



## Determinant State Earnings Qualities Better Than Private Pharmaceutical Companies

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### ABSTRACT

**Purpose:** Comparative Earning Quality of State and privately pharmaceutical companies listed on Indonesian Stock Exchange (BEI) between 2019-2023 period with liquidity, profitability, solvency and efficiency ratio.

**Methodology/approach:** After collecting the necessary data, appropriate financial ratios and descriptive statistical techniques are used to analyze, interpret and provide a brief overview of the data collected. the comparison involves two state-owned and two privately-owned pharmaceutical discretionary accruals and earnings persistence for earnings quality, and net profit margin, current ratio, debt-to-equity ratio, and total asset turnover for financial performance measurements.

**Findings:** net profit margin, current ratio, debt to equity ratio, dan total asset turnover have significant differences in the variables private are superior to those of state pharmaceutical companies. This recommends the importance of improving earnings quality of State pharmaceutical companies

**Practical implications:** these companies should refrain from earnings manipulation to foster strong and high-quality financial performance, particularly within Indonesia's pharmaceutical sector.

**Originality/value:** This comparison aims to contribute to financial management research by providing insights into the performance of different types of pharmaceutical companies based on earnings quality and financial statement ratios, thus offering academic contributions to the field.

**Keywords:** Earnings quality; Financial Performances; Pharmaceutical Companies.



## INTRODUCTION

The COVID-19 pandemic has heightened awareness of global health, influencing health behaviors related to cleanliness, vaccination, literacy, technology use, and overall public health ([Dănescu & Popa, 2020](#); [Fabiano, Marcellusi, & Favato, 2020](#); [Picard & Rusli, 2018](#)). Economically, there has been a rising demand for preventive medicines and supplements, prompting the pharmaceutical industry to develop more preventive products ([Teixeira Pereira, Moury, & Pita Barros, 2023](#)). Given their significant role in healthcare, pharmaceutical companies are crucial for improving human quality of life and are heavily influenced by political and social factors ([Persakis & Iatridis, 2015](#)). Responses differ between government and private pharmaceutical companies. State-owned firms are generally more responsive to national needs during crises, focusing on affordable, essential generic drugs to enhance public welfare. In contrast, private companies are more adaptable and innovative in resource allocation ([Kalaiselvan, Shukla, Arora, Shrivastava, & Raghuvanshi, 2022](#)).

Research indicates that private companies exhibit higher levels of innovation moreover struggle ([Picard & Rusli, 2018](#)), but stringent regulations can negatively impact their R&D. State-owned companies, on the other hand, are more effective in distributing essential drugs ([Wang & Yung, 2011](#)) and tend to offer lower prices and greater drug accessibility. Private firms often have higher prices, especially for new drugs, and utilize the patent system to maximize returns ([Dănescu & Popa, 2020](#)). In terms of funding and investment, domestic companies rely on government budgets, offering stable but limited investment, whereas private firms seek private capital and stock market strategies for greater investment in innovation ([Gaio & Pinto, 2018](#)).

Regarding operational transparency, government-owned companies face stricter public scrutiny due to their accountability to taxpayers, while private companies are more autonomous but face investor pressure for transparency ([Safari, Razghandi, Fathi, Cruz-Machado, & Cabrita, 2020](#)). Financially, state-owned companies usually demonstrate more stable growth with a focus on operational efficiency, while private companies might exhibit higher growth and margins but with greater volatility ([Rocha, de Andrade, Alves, Cândido, & Borio, 2020](#)). Financial performance, which includes metrics like profitability, return on sales, and market share, reflects the company's overall financial health over time ([Chakraborty, 2022](#)). State-owned companies typically show higher liquidity ratios and lower solvency ratios, while private companies often have better profitability and activity ratios with higher solvency ([Kalaiselvan et al., 2022](#)).

Earnings quality, which measures whether reported earnings accurately reflect operational performance, also varies. State-owned companies generally have more stable earnings quality due to their focus on public interest and government policies ([Ben-Nasr, Boubakri, & Cosset, 2015](#)), while private companies may face market pressures affecting their earnings quality. State-owned companies often provide more extensive public policy disclosures, while private firms focus on financial metrics pertinent to investors ([Sun, Yuen, Zhang, & Zhang, 2020](#)). Recent industry trends emphasize ESG metrics, investment in R&D, and the impact of drug pricing regulations on financial performance.

This study uses earnings quality to compare the performance of two types of pharmaceutical companies by conducting a comparative analysis of financial reports from companies listed on the Indonesia Stock Exchange. It explores how earnings quality impacts financial performance, using indicators such as net profit margin, current ratio, debt to equity ratio, and total asset turnover, with a specific focus on pharmaceutical companies in Indonesia. This comparison aims to contribute to financial management research by providing insights into the performance of different types of pharmaceutical companies based on earnings quality and financial statement ratios, thus offering academic contributions to the field.

## LITERATURE REVIEW

Financial performance assesses how well an organization has achieved its financial objectives, serving as a gauge of the company's overall financial well-being during a specific timeframe which emphasizes that a firm's financial performance is primarily evaluated through the analysis of its financial statements, structured datasets prepared following systematic accounting principles. These statements aim to provide insights into various financial aspects of the enterprise ([Bailey, 1989](#)).

