

A Comparative Analysis of the Financial Performance of PT XL Axiata Tbk Before and After Its Merger with PT Smartfren Telecom Tbk

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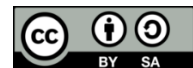
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ABSTRACT

This study aims to analyze differences in the financial performance of PT XL Axiata Tbk before and after its merger with PT Smartfren Telecom Tbk. Financial performance was measured using the Current Ratio (CR), Debt-to-Equity Ratio (DER), Total Asset Turnover (TATO), and Return on Equity (ROE), representing liquidity, solvency, activity, and profitability, respectively. This study employed a quantitative descriptive-comparative approach using secondary data obtained from the companies' official financial statements and the Indonesia Stock Exchange. The observation period covered one year before and one year after the merger, consisting of 11 paired observations for each financial ratio. Data analysis was conducted using descriptive statistics, the Kolmogorov-Smirnov normality test, and the Paired-Sample t-test. The results indicate significant differences in all financial ratios before and after the merger, with significance values below 0.05. The average CR increased from 0.5118 to 0.6209, TATO increased from 0.4564 to 0.5436, and ROE increased from 7.1091% to 8.1364%, indicating improvements in liquidity, asset utilization efficiency, and profitability. However, the average DER also increased from 1.8418 to 2.1691, reflecting greater reliance on debt financing and increased financial risk. Overall, the merger positively affected the company's operational and financial performance, although careful management of leverage remains necessary.

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1. INTRODUCTION

The telecommunications industry is a strategic sector that supports national connectivity, digital transformation, and the development of an information technology-based economy. In Indonesia, the continued growth of internet users, smartphone

penetration, and data consumption requires telecommunications companies to expand networks, improve service quality, and manage financial resources efficiently.

As a capital-intensive industry, telecommunications demands substantial investment in network infrastructure, spectrum acquisition, 4G and 5G technology

development, and service improvement, while intense price competition and regulatory pressures continue to constrain profit margins. Consequently, companies need corporate strategies that strengthen capital structures, improve operational efficiency, and expand market share. One widely adopted strategy is mergers and acquisitions (M&A), in which companies combine their resources to create synergies, achieve economies of scale, reduce cost duplication, expand markets, and strengthen financial structures [1]. Mergers may also enhance competitiveness by integrating technology, distribution networks, and human resources, although their success depends on effective organizational integration, appropriate financing structures, and industry conditions [2]. In Indonesia's highly competitive telecommunications industry, mergers have therefore become increasingly relevant for creating a more efficient and sustainable market structure, as reflected in the merger between PT XL Axiata Tbk and PT Smartfren Telecom Tbk.

The merger of these two companies is viewed as a strategic move to strengthen their competitive position in the national telecommunications market. XL Axiata is known as one of the major operators with an extensive network and a significant customer base, while Smartfren has a market penetration strategy focused on data services. The synergy between the two companies is expected to improve operational efficiency, optimize infrastructure utilization, and strengthen the companies' financial structures. However, the consolidation of assets, liabilities, and equity from both entities also has the potential to significantly alter the companies' financial ratios. Therefore, an empirical analysis is needed to assess whether the merger actually improves the companies' financial performance—which is generally measured through liquidity, solvency, activity, and profitability ratios, namely the Current Ratio (CR), Debt-to-Equity Ratio (DER), Total Asset Turnover (TATO), and Return on Equity (ROE).

The Current Ratio (CR) measures a company's ability to meet its short-term

obligations using current assets, thereby reflecting the company's liquidity level. In the context of a merger, changes in the CR may occur due to the consolidation of current assets and liabilities, which can either enhance or reduce the company's liquidity [3]. Meanwhile, the Debt-to-Equity Ratio (DER) is used to assess a company's capital structure by comparing debt to equity, thereby indicating the company's level of financial risk. Additionally, the efficiency of asset utilization is measured through Total Asset Turnover (TATO), which is the ratio that compares total sales to total assets. In a merger scenario, an increase in assets must be accompanied by sales growth to maintain the company's efficiency. Therefore, analyzing the CR, DER, and TATO is crucial for assessing changes in the company's liquidity, capital structure, and operational efficiency following the merger.

Profitability ratios in this study are measured using Return on Equity (ROE), a ratio that indicates the rate of return on equity invested by shareholders by comparing net income to total equity. This ratio is a primary concern for investors because it reflects management's ability to generate profits from available capital. In the context of a merger, ROE has the potential to increase if operational synergies successfully boost net income; however, in the early post-merger phase, integration costs and interest expenses may pressure profits, causing ROE to decline temporarily. Therefore, a comparative analysis of ROE before and after the merger is essential to assess whether the merger provides added value to shareholders. Overall, this study uses four financial ratios—Current Ratio (CR), Debt-to-Equity Ratio (DER), Total Asset Turnover (TATO), and Return on Equity (ROE)—to describe a company's liquidity, capital structure, asset efficiency, and profitability. The study employs a comparative analysis approach to compare financial ratios before and after the merger based on the companies' financial statements. Academically, this study contributes to the corporate finance literature regarding the impact of mergers in Indonesia's telecommunications sector,

which, according to previous research, has yielded mixed results and is influenced by financing structures, industry conditions, and corporate integration strategies [2]. Therefore, this study aims to empirically analyze whether there are significant differences in liquidity (CR), solvency (DER), activity (TATO), and profitability (ROE) ratios before and after the merger between PT XL Axiata Tbk and PT Smartfren Telecom Tbk.

