

Content lists available at [Indonesia Academia Research Society](https://ejournals.indoacademia-society.com/ijietom)

International Journal of Industrial Engineering, Technology & Operations Management

Journal homepage: ejournals.indoacademia-society.com/ijietom

Original Article



Analyzing the Financial Performance of PT. Steel Pipe Industry of Indonesia Tbk.

Bambang Widjanarko ^{a,*}, Awan Panjinata ^a, Agus Sukoco ^a and Joko Suyono ^a^a Faculty of Economics and Business, Universitas Narotama, Sukolilo, 60117 Surabaya, Jawa Timur, Indonesia.* Correspondence: bambangkoko@gmail.com

Article History

Received 3 July 2023
 Revised 16 November 2023
 Accepted 8 December 2023
 Available Online 31 Dec 2023

Keywords:

Financial performance
 Sales forecasting
 Least square approach

Abstract

The financial report is vital for acquiring insights into a company's financial position and business performance. Through financial statement analysis, crucial indicators pertaining to the company's financial health are unveiled, rendering it a valuable resource for guiding financial decision-making processes and offering a comprehensive portrayal of the company's performance. This study evaluates the financial performance of PT. Steel Pipe Industry of Indonesia Tbk. and forecasts the company's sales turnover over the next five years. This research adopts a quantitative descriptive approach, utilizing secondary data from 2018 to 2022 from the PT. Steel Pipe Industry of Indonesia Tbk. The data analysis process encompasses several stages, including (i) Ratio Analysis of Financial Reports from 2018 to 2022, (ii) Compilation of sales data, (iii) Projections of sales figures using the least squares method, and (iv) Forecasting profits for the period from 2023 to 2027. The findings of this study indicate that the PT. Steel Pipe Industry of Indonesia Tbk. is facing challenges in its financial performance, as the ratio values consistently fall below industry-standard financial metrics. However, the company has demonstrated resilience in maintaining its profitability levels, evidenced by a 6% increase in profit percentage in 2021 compared to 2020. This can be attributed to the company's consistent profit generation efforts, resulting in year-on-year profit growth.



Copyright: © 2023 by the authors. Submitted for possible open-access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The financial report is a tool to obtain information about a company's financial position and business results (Zeff, 2013). Financial statement analysis can provide important indicators related to the company's financial condition, making it a tool for consideration in financial decision-making and depicting the company's performance (Zager & Zager, 2006). PT Steel Pipe Industry of Indonesia Tbk (SPINDO) is a company that manufactures steel pipes in Indonesia. The company produces various types of steel pipes for various industrial purposes, including construction, infrastructure, oil and gas, and other energy sectors.

PT Steel Pipe Industry of Indonesia Tbk (SPINDO) produces various types of steel pipes for industrial purposes, including (a) Pipes for drinking water distribution, wastewater channels, and clean water infrastructure. (b) Special pipes for the transportation of oil, gas, and other fuels. (c) Pipes are used in

construction and infrastructure such as bridges, buildings, and other construction projects. (d) Pipes are used in special industries such as the chemical and petrochemical industries.

Business owners undoubtedly expect the sustainability of their business. Therefore, an assessment of financial performance and financial activity planning is needed. This involves financial ratio analysis and financial planning, which requires sales forecasting as sales are the starting point for a company's activities. Financial ratio analysis includes liquidity, solvency, activity, and profitability ratios. Additionally, forecasting is an integral term in business activities, especially when determining the quantity of products to be produced. Financial planning involves sales forecasting, as sales are the starting point of a company's activities.

Financial management is critical in any company, large or small, especially in the evolving business world with increased competition and economic uncertainties

leading to sudden bankruptcies (Filatotchev & Toms, 2006; Karadag, 2015). To survive and grow, companies must closely monitor their conditions and performance. Financial performance evaluation can be done using financial statement analysis, where balance sheets and income statements are the fundamental inputs for this analysis (Purnama, Hanitha, & Angreni, 2020). Financial ratio analysis guides investors and creditors in deciding or considering a company's future achievements.

Financial statement analysis uses existing financial statement data as the basis for assessment. The measurement and relationship between one item and another in the financial statements visible in financial ratios can provide significant conclusions in determining the health of a company's financial statements (Palepu, Healy, Wright, Bradbury, & Coulton, 2020; Robinson, 2020). Financial performance analysis is created to assess a company's prospects and risks. The prospect can be seen from the level of profitability, while the risk can be seen from the possibility of the company experiencing financial difficulties or bankruptcy.

