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Comparison of Islamic Commercial Banks and Islamic Business Units: Which Is More Efficient?

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Abstract

Although Islamic banks have been present in Indonesia for three decades, their market share remains significantly behind that of conventional banks. In response, regulators have mandated that Islamic Business Units (UUS) be converted into full-fledged Islamic Commercial Banks (BUS) once specific criteria are met. This study aims to analyze the development of operational efficiency between BUS and UUS in Indonesia. The research uses secondary data from the 2015-2024 period obtained from OJK Islamic banking statistics. The methods employed include descriptive statistical analysis and the nonparametric Mann-Whitney U test. The findings reveal a statistically significant difference in efficiency between BUS and UUS, as reflected by the BOPO ratio, with UUS proving to be more efficient than BUS. Theoretically, this study provides new and updated insights into the cost efficiency management capabilities of BUS and UUS. These findings also highlight the need for policymakers to ensure that the separation does not compromise efficiency while maintaining the sustainability of Islamic banks.

Keywords: *BOPO, BUS, Efficiency, Islamic Bank, UUS*

Introduction

Islamic banks have been present in Indonesia for three decades and have gradually developed over time. As of April 2024, there are 14 Islamic commercial banks (BUS), 19 Islamic business units (UUS) under conventional banks, and 173 Islamic rural banks (BPRS).[1] Although Islamic banks were initially established to cater to the needs of the Muslim community for non-usurious financial services,[2] they have now become an integral part of society, serving not only Muslims but also the wider public.[3] However, according to data from the Financial Services Authority (OJK), the market share of Islamic banks in Indonesia as of March 2024 is only 7.38%.[4] This fact is far from satisfactory given Indonesia's predominantly Muslim population. It also means that Islamic banks face significant challenges in competing with conventional banks.

The structure of Indonesia's banking industry itself contributes to this competitive environment. The foundation for this was laid by Law No. 10 of 1998, which introduced a dual banking system. This regulation enabled the coexistence of

[1] Statistik Perbankan Syariah, August 1, 2024, https://ojk.go.id/id/kanal/syariah/data-dan-statistik/statistik-perbankan-syariah/Default.aspx.

[2] Syed Alamdar Ali Shah, Raditya Sukmana, and Bayu Arie Fianto, "Efficiencies in Islamic Banking: A Bibliometric and Theoretical Review," *International Journal of Productivity and Quality Management*, Vol. 32, No. 4 (2021), 458-501. https://doi.org/10.1504/IJPQM.2021.114268.

[3] Zulfa Ahmad Kurniawan and Iva Faizah, "Analisis Pengungkapan Sumber dan Penggunaan Dana Kebajikan pada Laporan Keuangan Bank Umum Syariah di Indonesia," *Al-Mashrof: Islamic Banking and Finance*, Vol. 3, No. 1, (2022), 63. https://doi.org/10.24042/al-mashrof.v3i1.12161.

[4] Grahanusa Mediatama, "Pangsa Pasar Perbankan Syariah Tumbuh 7,38% pada Maret 2024, OJK Beberkan Pemicunya," Kontan, 2024, https://keuangan.kontan.co.id/news/pangsa-pasar-perbankan-syariah-tumbuh-738-pada-maret-2024-ojk-beberkan-pemicunya.

two forms of Islamic banking entities mentioned earlier: full-fledged Islamic commercial banks (BUS) and Islamic business units (UUS) operating under conventional parent banks. Consequently, this framework fosters a unique landscape where Islamic banks must compete not only with each other but also directly with established conventional banks and their Sharia units.

Competition among banks influences their intermediation functions and profitability. According to the structure-performance (SP) hypothesis,[5] a concentrated market with less competition is more favorable for profitability. Conversely, a highly competitive market reduces profit potential. To face this competition, Islamic banks employ various strategies to attract public funds, including offering competitive profit-sharing rates, which in turn increase their cost of funds. On the lending side, banks may compromise on prudential principles in their financing activities due to high performance targets. Both factors could lead to a decline in profitability for Islamic banks.