Earnings quality is important and specifically for assessing a company's financial well-being as it pertains to the accuracy of reported earnings reflecting the true income of the company. Furthermore, according to ([Du, Huddart, Xue, & Zhang, 2020](#)). Earnings quality pertains to the percentage of profits derived from the fundamental operations of a business ([Putra, 2024](#)). This information is considered crucial as it authentically represents a company's financial performance, which is reflected by profits in its financial statements. Recent research has highlighted earnings quality as a critical factor influencing the financial level measurement effectivity of companies ([Gaio & Pinto, 2018](#)). Research conducted by [Sun et al. \(2020\)](#) examined how company ownership influences earnings management within firms. Contrary to the conventional belief that state ownership leads to corporate inefficiency, this study discovered that State-Owned Enterprises (SOEs) in China engage in less revenue manipulation compared to their private counterparts. The researchers also suggested that government support for state enterprises may alleviate managerial pressures to manipulate proprietary company data. Furthermore, that variations in earnings quality among State-Owned Enterprises and private firms have become less apparent as market forces increasingly influence the economy.

Ratio analysis stands out as a crucial analytical approach enabling the establishment of quantitative connections among elements within a company's financial statements. [Darapuspa and Soekarno \(2023\)](#) discovered ratio measure leverage and profitability define significant post effect on the quality of earnings. It articulates these relationships in terms of percentages. The primary objective of ratio analysis is to gauge asset efficiency, the utilization of external resources, profitability, and solvency, by examining meaningful interrelations among accounts. Information gleaned from ratio analysis not only illuminates past financial conditions but also facilitates future projections. Moreover, the insights derived guide decision-making pertaining to the business's future ([Akter et al., 2019](#)). Company bolster their

financial resilience by increasing their capital levels in response to the liquidity risks associated with generating liquidity. [Van Assche et al. \(2018\)](#) write things earnings Saharan Africa firm determine by character like internationalization and ownership structure and others. Higher capitalization strengthens capabilities to facilitate liquidity. Earning management, as described by [Mushirah, Keshav, and Neeveditah \(2018\)](#), involves a transparent and ethical approach to decision-making and reporting within management, with the goal of achieving consistent and foreseeable financial outcomes. The effect of earnings management on the trustworthiness of financial statements suggesting that it can diminish credibility for decision-making purposes. There are two main theories concerning earnings management: informative earnings management and opportunistic earnings management. Opportunistic earnings management has a detrimental impact on company performance, whereas informative earnings management can enhance it ([Safari et al., 2020](#)). Managers are motivated to manage earnings for two primary reasons. First, if reported earnings do not meet investor expectations, the company's performance may suffer. Second, companies with promising outlooks may choose to maximize current-year profits, even at the risk of reducing profits in subsequent years. This strategy entails the risk that lower future earnings could harm the company's standing.

## METHODS

A dataset was created featuring 13 global pharmaceutical companies operating in Indonesia, ranked by market capitalization from 2019 to 2023. Then comparative descriptive research design to evaluate the financial performance of state-owned enterprises (BUMN) and private sector companies (BUMS) within the pharmaceutical industry listed on the Indonesia Stock Exchange (IDX) from 2019 to 2023. Method was chosen for its ability to provide a comprehensive overview of financial performance differences between BUMN and BUMS companies, while also allowing for the identification of trends over the five-year period, these companies were categorized into two groups: state pharmaceutical companies (BUMN) and private pharmaceutical companies (BUMS).

The objectives of these groups differ: private pharmaceutical companies focus on profit, whereas state-owned companies are more socially oriented, aiming to provide essential medicines and improve public welfare at affordable prices. Secondary data was gathered from financial statements and annual reports available on the IDX official website and the companies' websites, utilizing documentation techniques for data collection. his approach aligns with similar studies in the field of financial performance analysis ([Safari et al., 2020](#)). Secondary data were sourced from audited financial statements and annual reports of the selected companies. These documents were accessed through the official IDX website ([www.idx.co.id](http://www.idx.co.id)) and the respective companies' official websites, employing a documentation technique for data collection. This method ensures the reliability and validity of the financial data used in the analysis. The specific financial documents collected included balance sheets, income statements, and cash flow statements for each year from 2019 to 2023. Additional data on market capitalization, stock prices, and dividend payments were also gathered to provide a comprehensive view of financial performance ([Gaio & Pinto, 2018](#)). To ensure data accuracy, all

financial figures were cross-referenced with those reported in the companies' official filings to the IDX.

The initial population comprised 13 pharmaceutical companies listed on the IDX during the study period. To maintain confidentiality and adhere to ethical research practices, a non-probability sampling technique, specifically quota sampling). This approach resulted in a final sample of four conventional pharmaceutical companies in Indonesia, equally distributed between state-owned (n=2) and private sector (n=2) entities. The use of quota sampling in financial performance studies has been validated in previous research ([Gaio & Pinto, 2018](#)).

The selection criteria for the sampled companies included:

1. Continuous listing on the IDX from 2019 to 2023
2. Availability of complete financial data for the entire study period
3. No major restructuring or mergers during the study period that could significantly skew financial performance
4. Comparable market capitalization within their respective categories (BUMN or BUMS)

These criteria ensured that the selected companies provided a representative sample of the Indonesian pharmaceutical sector while allowing for meaningful comparison between state-owned and private entities ([Wang & Yung, 2011](#)).

### **Data Processing**

The research employed a comparative descriptive method to assess the financial performance of state-owned and private pharmaceutical companies listed on the Indonesia Stock Exchange from 2019 to 2023. Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS) version 27.0. The study population consisted of 13 pharmaceutical companies listed on the IDX during this period. After performing quota sampling, the study focused on four traditional pharmaceutical companies in Indonesia: two state-owned and two private companies.

