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Debt Restructuring in Indonesia: Merger and Acquisition Perspective

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ABSTRACT

The number of companies undergoing debt restructuring in Indonesia has significantly increased each year. Debt restructuring, as an alternative to mergers and acquisitions, has become a strategy for many companies facing financial challenges, especially in the credit sector. The purpose of this research is to conduct an in-depth examination of debt restructuring in Indonesian companies during the period 2003 - 2022. This study utilizes a method involving the analysis of pre-test and post-test financial performance ratios of companies after debt restructuring. The main financial ratios focused on in this research are liquidity ratio, solvency ratio, profitability ratio, and efficiency ratio. The data period used for the study includes two years before (t-2) and two years after (t+2) the occurrence of debt restructuring. The study involves 44 samples of companies in Indonesia that underwent debt restructuring during the years 2003 - 2022, processed through SPSS statistical analysis. Based on the ratio calculations, this research concludes that debt restructuring has caused significant differences in the Cash Ratio, Debt to Asset Ratio, Profit Margin, Return to Asset, Return to Equity, and Asset Turnover.

Keywords: Capital Structure, Debt Restructuring, Pecking Order Theory, Trade-off Theory

INTRODUCTION

(Syahrizal, 2020) states that the risk of default is increasing every year in all sectors in Indonesia. This is due to liquidity pressures caused by the impact of debt restructuring. The total value of non-performing loans in 2020 reached Rp 3.23 trillion in principal value. Meanwhile, the value of interest for rupiah from bond and syndicated debt reached Rp 72.16 billion, plus the total value of interest of Rp.95.72 billion. Default is a condition where a company is unable to meet its debt obligations.

To avoid this, the importance of conducting debt restructuring for companies with debt problems is emphasized. According to Peraturan OJK Nomor 11 Tahun 2020, debt restructuring is a process of changing loan agreements that is carried out between creditors and debtors to overcome the financial difficulties experienced by the debtor. Debt restructuring aims to save the debtor from bankruptcy and restore a healthy financial condition. Companies must conduct debt restructuring when they experience financial problems such as excessive debt, economic crisis, and lack of income to avoid a decrease in the value of the company to bankruptcy. The impact of debt restructuring on a company's capital structure can vary, depending on the type of debt restructuring that is carried out.

(Surya & Suyatma, 2014) write that one type of debt restructuring that can be done in Indonesia is merger and acquisition. According to (Andy et al., 2022), the use of external funds (debt) by a company can trigger agency problems, which is a conflict of interest between shareholders and managers. As a result, the company must face agency costs, which include monitoring costs, bonding

costs, and residual losses. However, these agency costs can be minimized by applying the debt financing theory (trade-off theory). According to (Wikartika & Fitriyah, 2018), trade-off theory is the condition in which a company chooses the optimal capital structure by balancing the costs and benefits of using debt.

Unlike the trade-off theory, the pecking order theory explains that companies prefer to optimize internal financing first before external financing. This theory refers to the hierarchy of funding sources to start from the cheapest, namely internal funds to the last choice, namely the issuance of shares. The decision of a company to use debt results in the company bearing high risks, especially if the company is unable to manage debt efficiently. Companies that have the capacity to generate large profits tend to have little debt to minimize risk. However, few companies in Indonesia still rely on their debt, even though they are at risk of bankruptcy and facing liquidity problems.

This statement is also supported by the research of (Angeline et al., 2023), which states that the decision to use external financing (debt) can lead to financial difficulties for companies. To overcome this problem, companies can conduct debt restructuring. According to (Riani et al., 2020), debt restructuring is a process of restructuring and organizing the company's obligations to overcome financial issues. It is hoped that after debt restructuring, the financial condition of the company will be better than before. Companies need to consider debt restructuring if they experience difficulties in meeting principal obligations and interest on time, there is a decrease in cash flows, and there are unhealthy changes in financial ratios.

Quoted from (Ghosh, 2019), at this difficult time, companies are faced with two options to reorganize their debt contracts. The first option is for the company to renegotiate with creditors to discuss the recruitments of the debt claims. The alternative option is for the company to take the extreme step of filing for official bankruptcy. This is then followed by a legal process to allocate or liquidate assets, and the proceeds will be distributed to creditors. Both options open pathways for companies to resolve their financial problems through debt restructuring.

In Indonesia, in 2003 - 2022 there were more than 34 companies carrying out debt restructuring. This research aims to prove whether there are differences in debt ratios and other financial ratios in the two-year period before the company carried out debt restructuring (t-2) and two years after the company carried out debt restructuring (t+2). To prove this difference, financial ratios such as Liquidity Ratios, Solvency Ratios, Profitability Ratios and Efficiency Ratios are used as the indicators. Liquidity Ratios are ratios that measure a company's ability to meet its short-term obligations (debt) using current assets. The Profitability Ratio is a ratio to measure a company's ability to generate net profit against total equity or total assets.

The Solvency Ratio is a ratio to measure a company's ability to fulfill its obligations, especially long-term obligations (debt). The efficiency ratio is a ratio used to assess a company's efficiency in using assets and generating net income from its operational activities. Several financial ratios can provide an overview of the company's financial condition before and after debt restructuring.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Debt restructuring is a signal for a company to improve its financial health and reduce the risk of bankruptcy. As explained previously, the use of external funds (debt) by a company can trigger agency conflicts and cause the company to face agency costs. This conflict is related to the study (Tan & Luo, 2021), which examines the impact of debt restructuring on investment and financing decisions and agency issues between shareholders and creditors. The results of this study state that debt restructuring can reduce underinvestment and weaken the asset substitution motive of shareholders, thereby reducing agency costs. According to (Angelina et al., 2023), synergistic value is the result of organization efficiency management or company expansion so that growth is maintained.