At the same time, digital transformation has become a key driver of efficiency in modern banking.[6] The adoption of fintech, AI, and blockchain in Islamic banking can reduce operational costs, improve service delivery, and expand financial inclusion. According to the efficiency hypothesis, a bank's performance is determined by how well its management utilizes available resources to achieve the desired level of profitability. The more efficient a bank is, as reflected by a low BOPO ratio (operating expenses to operating income), the better its performance.[7] This indicator becomes a key factor in determining whether a bank can compete in the market.[8]

In recent years, the government has held high expectations for the Islamic banking industry in Indonesia. One such goal is to position Bank Syariah Indonesia (BSI) among the top 10 global Islamic banks.[9] Additionally, the government has actively promoted consolidation within the Islamic banking sector through mergers and spin-offs. This strategy is also expected to enhance financial inclusion and economic resilience, aligning with the Sustainable Development Goals (SDGs), particularly in reducing inequalities (SDG 10) and promoting sustainable economic growth (SDG 8). The spin-off requirement is outlined in the Islamic Banking Law No. 21 of 2008, which mandates that Islamic business units (UUS) owned by conventional banks must be separated (spin-off) once their assets reach 50% of the parent bank's total

[5] M. Nur Rianto Al Arif, M. Arief Mufraini, and M. Agung Prabowo, "Market Structure, Spin-Off, and Efficiency: Evidence from Indonesian Islamic Banking Industry," *Emerging Markets Finance and Trade*, Vol. 56, No. 2, (January 26, 2020), 329–37. https://doi.org/10.1080/1540496X.2018.1553162.

[6] Chi-Chuan Lee, *et. al.*, "Does Fintech Innovation Improve Bank Efficiency? Evidence from China's Banking Industry," *International Review of Economics & Finance*, 2021, https://doi.org/10.1016/J.IREF.2021.03.009; L Zuo, Jack Strauss, and L Zuo, "The Digitalization Transformation of Commercial Banks and Its Impact on Sustainable Efficiency Improvements through Investment in Science and Technology," *Sustainability*, 2021, https://doi.org/10.3390/su131911028.

[7] Rizky Yudaruddin, "Market Structure, Conduct and Performance: Evidence from Indonesia Banking Industry," *EKUITAS (Jurnal Ekonomi dan Keuangan),* Vol. 19, No. 3, (August 7, 2017), 299. https://doi.org/10.24034/j25485024.y2015.v19.i3.1770.

[8] Miroslav Mateev, Ahmad Sahyouni, and Turki Al Masaeid, "Bank Performance before and during the Covid-19 Crisis: Does Efficiency Play a Role?," *Review of Managerial Science*, Vol. 18, No. 1, (August 11, 2024), 29–82. https://doi.org/10.1007/s11846-022-00611-y.

[9] Tentang Kami-Informasi Perusahaan Bank Syariah Indonesia, August 8, 2024, https://www.bankbsi.co.id/company-information/tentang-kami.

assets or after 15 years of the law's enactment (by 2023). However, this provision was revised with the passage of the Financial Sector Development and Strengthening Law (UU P2SK). Currently, according to OJK Regulation No. 12 of 2023, a conventional commercial bank (BUK) must spin off its UUS into a full-fledged Islamic Commercial Bank if the UUS assets reach 50% of the parent bank's total assets or if the UUS assets reach a minimum of IDR 50 trillion.

This study aims to analyze the efficiency levels of Islamic Business Units (UUS) and Islamic Commercial Banks (BUS) in Indonesia in terms of operational cost and revenue. The research is relevant to regulatory demands for UUS to be spun off and transformed into BUS. The study compares the efficiency of these two entities to determine which is more efficient. Although both operate under the same business principles of Sharia values, UUS and BUS differ significantly in institutional structure. This study is crucial as it provides valuable insights for bank managers and policymakers to enhance banking performance.[10]

Previous studies have explored the comparative efficiency of Islamic banks with mixed results. Nugroho, *et. al.,* (2019) concluded that Islamic business units (UUS) are more efficient than Islamic commercial banks (BUS), using the BOPO ratio as an efficiency indicator and testing it with an independent sample T-test.[11] A study by Asmirawati, *et. al.,* (2021) examined the changes in efficiency between BUS and UUS before and during the pandemic, finding that BUS efficiency decreased during the pandemic, while UUS efficiency improved, indicating better adaptability in crisis conditions.[12] Trinugroho, (2021) also found that Islamic commercial banks (BUS) tend to be less efficient compared to UUS owned by conventional banks.[13]

However, not all studies show UUS as more efficient. According to Tsany, (2022), UUS in Indonesia has not yet achieved optimal efficiency, as evidenced by Data Envelopment Analysis (DEA) scores for seven UUS during the 2016-2020 period, which fell below 100%, indicating inefficiency.[14] Hidayati, (2017) also stated that neither BUS nor UUS in Indonesia has reached maximum technical efficiency.[15] Meanwhile, Andriansyah, (2023) noted that post-pandemic, both BUS and conventional

[10] Marwan Izzeldin. *et. al.,* "Efficiency Convergence in Islamic and Conventional Banks," *Journal of International Financial Markets, Institutions and Money,* No. 70, (July 30, 2021), 101279. https://doi.org/10.1016/j.intfin.2020.101279.

