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The Role of Cost Efficiency in Mediating the Effect of Revenue Diversification on Profitability in Commercial Banks Listed on the Indonesia Stock Exchange (IDX)

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Abstract

This study aims to analyze the effect of revenue diversification on bank profitability with cost efficiency as a mediating variable in commercial banks listed on the Indonesia Stock Exchange (IDX). The study uses a quantitative approach with a causal-comparative design and utilizes panel data combining cross-section and time-series data for the period 2018–2024. The research sample consists of 16 national commercial banks selected based on certain criteria. Data analysis was conducted in stages using Partial Least Squares-based Structural Equation Modeling (PLS-SEM). The results show that revenue diversification has a positive and significant effect on profitability, and has a very strong and significant effect on cost efficiency. Cost efficiency is also proven to have a positive and significant effect on profitability. Furthermore, cost efficiency acts as a partial complementary mediator in the relationship between revenue diversification and profitability, where the indirect effect through cost efficiency is greater than the direct effect. These findings indicate that increasing bank profitability will be more optimal if the revenue diversification strategy is implemented simultaneously with strengthening cost efficiency. This research provides theoretical contributions to enrich the banking literature on value creation mechanisms, as well as practical implications for bank management and regulators in formulating sustainable business strategies.

Keywords: *Revenue diversification; cost efficiency; profitability; PLS-SEM; commercial banks; Indonesia Stock Exchange.*

Introduction

The banking industry can no longer rely solely on loan interest income as its primary source of profit, as competition between banks intensifies and the entry of digital banks and financial technology (fintech) services. Digital banks and online lenders are able to offer lower interest rates due to more efficient cost structures, the absence of extensive physical office networks, and the utilization of smartphone-based technology penetration. This situation puts pressure on conventional banks' interest margins and forces banks to transform their business models to remain competitive and sustainable. On the other hand, the banking sector is a fundamental pillar of the national economy, performing intermediation, capital allocation, liquidity provision, payment systems, and monetary policy transmission functions. Bank stability and profitability are important indicators of economic health, as banking sector fragility can quickly trigger a financial crisis and economic contraction, as demonstrated by various global and domestic crises. Therefore, sustainable bank profitability is not merely a micro issue but is closely linked to the stability of the financial system as a whole.

Profitability reflects a bank's ability to efficiently manage assets, capital, and risk, which is generally measured by the Return on Assets (ROA) and Return on Equity (ROE) ratios. Profitable banks have the capacity to build internal capital, comply with regulations such as Basel III, invest in digital technology, and expand their intermediary function to the productive sector. Furthermore, profitability is a positive signal for customers and investors, given that trust is the most valuable intangible asset in the banking industry. One key strategy for maintaining profitability is revenue diversification by developing non-interest income sources such as fee-based income, payment services, bancassurance, wealth management, and other digital services. This strategy aligns with Modern Portfolio Theory (Markowitz, 1952), which emphasizes that diversification can reduce risk without sacrificing expected

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returns. Revenue diversification also serves as a cash flow stabilization mechanism when interest income is under pressure due to interest rate fluctuations or credit risk, thus contributing to long-term profitability (Stiroh, 2004; Mercieca et al., 2022).