The synergistic value generated from corporate restructuring comes from the difference between before and after the debt restructuring. The synergy theory is proven in the study (Hoshi et al., 2018) & (Payne, 2018), which states that debt restructuring can improve and improve the relationship between creditors so that the company can expand and have more room to adapt. The study (Soedarmono et al., n.d.) explains the impact of debt restructuring on risk and financial performance in Indonesia. The study mentions that the amount of debt restructured in companies with high capitalization and state-owned companies can increase solvency risk. In general, an increase in debt restructuring lowers profitability ratios. The study (*Analysis of Debt Restructuring Methods for Negative Equity Firm*, 2021) states that generally companies will have better performance after debt restructuring, especially when using the debt-to-equity swap method.

The study proves that by debt restructuring, the company will experience an increase in P/BV and capital structure in a positive direction. However, there are also studies that show that there is no significant difference in Debt-to-Equity Ratio before and after debt restructuring. The study (Permana, 2020) conducted research on the impact of debt restructuring through debt-to-equity swap policies on financial performance. Based on the results of hypothesis testing, it was found that debt restructuring measured by debt-to-equity ratio has a significant effect on Profitability Ratios and activity ratios. Meanwhile, debt restructuring does not affect a company's liquidity.

These results are in line with the results of the study which states that Profitability Ratios consisting of Profit Margin, Return on Asset, and Return on Equity have a significant effect for companies that restructure debt. Referencing the results of previous studies, the researcher is interested in further researching whether there are any significant differences in Liquidity Ratios, Solvability Ratios, Profitability Ratios, and Efficiency Ratios between before and after debt restructuring. This study is limited to the period one and two years before and after debt restructuring was carried out in several sample companies in Indonesia. Based on the above statements, the research hypothesis can be formulated as follows:

H1: There is a significant difference in Liquidity Ratios (Current Ratio, Quick Ratio, Cash Ratio) between before (t-1 and t-2) and after (t+1 and t+2) Debt Restructuring.

H2: There is a significant difference in Solvability Ratios (Debt to Asset Ratio, Debt to Equity Ratio) between before (t-1 and t-2) and after (t+1 and t+2) Debt Restructuring.

H3: There is a significant difference in Profitability Ratios (Profit Margin, Return on Asset, Return on Equity) between before (t-1 and t-2) and after (t+1 and t+2) Debt Restructuring.

H4: There is a significant difference in Efficiency Ratios (Inventory Turnover, Account Receivable Turnover, Asset Turnover) between before (t-1 and t-2) and after (t+1 and t+2) Debt Restructuring.

RESEARCH METHOD

The research uses a quantitative research approach involving the collection and analysis of numerical or numerical data. The main objective of this research is to identify significant differences in financial conditions before and after the company restructures its credit. The data source and collection technique used are secondary data. According to (Sugiyono, 2014), secondary data is a data source that does not provide data or information directly to the researcher or data collector. The data was obtained from the annual financial statements of the sample company for a period of two years before (Pre-) and two years after (Post-) the debt restructuring was carried out.

The research sample is 44 events from 34 companies that restructured their debt in the 2003-2022 period. The data analysis technique used is a parametric statistical test technique Paired Sample T-Test in the SPSS (Statistical Program for Social Science) program. According to (Ahmaddien & Syarkani, 2019), Paired Sample T-Test is a statistical test technique used to assess the effectiveness of

a particular treatment by comparing the difference in mean results before and after the treatment is performed. In this analysis, a comparison of the company's financial performance ratios two years before debt restructuring (t-2) and two years after debt restructuring (t+2) was conducted. The financial ratios used as a benchmark are liquidity ratio, solvability ratio, profitability ratio, and efficiency ratio. Liquidity ratio consists of current ratio, quick ratio, and cash ratio.

Solvability Ratio consists of Debt-to-Equity Ratio and Debt to Asset Ratio. Profitability Ratio consists of profit margin, Return on Asset, and Return on Equity. And the last ratio is Efficiency Ratio which consists of Inventory Turnover, Account Receivable Turnover, and Asset Turnover.

RESULTS AND DISCUSSION

Results

Liquidity Ratio

The Liquidity Ratio Testing, conducted through the Paired Samples t-test using the SPSS 25.00 for Windows program, encompasses the examination of Liquidity Ratio types, including the Current Ratio, Quick Ratio, and Cash Ratio. The outcomes of these calculations are elucidated in the tabulated format presented in both Table 1 and Table 2 below.

Table 1.