### **Analysist Ratio**

The analysis was conducted using the Statistical Package for Social Sciences (SPSS) software, version 27.0. Descriptive statistics, including means, standard deviations, and ranges, were calculated for each financial ratio across the five-year period. To identify significant differences in financial performance between BUMN and BUMS pharmaceutical companies, independent samples t-tests were conducted for each ratio ([Du et al., 2020](#)). Financial ratios were calculated based on the collected data to assess various aspects of company performance, including liquidity, profitability, and solvency ([Darapuspa & Soekarno, 2023](#)).

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To ensure the robustness of the results, normality tests (Shapiro-Wilk) and homogeneity of variance tests (Levene's test) were conducted prior to the t-tests and ANOVA. In cases where assumptions were violated, non-parametric alternatives such as the Mann-Whitney U test and Friedman test were employed. The research includes an examination of public regulations related to natural resources, comprehensive trade and legal systems, as well as specific earning quality. Net Profit Margin (NPM) calculated by dividing net

profit after taxes and interest by total sales. The company's ability to generate profits is strong if the NPM ratio is high. Moreover, the Current Ratio indicates a company's ability to cover short-term obligations with its current assets.

The Debt-to-Equity Ratio (DER) gauges a company's leverage by measuring debt against its capital. [Putra \(2015\)](#), a high DER can adversely affect company performance due to increased interest expenses, potentially reducing profits and, subsequently, investor returns. The metric that evaluates how well a company handles its assets is known as activity ([Bailey, 1989](#)).

Total Assets Turnover Ratio (TATO) relevance to company management as it reflects the financial efficiency of operations which indicates value of revenue per unit of capital invested in total asset ([Karim, Widayarti, & Santoso, 2023](#)). This superiority of state construction firms in TATO metrics contrasts with privately owned companies, which typically exceed the BUMN1 average TATO values.

### **Ethical Considerations**

To maintain the confidentiality of the companies involved and comply with data protection regulations, all company-specific identifiers were anonymized in the reporting of results ([Du et al., 2020](#)). Companies were assigned codes (e.g., BUMN1, BUMN2, BUMS1, BUMS2) to protect their identities while still allowing for meaningful analysis and reporting of results. These guidelines emphasize the importance of data integrity, transparency in methodological approaches, and the responsible use of financial information. Furthermore, as all data used in this study were publicly available through official channels, no additional ethical approval was required.

After collecting the necessary data, appropriate financial ratio techniques and descriptive statistics were used to analyze, interpret, and provide a brief overview of the data collected. This comparison involves two state-owned and two private pharmaceutical companies using discretionary accruals and earnings resilience for earnings quality, as well as net profit margin, current ratio, debt-to-equity ratio, and total asset turnover for financial performance measurement.

## **RESULTS & DISCUSSION**

### **Earnings Quality**

Financial firm level has a positive, though not earth-shattering, impact on earnings quality. When companies diligently follow solid corporate governance principles, it's like waving a magic wand over investor confidence while putting a lid on any funny business in financial reports. ([Persakis & Iatridis, 2015](#)) back this up, proving that top-notch earnings and good corporate governance practices make companies sparkle brighter in the eyes of investors. To enhance the quality of profits reported in financial statements, effective Corporate Governance (CG) mechanisms are essential. According to Signaling Theory, the company signals to shareholders that the anticipated profits are robust and of high caliber. In simpler terms, a strong alignment between retention rates and financial management correlates with higher-quality profits generated by the company. ([Ben-Nasr et al., 2015](#)) the strategic stakeholder perspective is an ethical concept that explores how the outcomes, trends, and profitability of a company affect all stakeholders involved, including shareholders, employees, financiers, government, consumers,

suppliers, and others. To optimize outcomes by maximizing profits, managers need to assess, oversee, and engage with all stakeholders of an organization in a manner that emphasizes the value of these relationships.

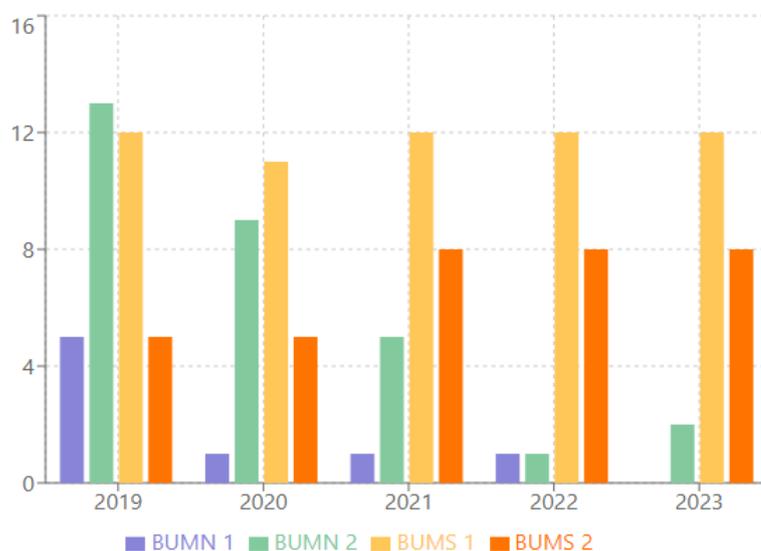
### Analysist Ratio

Researchers result use quantitative descriptive with standard BUMN1verage tables consisting of the Net Profit Margin ratio, Current Ratio, Debt to Equity Ratio, and Total Asset Turnover. The following is a table containing averages and standard financial performance indicators which Criteria Industry Standards.