However, empirical evidence regarding the effect of revenue diversification on profitability remains inconsistent. Teimet et al. (2020) in Kenya and Devkota (2024) in Nepal found that non-interest income diversification had a positive effect on ROA and ROE. Similar findings were also obtained in Indonesia by Setiawan & Arrafi (2022), Kusumadewi et al. (2024), and Aznandy & Yanuar (2024), particularly in well-capitalized banks. Conversely, Bolivar et al. (2024) in European banks and Sudaryanti et al. (2023) in Indonesian state-owned banks found that revenue diversification actually had a negative impact on profitability due to increased complexity and inefficiency, thus emphasizing that diversification must be implemented strategically and in an integrated manner. In addition to revenue diversification, cost efficiency is a key factor in increasing bank profitability. The X-efficiency theory (Leibenstein, 1966) emphasizes the importance of reducing internal waste, while Agency Theory (Jensen & Meckling, 1976) views efficiency as a mechanism to control opportunistic management behavior. Empirically, Alhassan & Tetteh (2022), Chen et al. (2022), and Liu et al. (2023) demonstrated that cost efficiency significantly contributes to sustainable banking profitability. Revenue diversification also has the potential to increase cost efficiency through economies of scale and operational synergies, as explained by Transaction Cost Theory (Williamson, 1985) and supported by the findings of Teimet et al. (2020), Nguyen & Pham (2020), and Kusumadewi et al. (2024). The Indonesian banking sector for the 2022–2024 period showed increasing profits and stable ROA, decreasing interest income, growing non-interest income, and strengthening cost efficiency (OJK, 2022–2024). Although indicating a link between revenue diversification, cost efficiency, and profitability, empirical studies explicitly examining the mediating role of cost efficiency in this relationship among commercial banks listed on the Indonesia Stock Exchange are still limited. Therefore, this study aims to comprehensively examine the role of cost efficiency in mediating the effect of revenue diversification on the profitability of commercial banks listed on the IDX, with theoretical contributions and practical implications for banking management and regulators.

LITERATURE REVIEW

Profit Maximization Theory

Profit maximization theory is a classic approach in economics and financial management that emphasizes that the primary objective of a company is to obtain the highest possible profit through optimal management of revenues and costs (Varian, 2014; Pindyck & Rubinfeld, 2017), as also emphasized by Friedman (1970) that the primary responsibility of a business is to increase profits while remaining within legal and ethical corridors. Within this framework, profit maximization is achieved through two main mechanisms, namely increasing revenue through business expansion and diversification that can reduce profit volatility and create profitability stability, and cost efficiency by reducing operational costs without sacrificing quality so that profit margins and the ability to generate ROA increase. Thus, profit maximization theory views profit achievement not merely as a short-term accounting goal, but as a comprehensive strategy that directs all business functions to be more efficient, productive, and oriented towards sustainable value creation.

Diversification Theory

The concept of diversification in banking is rooted in Modern Portfolio Theory proposed by Markowitz (1952), which asserts that spreading assets or activities across components with low correlation can reduce overall risk without sacrificing expected returns. The principle of "not putting all your eggs in one basket" underpins a diversification strategy, where excessive reliance on a single source of income or type of asset can increase concentration risk. In the banking context, diversification is viewed as a risk management strategy for building a more balanced and resilient business portfolio, thereby stabilizing financial performance and increasing long-term profitability (Mercieca et al., 2007). However, the literature also emphasizes that diversification carries its own costs and risks, requiring careful management to avoid inefficiencies and increased agency costs, particularly when banks enter business lines outside their core competencies (Šeho et al., 2021). Revenue diversification is a concrete implementation of the diversification concept in banking, aimed at reducing dependence on traditional interest income by increasing the contribution of non-interest or fee-based income (Stiroh, 2004). This strategy includes the development of various services and products such as transaction services, banking commissions, wealth management, bancassurance, securities and foreign exchange trading, and digital services, which collectively form a more balanced and stable revenue portfolio. Revenue

diversification is expected to reduce profit volatility, increase banks' resilience to interest rate fluctuations and credit risk, and encourage sustainable profitability (Paramitha & Prasetyia, 2023). Various studies confirm that banks with more diverse revenue sources tend to be more adaptive to market and regulatory changes, more resilient to economic shocks, and have the potential for better financial performance, as long as such diversification is managed in an integrated manner and accompanied by adequate risk controls (Teimet et al., 2020; Susanto & Putri, 2022; Wahyuni & Pratama, 2023).