Paired Samples Test on Liquidity Ratios

		Paired Differences			
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower
Pair 1	**Current Ratio (t-2) - Current Ratio (t+2)**	-.32659	1.81421	.27350	-.87816
Pair 2	**Current Ratio (t-1) - Current Ratio (t+1)**	.11591	.94231	.14206	-.17058

Pair 3	**Quick Ratio (t-2) - Quick Ratio (t+2)**	-.26068	.99042	.14931	-.56180
Pair 4	**Quick Ratio (t-1) - Quick Ratio (t+1)**	-.00386	.69906	.10539	-.21640
Pair 5	**Cash Ratio (t-2) - Cash Ratio (t+2)**	-.01386	.12897	.01944	-.05307*
Pair 6	**Cash Ratio (t-1) - Cash Ratio (t+1)**	-.01114	.12297	.01854	-.04852**

*** = significant with 1% α, ** = significant with 5% α, * = significant with 10% α.

Significance (α) represents the threshold for the acceptable probability of error in a research study. This investigation establishes a significance level (α) of 0.10, indicating that the researcher can tolerate a maximum error of 0.10. If the significance value (α) falls below (<) 0.10, it can be inferred that there is a noteworthy impact of financial ratios before and after debt restructuring. Conversely, if the significance value (α) exceeds (>) 0.10, it can be deduced that there is no significant effect of financial ratios before and after debt restructuring.

Table 1 illustrates the significance of the difference in Liquidity Ratios between one and two years before and after debt restructuring. Both Current Ratio and Quick Ratio exhibit no significant differences. In the period t-2 and t+2 (Pair 1), the significance figure for the Current Ratio is notably high, reaching 0.87816. This value exceeds the permissible error limit of 0.10. Similarly, in the same period, the significance figure for Quick Ratio (Pair 3) is relatively high at 0.56180. Although during the period t-1 and t+1, both ratios (Pair 2 and Pair 4) show lower significance compared to the t-2 and t+2 periods (Pair 1 and 3), the figures are still considered as having no significant difference.

Conversely, the significance of Cash Ratio in the one and two years before and after debt restructuring is categorized as having a significant difference. This conclusion is drawn from the results of the significance of t-2 and t+2 (Pair 5) at 0.05307 and t-1 and t+2 (Pair 6) at 0.04852. Both outcomes indicate a significant difference as they fall below the predetermined significance level of 0.10.

Table 2.

Paired Samples Statistics on Liquidity Ratios

	Mean	**N**	**Std. Deviation**	**Std. Error Mean**

Pair 1	**Current Ratio (t-2)**	1.7780	44	1.26374	.19052
	Current Ratio (t+2)	2.1045	44	2.48799	.37508
Pair 2	**Current Ratio (t-1)**	1.6882	44	1.21422	.18305
	Current Ratio (t+1)	1.5723	44	.80150	.12083
Pair 3	**Quick Ratio (t-2)**	1.1136	44	.71307	.10750
	Quick Ratio (t+2)	1.3743	44	1.52303	.22961
Pair 4	**Quick Ratio (t-1)**	1.0641	44	.76134	.11478
	Quick Ratio (t+1)	1.0680	44	.59244	.08931
Pair 5	**Cash Ratio (t-2)**	.1382	44	.18764	.02829
	Cash Ratio (t+2)	.1520	44	.22171	.03342
Pair 6	**Cash Ratio (t-1)**	.1193	44	.20263	.03055
	Cash Ratio (t+1)	.1305	44	.17159	.02587

Examining the outcomes presented in Table 2 reveals a notable trend in the average Current Ratio among the sampled companies. It indicates a decrease in the first year, succeeded by an increase in the second year following the implementation of debt restructuring. Specifically, the

average Current Ratio during the t-1 to t+1 period (Pair 2) exhibited a decrease of 0.1159. Conversely, during the t-2 to t+2 period (Pair 1), debt restructuring demonstrated a positive impact on the companies, leading to a noteworthy increase in the average Current Ratio at t+2 by 0.3265, rising from the baseline at t-2 of 1.7780 to 2.1045.

In contrast to the Current Ratio, the average Quick Ratio displayed an upward trajectory in the one and two years before and after debt restructuring. In the t-1 to t+1 period (Pair 4), the average Quick Ratio witnessed an increase of 0.0039. Furthermore, in the t-2 to t+2 period (Pair 3), the average Quick Ratio experienced a further augmentation. The Quick Ratio at t+2 of debt restructuring reached 1.3743, reflecting a growth of 0.2607 from the average Quick Ratio at t-2. According to a source (Sopini, 2016), a higher Quick Ratio value indicates a swifter ability for the company to meet its short-term obligations without relying on inventory. This consistent elevation signifies a positive indicator that the company is well-positioned to fulfill its debts, particularly in the near term.

Like the Quick Ratio, the average Cash Ratio also exhibited a consistent increase over the one and two years before and after the debt restructuring. Specifically, in the time intervals of t-1 and t+1 (Pair 6) and t-2 and t+2 (Pair 5), there was an average rise in the Cash Ratio by 0.0112 and 0.0138, respectively. Furthermore, the Cash Ratio demonstrated a gradual increment from the first year to the second year. As elucidated in (Masyitah et al., 2018), an elevated Cash Ratio signifies that the company possesses an enhanced capacity to settle its debts, relying solely on cash and cash equivalents.

Upon comprehensive data analysis, it can be inferred that during the one to two years post-debt restructuring, there was no significant difference in the Current Ratio and Quick Ratio. However, the Cash Ratio exhibited a notable disparity with a consistent average increase observed after two years of the debt restructuring process. This discovery underscores that alterations in the Current Ratio and Quick Ratio necessitate more time to manifest post-debt restructuring, whereas the Cash Ratio demonstrates a swiffer response.

Solvability Ratio

The Solvability Ratio Testing, conducted through the Paired Samples t-test using the SPSS 25.00 for Windows program, encompasses the examination of Solvability Ratio types, including the Debt to Asset Ratio and Debt to Equity Ratio. The outcomes of these calculations are elucidated in the tabulated format presented in both Table 3 and Table 4 below.