[11] Lucky Nugroho, Fiki Wahyu Kuncoro, and Akhmad Amien Mastur, "Analis Perbandingan Bank Umum Syariah dengan Unit Usaha Syariah dari Aspek Efisiensi; Kualitas Asset dan Stabilitas Keuangan (Periode Tahun 2014-2017)," *IQTISHADIA Jurnal Ekonomi & Perbankan Syariah,* Vol. 6, No. 2, (July 30, 2019), 100-118. https://doi.org/10.19105/iqtishadia.v6i2.2354.

[12] Asmirawati and Mia Kurniati, "Analisis Perbandingan Kinerja Keuangan BUS dan UUS antara Sebelum dan Selama Pandemi Covid-19," *Jurnal REKSA: Rekayasa Keuangan, Syariah dan Audit,* Vol. 8, No. 2, (July 30, 2021), 87-99. https://doi.org/10.12928/j.reksa.v8i2.4332.

[13] Trinugroho, *et. al.,* "Is Spin-off Policy an Effective Way to Improve Performance of Islamic Banks? Evidence from Indonesia."

[14] Muhammad Fauzan Yasir Tsany, Purnama Putra, and Mas Deden Tirtajaya, "Analisis Efisiensi Kinerja Unit Usaha Syariah di Indonesia dengan Metode Data Envelopment Analysis dan Rasio Eagles," *At-Tamwil: Journal of Islamic Economics and Finance,* Vol. 1, No. 1, (August 12, 2022), 17–33. https://doi.org/10.33558/attamwil.v1i1.5661.

[15] Nadiah Hidayati, Hermanto Siregar, and Syamsul Hidayat Pasaribu, "Determinant of Efficiency of The Islamic Banking in Indonesia," *Buletin Ekonomi Moneter dan Perbankan,* Vol. 20, No. 1, (August 12, 2017), 29-48. https://doi.org/10.21098/bemp.v20i1.723.

banks (BUK) achieved high efficiency, with no statistically significant difference between them.[16]

Literature Review

Efficiency is fundamentally a desirable objective in all forms of economic activity.[17] As a result, businesses will consistently strive to achieve this condition to maximize the value and benefits they generate. On the other hand, market structure also plays a significant role in a bank's ability to achieve profitability. This relationship is further elaborated in the discussion below.

Structure-Performance (SP) Hypothesis

The Structure-Performance (SP) hypothesis posits that market conditions significantly influence a bank's performance. It suggests that the more concentrated a market is with fewer competitors the more optimal a bank's performance can be. This idea has gained strong support from empirical studies in the banking sector. For instance, research in Ethiopia found compelling evidence supporting the SCP hypothesis, demonstrating that market concentration, as measured by the Herfindahl-Hirschman Index (HHI), has a significant positive effect on bank profitability.[18] This suggests that in highly concentrated markets, banks tend to perform better. A similar pattern was observed in Pakistan, where a strong positive relationship between the concentration ratio (CR) and profitability pointed to the conclusion that market concentration is a key determinant of bank success in that context.[19]

From a different perspective, this hypothesis is also strengthened by studies showing a negative relationship between banking competition and firm value, suggesting that less competition may provide a more favorable environment for improved performance. Moreover, bank size, as a core element of market structure, also has a significant impact. Larger banks are often expected to generate higher profits due to their ability to achieve economies of scale.[20] This advantage enables them to operate more efficiently by reducing operational costs and mitigating risks, which further supports the argument that the structural aspects of the market, such as concentration and size, are closely tied to bank performance.[21]

Efficiency Hypothesis

The Efficiency Hypothesis posits that a bank's superior performance is driven by its internal efficiency rather than its market power. From this perspective, a competitive

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[16] Fajar Andriansyah and Aan Julia, "Analisis Perbandingan Efisiensi Bank Umum Konvensional dan Syariah Pasca Pandemi Covid-19," *Jurnal Riset Ilmu Ekonomi dan Bisnis*, (August 12, 2023), 143-52. https://doi.org/10.29313/jrieb.v3i2.2685.