Financial performance is crucial and requires attention from managers (Shi & Yu, 2013; Waddock & Graves, 1997). Companies must convey information about their financial conditions through financial statements to the public. A company showing good profitability indicates that management can efficiently use available resources to generate maximum profits. The Current Ratio (CR) is a measurement to determine a company's ability to meet its short-term obligations

through shareholder returns (Husna & Satria, 2019; Sari, Novari, Fitri, & Nasution, 2022). When a company achieves optimal profits, financing and funding will become smoother.

Still, the opposite will occur if the company does not achieve profits. A good indicator to gauge a company's growth is profit, the main objective of any company. However, large profits do not necessarily indicate that the company works efficiently. The ability of a company to obtain maximum profits is crucial. Stakeholders, such as investors and creditors, measure a company's success based on management's performance in generating profits in the future.

Profitability is a company's ability to generate profit compared to the capital used, expressed as a percentage (De Luca & De Luca, 2018; Slamet, 2016; Yenni, Arifin, Gunawan, Pakpahan, & Siregar, 2021). In a company, a good and thorough business analysis is the responsibility of management. If management functions can be carried out optimally, a company conducting its business activities will obtain maximum profits, achieving its set goals. In this research, the focus is on financial statements in the last 5 years. The balance sheet data for PT. Steel Pipe Industry of Indonesia Tbk. from 2018 to 2022 is presented for comparison. Table 1 captures the total assets, liabilities, and equity fluctuates yearly. Also, the balance sheet accounts experience fluctuations. For example, the current assets account decreased from 6,494,070 in 2018 to 6,424,507 in 2019.

Table 1. Financial Balance Sheet (in million IDR).

Description(s)	Year(s)				
	2018	2019	2020	2021	2022
Cash and Bank	232,235	219,024	59,543	50,092	50,178
Accounts receivable	669,538	798,622	848,299	1,019,584	1,159,861
Other Receivables	14,689	8,923	6,409	1,618	1,705
Preparation	2,658,086	2,453,314	2,103,313	3,243,760	3,095,377
Down payment	66,172	67,406	96,048	107,635	94,289
Total Current Assets	3,640,720	3,547,289	3,113,612	4,422,689	4,401,410
Non-Current Assets	2,853,350	2,877,218	2,962,992	2,674,633	3,004,521
Total assets	6,494,070	6,424,507	6,076,604	7,097,322	7,405,931
Short Term Liabilities	2,579,383	2,542,901	2,162,323	2,761,503	2,606,899
Long Term Liabilities	3,578,654	3,325,841	2,741,264	3,310,209	3,261,396
Equity	2,915,416	3,098,666	3,335,340	3,787,113	4,144,535
Liability and equity	6,494,070	6,424,507	6,076,604	7,097,322	7,405,931

In 2020, there was a further decrease to 6,076,604. However, in the following years, there was an increase in 2021 to 7,097,322 and in 2022 to 7,405,931. All changes in the balance sheet accounts can be analyzed to understand the factors influencing the balance increase and decrease from one period to the next. The analysis uses ratio calculations, which are expected to evaluate the past, present, and future conditions. The financial ratios include liquidity, solvency, activity, and profitability ratios. The following is PT's net profit report. Steel Pipe Industry Tbk. for 5 years.

Table 2. Net profit (in million IDR)

No.	Year	Net Profit
1	2018	74,475
2	2019	183,251
3	2020	237,344
4	2021	494,165
5	2022	421,010

Table 2 shows the net profit of PT Steel Pipe Industry of Indonesia Tbk. has experienced fluctuations from 2018 to 2022. The factors causing this are discussed to

ascertain which accounts influence these increases and decreases.

2. Materials and Methods

This study is designed using descriptive analysis with a quantitative approach. The data used in the analysis are secondary, and the data collection method involves non-participant observation based on the records obtained from the Indonesia Stock Exchange (IDX) for the company PT Steel Pipe Industry of Indonesia Tbk., abbreviated as SPINDO, which is a company that produces steel, and the data used includes financial reports for the 5 years from 2018 to 2022. The data analysis technique is carried out in several stages: (i) Collecting the Financial Reports of PT Steel Pipe Industry of Indonesia Tbk. (ii) Performing Financial Ratio Analysis, including Liquidity, Solvency, and Profitability ratios. (iii) Collect sales data from 2018 to 2022 and calculate sales forecasting for 2023-2027 using the least square method. (iv) Creating a table estimating the development of capital for the years 2023-2027 and (v) Creating a graph illustrating the company's performance.