Table 3.

Paired Samples Test on Solvability Ratios

	Paired Differences			
				95% Confidence Interval of the Difference
	Mean	Std. Deviation	Std. Error Mean	Lower

Pair 1	**DAR (t-2) - DAR (t+2)**	.00159	.17938	.02704	-.05294*
Pair 2	**DAR (t-1) - DAR (t+1)**	-.00318	.15526	.02341	-.05039**
Pair 3	**DER (t-2) - DER (t+2)**	-.11295	1.38326	.20853	-.53350
Pair 4	**DER (t-1) - DER (t+1)**	-.12000	.98594	.14864	-.41975

*** = significant with 1% α, ** = significant with 5% α, * = significant with 10% α.

Table 3 displays the significance of the differences in Solvability Ratios between one and two years before and after debt restructuring. The outcomes of the Paired Sample T-Test indicate a notable distinction in the Debt to Asset Ratio, while no significant difference is observed in the Debt-to-Equity Ratio. In the period of t-2 and t+2 (Pair 1), the significant value of Debt to Asset Ratio is 0.05294. Similarly, in the period of t-1 and t+1 (Pair 2), the significant value of Debt to Asset Ratio is 0.05039. Both values are categorized as having significant differences, meeting the predetermined significance level. Conversely, the Debt-to-Equity Ratio is deemed to have no significant difference, as the significance values, whether one or two years before and after debt restructuring, are comparatively high. Specifically, in the time range of t-2 and t+2 (Pair 3), the significant value of Debt-to-Equity Ratio is 0.53350, and at t-1 and t+1 (Pair 4), the significant value of Debt-to-Equity Ratio is 0.41975.

Table 4.

Paired Samples Statistics on Solvability Ratios

		Mean	**N**	**Std. Deviation**	**Std. Error Mean**
Pair 1	**DAR (t-2)**	.3045	44	.16667	.02513
	DAR (t+2)	.3030	44	.18881	.02846
Pair 2	**DAR (t-1)**	.3023	44	.16460	.02481
	DAR (t+1)	.3055	44	.18413	.02776
Pair 3	**DER (t-2)**	.9170	44	1.16367	.17543

	DER (t+2)	1.0300	44	1.17182	.17666
Pair 4	**DER (t-1)**	.8914	44	.90575	.13655
	DER (t+1)	1.0114	44	1.14415	.17249

Analyzing the outcomes presented in Table 4 reveals a distinct trend in the average Debt to Asset Ratio (DAR) among the sampled companies following debt restructuring. It demonstrates an increase in the first year, succeeded by a decrease in the second year. Specifically, the average DAR during the t-1 to t+1 period (Pair 2) exhibited an increase of 0.0032. Conversely, during the t-2 to t+2 period (Pair 1), debt restructuring showcased a positive impact on the companies, leading to a decrease in the average Debt to Asset Ratio at t+2 by 0.0015, reducing it from the average at t-2 to 0.3030.

According to (Fraser & Ormiston, 2016), a higher Debt to Asset Ratio (DAR) signifies a greater proportion of the company's debt to its total assets, implying elevated risk. The observed fluctuations in the average Debt to Asset Ratio (DAR), involving both increases and decreases, suggest ongoing instability post-debt restructuring. Therefore, an extended research period is imperative to ascertain significant differences.

In contrast to the Debt to Asset Ratio (DAR), the average Debt to Equity Ratio (DER) experienced an increase in both one and two years before and after debt restructuring. In the t-1 to t+1 period (Pair 4), the average Debt to Equity Ratio (DER) witnessed an increase of 0.12. Furthermore, in the t-2 to t+2 period (Pair 3), the average Debt to Equity Ratio (DER) demonstrated another increment. The average Debt to Equity Ratio (DER) at t+2 reached 1.0300, reflecting an increase of 0.113 from the average at t-2.

Profitability Ratio

The Profitability Ratio Testing, conducted through the Paired Samples t-test using the SPSS 25.00 for Windows program, encompasses the examination of Profitability Ratio types, including the Profit Margin, Return on Asset, and Return on Equity. The outcomes of these calculations are elucidated in the tabulated format presented in both Table 5 and Table 6 below.

Table 5.

Paired Samples Test on Profitability Ratios

	Paired Differences			
	Mean	**Std. Deviation**	**Std. Error Mean**	**95% Confidence Interval of the Difference**

					Lower
Pair 1	**Profit Margin (t-2) - Profit Margin (t+2)**	.00409	.08987	.01355	-.02323**
Pair 2	**Profit Margin (t-1) - Profit Margin (t+1)**	.00068	.10137	.01528	-.03014**
Pair 3	**ROA (t-2) - ROA (t+2)**	.01000	.08570	.01292	-.01605**
Pair 4	**ROA (t-1) - ROA (t+1)**	.00159	.09004	.01357	-.02578**
Pair 5	**ROE (t-2) - ROE (t+2)**	.03136	.27035	.04076	-.05083*
Pair 6	**ROE (t-1) - ROE (t+1)**	-.00568	.17808	.02685	-.05982*

*** = significant with 1% α, ** = significant with 5% α, * = significant with 10% α.

Table 5 elucidates the significance of the differences in Profitability Ratios one and two years before and after debt restructuring. Each of the three tested Profitability Ratios, namely Profit Margin, Return on Asset (ROA), and Return on Equity (ROE), exhibits a noteworthy difference. This assertion is based on the significance results, with Profit Margin in the time range t-2 and t+2 (Pair 1) reaching 0.02323, and in the time range t-1 and t+1 (Pair 2), the significant value of Profit Margin is 0.03014. Moreover, the significance result of Return on Asset (ROA) in the time range t-2 and t+2 (Pair 3) is 0.01605, and at t-1 and t+1 (Pair 4), it is 0.2578. Additionally, the significance result of Return on Equity (ROE) in the time range t-2 and t+2 (Pair 5) is 0.05083, and at t-1 and t+1 (Pair 6), it is 0.5982. All the results of the significance test on Profitability Ratios signify a substantial difference between before and after debt restructuring. This is attributed to all ratios having values below the employed significance level, which is 0.10.