[17] José Luis Gómez-Barroso, *Public Economics: A Concise Introduction* (Routledge, 2021).

[18] Alem Gebremedhin Berhe, "Determinants of Bank Profitability in Ethiopia: Does Political Stability Matter?," *Cogent Business & Management*, Vol. 11, No. 1, (2024), 2410406.

[19] Ghulam Ali Bhatti and Haroon Hussain, "Evidence on Structure Conduct Performance Hypothesis in Pakistani Commercial Banks," *International Journal of Business and Management*, Vol. 5, No. 9, (2010), 174.

[20] Ekaterina Koroleva, *et. al.*, "Determinants Affecting Profitability of State-Owned Commercial Banks: Case Study of China," *Risks*, Vol. 9, No. 8, (2021), 150.

[21] Oluwaseyi Ebenezer OLALERE, *et. al.*, "The Effect of Financial Innovation and Bank Competition on Firm Value: A Comparative Study of Malaysian and Nigerian Banks," *The Journal of Asian Finance, Economics and Business*, Vol. 8, No. 6, (2021), 245–53.

environment serves as a key motivator for banks to operate more efficiently, enhance service quality, and reduce operational costs to remain competitive.[22] Accordingly, technical efficiency becomes a vital factor that enables banks to reduce costs, improve profitability, and maintain their competitiveness in the market.[23]

Empirical support for this hypothesis has been found across various markets. A study in Singapore, for example, confirms a long-term causal relationship in which an efficient market structure has a positive influence on firm value and performance.[24] Similar evidence is observed in Indonesia, where increasing competition has encouraged banks to become more efficient. In this context, banking consolidation is viewed more as a strategic effort to enhance efficiency rather than as anti-competitive behavior. As long as healthy competition is preserved, concerns about market concentration become less relevant.[25]

Spin-off

Spin-offs are corporate actions with positive intentions. According to Trinugroho, *et. al.,* (2021), the spin-off regulation aims to strengthen the intermediation function and accelerate the growth of Islamic banks. By becoming independent entities, Islamic banks gain full operational authority, which is expected to enhance their business scale and expand their market share.[26] However, any corporate action carries significant risks. Commitment and caution are essential to executing such a major initiative, which is why the Financial Services Authority (OJK) emphasizes that the separation of Islamic Business Units (UUS) should be conducted with a focus on achieving efficient, stable, and sustainable financial industry performance.

Hypothesis

Based on the theories and previous studies, the following hypothesis is proposed:

1. Null Hypothesis (H_0): There is no significant difference in efficiency between Islamic Commercial Banks (BUS) and Islamic Business Units (UUS) as reflected by the BOPO ratio.
2. Alternative Hypothesis (H_1): There is a significant difference in efficiency between Islamic Commercial Banks (BUS) and Islamic Business Units (UUS) as reflected by the BOPO ratio.

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[22] Wanying Song, *et. al.,* "Do Financial Inclusion and Bank Competition Matter for Banks' Stability in Asia?," *Technological and Economic Development of Economy,* Vol. 30, No. 5, (2024), 1457-85.

[23] Özlem O Akdeniz, *et. al.,* "Technical Efficiency in Banks: A Review of Methods, Recent Innovations and Future Research Agenda," *Review of Managerial Science*, Vol. 18, No. 11, (2024), 3395–3456.

[24] Arifa Bano Talpur, "Market Power and Concentration-Performance Analysis of the Banking Sector: A Comparative Study of Singapore and Pakistan," *Social Sciences & Humanities Open*, Vol. 7, No. 1, (2023), 100383.

[25] Dwi Budi Santoso, *et. al.,* "Analysis of Banking Competition in Indonesia and Its Impact on Profitability: Structure Conduct Performance (SCP) Approach," *Journal of Innovation in Business and Economics,* Vol. 7, No. 01, (2023), 19–28.

[26] Irwan Trinugroho, *et. al.,* "Is Spin-off Policy an Effective Way to Improve Performance of Islamic Banks? Evidence from Indonesia," *Research in International Business and Finance,* No. 56, (April 1, 2021). https://doi.org/10.1016/j.ribaf.2020.101352.