Cost Efficiency

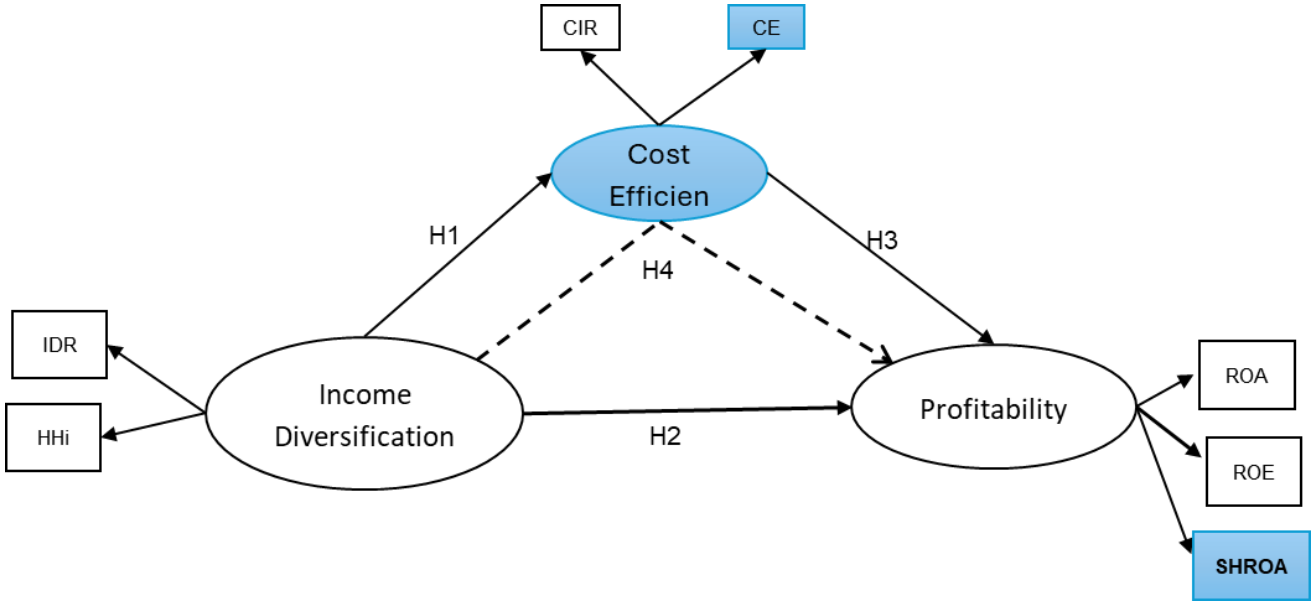
Cost efficiency is a measure of a bank's ability to minimize operational costs to optimally produce a specific level of output or service without sacrificing quality, reflecting the effectiveness of resource management in banking activities. According to Farrell (1957), cost efficiency is a combination of technical and allocative efficiency, namely the bank's ability to use inputs appropriately within the prevailing price structure to produce the desired output, thus reflecting the extent to which the bank is able to avoid waste and internal inefficiencies. In the banking context, cost efficiency plays a crucial role due to the intangible and service-based nature of products, high levels of regulation and compliance costs, and increasing reliance on information technology in the provision of financial services. Furthermore, cost efficiency is also closely related to a bank's ability to utilize economies of scale and economies of scope, where increasing transaction volume and expanding the range of services can be done without a proportional increase in costs. Banks that are able to achieve high cost efficiency tend to have healthier cost structures, larger operating margins, and greater resilience to competitive pressures and economic fluctuations, thus positively impacting profitability and financial performance stability. Cost efficiency also allows banks to manage risks more effectively, providing a larger buffer to absorb potential losses, and creating internal fiscal space for investment in digital innovation, product development, and long-term market expansion, ultimately increasing investor and stakeholder confidence. Cost efficiency in banking is generally measured using financial ratios, particularly the Cost-to-Income Ratio (CIR), which indicates the amount of operational costs required to generate each unit of revenue. The lower the CIR, the more efficient the bank's performance (Berger & Mester, 1997), and the Cost per Employee ratio, which reflects the efficiency of labor use and the level of technology utilization. Therefore, cost efficiency is not merely an indicator of operational performance but a strategic factor determining the sustainability, competitiveness, and profitability of banks amidst the dynamics of an increasingly competitive and digitalized financial industry.