Table 6.

Paired Samples Statistics on Profitability Ratios

	Mean	**N**	**Std. Deviation**	**Std. Error Mean**

Pair 1	**Profit Margin (t-2)**	.3230	44	.16212	.02444
	Profit Margin (t+2)	.3189	44	.16201	.02442
Pair 2	**Profit Margin (t-1)**	.3184	44	.16719	.02521
	Profit Margin (t+1)	.3177	44	.15833	.02387
Pair 3	**ROA (t-2)**	.1207	44	.12199	.01839
	ROA (t+2)	.1107	44	.13225	.01994
Pair 4	**ROA (t-1)**	.1168	44	.13692	.02064
	ROA (t+1)	.1152	44	.13080	.01972
Pair 5	**ROE (t-2)**	.2545	44	.23482	.03540
	ROE (t+2)	.2232	44	.36403	.05488
Pair 6	**ROE (t-1)**	.2298	44	.28363	.04276
	ROE (t+1)	.2355	44	.29018	.04375

Based on the findings presented in Table 6, it is evident that most of the average Profitability Ratios for the sampled companies witnessed a decline in both one and two years before and after debt restructuring. The average Profit Margin experienced a reduction in the first year, followed by a further decrease in the second-year post-debt restructuring. Specifically, the average Profit Margin in the time range t-1 and t+1 (Pair 2) decreased by 0.0007. In the subsequent time range of t-2 and t+2 (Pair 1), the average Profit Margin exhibited another decrease, reaching 0.3189, down by 0.0041 from the average at t-2. According to (Pontoh et al., n.d.), a lower Profit Margin indicates poorer operational performance. The observed decline suggests that the intended goal of debt restructuring, which is to enhance the Profit Margin, has not been achieved. Consequently, a more extended timeframe is imperative to observe the positive impact of debt restructuring on Profit Margin.

Similarly, the average Return on Asset (ROA) demonstrated a decline in both one and two years before and after debt restructuring. In the time range t-1 and t+1 (Pair 4), the average ROA decreased by 0.0016. Furthermore, in the time range t-2 and t+2 (Pair 3), the average Return on Asset witnessed another decrease, with the average ROA at t+2 reaching 0.1107, down by 0.01 from the average at t-2.

In contrast to Profit Margin and Return on Asset (ROA), the average Return on Equity (ROE) exhibited an increase in the first year following debt restructuring. In the time range t-1 and t+1 (Pair 6), there was an uptick in the average ROE by 0.0057. However, this increase was transient, as in the subsequent time range of t-2 and t+2 (Pair 5), the average ROE decreased by 0.0313. The fluctuation in ROE values after debt restructuring illustrates its instability. The decline in the average Profitability Ratio is attributed to the fact that significant changes in financial ratios necessitate a considerable amount of time. Nonetheless, it is crucial to acknowledge the study's limitation, as it spans a maximum period of only two years post-restructuring.

Efficiency Ratio

The Efficiency Ratio Testing, conducted through the Paired Samples t-test using the SPSS 25.00 for Windows program, encompasses the examination of Efficiency Ratio types, including the Inventory Turnover, Account Receivable Turnover, and Asset Turnover. The outcomes of these calculations are elucidated in the tabulated format presented in both Table 7 and Table 8 below.

Table 7.

Paired Samples Test on Efficiency Ratios

		Paired Differences			
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference: Lower
Pair 1	**Inventory Turnover (t-2) - Inventory Turnover (t+2)**	2.21000	34.88042	5.25842	-8.39462
Pair 2	**Inventory Turnover (t-1) - Inventory Turnover (t+1)**	5.47659	41.87038	6.31220	-7.25317

Pair 3	**AR Turnover (t-2) - AR Turnover (t+2)**	-.41773	9.93618	1.49793	-3.43860
Pair 4	**AR Turnover (t-1) - AR Turnover (t+1)**	-.19909	3.89544	.58726	-1.38341
Pair 5	**Asset Turnover (t-2) - Asset Turnover (t+2)**	.12818	.34942	.05268	.02195**
Pair 6	**Asset Turnover (t-1) - Asset Turnover (t+1)**	.10386	.28151	.04244	.01828**

*** = significant with 1% α, ** = significant with 5% α, * = significant with 10% α.

Table 7 presents the significance of the differences in Efficiency Ratios one and two years before and after debt restructuring. The test results revealed that both Inventory Turnover and Account Receivable Turnover exhibited no significant differences. In the period of t-1 and t+1 (Pair 2), the significance figure for Inventory Turnover was notably high, reaching 7.25317. Furthermore, in the period of t-2 and t+2 (Pair 1), the significance figure for Inventory Turnover increased even higher than the previous year, reaching 8.39462. Additionally, in the period of t-1 and t+1 (Pair 4), the significance result for Account Receivable Turnover was 1.38341, and in t-2 and t+2 (Pair 5), the significance result for Account Receivable Turnover was even higher, reaching 3.43860. Both ratios exhibited significance values well below the specified significance threshold of 0.10 or 10%.