The focus of this research is to compare the efficiency of UUS and BUS. One key distinction of this study lies in the use of monthly data covering an extensive period from 2015 to April 2024. With a more extended timeframe and higher data resolution, this research aims to provide a more comprehensive overview of efficiency trends, as reflected in the operating expenses-to-operating income (BOPO) ratio.

Methodology

This study will compare the operational efficiency (BOPO) of Islamic Commercial Banks (BUS) and Islamic Business Units (UUS) in Indonesia using monthly data spanning ten years, covering the entire population from 2015 to April 2024. To ensure validity and reliability, the data is collected from a reliable source, specifically the Islamic Banking Statistics from the Financial Services Authority (*Otoritas Jasa Keuangan* - OJK).[27]

A quantitative approach will be applied using two analytical tools: Descriptive Statistics and the Mann-Whitney U Test. The BOPO ratio will be analyzed using descriptive statistics to observe year-by-year trends, providing an overview of the operational efficiency of BUS and UUS over the study period. The Mann-Whitney U Test will be employed to statistically assess the difference in BOPO between BUS and UUS. This test is chosen because the BOPO data may not be normally distributed, making a non-parametric test more appropriate.[28] The decision criteria are as follows:

1. If the p-value ≤ α (0.05), then H_0 is rejected and H_1 is accepted.
2. If the p-value > α (0.05), then H_0 is accepted.

Result and Discussion

To provide a visual representation of the dynamics of operational efficiency, the following graph presents the monthly movement of the BOPO ratio between Islamic Commercial Banks (BUS) and Islamic Business Units (UUS) over the period from February 2015 to April 2024. It is important to note that a lower BOPO ratio indicates a higher level of efficiency.

[27] OJK, "Statistik Perbankan Syariah," 2024, https://ojk.go.id/id/kanal/syariah/data-dan-statistik/statistik-perbankan-syariah/Default.aspx.

[28] Patrick McKnight and Julius Najab, "Mann–Whitney U Test," *The SAGE Encyclopedia of Research Design*, 2022, https://doi.org/10.4135/9781412961288.n228.

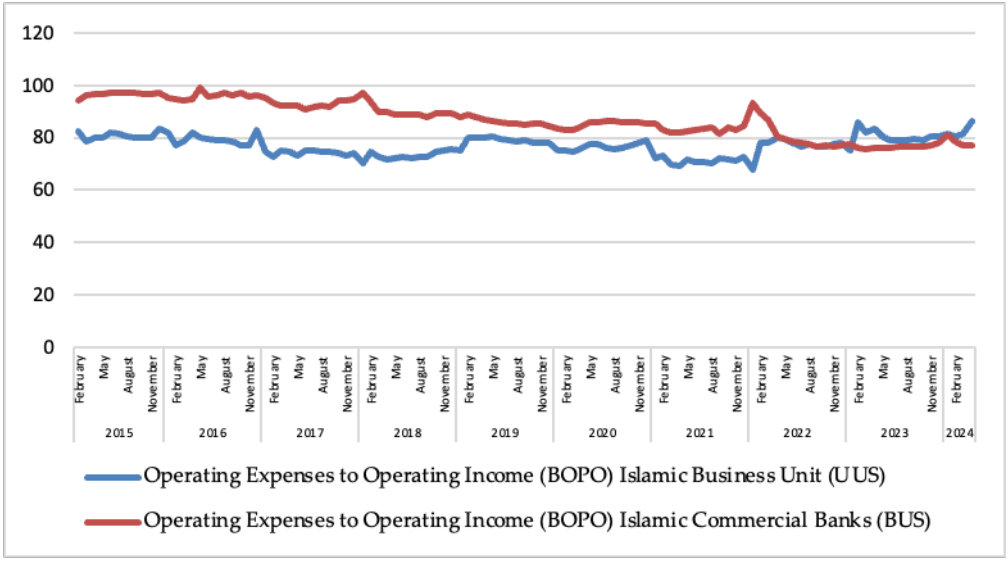

Figure 1. BOPO Ratio in Islamic Banks

The table below presents a summary of the descriptive statistics for the BOPO data of both bank groups. These statistics include the number of observations (N), the data range, minimum and maximum values, the mean, and the standard deviation. This information provides an initial overview of the central tendency and variability of efficiency levels in BUS and UUS during the study period.