Profitability Concept

Profitability is a crucial financial performance indicator for assessing the success of companies, including banks, as it reflects management's ability to generate profits from existing resources such as assets, equity, and revenue (Hargrave, 2022; Wild et al., 2007; Brigham & Houston, 2019). A high level of profitability indicates the effectiveness of financial management strategies, the efficiency of cost structures, and the competitiveness and sustainability of the business. Low profitability can signal operational or structural problems (Gitman & Zutter, 2015). In the banking context, profitability is also closely related to a bank's ability to manage risk, optimally distribute credit, and develop interest and non-interest income. Therefore, profitability is often positioned as a dependent variable influenced by various internal factors such as cost efficiency, revenue diversification, risk management, bank size, and capital structure, as well as external factors such as macroeconomic conditions, inflation, interest rates, and financial system regulation and stability (Berger & Mester, 1997; Chen et al., 2022; Tabak et al., 2016; Phan et al., 2020).

Banking profitability is generally measured using key financial ratios, namely Return on Assets (ROA), Return on Equity (ROE), and Shareholder Return on Assets (SHROA), each of which provides a different perspective on a bank's profit performance. ROA reflects a bank's ability to utilize all assets to generate profits and is widely used as a primary indicator of operational efficiency because it is independent of funding structure (Brigham & Houston, 2019; Kafait et al., 2022; Nguyen et al., 2022). ROE assesses the return on shareholder capital and is an important indicator for investors in assessing the effectiveness of equity use (Sari & Sudiyatno, 2021; Swaskarina & Pangestuti, 2024), while SHROA provides a more shareholder-oriented view of asset returns, taking into account financing costs and risks (Susilo & Anggraini, 2021; Pradana & Kurniawan, 2022). Using these three indicators allows for a more comprehensive assessment of profitability, although ROA is often used as the primary measure because it directly reflects a bank's ability to convert assets into profits efficiently and sustainably.

Figure 1 Conceptual Framework



Research Hypothesis

H1. Revenue Diversification has a positive and significant effect on Cost Efficiency

H2. Revenue Diversification has a positive and significant effect on Profitability

H3. Cost Efficiency has a positive and significant effect on Profitability

H4. Revenue Diversification has a positive and significant effect on Profitability, mediated by Cost Efficiency

RESEARCH METHODS

This study uses a quantitative approach with a causal-comparative design that aims to analyze the causal relationship between revenue diversification as an independent variable, cost efficiency as a mediating variable, and profitability as a dependent variable through simultaneous testing of the mediation model. Data analysis uses panel data that combines cross-section (bank sample) and time-series data (research period 2018–2024) to obtain a comprehensive picture of the dynamics of the relationship between variables. The research population includes all national commercial banks listed on the Indonesia Stock Exchange until 2018 with a total of 32 banks, while the research sample consists of 16 banks, namely Bank Central Asia Tbk., Bank Mestika Dharma Tbk., Bank Negara Indonesia (Persero) Tbk., Bank Rakyat Indonesia (Persero) Tbk., Bank Tabungan Negara (Persero) Tbk., Bank Danamon Indonesia Tbk., West Java Regional Development Bank, East Java Regional Development Bank, Bank Mandiri (Persero) Tbk., Bank CIMB Niaga Tbk., Bank Maybank Indonesia Tbk., Bank Permata Tbk., Bank Mega Tbk., Bank Pan Indonesia Tbk., Bank OCBC NISP Tbk., and Bank BTPN Tbk., with data analysis carried out in stages using the Partial Least Squares (PLS-SEM) based Structural Equation Modeling approach.

OPERATIONAL DEFINITION OF VARIABLES

Revenue Diversification (X): Revenue diversification is a bank's ability to generate income from non-interest sources as a complement to or substitute for interest income. Cost Efficiency (Z): Cost efficiency is a bank's ability to manage operating costs to generate revenue, indicating how efficiently management controls costs. Profitability (Y): Profitability is a bank's ability to generate profit from its assets or equity. Profitability reflects financial performance and the ability to create economic value.

RESEARCH RESULT

Outer Loading/Loading Factor Assessment

The outer loading assessment in SEM-PLS aims to evaluate the extent to which each indicator contributes to reflecting the latent construct being measured, where the loading factor value indicates the strength of the relationship between the indicator and its construct and the indicator's ability to represent the underlying theoretical concept. In the embedded two-stage approach, the first stage focuses on testing the validity and reliability of the indicators to ensure that each indicator has a strong

and consistent relationship with the latent construct it represents. The general criteria used state that an outer loading value ≥ 0.7 has met the minimum threshold of feasibility, so that the measurement model can be considered capable of accurately capturing the theoretical essence of the construct and becoming a solid foundation for structural analysis in the next stage (Hair et al., 2017).