**Table1. Comparative Net Profit Margin Ratio of State and Private pharmaceutical companies in 2019-2023**

Years	State Companies BUMN			Private Companies BUMS		
	BUMN1	BUMN2	Result	BUMS1	BUMS2	Result
2019	5%	13%	Excellent	12%	5%	Excellent
2020	1%	9%	Excellent	11%	5%	Excellent
2021	1%	5%	Not Good	12%	8%	Excellent
2022	1%	1%	Not Good	12%	8%	Excellent
2023	0%	2%	Not Good	12%	8%	Excellent
<b>Industry Standards</b>	5%					
<b>Average</b>	4%		Not Good	9%		Excellent

Source: Processed Data (2024)



**Figure 1. Comparative Net Profit Margin Ratio of State and Private pharmaceutical companies in 2019-2023**

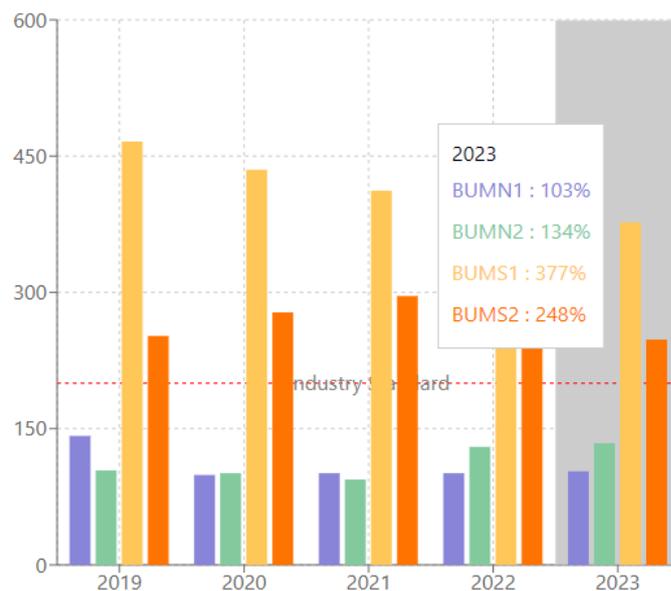
State Pharmaceutical Companies such as BUMN1 and BUMN2, as well as private sector enterprises (BUMS) like BUMS1 and BUMS2, exhibit notable differences. SOEs in the industry have an average net profit margin (NPM) of 4%, reflecting challenges such as declining product sales, rising expenses, and increased interest payments on overdue debts. Conversely, BUMS companies maintain a healthier average NPM of 9%. Notably, BUMS1 and BUMS2 have

achieved this through increased sales and enhanced marketing strategies. As a result, BUMS companies are generally considered financially robust.

**Table 2. Comparative Current Ratio of State and Private pharmaceutical companies in 2019-2023**

Years	State Companies BUMN			Private Companies BUMS		
	BUMN1	BUMN2	Result	BUMS1	BUMS2	Result
2019	142%	104%	Not Good	466%	252%	Excellent
2020	99%	101%	Not Good	435%	278%	Excellent
2021	101%	94%	Not Good	412%	296%	Excellent
2022	101%	130%	Not Good	445%	329%	Excellent
2023	103%	134%	Not Good	377%	248%	Excellent
<b>Industry Standards</b>	200%					
<b>Average</b>	111%		Not Good	354%		Excellent

Source: Processed Data (2024)



**Figure 2. Comparative Current Ratio of State and Private pharmaceutical companies in 2019-2023**

The current ratios of the aforementioned four companies reveal distinct characteristics. State Pharmaceutical Companies, specifically BUMN1 and BUMN2, exhibit an average current ratio of 111%, which is considered unfavorable. This indicates potential liquidity challenges stemming from increased financial obligations and credit extended to distributors, leading to current assets predominantly comprised of trade receivables from related parties. Consequently, these state-owned enterprises face significant short-term bank debt and substantial expenses, rendering them illiquid. In contrast,

BUMS companies, namely BUMS1 and BUMS2, demonstrate more favorable average current ratios. These companies are classified as liquid because they are well-positioned to meet short-term debt obligations and maintain cash flow operational needs.

**Table 3. Comparative Debt Equity Ratio of State and Private pharmaceutical companies in 2019-2023**

Years	State Companies BUMN			Private Companies BUMS		
	BUMN1	BUMN2	Result	BUMS1	BUMS2	Result
2019	182%	137%	Not Good	19%	45%	Excellent
2020	148%	155%	Not Good	21%	45%	Excellent
2021	146%	159%	Not Good	23%	43%	Excellent
2022	145%	148%	Not Good	21%	40%	Excellent
2023	147%	134%	Not Good	23%	50%	Excellent
<b>Industry Standards</b>			90%			
<b>Average</b>		150%	Not Good	33%	Excellent	

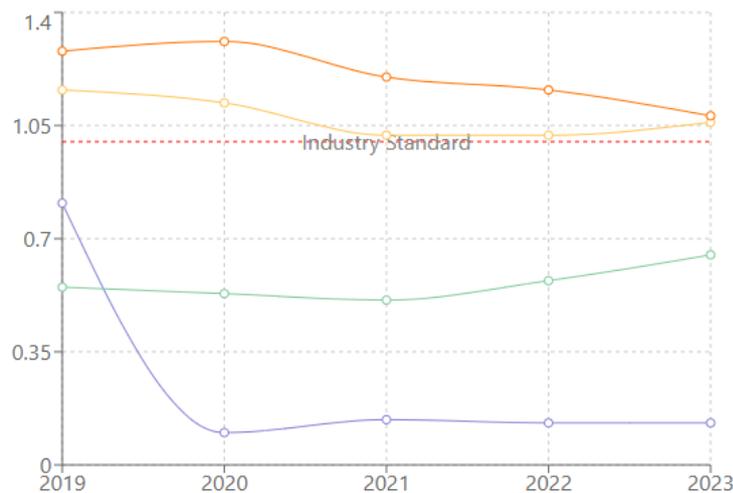
Source: Processed Data (2024)

From the table above interpreted values average debt to equity ratio in 2019-2023 for state company is 150%, the debt to equity ratio of these state companies is still not good. This is because on average the company's operational activities are financed by short and long period of debt loans rather than equity and the company is still unable to cover its obligations. Average debt to equity ratio of BUMS company's percentage on 33%, this indicates that the company's DER ratio is very good.