Table 1. Descriptive Statistics

	N	Range	Minimum	Maximum
	Statistic	Statistic	Statistic	Statistic
BOPO_UUS	111	18.83	67.76	86.59
BOPO_BUS	111	23.26	75.78	99.04
	Std. Deviation	**Variance**	**Skewness**	
	Statistic	Statistic	Statistic	Std. Error
BOPO_UUS	374.656	14.037	-0.150	0.229
BOPO_BUS	696.082	48.453	-0.077	0.229

	Mean	
	Statistic	Std. Error
BOPO_UUS	76.9881	0.35561
BOPO_BUS	87.1052	0.66069
	Kurtosis	
	Statistic	Std. Error
BOPO_UUS	-0.387	0.455
BOPO_BUS	-1.190	0.455

The two figures above illustrate the trends in operational efficiency within Islamic Commercial Banks (BUS) and Islamic Business Units (UUS) over the period from 2015 to the first quarter of 2024. Efficiency levels are assessed using the BOPO (Operating Expenses to Operating Income) ratio, where a lower value indicates better management efficiency in handling operational activities. The data shows that UUS consistently maintained a lower BOPO ratio, reflecting higher efficiency, from 2015 until the second quarter of 2022. However, in the third quarter of 2022, for the first time, UUS recorded a higher BOPO ratio than BUS, although the difference was minimal. In August 2022, UUS had a BOPO ratio of 77.57, while BUS recorded a ratio of 77.34. A significant decline in UUS efficiency was observed as the BOPO ratio rose to 85.78 in February 2023 and 86.59 in April 2024.

BUS exhibited a different efficiency pattern. From 2015 to 2022, its BOPO ratio was consistently higher than that of UUS, indicating that BUS struggled to achieve the same level of operational efficiency. The best efficiency achieved by BUS was a BOPO ratio of 75.78 in March 2023, while the most severe inefficiency occurred in May 2016, with a BOPO ratio of 99.04. However, considering the overall trend, BUS showed a gradual improvement in its BOPO ratio, indicating progressive enhancements in cost management.

To determine whether these differences are statistically significant, a non-parametric Mann-Whitney U test was conducted, with the following results:

Table 2. Ranks

	Types of Bank	N	Mean Rank	Sum of Ranks
BOPO	UUS	111	69.29	7691.00
	BUS	111	153.71	17062.00
	Total	222		

Table 3. Test Statistics

	BOPO
Mann-Whitney U	1.475.000
Wilcoxon W	7.691.000
Z	-9.792
Asymp. Sig. (2-tailed)	.000
a. Grouping Variable: Types_Bank	

The results of the Mann-Whitney U test in the figure above indicate a significant difference in operational efficiency, as measured by the BOPO ratio, between Islamic Commercial Banks (BUS) and Islamic Business Units (UUS). Figure 3 shows that BUS has a mean rank of 153.71, which is significantly higher than UUS's mean rank of 69.29 (not the BOPO ratio itself). The Mann-Whitney U test also yielded a U-value of 1,475, along with a Z-value of -9.792 and a significance level (Asymp. Sig. 2-tailed) of 0.000, which is below the 0.05 threshold. This indicates that the null hypothesis (H0) of no difference is rejected, and the alternative hypothesis (H1) is

accepted. Therefore, the difference in efficiency between BUS and UUS is statistically significant, with BUS generally being less efficient than UUS.

In the face of competition from conventional banks with larger assets and broader business scales, efficiency is crucial for Islamic banks. According to the efficiency hypothesis, a firm's success depends on the level of efficiency it can achieve.[29] Efficiency is also essential for a bank's financial stability, especially in times of macroeconomic uncertainty, such as during a crisis.[30] Higher efficiency enhances financial stability.[31] Additionally, investors closely monitor a bank's management's ability to raise funds at lower costs and increase profitability, which is reflected in the stock prices in the capital market.[32]

Based on the above tests, we found that UUS is more efficient than BUS. This aligns with several studies conducted by Nugroho, *et. al.,* (2019), Asmirawati, *et. al.* (2021), and Trinugroho, *et. al.,* (2021). We then analyzed why BUS, which was expected to be a booster for expanding market share, is less efficient than UUS. In general, according to Shah, *et. al.,* (2021), the requirement to comply with Sharia principles leads Islamic banks to face cost inefficiencies.[33] By applying the profit and loss sharing (PLS) principle, Islamic banks are required to assess various business sectors with diverse risk profiles. Additionally, the dual board structure, including the Sharia Supervisory Board (DPS), contributes to their cost inefficiencies.[34]