Table 1 Measurement of Reliability of Research Variables

Variabel	Indikator	Loading Factor
Cost Efficiency	*Cost per Employee (CE)*	0.949
	Cost-to-Income Ratio (CIR)	0.953
Revenue Diversification	HHI_{Income}	0.956
	Income Diversification (IDR)	0.955
Profitability	*Return On Assets (ROA)*	0.911
	Return On Equity (ROE)	0.929
	Shareholder Return on Assets (SHROA)	0.926

Source: Processed Primary Data, 2025

The results of the construct validity test through outer loading show that all indicators in the model have loading factor values above the threshold of 0.70, and the majority even exceed 0.90, which confirms the fulfillment of excellent convergent validity. In the Cost Efficiency construct, the Cost-to-Income Ratio (CIR) indicator has the highest outer loading of 0.953, slightly greater than the Cost per Employee (CE) of 0.949, which indicates that CIR is the most dominant indicator in representing the cost efficiency of commercial banks listed on the Indonesia Stock Exchange because it is aggregated and reflects a direct comparison between costs and operating income. In the Revenue Diversification construct, the Revenue HHI indicator shows the highest outer loading of 0.956, slightly exceeding the Income Diversification Ratio (IDR) of 0.955, which indicates that HHI is stronger in capturing the structure and level of concentration of bank income sources comprehensively, while IDR still contributes strongly but is more partial. In the Profitability construct, all indicators also show very high outer loadings, namely ROE of 0.929, SHROA of 0.926, and ROA of 0.911, with ROE as the most dominant indicator reflecting the profitability of public banks from a shareholder perspective. Overall, the high outer loading values on all indicators confirm that the measurement model has excellent quality, capable of representing the constructs of cost efficiency, revenue diversification, and profitability accurately and consistently, thus providing a strong methodological foundation for continuing the analysis of structural relationships and testing the mediating role of cost efficiency in the SEM-PLS model.

Hypothesis Testing

Hypothesis testing is conducted by examining the relationships between latent constructs formulated in the model. In this study, a mediation path coefficient test will be conducted to prove the hypothesis formulated in the research model. The first test is the path coefficient test on the main parameters to determine the direction and strength of the relationship, as well as the t-statistic and p-values to assess the statistical significance of the relationship. The relationship is considered significant if the t-statistic > 1.96 and p-value ≤ 0.05.

Table 2 Hypothesis Testing

Hipotesis	*Original sample (O)*	*Sample mean (M)*	*Standard deviation (STDEV)*	*T statistics (|O/STDEV|)*	*P values*
DIRECT RELATIONSHIP HYPOTHESIS					

Revenue Diversification -> Cost Efficiency	0.800	0.798	0.035	22.951	0.000
Revenue Diversification -> Profitability	0.308	0.306	0.085	3.628	0.000
Cost Efficiency -> Profitability	0.548	0.548	0.084	6.504	0.000
MEDIATION HYPOTHESIS					
Revenue Diversification -> Cost Efficiency -> Profitability	0.438	0.438	0.073	5.973	0.000

Source: Processed Primary Data, 2025

DISCUSSION

The Effect of Revenue Diversification on Profitability

The results of the study indicate that income diversification has a positive and significant effect on bank profitability with a moderate influence, indicating that the more diverse a bank's income sources—both from interest and non-interest—the higher the level of profitability achieved, although its effectiveness still depends on operational efficiency. Empirically, the average Income Diversification Ratio (IDR) value of 22.39% indicates a moderate level of income diversification, where non-interest income has made a significant contribution to profits but the bank's income structure is still dominated by traditional intermediation activities, in line with the moderate diversification category in the literature (Stiroh, 2004). This is reinforced by the income HHI value of 0.67 which reflects an income structure that is not too concentrated but also not optimally diversified, a condition that according to Lepetit et al. (2008) is actually the most effective in increasing profitability because it is able to reduce risk without creating excessive complexity. The results of the outer loading test show that revenue diversification is more strongly represented by the revenue HHI (0.956) compared to IDR, while profitability is most dominantly represented by ROE (0.929), which confirms that revenue structure and profit stability have direct implications for return on equity. Non-interest income, which is fee-based and digital services tend to have lower volatility and are not directly exposed to credit risk and interest rate fluctuations, thus functioning as a profit buffer and strengthening the average bank ROE of 12.18%, with banks such as BCA, Mandiri, BRI, BNI, and Mega showing higher levels of diversification and profitability. This finding is consistent with portfolio theory (Markowitz, 1952) which emphasizes that diversification reduces revenue risk and increases profit stability, and is in line with empirical evidence from Teimet et al. (2020), Devkota (2024), Setiawan & Arrafi (2022), and Kusumadewi et al. (2020). (2024), and Aznandy & Yanuar (2024) which show that income diversification, especially in large-capital banks with infrastructure and technology support, significantly increases the bank's ability to generate profits sustainably.