**Table 4. Comparative Total Asset Turnover of State and Private pharmaceutical companies in 2019-2023**

Years	State Companies BUMN			Private Companies BUMS		
	BUMN1	BUMN2	Result	BUMS1	BUMS2	Result
2019	0,81	0,55	Not Good	1,16	1,28	Not Good
2020	0,10	0,53	Not Good	1,12	1,31	Not Good
2021	0,14	0,51	Not Good	1,02	1,20	Not Good
2022	0,13	0,57	Not Good	1,02	1,16	Not Good
2023	0,13	0,65	Not Good	1,06	1,08	Not Good
<b>Industry Standards</b>			1			
<b>Average</b>		0,41	Not Good	1,14	Not Good	

Source: Processed Data (2024)



**Figure 4. Comparative Total Asset Turnover of State and Private pharmaceutical companies in 2019-2023**

Based on the table provided, it can be inferred that state pharmaceutical firm have an average turnover ratio of 0.41. This low ratio is attributed to modest sales figures, with a significant portion financed through long-term debt, which incurs substantial costs. Consequently, state pharmaceutical companies are categorized as financially unstable. Contrast BUMS pharmaceutical firm have an average turnover ratio of 1.14. Despite this higher ratio, the companies are deemed financially unstable due to suboptimal asset utilization that hinders sales growth and results in accumulated total assets.

Due to the sample size, the Shapiro-Wilk test was used to assess the normality of the data being  $< 30$ . In this study, the Shapiro-Wilk test was employed to assess data normality at a significance level ( $\alpha$ ) of 5%. The decision criteria for the Shapiro-Wilk test are as follows: If the significance level exceeds 5% (0.05), the data is considered normally distributed. If the significance level is less than 5% (0.05), the data is considered not normally distributed. When the data does not show a normal distribution, it is appropriate to use a nonparametric test such as the Mann-Whitney test. The results of the normality test conducted in the study are shown in the following table.

**Table 5. Result Normality Kolmogorov-Smirnov Shapiro-Wilk tests**

	Pharmaceutical Company	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	dfs	Signc	Statistic	dfs	Signc
<b>NPM</b>	BUMN	.235	10	.124	.816	10	.023
	BUMS	.241	10	.102	.849	10	.056
<b>DER</b>	BUMN	.395	10	.000	.613	10	.000
	BUMS	.277	10	.028	.831	10	.034
<b>CR</b>	BUMN	.355	10	.001	.775	10	.007
	BUMS	.157	10	.200	.907	10	.258
<b>TATO</b>	BUMN	.251	10	.074	.855	10	.067
	BUMS	.128	10	.200*	.935	10	.495

Source: SPSS Data Processing Results (2024)

Parametric tests are suitable when data follow a normal distribution, whereas non-parametric tests are preferred otherwise. Non-parametric tests include the Mann-Whitney, Wilcoxon, or Kruskal-Wallis tests. In this research, some data were found to deviate from normality, prompting the use of the Mann-Whitney test. This test was applied alongside the independent sample t-test. Decision-making criteria based on the outcomes test of Mann Whitney.

**Table 6. Results for Mann-Whitney Test**

		Ranks		
Pharmaceutical firm		N	Mean Rank	Sum of Ranks
<b>Net Profit</b>	BUMN	10	7.00	70.00
<b>Margin (NPM)</b>	BUMS	10	14.00	140.00
	Total	20		
<b>Current Ratio (CR)</b>	BUMN	10	5.50	55.00
	BUMS	10	15.50	155.00
	Total	20		
<b>Debt to Equity Ratio (DER)</b>	BUMN	10	14.50	145.00
	BUMS	10	6.50	65.00
	Total	20		
<b>Total Asset Turnover (TATO)</b>	BUMN	10	5.50	55.00
	BUMS	10	16.50	165.00
	Total	20		

Source: SPSS Data Processing Results (2024)

Suitable with research to investigate potential disparities in the financial performance of two distinct categories of pharmaceutical companies-state (BUMN) and private (BUMS)-assessed through financial ratios. The research employs the independent sample t-test, a statistical method utilized to compare two unpaired or independent samples. Specifically, it analyzes BUMN and BUMS pharmaceutical companies as independent groups to test the hypotheses formulated.

**Table 7. Results Hypothesis testing**

	Test Statistics <sup>a</sup>			
	Net Profit Margin (NPM)	Current Ratio (CR)	Debt to Equity Ratio (DER)	Total Asset Turnover (TATO)
<b>Mann-Whitney U</b>	15.000	.000	10.000	.0100
<b>Wilcoxon W</b>	70.000	55.000	65.000	45.000
<b>Z</b>	-2.648	-3.785	-3.024	-2.824
<b>Asymp. Sig. (2-tailed)</b>	.008	.000	.002	.005
<b>Exact Sig. [2*(1-tailed Sig.)]</b>	.007 <sup>b</sup>	.000 <sup>b</sup>	.002 <sup>b</sup>	.001 <sup>b</sup>

a. Grouping Variable: Pharmaceutical companies

b. Not corrected for ties.