This study compares PT XL Axiata Tbk's financial performance before and after its merger with PT Smartfren Telecom Tbk using the Current Ratio (CR), Debt-to-Equity Ratio (DER), Total Asset Turnover (TATO), and Return on Equity (ROE). The analysis aims to identify changes in liquidity, capital structure, asset utilization efficiency, and profitability, while providing empirical evidence for management, investors, and academics in evaluating merger effectiveness in the telecommunications sector.

2. LITERATURE REVIEW

2.1 *Merger Theory*

A merger is an external growth strategy involving the combination of two or more companies, with one company retaining its legal entity and the other being dissolved along with all its assets and liabilities [1]. A merger is considered successful if the value of the company after the merger exceeds the total value of each company prior to the merger as a form of synergy [4]. The merger of PT XL Axiata Tbk and PT Smartfren Telecom Tbk is classified as a horizontal merger because both operate in the capital-intensive mobile telecommunications industry. Its primary objectives are to increase corporate value and shareholder welfare through cost efficiencies, infrastructure and technology integration, market share expansion, and capital structure optimization [5]. In the telecommunications industry, synergies can be realized through the consolidation of BTS networks, spectrum efficiency, and workforce optimization to improve TATO and ROE and achieve economies

of scale and economies of scope [4]. However, success still depends on the effectiveness of post-merger integration, organizational cultural fit, and risk management.

2.2 *Theory of Synergy*

The theory of synergy states that mergers are conducted to create added value through the combination of complementary resources. [4] explain that synergies in mergers can take the form of operational synergies—namely, cost efficiencies and increased productivity; financial synergies—namely, reduced cost of capital and increased financing capacity; and managerial synergies—namely, improved governance and decision-making effectiveness. The success of these synergies is generally reflected in improved efficiency and profitability for the company, whereas integration failure can actually lead to diseconomies of scale that negatively impact financial performance.

2.3 *Signaling Theory*

Signaling theory explains the existence of information asymmetry between management and external parties, leading companies to send signals through various strategic policies—including mergers and acquisitions—to demonstrate growth prospects and enhanced competitiveness [6]. A merger may be perceived as management's confidence in the potential for synergies and an increase in corporate value, but the credibility of such a signal depends on post-merger performance [4]. An increase in ROE and TATO, as well as improvements in capital structure, indicate positive signals, whereas a decline in performance may reflect the failure of the merger. Therefore, changes in the financial ratios of PT XL Axiata Tbk and PT Smartfren Telecom Tbk need to be analyzed to assess whether the merger truly strengthens the companies' fundamentals.

2.4 Agency Theory

Agency theory explains the contractual relationship between shareholders (principals) and management (agents), in which shareholders grant authority to management to run the company with the expectation that management will act in the best interests of shareholders. However, differences in interests and information can lead to agency conflicts [7]. These conflicts may arise when management makes decisions that benefit themselves more, such as pursuing a merger to expand the company's size (empire building), enhance its reputation, or secure higher compensation. [4] explain that such conflicts can be minimized through oversight mechanisms such as financial statement transparency, corporate governance, and performance evaluations based on financial ratios, where profitability ratios such as ROE serve as key indicators in assessing whether management is creating value for shareholders. In the context of mergers, a post-merger evaluation is necessary to ensure that the decision truly enhances shareholder welfare. If there is an increase in profits, asset efficiency, and a more optimal capital structure, then management is considered to be acting in alignment with the principal's interests. Conversely, if performance declines and financial risk increases—for example, if the Debt-to-Equity Ratio (DER) rises without a corresponding increase in profitability—then the merger may be viewed as inefficient and generate agency costs for shareholders.

2.5 Financial Performance

Financial performance reflects a company's condition and achievements in effectively managing resources to generate profits and maintain operational stability [1]. This performance can be analyzed through liquidity, measured by the Current Ratio (CR); solvency, measured by the Debt-to-

Equity Ratio (DER); activity, measured by Total Asset Turnover (TATO); and profitability, measured by Return on Equity (ROE) [5]. In the context of a merger, changes in assets, liabilities, and equity can cause fluctuations in performance due to integration and restructuring costs; however, in the long term, a merger is expected to improve liquidity, capital structure efficiency, asset utilization, and profitability. Therefore, a comparison of financial performance before and after the merger is necessary to objectively assess the effectiveness of the merger.