The Effect of Revenue Diversification on Cost Efficiency

The results of the study indicate that revenue diversification has a positive and significant effect on cost efficiency, which confirms that the more diverse a bank's revenue sources—both interest and non-interest—the higher the bank's ability to reduce operational costs. The outer loading results show that revenue diversification is most strongly represented by the revenue HHI (0.956), while cost efficiency is most dominantly reflected by the Cost-to-Income Ratio (CIR) with a value of 0.953, which confirms the relevance of revenue structure in driving cost efficiency. The average CIR value of 58.40% indicates that the bank is in the fairly efficient category, where every Rp100 of revenue still requires Rp58.40 of operational costs, while the revenue HHI value of 0.67 reflects a relatively balanced medium level of diversification between interest and non-interest income. This condition indicates that although banks still rely on interest income, the consistent increase in non-interest income during the 2018–2024 period—especially at banks such as BNI, Mandiri, BCA, BRI, and Mega with lower HHI—has created income stability, reduced volatility, and enabled operational costs to be covered without proportional cost increases. Fee-based and digital-based non-interest income has a low marginal cost, creates economies of scope, and increases cash flow predictability, thus contributing directly to a decrease in CIR. This finding aligns with empirical literature stating that moderate diversification is most effective in improving performance (Lepetit et al., 2008) and is consistent with the Resource-Based View

perspective (Barney, 1991), which emphasizes that a bank's ability to combine strategic resources such as digital technology, service capabilities, and customer base will result in higher internal efficiency. The results of this study also support the findings of Nguyen & Pham (2020) and Kusumadewi et al. (2024) which proves that income diversification, especially through fee-based income and digital services, significantly increases the efficiency of bank operational costs.

The Effect of Cost Efficiency on Profitability

The results of the study indicate that cost efficiency has a positive and significant impact on bank profitability, confirming that the more efficient the cost structure, the greater the bank's ability to generate profits. Cost efficiency, proxied by the Cost to Income Ratio (CIR), reflects the bank's management's ability to manage all operational resources—labor, technology, networks, and capital—to generate revenue at minimal cost, creating economies of scale and scope, reducing operational risk, and increasing competitiveness. Empirically, the average CIR value of 58.40% indicates that the bank only spends IDR 58.40 for every IDR 100 of revenue, thus providing considerable room for increasing net profit, which has a direct impact on increasing profitability, proxied by an average ROE of 12.09%. A decrease in CIR directly increases operating margin, net profit, and ultimately ROE, while strengthening revenue stability, reducing operational risk, and expanding expansion capacity through more productive fund allocation. The data description also shows that banks with relatively low CIRs in the range of 40%–60%, such as Bank BNI, Mandiri, BCA, BRI, and Mega, tend to have higher ROEs in the range of 13%–20%, confirming the positive relationship between cost efficiency and profitability. Theoretically, this finding is consistent with Profit Maximization Theory, which asserts that optimal profit is achieved through cost control without reducing revenue capacity, and Transaction Cost Theory, which emphasizes the importance of reducing internal coordination, monitoring, and administration costs to increase shareholder returns. Empirically, these results align with the findings of Abbas et al. (2024), Alhassan & Tetteh (2022), Liu et al. (2023), and Chen et al. (2022), which demonstrate that cost efficiency is a key factor in improving and maintaining sustainable banking profitability.