Conversely, the significance results for Asset Turnover in the time periods one and two years before and after debt restructuring indicate a significant difference. This conclusion is drawn from the significance results for t-2 and t+2 (Pair 5), which were 0.02195, and for t-1 and t+2 (Pair 6), which were 0.01828. These results lead to the conclusion that Asset Turnover exhibited a significant difference between before and after debt restructuring, as the significance values were below the specified significance level.

Table 8.

Paired Samples Statistics on Efficiency Ratios

	Mean	**N**	**Std. Deviation**	**Std. Error Mean**

Pair 1	**Inventory Turnover (t-2)**	23.9284	44	56.65253	8.54069
	Inventory Turnover (t+2)	21.7184	44	55.16930	8.31708
Pair 2	**Inventory Turnover (t-1)**	29.4834	44	82.53072	12.44197
	Inventory Turnover (t+1)	24.0068	44	69.42469	10.46617
Pair 3	**AR Turnover (t-2)**	11.8505	44	12.88915	1.94311
	AR Turnover (t+2)	12.2682	44	17.99240	2.71246
Pair 4	**AR Turnover (t-1)**	11.8152	44	13.01484	1.96206
	AR Turnover (t+1)	12.0143	44	14.65702	2.20963
Pair 5	**Asset Turnover (t-2)**	.8955	44	.57088	.08606
	Asset Turnover (t+2)	.7673	44	.49190	.07416
Pair 6	**Asset Turnover (t-1)**	.8561	44	.53409	.08052

Asset Turnover (t+1)	.7523	44	.44167	.06658

Referring to the information provided in Table 8, a significant decrease is evident in both Inventory Turnover and Asset Turnover. Specifically, the Inventory Turnover value one year before (t-1) and after (t+1) debt restructuring witnessed a decrease of 5.4766, declining from 29.4834 to 24.0068. Similarly, in the two-year period before (t-2) and after (t+2) debt restructuring, the Inventory Turnover value experienced a decrease of 2.21, reducing from 23.9284 to 21.7184. According to research (Kasmir, 2018) a low Inventory Turnover suggests inefficient inventory management, leading to the accumulation of inventory.

Moreover, Asset Turnover demonstrated a significant decrease of 0.1438 in the t-1 and t+1 periods, declining from 0.8961 to 0.7523. This decrease persisted in the t-2 and t+2 periods by 0.1282, reducing from 0.8955 to 0.7673. According to (Murhadi, 2013), a low Total Assets Turnover indicates the company's inefficiency in utilizing its assets to generate income. Based on these findings, it becomes apparent that the impact of debt restructuring to enhance Asset Turnover has not manifested in the one to two years following the debt restructuring.

In contrast to Inventory Turnover and Asset Turnover, which both experienced a decrease, Account Receivable Turnover exhibited a notable increase in both periods. The increase in Account Receivable Turnover in the year before (t-1) and after (t+1) debt restructuring was 0.1991, rising from 11.8152 to 12.0143. Similarly, in the second year before (t-2) and after (t+2) debt restructuring, Account Receivable demonstrated an increase of 0.4177, escalating from 11.8505 to 12.2682.

From these findings, it can be inferred that Inventory Turnover and Account Receivable Turnover require a more extended period to exhibit a significant difference after debt restructuring compared to Asset Turnover. This prolonged adjustment period is attributed to the inclusion of Inventory Turnover and Account Receivable Turnover in Working Capital. Considering that alterations in a company's Working Capital necessitate more time to adapt to changes in the capital structure.

Discussion

The Paired Samples T-test reveals significant differences in various financial ratios, including Cash Ratio, Debt to Asset Ratio, Profit Margin, Return on Asset, Return on Equity, and Asset Turnover, between the one-year period before (t-1) and after (t+1) debt restructuring, as well as the two-year period before (t-2) and after (t+2) debt restructuring.

Among the liquidity ratios examined, only Cash Ratio exhibits significant differences between the periods before (t-1 and t-2) and after (t+1 and t+2) debt restructuring. As defined by (Hery, 2018), Cash Ratio measures a company's ability to meet short-term obligations using available cash. The noteworthy difference in Cash Ratio suggests that debt restructuring impacts a company's ability to fulfill short-term financial obligations. The positive average increase in Cash Ratio, 0.0112 in the first year and 0.0138 in the second-year post-restructuring, supports this finding, indicating improved liquidity due to enhanced capital structure. These results align with previous studies by (As'ari et al., 2019) & (Gupta, 2017) which also highlight significant differences in liquidity before and after debt restructuring.

The analysis of Solvency Ratios through the Paired Samples T-test reveals a significant difference in Debt to Asset Ratio. According to (Kasmir, 2016), Debt to Asset Ratio (DAR) assesses the extent to which a company's assets are financed by debt. The substantial difference in Debt to Asset

Ratio (DAR) indicates that debt restructuring impacts the proportion of debt to a company's assets. In the first year, the average value of Debt to Asset Ratio (DAR) increased by 0.0032, followed by a decrease of 0.0015 in the second year. The goal of debt restructuring is to reduce the value of Debt to Asset (DAR). However, the study results indicate that this goal was achieved only in the second year, with an increase observed in the first year. Consequently, it can be inferred that in the first year of debt restructuring, there was no significant difference in the company's capital structure, while improvements became evident in the second year, as reflected in the decreased average value of Debt to Total Asset Ratio.