2.6 Financial Ratio Analysis

Financial ratio analysis is used to assess a company's condition and performance by comparing items in financial statements, covering aspects of liquidity, solvency, activity, and profitability [1]. This analysis helps identify a company's strengths and weaknesses and enables comparisons across periods as well as between companies within the same industry [5]. In this study, financial ratios are used to compare the performance of PT XL Axiata Tbk and PT Smartfren Telecom Tbk before and after the merger.

a. Current Ratio (CR) – Liquidity Ratio

The Current Ratio (CR) is a liquidity ratio used to measure a company's ability to meet its short-term obligations through current assets, such as cash, accounts receivable, inventory, and other assets that can be converted into cash within one year [1]. A CR value above 1 indicates that a company's current assets are sufficient to cover its current liabilities; however, a value that is too high may indicate the presence of idle assets that have not been utilized productively, so its interpretation must take into account industry characteristics, operational cycles, and corporate strategy [5]. In the context of a merger, the consolidation of current assets and

liabilities can increase or decrease the CR, primarily due to differences in the liquidity levels of the two companies as well as the funding requirements for system integration and restructuring during the early post-merger phase.

b. Debt-to-Equity Ratio (DER) – Solvency Ratio

The Debt-to-Equity Ratio (DER) is a solvency ratio that measures the proportion of debt used relative to equity to finance a company's assets and reflects its capital structure and level of financial risk [4]. The higher the DER, the greater the company's reliance on debt and the greater the risk in meeting interest and principal obligations, although effective use of debt can increase shareholder returns through leverage, while a DER that is too low may indicate suboptimal utilization of external financing [5]. In the context of a merger, the combination of the two companies' debt and equity can significantly alter the DER, particularly if the company uses debt financing to support integration, network expansion, and technology investments; thus, analyzing the DER is crucial for assessing the stability and sustainability of the post-merger financial structure.

c. Total Asset Turnover (TATO) – Activity Ratio

Total Asset Turnover (TATO) is an activity ratio that measures a company's efficiency in using all its assets to generate revenue and indicates the effectiveness of management in utilizing its economic resources [1]. The higher the TATO value, the more efficiently the company's assets are utilized, while a low value indicates that assets are not being optimally utilized. This ratio is important in the capital-intensive telecommunications industry, which

requires significant investment in fixed assets and infrastructure. In the context of a merger, an increase in total assets resulting from the combination of the two companies must be accompanied by a proportional increase in sales to maintain the efficiency of asset utilization. If the increase in assets is not offset by revenue growth, this may indicate that post-merger synergies and operational integration have not been optimally achieved.

d. Return on Equity (ROE) – Profitability Ratio

Return on Equity (ROE) is a profitability ratio that measures a company's ability to generate net income from the capital invested by shareholders and indicates the rate of return on the owners' investment [4]. The higher the ROE, the more effectively a company manages its equity to generate profits; however, increases in ROE must be analyzed carefully as they can be influenced by high leverage, so their interpretation must take the company's capital structure into account [5]. In the context of mergers, ROE is used to assess a company's success in creating value for shareholders; a significant and sustained increase in ROE indicates the achievement of synergies and improved profitability, whereas a decline in ROE may suggest that the integration process is not yet optimal or that merger costs are still weighing on the company's profits.

2.7 Previous Research

Previous research indicates that the impact of mergers on a company's financial performance continues to yield inconsistent findings. Some studies have found an increase in asset utilization efficiency, as indicated by a rise in Total Asset Turnover (TATO), but this increase is not always accompanied by improvements in profitability and

liquidity [8], [9]. Other studies indicate that Return on Equity (ROE) does not undergo significant changes following a merger, whereas the Debt-to-Equity Ratio (DER) tends to rise due to changes in capital structure and increased reliance on debt [10]–[13]. Conversely, some studies have found that profitability and asset efficiency may improve in the medium term, although corporate liquidity tends to fluctuate or experience a temporary decline during the early stages of integration [14]–[16]. These differing results indicate that the success of a merger is significantly influenced by firm characteristics, the observation period, industry conditions, financing structure, and the effectiveness of the post-merger integration process.

Based on previous research, there remains a research gap in the form of a limited number of studies that specifically analyze changes in financial performance in the merger of PT XL Axiata Tbk and PT Smartfren Telecom Tbk using indicators that simultaneously represent four key financial aspects: the Current Ratio (CR) for liquidity, the Debt-to-Equity Ratio (DER) for solvency, Total Asset Turnover (TATO) for activity, and Return on Equity (ROE) for profitability. Most previous studies have focused on telecommunications companies in general, cross-sector companies, or have analyzed only specific ratios, thus failing to provide a comprehensive picture of the merger's impact on the financial condition of these two companies. Therefore, this study aims to fill this gap by comparing financial performance before and after the merger to obtain empirical evidence

regarding changes in liquidity, capital structure, asset efficiency, and the companies' ability to generate profits following the consolidation process.

2.8 Theoretical Framework

Mergers are corporate strategies undertaken to strengthen competitive positions, improve operational efficiency, achieve economies of scale, and create added value for shareholders—particularly in the telecommunications industry, which is capital-intensive, highly competitive, and requires significant infrastructure investment. The conceptual framework of this study is based on these conditions and analyzes the merger between PT XL Axiata Tbk and PT Smartfren Telecom Tbk using synergy theory, signaling theory, and agency theory. The merger is treated as the independent variable, distinguished by the one-year period before and the one-year period after the merger, while financial performance—the dependent variable—is measured using the Current Ratio (CR), Debt-to-Equity Ratio (DER), Total Asset Turnover (TATO), and Return on Equity (ROE). The analysis was conducted through normality tests and paired-sample tests using the Paired Sample t-test or the Wilcoxon test to determine whether there were significant differences in each financial ratio before and after the merger. Based on this theoretical foundation and conceptual framework, the research hypothesis was formulated to test for significant differences in the CR, DER, TATO, and ROE following the merger between PT XL Axiata Tbk and PT Smartfren Telecom Tbk.

