

Independent Samples Test							
		t-test for Equality of Means					
		T	*Df*	*Significance*		*Mean Difference*	*Std. Error Difference*
				One-Sided p	*Two-Sided p*		
Operating Profit Margin	*Equal variances assumed*	-10.113	22	<0.001	<0.001	-15.06250	1.48937
	Equal variances not assumed	-10.113	14.906	<0.001	<0.001	-15.06250	1.48937
Net Profit Margin	*Equal variances assumed*	-8.612	22	<0.001	<0.001	-10.86250	1.26138
	Equal variances not assumed	-8.612	14.978	<0.001	<0.001	-10.86250	1.26138
Return On Assets	*Equal variances assumed*	-3.390	22	0.001	0.003	-0.46500	0.13717
	Equal variances not assumed	-3.390	16.645	0.002	0.004	-0.46500	0.13717

Independent Samples Test							
		t-test for Equality of Means					
		T	Df	Significance		Mean Difference	Std. Error Difference
				One-Sided p	Two-Sided p		
Return On Equity	Equal variances assumed	-1.055	22	0.151	0.303	-1.54667	1.46614
	Equal variances not assumed	-1.055	21.642	0.152	0.303	-1.54667	1.46614
Return On Investment	Equal variances assumed	-0.994	22	0.166	0.331	-0.92750	0.93320
	Equal variances not assumed	-0.994	21.898	0.166	0.331	-0.92750	0.93320
Return On Sale	Equal variances assumed	-10.045	22	<0.001	<0.001	-15.34750	1.52781
	Equal variances not assumed	-10.045	14.480	<0.001	<0.001	-15.34750	1.52781
Earning Per Share	Equal variances assumed	3.896	22	<0.001	<0.001	95.92167	24.61995
	Equal variances not assumed	3.896	14.853	<0.001	0.001	95.92167	24.61995

Source: Research data (2025)