Islamic banks in the form of BUS face significant challenges, particularly if the BUS is the result of a spin-off from a UUS. According to Arif, *et. al.,* (2020), administrative costs become a significant operational burden for Islamic banks post-spin-off.[35] The separation process requires BUS to make substantial investments in both fixed and non-fixed assets, including office buildings, branding, technology, and other related expenses. Other factors that contribute to efficiency include capital adequacy (CAR),[36] financing (NPF & FDR),[37] bank size (in terms of assets), and the adoption of digital technology.[38]

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[29] Yudaruddin, "Market Structure, Conduct And Performance: Evidence From Indonesia Banking Industry."

[30] Mateev, Sahyouni, and Al Masaeid, "Bank Performance before and during the Covid-19 Crisis: Does Efficiency Play a Role?"

[31] Mateev, Sahyouni, and Al Masaeid.

[32] Ali Mirzaei, Mohsen Saad, and Ali Emrouznejad, "Bank Stock Performance during the Covid-19 Crisis: Does Efficiency Explain Why Islamic Banks Fared Relatively Better?," *Annals of Operations Research,* Vol. 334, No. 1–3 (August 11, 2024): 317–55, https://doi.org/10.1007/s10479-022-04600-y.

[33] Shah, Sukmana, and Fianto, "Efficiencies in Islamic Banking: A Bibliometric and Theoretical Review."

[34] Md Hamid Uddin, "Corporate Earnings Uncertainty in Islamic Banking System: An Analysis and Evidence," 2017,https://www.semanticscholar.org/paper/Corporate-Earnings-Uncertainty-in-Islamic-Banking-%3A-Uddin/b95a379baffaaca432f93a526b0b396224bb967d.

[35] Al Arif, Mufraini, and Prabowo, "Market Structure, Spin-Off, and Efficiency: Evidence from Indonesian Islamic Banking Industry."

[36] Fajra Octrina and Alia Gantina Siti Mariam, "Islamic Bank Efficiency in Indonesia: Stochastic Frontier Analysis," *The Journal of Asian Finance, Economics and Business,* Vol. 8, No. 1, (July 18, 2021), 751–58, https://doi.org/10.13106/JAFEB.2021.VOL8.NO1.751.

[37] Hidayati, Siregar, and Pasaribu, "Determinant of Efficiency of The Islamic Banking in Indonesia."

[38] Maha Shehadeh, *et. al.,* "Digital Transformation: An Empirical Analysis of Operational Efficiency, Customer Experience, and Competitive Advantage in Jordanian Islamic Banks," *Uncertain Supply Chain Management*, Vol. 12, No. 2, (August 11, 2024), 695–708, https://doi.org/10.5267/j.uscm.2024.1.015.

Although the findings indicate that UUS is more efficient than BUS, recent trends over the past two years show a different pattern. In 2023, BUS managed to improve its efficiency better than UUS, which experienced a decline. If this positive trend continues in the coming years, the prospects for improving performance and expanding the market share of Islamic banks in Indonesia may be realized.

A Reversal in Efficiency Trends

A notable finding in this study is the reversal of the efficiency trend among Islamic Commercial Banks (BUS) in the past two years. The data indicate that, since early 2023, the BUS category has shown a consistent improvement in efficiency at the aggregate level. One possible driver behind this phenomenon is the consolidation effect of Bank Syariah Indonesia (BSI). As the largest entity formed through a merger, BSI may have successfully achieved economies of scale, consistent with the view that larger banks are more likely to attain higher profitability due to their ability to mitigate risks and reduce operational costs.[39]

BSI's performance as a dominant player is likely to have a significant influence on the overall decline in the average BOPO ratio across the BUS group. Moreover, this efficiency improvement can also be attributed to the increasingly widespread adoption of digital technologies. The integration of technological innovation into banking operations has been shown to reduce costs and enhance service efficiency.[40] Therefore, the combination of scale realization by a significant market player and accelerated digital transformation offers a compelling explanation for the observed reversal in the efficiency trend among Islamic Commercial Banks.

Conclusion

This study finds that the operational efficiency of Islamic Business Units (UUS) is better than Islamic Commercial Banks (BUS), as indicated by the descriptive statistics showing a lower average BOPO ratio for UUS (76.98) compared to BUS (87.10). These results are further supported by the Mann-Whitney U test, which confirms a statistically significant difference in efficiency between UUS and BUS as reflected in the BOPO ratio.