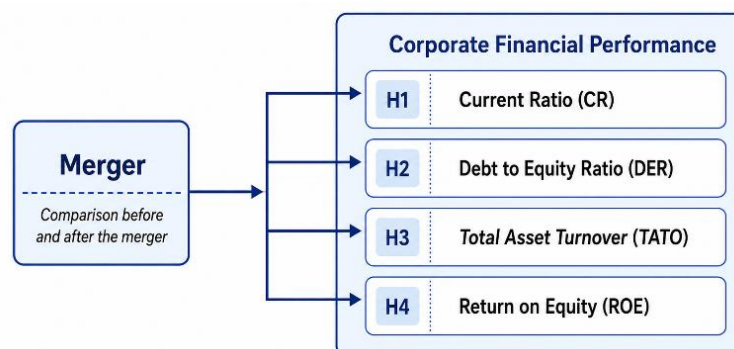


Figure 1. Conceptual Framework

3. METHODS

3.1 Research Type and Approach

This study employs a quantitative method with a descriptive-comparative approach to analyze and compare the financial performance of PT XL Axiata Tbk before and after its merger with PT Smartfren Telecom Tbk, based on financial data from financial statements that have been statistically analyzed. Financial performance is measured using the Current Ratio (CR), Debt-to-Equity Ratio (DER), Total Asset Turnover (TATO), and Return on Equity (ROE) to determine whether there are significant differences and to illustrate the financial condition during each observation period. The research was conducted through a documentary study without visiting the companies' physical locations, using secondary data in the form of annual financial statements and audited financial reports published on the companies' official websites and the Indonesia Stock Exchange. The study was conducted in 2026, covering a one-year period before and one year after the merger to assess short-term changes in financial performance as well as the effectiveness of the merger in improving the company's performance.

3.2 Population, Sample, and Sampling Technique

The population of this study consists of all annual financial statements of telecommunications companies listed on the Indonesia Stock Exchange that have undergone a merger, with a focus on PT XL Axiata Tbk, which merged with PT Smartfren Telecom Tbk. The research

sample consists of PT XL Axiata Tbk's annual financial statements for the one-year period before and one year after the merger, including the balance sheet and income statement, which are used to calculate the Current Ratio (CR), Debt-to-Equity Ratio (DER), Total Asset Turnover (TATO), and Return on Equity (ROE). The sampling technique employed purposive sampling, with criteria including telecommunications companies listed on the Indonesia Stock Exchange, having undergone a merger during the study period, and having published complete and audited financial statements. Based on these criteria, PT XL Axiata Tbk was selected as the research sample.

3.3 Variables and Operational Definitions

This study uses the merger between PT XL Axiata Tbk and PT Smartfren Telecom Tbk as the independent variable, while the dependent variable is the company's financial performance. The merger variable is proxied categorically by the pre-merger and post-merger periods, which are then compared to determine significant changes in financial performance.

The dependent variable in this study is the company's financial performance, measured through the aspects of liquidity, solvency, activity, and profitability. For the liquidity aspect, the Current Ratio (CR) is used—a ratio that measures a company's ability to meet its short-term obligations with current assets, calculated by dividing

total current assets by total current liabilities

$$CR = \frac{\text{Aset Lancar}}{\text{Kewajiban Lancar}}$$

A Current Ratio (CR) above 1 indicates that current assets are sufficient to cover current liabilities, while a CR below 1 suggests potential liquidity problems; in the context of a merger, this ratio may change due to adjustments to current assets and liabilities. Meanwhile, the Debt-to-Equity Ratio (DER) measures a company's solvency by comparing total liabilities to total equity.

$$DER = \frac{\text{Total Utang}}{\text{Total Ekuitas}}$$

A high Debt-to-Equity Ratio (DER) indicates a predominance of debt-based financing, while a low DER reflects a more conservative capital structure; in a merger, this ratio may change due to debt consolidation and equity adjustments. Meanwhile, Total Asset Turnover (TATO) measures a company's effectiveness in using its total assets to generate sales, calculated by dividing net sales by total assets.

$$TATO = \frac{\text{Penjualan}}{\text{Total Aset}}$$

A high Total Asset Turnover (TATO) indicates efficient use of assets, while a low value suggests that assets are not being utilized optimally; in a merger, operational synergies are expected to increase TATO. Meanwhile, Return on Equity (ROE) measures a company's ability to generate net income based on shareholders' equity, which is calculated by dividing net income after taxes by total equity.

$$ROE (\%) = \frac{\text{Laba Bersih}}{\text{Total Ekuitas}} \times 100$$

A high Return on Equity (ROE) indicates a company's ability to generate good returns for shareholders, while a low ROE reflects suboptimal profitability. In the context of a merger,

success can be measured by an increase in net income that drives up the ROE.