The Effect of Revenue Diversification on Profitability Mediated by Cost Efficiency

The results of the study indicate that cost efficiency acts as a positive and significant mediator in the relationship between revenue diversification and profitability, confirming that revenue diversification not only directly increases profitability but its impact is stronger when accompanied by a more efficient cost structure. This finding indicates that cost efficiency is a key mechanism explaining how and why revenue diversification can increase profitability, because increasingly diverse revenues will be converted into profits more optimally when operational costs, processing costs, and transaction costs can be reduced, thereby increasing operating margins. The type of mediation found is partial complementary mediation (Hair et al., 2021), where the direct and indirect effects are both significant with the direction of the coefficients in line, and the indirect effect through cost efficiency is more dominant in strengthening the relationship, indicating that cost efficiency does not replace the role of revenue diversification but complements and strengthens its effectiveness. Theoretically, these findings are consistent with the Resource-Based View, which views cost efficiency as a strategic internal capability—reflected by effective information technology systems, human resource productivity, and strong cost control—that enables banks to manage diversification activities more productively. This is also in line with profit maximization theory, which emphasizes that optimal profits are achieved through a combination of increased revenue and reduced costs. Empirically, these results support the findings of Sufian & Kamarudin (2022), Chen et al. (2022), and Liu et al. (2023), which show that cost efficiency is a determining factor in ensuring that a revenue diversification strategy is truly capable of improving bank performance and profitability sustainably.

Theoretical Implications and Industrial Phenomena

The results of this study provide important theoretical and empirical contributions by confirming that banking financial performance cannot be explained partially, but rather through an integrated strategic mechanism between revenue diversification, cost efficiency, and profitability. The research findings strengthen the relevance of Profit Maximization Theory by showing that increasing bank profits depends not only on revenue expansion, but also on the ability to manage cost efficiency simultaneously, so that profit maximization is a multidimensional process that requires a balance between growth strategy and operational discipline. Furthermore, the results provide empirical reinforcement for Transaction Cost Theory by confirming that although revenue diversification has the potential to increase transaction complexity and costs, efficient organizational management, governance, and technology can reduce these costs and actually increase profitability. This study also

enriches the application of the Resource-Based View by showing that cost efficiency is a manifestation of a bank's internal capabilities—including managerial quality, information technology systems, human resources, and organizational culture—which enable the creation of synergy between diversification strategy and operational efficiency. The main theoretical implication of these findings is the confirmation of cost efficiency as a mediating variable explaining the mechanism of value creation in banking, so that revenue diversification does not automatically increase profitability without the support of internal efficiency. Contextually, the results of this study reflect the dynamics of the Indonesian banking industry, which is currently facing interest margin pressures, digital bank competition, and changing customer behavior. Bank success is determined by the ability to integrate diversification strategies with disciplined cost management. Therefore, this study confirms that transforming the banking business model toward an adaptive, efficient, and sustainable direction requires management's ability to simultaneously manage complexity and efficiency to create long-term value and support financial system stability.

CONCLUSION AND SUGGESTIONS

The results of the study indicate that revenue diversification has a positive and significant effect on bank profitability both directly (β = 0.308) and indirectly through cost efficiency, where revenue diversification also has a very strong effect on cost efficiency (β = 0.800) and cost efficiency is proven to increase the bank's ability to convert revenue into profit. Cost efficiency acts as a partial mediator that strengthens the relationship between revenue diversification and profitability, reflected in the indirect effect (β = 0.438) which is greater than its direct effect, thus indicating that bank profitability will increase optimally if the revenue diversification strategy is implemented simultaneously with strengthening cost efficiency. Based on these findings, banks are advised to expand revenue diversification in a balanced manner by increasing fee-based income based on digital banking, e-channel services, wealth management, and other technology-based services, while making cost efficiency a priority in operational strategies through process automation, service digitalization, and integration of core banking systems. Furthermore, increasing profitability should be achieved through a combination of measurable and sustainable diversification and efficiency strategies, while further research is recommended to include other variables such as credit risk, market risk, bank size, asset quality (NPL), and digital capabilities to enrich understanding of the determinants of banking profitability.

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