These findings have important implications for Islamic banking stakeholders when considering the policy of separating UUS into BUS. Such policies need to be carefully assessed to avoid sacrificing efficiency, which could ultimately impact the sustainability and competitiveness of Islamic banks.

This study has limitations as it compares efficiency using population-level data rather than entity-specific data. Given the dynamic changes in the BOPO ratio over the past two years, further research on efficiency in Islamic banks is crucial, particularly regarding the operational efficiency of entities implementing spin-off strategies and transforming from UUS to BUS. Such studies will help evaluate

[39] Koroleva, *et. al.*, "Determinants Affecting Profitability of State-Owned Commercial Banks: Case Study of China."

[40] Lee, *et. al.*, "Does Fintech Innovation Improve Bank Efficiency? Evidence from China's Banking Industry."

whether the separation and consolidation strategies initiated by regulators can drive operational efficiency and contribute to expanding market share as intended.

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Appendix

Year	Month	Operating Expenses to Operating Income (BOPO)	
		Islamic Business Unit (UUS)	Islamic Commercial Banks (BUS)
2015	February	82,28	94,23
	March	78,76	95,98
	April	79,97	96,69
	May	79,79	96,51
	June	82,06	96,98
	July	81,43	97,08
	August	80,37	97,30
	September	80,06	96,94
	October	79,96	96,71
	November	79,99	96,75
	December	83,41	97,01
2016	January	81,78	95,28
	February	77,05	94,49
	March	78,32	94,40
	April	81,93	94,71
	May	80,14	99,04
	June	79,53	95,61
	July	79,29	96,15
	August	79,01	96,96
	September	78,50	96,27
	October	77,27	97,21
	November	77,18	95,91
	December	82,85	96,23

2017	January	74,51	95,09
	February	72,78	93,35
	March	75,07	92,34
	April	74,40	92,31
	May	73,35	92,26
	June	75,08	90,98
	July	74,89	91,56
	August	74,62	92,03
	September	74,67	91,68
	October	74,09	94,16
	November	72,97	94,05
	December	74,15	94,91
2018	January	70,14	97,01
	February	74,51	93,81
	March	72,64	89,90
	April	71,90	89,75
	May	72,36	88,90
	June	72,62	88,75
	July	72,13	88,69
	August	72,68	88,64
	September	72,88	88,08
	October	74,70	89,36
	November	75,10	89,17
	December	75,38	89,18
2019	January	75,29	87,69
	February	80,22	89,09
	March	79,80	87,82
	April	80,14	86,95
	May	80,39	86,29
	June	79,54	85,72
	July	78,98	85,58
	August	78,65	85,59
	September	78,97	85,14
	October	78,08	85,55
	November	77,85	85,32
	December	78,01	84,45
2020	January	75,09	83,62
	February	75,03	82,78
	March	74,56	83,04
	April	76,10	84,60
	May	77,41	85,72
	June	77,37	86,11
	July	76,34	86,25
	August	75,82	86,22
	September	76,22	86,12
	October	76,94	86,08
	November	78,16	86,10
	December	78,96	85,55

2021	January	71,99	85,44
	February	73,35	82,98
	March	69,72	82,10
	April	69,19	81,86
	May	71,66	82,33
	June	70,78	83,15
	July	70,49	83,48
	August	70,17	83,86
	September	72,09	81,69
	October	71,64	83,79
	November	71,24	82,81
	December	72,70	84,33
2022	January	67,76	93,10
	February	78,12	89,51
	March	78,19	86,76
	April	80,17	80,58
	May	79,41	79,44
	June	78,01	78,53
	July	76,68	77,91
	August	77,57	77,34
	September	76,61	76,67
	October	76,53	76,86
	November	77,73	76,71
	December	77,97	77,28
2023	January	75,30	77,51
	February	85,78	76,05
	March	81,80	75,78
	April	83,26	75,88
	May	80,28	75,98
	June	79,09	76,02
	July	79,20	76,47
	August	79,12	76,60
	September	79,60	76,53
	October	78,94	76,61
	November	80,71	77,09
	December	80,32	78,31
2024	January	81,34	80,90
	February	80,64	78,45
	March	81,47	76,89
	April	86,59	77,32

Source: Statistik Perbankan Syariah, Financial Services Authority (OJK)