3.4 Research Instruments

The research instruments consist of secondary data from monthly financial statements, audited financial statements, and capital market data obtained from the company's official website and the Indonesia Stock Exchange. This data includes current assets, current liabilities, total liabilities, total equity, net sales, and net income after taxes. These figures are used to calculate the Current Ratio (CR), Debt-to-Equity Ratio (DER), Total Asset Turnover (TATO), and Return on Equity (ROE); to compare financial performance before and after the merger; and to serve as the basis for testing hypotheses objectively and consistently.

3.5 Data Collection Techniques

The data collection technique in this study employs a documentary method by gathering and analyzing the official financial statements of PT XL Axiata Tbk—as the company resulting from the merger with PT Smartfren Telecom Tbk—including the statement of financial position, income statement, and notes to the financial statements before and after the merger. The data collection process involved determining the observation period, downloading annual or audited financial statements from the company's official website and the Indonesia Stock Exchange, recording data on current assets, current liabilities, total liabilities, total equity, net sales, and net income, and then processing the data to calculate the Current Ratio (CR), Debt-to-Equity Ratio (DER), Total Asset Turnover (TATO), and Return on Equity (ROE). This method was chosen because the data used is objective, verified, and has undergone an audit process.

3.6 Data Analysis Techniques

The data analysis technique employs a comparative quantitative method to examine differences in the financial performance of PT XL Axiata Tbk before and after its merger with PT Smartfren Telecom Tbk. The analysis

begins with descriptive statistics, including the mean, minimum, maximum, and standard deviation for the Current Ratio (CR), Debt-to-Equity Ratio (DER), Total Asset Turnover (TATO), and Return on Equity (ROE), followed by a normality test using the Shapiro-Wilk or Kolmogorov-Smirnov test. If the significance level is greater than 0.05, the data is considered normally distributed and tested using a Paired Sample t-test; otherwise, the data is tested using the Wilcoxon Signed-Rank Test. The null hypothesis is rejected if the significance level is less than 0.05, indicating a difference in financial performance before and after the merger.

4. RESULTS AND DISCUSSION

4.1 Background of the Merger

The telecommunications industry in Indonesia faces challenges in the form of high infrastructure investment needs, rapid technological developments, and intense price competition. These conditions have prompted companies to consolidate in order to ensure business sustainability and enhance competitiveness. The merger between PT XL Axiata Tbk and PT Smartfren Telecom Tbk aims to increase economies of scale, optimize networks and infrastructure, reduce

operating costs, and strengthen capital structure and financial position. However, the merger may also incur integration costs, organizational restructuring, and operational system adjustments that affect financial performance in the short term.

This study covers the one-year period before and one year after the merger, based on audited and officially published annual financial statements. This period was selected to evaluate the initial impact of the merger on liquidity (measured by the Current Ratio), solvency (measured by the Debt-to-Equity Ratio), activity (measured by Total Asset Turnover), and profitability (measured by Return on Equity). This analysis is expected to provide a focused overview of changes in the company's financial performance before and after the merger.

4.2 Descriptive Statistical Analysis

a. Pre-Merger Descriptive Analysis

Descriptive statistical analysis was used to describe the financial performance of PT XL Axiata Tbk before the merger based on the minimum, maximum, mean, range, and standard deviation of the CR, DER, TATO, and ROE, with 11 observation periods for each metric.

Table 1. Descriptive Statistical Analysis Before the Merger

Variable	Min	Max	Mean	Std. Deviation
Current Ratio Before Merger	0.45	0.58	0.5118	0.04215
Debt-to-Equity Ratio Before Merger	1.75	1.92	1.8418	0.04687
Total Asset Turnover Before Merger	0.42	0.50	0.4564	0.02618
Return on Equity Before Merger	6.20	7.80	7.1091	0.48467

Table 1 shows that prior to the merger, PT XL Axiata Tbk's Current Ratio (CR) had a minimum value of 0.45, a maximum of 0.58, an average of 0.5118, and a standard deviation of 0.04215, reflecting relatively low but stable liquidity, as current assets were not yet fully capable of covering short-term liabilities. The Debt-to-Equity Ratio (DER) had a minimum value of 1.75,

a maximum of 1.92, an average of 1.8418, and a standard deviation of 0.04687, indicating a relatively consistent capital structure with a fairly high level of debt reliance. Total Asset Turnover (TATO) has a minimum value of 0.42, a maximum of 0.50, an average of 0.4564, and a standard deviation of 0.02618, indicating that asset utilization efficiency is moderate and relatively

stable. Meanwhile, Return on Equity (ROE) has a minimum value of 6.20%, a maximum of 7.80%, an average of 7.1091%, and a standard deviation of 0.48467, indicating the company's ability to generate returns for shareholders with a relatively stable level of profitability.

b. Descriptive Analysis After the Merger

Descriptive statistical analysis after the merger was used to describe the financial performance of PT XL Axiata Tbk based on the minimum, maximum, mean, range, and standard deviation of the CR, DER, TATO, and ROE ratios, with 11 observation periods for each.