Source: SPSS Data Processing Results (2024)

The average rank of each group, specifically the Net Profit Margin (NPM), shows that the BUMS group has a higher average rank of 14.00 compared to the BUMN group's 7.00. Similarly, in the Current Ratio (CR), the BUMS group averages a higher rank of 15.50 versus the BUMN group's 5.50. The BUMS group also scores higher in Debt to Equity Ratio (DER) with an average rank of 6.50, surpassing the BUMN group's 14.50. Additionally, the BUMS group's Total Asset Turnover (TATO) has an average rank of 16.50, compared to the BUMN group's 5.50. Overall, this indicates that the BUMS group outperforms the BUMN group across all metrics.

Earning quality to compares state's financial performance (BUMN) and private's (BUMS) pharmaceutical sector using various financial ratios. BUMN pharmaceutical companies, represented by Industry A and B so exhibit an average Net Profit Margin (NPM) of 4%, which is lower than the 9% average for BUMS pharmaceutical companies such as BUMS1 and BUMS2. A NPM of 200% is considered average in the industry, highlighting BUMS companies' superior capability to fulfill immediate financial obligations in comparison to BUMN companies. These findings align with previous studies ([Putra, 2024](#)) which also noted significant differences in NPM between the two types of companies, concluding that BUMS pharmaceuticals generally outperform BUMN pharmaceuticals due to their higher NPM.

Regarding the Current Ratio (CR), there are significant differences between BUMN and BUMS pharmaceutical companies. The test Man Whitney's, with a significance value of  $0.000 < 0.05$ , confirms these differences. BUMN companies have an average CR of 111%, whereas BUMS companies average 354%. A CR above 100% indicates a healthy liquidity position, with the BUMN1verage being 200%. This indicates BUMS companies' stronger ability to cover short-term liabilities compared to BUMN companies. These results are consistent with earlier research, which also highlighted significant differences in CR between BUMN and BUMS pharmaceutical companies, emphasizing the superior financial performance of BUMS pharmaceuticals.

The Debt-to Equity Ratio (DER) also shows significant differences between BUMN and BUMS pharmaceutical companies, as evidenced by further analysis in the study. The Debt to Equity Ratio (DER) was analyzed with Mann-Whitney test, yielding an Asym. Sig. (2-tailed) value of  $0.002 < 0.05$ , indicating significant differences between BUMN pharmaceutical companies and BUMS pharmaceutical companies. State-owned pharmaceutical companies have a higher average DER of 150% compared to BUMS pharmaceutical companies, which average 33%. A DER value below 100% suggests that a company's total liabilities, including both short-term and long-term debt, do not exceed its total equity or capital. However, the BUMN1verage DER is 90%, indicating varying levels of debt and equity used to finance company operations. This study's findings are consistent with prior research which also highlighted significant differences in DER, showing higher ratios for state-owned compared to private pharmaceutical companies.

The Debt to Equity Ratio illustrates proportional value of a company's operational activities financed by debt versus equity. A lower DER typically signifies higher performance and potential returns, whereas a higher DER indicates increased risk of default and lower returns for investors. According

to this research, state-owned companies such as BUMN1 and BUMN2 exhibit high DER values, categorizing them as financially unhealthy due to heavy reliance on debt rather than equity to fund operations. Conversely, BUMS companies like BUMS1 and BUMS2 maintain relatively low DER values, demonstrating their ability to cover both short-term and long-term obligations primarily through equity, thereby indicating healthier financial management.

Regarding the Total Asset Turnover (TATO), result independent sample t-test was conducted, showing a significance value (2-tailed) of 0.000, which is less than 0.05, signifying significant differences between state-owned (BUMN) and private (BUMS) pharmaceutical companies. BUMS companies achieve a higher average TATO of 1.14 times compared to state-owned companies' average of 0.41 times. Despite being below the BUMN1 average of 2 times, this indicates that both types of pharmaceutical companies have not fully optimized their asset utilization to drive sales. This research aligns with earlier studies ([Putra, 2024](#)), which also observed significant differences in TATO between state-owned and private pharmaceutical companies, underscoring superior performance among BUMS pharmaceuticals in terms of average TATO. A higher TATO indicates better efficiency in asset utilization, potentially leading to increased profitability. Based on this study's findings, state-owned pharmaceutical companies exhibit a TATO of 0.41 times, while BUMS pharmaceutical companies achieve 1.14 times, demonstrating varying levels of efficiency in asset utilization between the two groups.

Stakeholders who need clarity regarding the earning quality of financial ratio variables can benefit from the detailed explanation provided in this report. Companies owned by the state, having political interference, usually sacrifice company profitability due to the policies of politicians who deliberately transfer resources to their supporters ([Ben-Nasr et al., 2015](#)). This suggests that state-owned companies may be seen as a means to raise capital to finance projects that have high social benefits, but may also be high risk and low return, or to provide financing to favored groups such as state-owned enterprises (BUMN). State-owned companies find it difficult to resist such detrimental government interference, whereas private companies are better able to resist it, and usually implement more prudent lending and/or profit-maximizing policies as a consequence ([Ben-Nasr et al., 2015](#)).