Testing of Profitability Ratios reveals significant differences in related metrics namely, Profit Margin, Return on Asset, and Return on Equity between the periods before (t-1 and t-2) and after (t+1 and t+2) the debt restructuring. As outlined by (Hery, 2018), Profit Margin is a ratio measuring a company's efficiency in generating net profit relative to sales. The findings indicate a decrease in the average Profit Margin values in the first and second years by 0.0007 and 0.0041, respectively, signifying a significant reduction after debt restructuring. Consequently, it can be inferred that the positive impact of debt restructuring on Profit Margin is not immediately apparent in the first and second years, emphasizing the need for an extended period for this positive effect to manifest. According to (Kasmir, 2016), Return on Asset (ROA) is a ratio assessing a company's ability to generate net profit using its total assets. The findings indicate a decrease in the average value of Return on Asset (ROA) in the first and second years by -0.0016 and -0.01.

This data demonstrates a significant decline in Return on Asset (ROA) after debt restructuring, validated by a difference test. These outcomes align with a study emphasizing significant differences in financial performance before and after company restructuring through a merger, particularly concerning Return of Asset (ROA). However, the desired increase in Return on Asset (ROA) has not materialized in the one- and two-years post debt restructuring, underscoring the notion that significant differences necessitate a more extended period for manifestation. According to (Wahdatunjannah, 2020), Return on Equity (ROE) is a tool for measuring net income after taxes with equity. The higher the Return on Equity ratio, the better and stronger the company's condition, and vice versa.

In the first year, the average value of Return on Equity (ROE) increased by 0.0057 after debt restructuring. However, in the second year, the average value of Return on Equity (ROE) decreased by 0.0313. These data show that debt restructuring resulted in a significant difference in Return on Equity (ROE). The increase and decrease that occurred in the first year and second year illustrate the instability of the value of Return on Equity (ROE) after debt restructuring. Therefore, more time is needed to see the results of debt restructuring.

According to (Agus & Martono, 2014), Asset Turnover is a financial ratio used to measure the efficiency of a company in using its entire assets. The higher the Asset Turnover value, the more productive and efficient the company is in utilizing its assets to generate sales. Conversely, the lower the ratio, the less efficient the company is in utilizing its assets. In the first and second years, there was a decrease in the average Asset Turnover value by 0.1038 and 0.1282. The research results show that the impact of debt restructuring to improve the efficiency of the company's asset utilization has not been seen in one and two years after the implementation of restructuring. This is because debt restructuring requires more time to see its impact on asset turnover improvement.

CONCLUSIONS AND SUGGESTIONS

This study aims to determine whether there are significant differences in the financial performance of companies before and after debt restructuring. The analysis, utilizing the Paired Sample T-Test, was conducted on a sample of 44 Indonesian companies that underwent debt restructuring between 2003 and 2022. The results indicate significant differences in various financial

ratios of companies before (t-1 and t-2) and after (t+1 and t+2) debt restructuring, including Cash Ratio, Debt to Asset Ratio, Profit Margin, Return to Asset, Return on Equity, and Asset Turnover. The study anticipates that its findings will contribute valuable insights into the extent to which debt restructuring can impact the financial performance of companies. The results of the Paired Sample T-Test suggest a new theory, implying that debt restructuring has the potential to enhance the financial performance of companies. However, not all aspects of a company's financial performance may exhibit significant differences within a two-year period, with certain financial ratios showing distinctions only after this timeframe.

Theoretical implications highlight the need for future research to explore significant differences over an extended period, aiming to comprehend improvements in specific ratios. Practically, the study underscores the importance for companies opting for debt restructuring to conduct a meticulous analysis. This diligence is crucial to ensure that changes in the capital structure yield a significant and positive difference in improving the financial performance of the company. Study limitations include the restricted analysis period of two years before and after debt restructuring, as well as the limited sample size. To address these limitations, research development is recommended by expanding the analysis period to three to five years before and after debt restructuring.

Encompassing a broader timeframe is expected to provide more detailed and focused contributions. Suggestions for future research involve proactive data search and management efforts to optimize the utilization of data and samples. Additionally, extending the research period is crucial to observe the long-term impact of debt restructuring, considering that significant results take time to manifest. This comprehensive approach is expected to enhance understanding of the impact of debt restructuring.

REFERENCES

Agus, H., & Martono. (2014). *Manajemen Keuangan* (edisi 1).

Ahmaddien, I., & Syarkani, Y. (2019). Statistika Terapan dengan Sistem SPSS. In *ITB Press*.

Analysis of Debt Restructuring Methods for Negative Equity Firm. (2021). https://doi.org/10.11594/nstp.2021.1001

Andy, A., Angeline, G., Roberto, Y., Wijaya, H., & Febrianty, L. (2022). Faktor-Faktor Yang Mempengaruhi Kebijakan Utang dengan Profitabilitas sebagai Pemoderasi pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia. *Jurnal Bina Akuntansi*, *10*(1). https://doi.org/10.52859/jba.v10i1.255

Angelina, C., Neka Fatyandri, A., & Manajemen Fakultas Bisnis dan Manajemen, J. (2023). Jurnal Mirai Management Analisis Lima kekuatan Model Kompetisi dan Strategi Restrukturisasi pada PT. Indofood CBP. *Jurnal Mirai Management*, *8*(2), 162–169.