Table 2. Descriptive Statistical Analysis After the Merger

Variable	Min	Max	Mean	Std. Deviation
Current Ratio After Merger	0.55	0.72	0.6209	0.05752
Debt-to-Equity Ratio After Merger	2.02	2.28	2.1691	0.09544
Total Asset Turnover After Merger	0.49	0.62	0.5436	0.04523
Return on Equity After Merger	7.40	9.10	8.1364	0.59038

Table 2 shows that after the merger, the Current Ratio (CR) had a minimum value of 0.55, a maximum of 0.72, an average of 0.6209, and a standard deviation of 0.05752, indicating an improvement in liquidity even though it remained below 1. The Debt-to-Equity Ratio (DER) had a minimum value of 2.02, a maximum of 2.28, an average of 2.1691, and a standard deviation of 0.09544, indicating an increase in debt utilization and financial risk following the merger. Total Asset Turnover (TATO) has a minimum value of 0.49, a maximum of 0.62, an average of 0.5436, and a standard deviation of 0.04523, indicating an increase in asset utilization efficiency. Meanwhile, Return on Equity (ROE) had a minimum value of 7.40%, a maximum of 9.10%, an

average of 8.1364%, and a standard deviation of 0.59038, reflecting an increase in the company's ability to generate returns for shareholders. Overall, the merger showed improvements in liquidity, asset efficiency, and profitability, but was also accompanied by an increase in leverage; therefore, further testing is needed to assess the significance of these changes.

4.3 Financial Performance Assessment

a. Current Ratio (CR) Before and After the Merger

A normality test was used to ensure that the financial ratio data were normally distributed before conducting a paired-sample t-test. The test used the one-sample Kolmogorov-Smirnov test with a significance level of 5% ($\alpha = 0.05$).

Table 3. Results of the Kolmogorov-Smirnov Normality Test for the Current Ratio (CR)

Component	Indicator	Current Ratio Before the Merger	Current Ratio After the Merger
N	Number of Observations	11	11
Normal Parameters	Mean	0.5118	0.6209
	Standard Deviation	0.04215	0.05752
Most Extreme Differences	Absolute	0.138	0.187
	Positive	0.138	0.187
	Negative	-0.112	-0.121
Test Statistic		0.138	0.187

Component	Indicator	Current Ratio Before the Merger	Current Ratio After the Merger
Asymp. Sig. (2-tailed)		0.200	0.200
Monte Carlo Sig. (2-tailed)	Significance	0.806	0.349
99% Confidence Interval	Lower Bound	0.796	0.337
	Upper Bound	0.816	0.362

Based on the results of the One-Sample Kolmogorov–Smirnov Test in Table 2, the Asymp. Sig. (2-tailed) values for the Current Ratio before and after the merger were 0.200, respectively, while the Monte Carlo Significance values were 0.806 and 0.349, respectively. All of these significance values are greater than

0.05, so it can be concluded that the Current Ratio data before and after the merger are normally distributed. Thus, the assumption of normality has been met, and the analysis can proceed using the parametric Paired-Sample t-test to test for differences in the Current Ratio before and after the merger.

Table 4. Paired Samples Test Current Ratio (CR)

Variable Pair	Mean	Standard Deviation	Standard Error of the Mean	95% CI Lower Bound	95% CI Upper Bound	t	df	Sig. (2-tailed)
Current Ratio Before the Merger – Current Ratio After the Merger	-0.10909	0.02948	0.00889	-0.12890	-0.08929	-12.273	10	0.000

A paired-sample t-test was conducted to determine the difference in the current ratio before and after the merger of PT XL Axiata Tbk and PT Smartfren Telecom Tbk, after the data met the assumption of normality. The test results showed a mean difference of -0.10909, indicating that the Current Ratio after the merger was higher than before the merger. The calculated t-value was -12.273 with df = 10, and the Sig. (2-tailed) value was 0.000 < 0.05, indicating a significant difference between the Current Ratios before and after the merger.

The 95% confidence interval ranges from -0.12890 to -0.08929 and does not cross zero, further reinforcing that the difference is significant and consistent.

b. Debt-to-Equity Ratio (DER) Before and After the Merger

A normality test was used to ensure that the Debt-to-Equity Ratio (DER) data before and after the merger were normally distributed, as a prerequisite for using the Paired-Sample t-test. The test was conducted using the One-Sample Kolmogorov–Smirnov Test at a 5% significance level ($\alpha = 0.05$).

Table 5. Normality Test for the Debt-to-Equity Ratio (DER)

Statistic	Component	Debt-to-Equity Ratio Before Merger	Debt-to-Equity Ratio After Merger
N	—	11	11

Statistic	Component	Debt-to-Equity Ratio Before Merger	Debt-to-Equity Ratio After Merger
Normal Parameters	Mean	1.8418	2.1691
	Std. Deviation	0.04687	0.09544
Most Extreme Differences	Absolute	0.158	0.172
	Positive	0.152	0.167
	Negative	-0.158	-0.172
Test Statistic	—	0.158	0.172
Asymp. Sig. (2-tailed)	—	0.200	0.200
Monte Carlo Sig. (2-tailed)	Sig.	0.623	0.478
99% Confidence Interval	Lower Bound	0.610	0.465
	Upper Bound	0.635	0.491

Based on 11 observations, the average DER increased from 1.8418 before the merger to 2.1691 after the merger, indicating a change in the company's capital structure. The results of the Kolmogorov–Smirnov test showed an Asymp. Sig. value of 0.200 for both periods, while

the Monte Carlo Significance values were 0.623 and 0.478, respectively. Since all significance values were greater than 0.05, the DER data before and after the merger were deemed to be normally distributed, allowing the analysis to proceed using a Paired Sample t-test.