By analyzing financial reports, companies can identify ongoing problems and implement the necessary actions to correct or maintain them. Key financial ratios and their improvement strategies include: Net Profit Margin (NPM): Indicates a company's ability to generate profits from total sales. To increase NPM with Reduce debt burden through issuing equity to attract investors, Increase sales to meet financial obligations with profits earned and expand business operations by opening branches in untapped markets. Current Ratio (CR): Measures the company's ability to settle current liabilities with current assets ([Bailey, 1989](#)). To increase CR with Reduce accumulated debt by minimizing operational costs, cut unnecessary raw material costs and impose fines for late payments to accelerate the reduction of receivables. Debt to Equity Ratio (DER): Assesses the company's dependence on debt versus capital for operational funding. To reduce DER with Reduce short-term and long-term debt used for operational activities, retain a portion of profits for

business growth instead of distributing all to shareholders and then sell unused assets to generate cash flow. Total Asset Turnover (TATO): Evaluates a company's efficiency in generating sales from its total assets. To improve TATO with Refine sales strategies, such as expanding reach and leveraging digital marketing, consider leasing or selling unused assets to minimize asset accumulation. These strategies align with modern financial management practices and can help both state-owned and private pharmaceutical companies improve their financial performance and earnings quality ([Putra, 2022](#)).

This research has Arguments Supporting the Superiority of Private Enterprises on Operational Efficiency. Therefore Private enterprises tend to be more efficient due to market pressures and competition ([Ben-Nasr et al., 2015](#); [Obembe, Adenipekun, Morakinyo, & Odebunmi, 2022](#)). Without political interference, private enterprises can focus on optimizing processes and reducing costs. Private enterprises have a primary objective of maximizing profits, which often results in stronger financial performance ([Safari et al., 2020](#)). Private enterprises are generally more flexible in responding to market changes and are quicker to adopt innovations ([Ben-Nasr et al., 2015](#)). Flexibility and Innovation less bureaucracy allows for faster decision-making. State-owned enterprises are more stable during economic crises due to government support ([Van Assche et al., 2018](#)). State-owned enterprises may have better access to resources and capital, especially in developing countries drugs ([Wang & Yung, 2011](#)). Ability to make large investments in infrastructure or long-term research. On hybrid models and innovation in governance, some state-owned enterprises have adopted hybrid governance models that combine the best elements of public and private ownership ([Ben-Nasr et al., 2015](#); [Nufyar & Mulyani, 2023](#); [Wicaksono, Wahyuningtias, Amalia, & Dewananda, 2023](#)). Examples of successful state-owned enterprises operating globally and competitively ([Teixeira Pereira et al., 2023](#)).

Contextual Factors Affecting Performance having Regulatory Environment can greatly influence the relative performance of state-owned and private enterprises. partial privatization can improve the performance of state-owned enterprises. Relative performance can vary by sector. For example, in the pharmaceutical industry, factors such as drug regulation, public health policy, and the need for long-term innovation can influence competitive dynamics. Level of Economic Development can differ between developed and developing countries. In some developing countries, state-owned enterprises may play a significant role in economic and industrial development.

## CONCLUSION

Comparison of earnings quality and financial performance between state-owned pharmaceutical companies (BUMN) and private pharmaceutical companies (BUMS) listed on the Indonesia Stock Exchange (IDX) during the period 2019 to 2023 shows significant differences in several variables, such as net profit margin, current ratio, debt to equity ratio, and total asset turnover. Private pharmaceutical companies show better performance in these variables compared to state-owned companies, which supports the alternative hypothesis and rejects the null hypothesis. This finding is in line with previous studies comparing earnings quality between state-owned and private companies in the pharmaceutical sector and other sectors, which show that private companies generally have better financial performance. This

difference may be due to looser financial reporting standards and decision-making flexibility in private companies, compared to state-owned companies that are bound by strict regulations.

This study highlights the importance of implementing better earnings quality standards in state-owned companies, especially in the Indonesian pharmaceutical sector, to improve public financial responsibility and achieve better financial performance. However, the two sectors show marked differences in terms of attention and focus. The chemical industry, which has been monitored for a longer time. This indicates that stakeholders in the chemical industry had higher expectations and attached more importance to sustainability practices and reporting. This increasingly shows that BUMN is refraining from carrying out profit management practices to encourage strong and quality financial performance, and more deeply about financial responsibility towards the public in accordance with the objectives of state-owned companies, especially in the Indonesian pharmaceutical sector.

## REFERENCES

- Akter, S., Bandara, R., Hani, U., Wamba, S. F., Foropon, C., & Papadopoulos, T. (2019). Analytics-based decision-making for service systems: A qualitative study and agenda for future research. *International Journal of Information Management*, 48, 85-95.
- Bailey, F. A. (1989). Intermediate financial management: E. F. Brigham & L. Gapenski Dryden (London, 1987). 816 pp. £20.95 (hbk). *The British Accounting Review*, 21(3), 286-288. doi:[https://doi.org/10.1016/0890-8389\(89\)90100-5](https://doi.org/10.1016/0890-8389(89)90100-5)
- Ben-Nasr, H., Boubakri, N., & Cosset, J.-C. (2015). Earnings quality in privatized firms: The role of state and foreign owners. *Journal of Accounting and Public Policy*, 34(4), 392-416. doi:<https://doi.org/10.1016/j.jaccpubpol.2014.12.003>
- Chakraborty, P. (2022). An Investigational Study on Factors of Quality Culture in Pharmaceutical Manufacturing Sectors. *Shanlax International Journal of Management*, 9, 146-154. doi:<https://doi.org/10.34293/management.v9iS1.4855>
- Dănescu, T., & Popa, M. A. (2020). Public health and corporate social responsibility: exploratory study on pharmaceutical companies in an emerging market. *Global Health*, 16(1), 117. doi:<https://doi.org/10.1186/s12992-020-00646-4>
- Darapuspa, I., & Soekarno, S. (2023). Pharmaceutical State-Owned Enterprises Holding Formation Performance Assessment. *International Journal of Current Science Research and Review*, 06. doi:<https://doi.org/10.47191/ijcsrr/V6-i8-12>
- Du, K., Huddart, S., Xue, L., & Zhang, Y. (2020). Using a hidden Markov model to measure earnings quality. *Journal of Accounting and Economics*, 69(2), 101281. doi:<https://doi.org/10.1016/j.jacceco.2019.101281>
- Fabiano, G., Marcellusi, A., & Favato, G. (2020). Public-private contribution to biopharmaceutical discoveries: a bibliometric analysis of biomedical research in UK. *Scientometrics*, 124(1), 153-168. doi:<https://doi.org/10.1007/s11192-020-03429-1>
- Gaio, C., & Pinto, I. (2018). The role of state ownership on earnings quality: evidence across public and private European firms. *Journal of Applied*