Angeline, G., Roberto, Y., & Wijaya, H. (2023). *FAKTOR-FAKTOR YANG MEMPENGARUHI KEBIJAKAN UTANG DENGAN PROFITABILITAS SEBAGAI PEMODERASI PADA PERUSAHAAN MANUFAKTUR YANG TERDAFTAR DI BURSA EFEK INDONESIA* (Vol. 10, Issue 1).

As'ari, H., Ahmad Pabulo, A. M., & Zaman, B. (2019). Pengaruh Restrukturisasi Perusahaan Terhadap Kinerja Perusahaan. *JAE (JURNAL AKUNTANSI DAN EKONOMI)*, *4*(3). https://doi.org/10.29407/jae.v4i3.13133

Fraser, L. M., & Ormiston, A. (2016). Understanding Financial Statements Eleventh Edition. In *Understanding Finance*.

Ghosh, S. (2019). Corporate distress, troubled debt restructurings and equity stripping: Analyzing corporate debt restructurings in India. *South Asian Journal of Business Studies*, *8*(1), 105–126. https://doi.org/10.1108/SAJBS-05-2018-0059

Gupta, V. (2017). Corporate Debt Restructuring and its Impact on Financial Performance. *International Journal of Engineering Technology, Management and Applied Sciences*, *5*(2).

Hery. (2018). Analisis laporan keuangan / Hery, S.E., M.Si., CRP., RSA. ; editor, Adipramono. In *Perpustakaan Nasional RI* (Vols. 978-602-375-540–0).

Hoshi, T., Koibuchi, S., & Schaede, U. (2018). The decline in bank-led corporate restructuring in Japan: 1981-2010. *Journal of the Japanese and International Economies*, *47*. https://doi.org/10.1016/j.jjie.2017.11.004

Kasmir. (2016). Pengantar Manajemen Keuangan - Google Books. In *Google Books*.

Kasmir. (2018). Analisis laporan keuangan / Dr. Kasmir. In *Perpustakaan Nasional RI* (Vols. 978-979-769-216–2).

Masyitah, E., Karya, D. K., & Harahap, S. (2018). *Analisis Kinerja Keuangan Menggunakan Rasio Likuiditas Dan Profitabilitas* (Vol. 1, Issue 1).

Murhadi, W. R. (2013). Analisis Laporan Keuangan Proyeksi dan Valuasi Saham. In *Salemba Empat*.

Payne, J. (2018). Debt Restructuring in the UK. In *European Company and Financial Law Review* (Vol. 15, Issue 3). https://doi.org/10.1515/ecfr-2018-0014

Permana, G. (2020). Effect of Debt Restructuring Through Debt To Equity Swap Policy Towards Financial Performance of PT. XYZ. *ECONOMICA*, *8*(2), 186–199. https://doi.org/10.22202/economica.2020.v8.i2.3667

Pontoh, N., Pelleng, F. A. O., & Mukuan, D. D. S. (n.d.). *ANALISIS PROFITABILITAS PATA PT. PEGADAIAN (PERSERO) KANWIL V MANADO*.

Riani, R., Nugraha, A. A., Akuntansi, J., & Bandung, P. N. (2020). Dampak Restrukturisasi Utang Terhadap Kinerja Keuangan (Studi Kasus pada PT X) ThedImpactdofdDebtdRestructuringdondFinancialdPerformance (Case Study in PT X). In *Indonesian Accounting Literacy Journal* (Vol. 1, Issue 1).

Soedarmono, W., Fiskara, I. G., Carla, I., Wulandari, S., Gunadi, I., Indawan, F., & Wulandari, C. S. (n.d.). *EXPLORING THE IMPACT OF LOAN RESTRUCTURING IN INDONESIAN BANKING*.

Sopini, P. (2016). Pengaruh Current Ratio dan Quick Ratio Terhadap Profit Margin Pada PT. Indosat, Tbk Periode 2005-2014. *Jurnal Ilmiah Dikdaya*, *6*(1).

Sugiyono. (2014). Sugiyono. (2014). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Alfabeta. *E-Jurnal Ekonomi Pembangunan*, *11*(10).

Surya, S. S., & Suyatma, I. N. (2014). Akibat Hukum Bentuk-bentuk Restrukturisasi Perusahaan Di Indonesia. *Kertha Semaya : Journal Ilmu Hukum*, *2*(5).

Syahrizal, S. (2020). *Ngeri, Gelombang Gagal Bayar Hantui Perusahaan RI*.

Tan, Y., & Luo, P. (2021). The impact of debt restructuring on dynamic investment and financing policies. *Economic Modelling*, *102*. https://doi.org/10.1016/j.econmod.2021.105583

Wahdatunjannah, W. (2020). ANALISIS PENGARUH NON PERFORMING LOAN (NPL) TERHADAP RETURN ON EQUITY PADA KOPERASI WANITA (KOPWAN) KARTIKA SARI KOTA BIMA. *Jurnal Ekonomi Balance*, *16*(1). https://doi.org/10.26618/jeb.v16i1.3463

Wikartika, I., & Fitriyah, Z. (2018). Pengujian Trade Off Theory dan Pecking Order Theory di Jakarta Islamic Index. *BISMA (Bisnis Dan Manajemen)*, *10*(2). https://doi.org/10.26740/bisma.v10n2.p90-101