Table 6. Paired Samples Test of the Debt-to-Equity Ratio (DER)

Pair	Paired Variables	Mean	Std. Deviation	Std. Error Mean	95% CI Lower	95% CI Upper	t	df	Sig. (2-tailed)
Pair 1	Debt-to-Equity Ratio Before Merger – Debt-to-Equity Ratio After Merger	-0.32727	0.12736	0.03840	-0.41284	-0.24171	-8.522	10	0.000

A comparative analysis of the debt-to-equity ratio (DER) was conducted to assess changes in the company's capital structure before and after the merger. Since the data were normally distributed, the analysis was performed using a paired-sample t-test. The results show a mean difference of -0.32727, a t-value of -8.522, df of 10, and Sig. (2-tailed) of 0.000, with a 95% confidence interval ranging from -0.41284 to -0.24171. Since the significance value is less than 0.05 and the interval does not include zero, there is a significant difference

in the DER before and after the merger. The increase in the DER indicates that the post-merger company relies more on debt-based financing, resulting in changes to its capital structure and financial risk.

c. Total Asset Turnover (TATO) Before and After the Merger

A normality test was used to ensure that the Total Asset Turnover (TATO) data before and after the merger were normally distributed, as a prerequisite for using the Paired Sample t-test. The test was conducted using the One-Sample

Kolmogorov–Smirnov Test at a 5% significance level ($\alpha = 0.05$).

Table 7. Normality Test for Total Asset Turnover (TATO)

Statistic	Component	Total Asset Turnover Before Merger	Total Asset Turnover After Merger
N	—	11	11
Normal Parameters	Mean	0.4564	0.5436
	Std. Deviation	0.02618	0.04523
Most Extreme Differences	Absolute	0.141	0.164
	Positive	0.141	0.164
	Negative	-0.089	-0.120
Test Statistic	—	0.141	0.164
Asymp. Sig. (2-tailed)	—	0.200	0.200
Monte Carlo Sig. (2-tailed)	Sig.	0.771	0.553
99% Confidence Interval	Lower Bound	0.760	0.540
	Upper Bound	0.781	0.566

Table 5 shows that Total Asset Turnover (TATO) before the merger had an average of 0.4564 with a standard deviation of 0.02618, while after the merger it increased to 0.5436 with a standard deviation of 0.04523. The results of the Kolmogorov–Smirnov test showed an Asymp. Sig. value of 0.200 for both periods, as well as a Monte

Carlo Significance value of 0.771 before the merger and 0.553 after the merger. Since all significance values were greater than 0.05, the TATO data before and after the merger were deemed to be normally distributed, allowing the analysis to proceed using a Paired Samples t-test.

Table 8. Paired Samples Test of Total Asset Turnover (TATO)

Pair	Paired Variables	Mean	Std. Deviation	Std. Error Mean	95% CI Lower	95% CI Upper	t	df	Sig. (2-tailed)
Pair 1	Total Asset Turnover Before Merger – Total Asset Turnover After Merger	-0.08727	0.02370	0.00715	-0.10320	-0.07135	-12.212	10	0.000

Source: Data processed by the researcher (2026)

Table 9 shows that the difference in the average Total Asset Turnover (TATO) before and after the merger is -0.08727, which means that the TATO value after the merger is higher than before the merger. The results of the paired-sample t-test yielded a t-value of -12.212 with df = 10 and a significance level (2-tailed) of 0.000. Since the significance value is less than 0.05 and the 95%

confidence interval ranges from -0.10320 to -0.07135 and does not include zero, it can be concluded that there is a significant difference in TATO before and after the merger.

d. Return on Equity (ROE) Before and After the Merger

A normality test was used to ensure that the Return on Equity (ROE) data before and after the merger were normally distributed as

a basis for using the Paired Sample t-test. The test was conducted using the One-Sample Kolmogorov–

Smirnov Test with a significance level of 5% ($\alpha = 0.05$).

Table 9. Results of the Kolmogorov–Smirnov Normality Test for Return on Equity (ROE)

Statistic	Component	Return on Equity Before Merger	Return on Equity After Merger
N	—	11	11
Normal Parameters	Mean	7.1091	8.1364
	Std. Deviation	0.48467	0.59038
Most Extreme Differences	Absolute	0.225	0.184
	Positive	0.225	0.184
	Negative	-0.208	-0.142
Test Statistic	—	0.225	0.184
Asymp. Sig. (2-tailed)	—	0.124	0.200
Monte Carlo Sig. (2-tailed)	Sig.	0.127	0.370
99% Confidence Interval	Lower Bound	0.118	0.358
	Upper Bound	0.135	0.383

Based on 11 observations, the average Return on Equity (ROE) increased from 7.1091 before the merger to 8.1364 after the merger, indicating a change in the company's profitability. The results of the Kolmogorov–Smirnov test showed an Asymp. Sig. value of 0.124 before the merger and 0.200 after the

merger, while the Monte Carlo Significance values were 0.127 and 0.370, respectively. Since all significance values are greater than 0.05, the ROE data before and after the merger are deemed to be normally distributed, allowing the analysis to proceed using a Paired Samples t-test.