- Accounting Research*, 19(2), 312-332.  
doi:<https://doi.org/10.1108/JAAR-07-2016-0067>
- Kalaiselvan, V., Shukla, S., Arora, S., Shrivastava, T. P., & Raghuvanshi, R. S. (2022). Public-private partnership (3Ps) in ensuring safe use of medicines: An Indian experience. *Frontiers in Public Health*, 10. doi:<https://doi.org/10.3389/fpubh.2022.930696>
- Karim, A., Widyarti, E. T., & Santoso, A. (2023). Effect of current ratio, total asset turnover, and size on profitability: Evidence from Indonesia manufacturing companies. *Diponegoro International Journal of Business*, 6(1), 57-63.
- Mushiirah, A. B., Keshav, S., & Neeveditah, P. M. (2018). An investigation of audit quality in mauritius. *Theoretical Economics Letters*, 8(13), 2773-2787. doi:<https://doi.org/10.4236/tel.2018.813174>
- Nufyar, A., & Mulyani, E. (2023). Growth Opportunity, Capital Structure And Profitability On Company Value. *Journal of Multiperspectives on Accounting Literature*, 1(2), 114 - 132. doi:10.22219/jameela.v1i2.29230
- Obembe, T. A., Adenipekun, A. B., Morakinyo, O. M., & Odebunmi, K. O. (2022). Implications of national tax policy on local pharmaceutical production in a southwestern state nigeria – qualitative research for the intersection of national pharmaceutical policy on health systems development. *BMC Health Services Research*, 22(1), 264. doi:<https://doi.org/10.1186/s12913-022-07579-1>
- Persakis, A., & Iatridis, G. E. (2015). Earnings quality under financial crisis: A global empirical investigation. *Journal of Multinational Financial Management*, 30, 1-35. doi:<https://doi.org/10.1016/j.mulfin.2014.12.002>
- Picard, P. M., & Rusli, R. D. (2018). State-owned firms and private debt. *Journal of Public Economic Theory*, 20(5), 672-702. doi:<https://doi.org/10.1111/jpet.12297>
- Putra, I. L. (2015). *Manajemen Keuangan*: INDRA LUKMANA PUTRA.
- Putra, I. L. (2022). *Manajemen Pemasaran Dilengkapi Studi Kasus dan Video Pembelajaran* (N. E. Susanti Ed.). Malang: CV. ALPHA ROCKET NUSANTARA.
- Putra, I. L. (2024). *Manajemen Aset* (A. Wahdi Ed.). Nganjuk: CV. Dewa Publishing.
- Rocha, M. d. M., de Andrade, E. P., Alves, E. R., Cândido, J. C., & Borio, M. d. M. (2020). Access to innovative medicines by pharma companies: Sustainable initiatives for global health or useful advertisement? *Global Public Health*, 15(6), 777-789. doi:<https://doi.org/10.1080/17441692.2020.1729391>
- Safari, H., Razghandi, E., Fathi, M. R., Cruz-Machado, V., & Cabrita, M. d. R. (2020). The effectiveness of quality awards on the company's performance – the case of Iran's national quality awards. *Benchmarking: An International Journal*, 27(4), 1319-1340. doi:<https://doi.org/10.1108/BIJ-12-2018-0409>
- Sun, H., Yuen, D. C. Y., Zhang, J., & Zhang, X. (2020). Is knowledge powerful? Evidence from financial education and earnings quality. *Research in International Business and Finance*, 52, 101179. doi:<https://doi.org/10.1016/j.ribaf.2019.101179>

- Teixeira Pereira, D., Moury, C., & Pita Barros, P. (2023). Business as usual? How the pharmaceutical industry protected its long-term interests during and after eurozone bailouts (2011–2020). *Political Research Exchange*, 5(1), 2193622. doi:<https://doi.org/10.1080/2474736X.2023.2193622>
- Van Assche, K., Nebot Giralt, A., Caudron, J. M., Schiavetti, B., Pouget, C., Tsoumanis, A., . . . Ravinetto, R. (2018). Pharmaceutical quality assurance of local private distributors: a secondary analysis in 13 low-income and middle-income countries. *BMJ Glob Health*, 3(3), e000771. doi:<https://doi.org/10.1136/bmjgh-2018-000771>
- Wang, L., & Yung, K. (2011). Do State Enterprises Manage Earnings More than Privately Owned Firms? The Case of China. *Journal of Business Finance & Accounting*, 38(7-8), 794-812. doi:<https://doi.org/10.1111/j.1468-5957.2011.02254.x>
- Wicaksono, A. P. N., Wahyuningtias, A. L., Amalia, F. A., & Dewananda, W. (2023). Corporate Social Responsibility (CSR) Disclosures, Board Of Directors And Company Profitability: Audit Quality As Moderation. *Journal of Multiperspectives on Accounting Literature*, 1(1), 47-58.

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