Table 10. Paired Samples Test of Return on Equity (ROE)

Pair	Paired Variables	Mean	Std. Deviation	Std. Error Mean	95% CI Lower	95% CI Upper	t	df	Sig. (2-tailed)
Pair 1	Return on Equity Before Merger – Return on Equity After Merger	-1.02727	0.41974	0.12656	-1.30926	-0.74529	-8.117	10	0.000

Source: Data processed by the researcher (2026)

An analysis of the difference in Return on Equity (ROE) before and after the merger was conducted using a paired-sample t-test because the data met the assumption of normality. The test results showed a mean difference of -1.02727, a t-value of -8.117, df of 10, and Sig. (2-tailed) of 0.000, with a 95% confidence

interval ranging from -1.30926 to -0.74529. Since the significance value is less than 0.05 and the interval does not include zero, there is a significant difference in ROE before and after the merger. The negative difference indicates that ROE after the merger is higher, suggesting that the merger was followed by an improvement in

the company's ability to generate profits from its own capital.

4.4 Discussion

Overall, the merger between PT XL Axiata Tbk and PT Smartfren Telecom Tbk has led to changes in the companies' financial performance, particularly in terms of liquidity, capital structure, asset efficiency, and profitability. These findings support the view that mergers can create synergies through the pooling of resources, networks, technology, and customer bases. However, the impact of the merger is not entirely positive, as improvements in efficiency and profitability are accompanied by changes in the funding structure that may increase financial risk. These results align with those of [17], who found that mergers result in varied changes in performance—primarily improvements in asset efficiency—but that financial stability remains influenced by the post-merger integration process.

In terms of liquidity, an increase in the current ratio indicates that companies have a greater ability to manage current assets to meet short-term obligations following a merger. This improvement may stem from the consolidation of current assets, more integrated cash flow management, and greater efficiency in managing operational liabilities. These findings align with those of [10], who stated that mergers can affect a company's liquidity conditions. However, these results differ from those of [8], [16], who found that liquidity tends to decline in the early stages of a merger due to an increase in short-term liabilities and the need for integration financing.

Regarding solvency, the increase in the debt-to-equity ratio indicates that companies rely more heavily on debt-based financing after a merger. This situation may be related to financing needs for network integration, technology development, service expansion, and organizational restructuring. These findings are

consistent with those of [12], [13], [15], who showed that corporate consolidation tends to be followed by an increase in leverage. Although debt can support expansion and accelerate the realization of synergies, companies need to maintain a balanced capital structure so that increased interest expenses do not offset the economic benefits generated by the merger.

In terms of operations, the increase in Total Asset Turnover indicates that companies have become more effective at utilizing assets to generate revenue. The integration of networks, infrastructure, technology, and operational resources enables companies to reduce asset duplication and enhance the productivity of their assets. This finding is consistent with [8], [9], who found that asset utilization efficiency improves following a merger. These results also support the research by [15], which states that consolidation in the telecommunications industry can improve asset efficiency through infrastructure optimization and the integration of operational activities.

In terms of profitability, the increase in Return on Equity indicates that the company is able to generate better returns for shareholders following the merger. This situation indicates that operational synergies, asset efficiency, market expansion, and resource integration are beginning to contribute to the company's ability to generate profits. These findings are consistent with those of [14], [16], who demonstrated an increase in profitability following a merger. However, these results differ from those of [11]–[13], who found that profitability had not undergone any significant changes. These differences suggest that the success of a merger is strongly influenced by firm characteristics, the observation period, the effectiveness of integration, and management's ability to control post-merger costs and risks.

5. CONCLUSION

This study shows that there were significant differences in the Current Ratio (CR), Debt-to-Equity Ratio (DER), Total Asset Turnover (TATO), and Return on Equity (ROE) of PT XL Axiata Tbk before and after its merger with PT Smartfren Telecom Tbk. Following the merger, the increase in the CR reflects improved liquidity, the rise in TATO indicates more efficient use of assets, and the increase in ROE points to improved profitability and returns to shareholders. However, the rise in the DER suggests that the company has become increasingly reliant on debt-based financing, meaning that the benefits of the merger are accompanied by increased leverage and financial risk. Overall, the merger has had a positive impact on the

company's operational and financial performance, although capital structure management still requires attention.

Management is advised to continue optimizing post-merger synergies, improving operational efficiency, and controlling debt usage to ensure that the rise in the DER does not pose excessive risk. Investors can use the improvements in efficiency and profitability as investment considerations, but they should still monitor the company's leverage trends. Future research could include additional ratios such as Return on Assets, Net Profit Margin, and Earnings per Share; extend the observation period; use comparison companies that did not undergo mergers; and apply Difference-in-Differences or event study methods to analyze the impact of mergers more comprehensively.

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