The forecasting method is divided into qualitative and quantitative methods. Qualitative forecasting is based on opinions and descriptive analysis, while

quantitative forecasting is based on mathematical calculations. Therefore, it is essential to know the method, as forecasting is a crucial analytical tool in business. Companies are more interested in gaining experience based on past sales data, assuming that what happened in the past will repeat itself now. Liquidity ratios describe the company's ability to meet short-term obligations at maturity using existing current assets. Common liquidity ratios include the current, inventory-to-net-worth, cash, and quick ratios (Wardani, Afandi, & Riani, 2020).

The solvency ratio is a ratio that assesses the company's ability to settle all of its obligations, both short-term and long-term, with the guarantee of assets or wealth owned by the company. The profitability ratio compares the company's ability to generate profit from income related to sales, assets, and equity-based on certain measurements.

3. Results and Discussions

From PT SPINDO's financial report data from 2018 to 2022, which is considered in the liquidity ratio, the following results are obtained:

Table 3. Summary of Liquidity, activity, and profitability ratios for 2018 – 2022.

No.	Ratio	2018	2019	2020	2021	2022	Ratio Average	Industry Standards	Condition
Liquidity ratio									
1	Current ratio	1.41	1.39	1.44	1.60	1.69	1.51	> 2 Times	Not good
2	Quick ratio	0.38	0.43	0.47	0.43	0.50	0.44	> 1.5 Times	Not good
3	Cash ratio	0.09	0.09	0.03	0.02	0.02	0.05	> 50%	Not good
Solvency ratio									
4	Total Debt to Equity Ratio	2.11	1.89	1.47	1.60	1.42	1.70	< 1 Times	Not good
5	Total Debt to Assets Ratio	0.95	0.91	0.81	0.86	0.79	0.86	< 1 Times	Good
6	Long-Term Debt to Equity Ratio	1.23	1.07	0.82	0.87	0.79	0.96	< 1 Times	Good
Activity ratio									
7	Total assets turnover	0.69	0.76	0.62	0.76	0.84	0.73	> 2 Times	Not good
8	Receivable turnover	6.45	6.66	4.58	5.76	5.74	5.84	> 15 Times	Not good
9	Inventory Turn over	1.55	1.64	1.41	1.59	1.73	1.59	> 4 times	Not good
10	Working capital turnover	4.21	4.86	3.97	3.24	3.49	3.95	> 6 Times	Not good
Profitability ratio									
11	Gross profit margin	11.90%	14.09%	14.78%	20.82%	12.13%	14.74%	> 30%	Not good
12	Net profit margin	1.67%	3.75%	6.29%	9.19%	6.73%	5.52%	> 20%	Not good
13	Return on Equity	2.55%	5.91%	7.12%	13.05%	10.16%	7.76%	> 40%	Not good
14	Return on Investment	1.15%	2.85%	3.91%	6.96%	5.68%	4.11%	> 30%	Not good

Table 3 shows the current ratio calculation from 2018 to 2022 has increased. This ratio of value means every Rp. 1 current debt is guaranteed or covered by current assets of Rp. 1.41 in 2018, Rp. 1.39 in 2019, Rp. 1.44 in 2020, Rp. 1.60 in 2021 and 1.69 in 2022. or in other words, the higher the current ratio, the more secure the company's debts are to creditors. If you look at the Current Ratio value, it shows good financial performance, because if measured with a ratio level of 100%, the company can be said to be good if it has a Current Ratio greater than 100%.

The quick ratio from 2018 to 2022 has fluctuated with the average for 5 years being 0.44, which means that the company has very liquid assets (such as cash, receivables and investments that can be immediately cashed in) of 44% to pay short-term obligations. With details of very liquid assets to guarantee current debt of 38% in 2018, 43% in 2019, 47% in 2020, 43% in 2021 and 50% in 2022. The quick ratio shows that the company does not have enough highly liquid assets to cover its short-term liabilities.

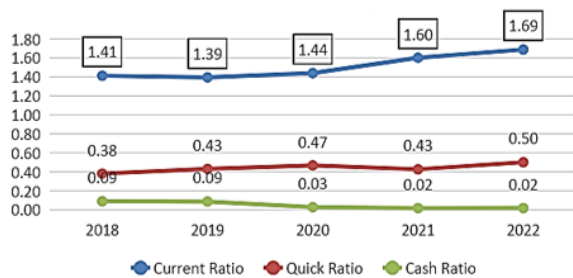


Figure 1. The result of asset liquidity

Figure 1 shows an average cash ratio of 0.05, which means that the company has cash reserves of 5% which can be used to pay its short-term obligations. In 2018 it was 9% in 2018 and 2019, 3% in 2020, and in 2021 and 2022 it was 2% which can be repaid by cash or cash equivalents. From PT SPINDO's financial report data from 2018 to 2022 which is considered in the solvency ratio, the following results are obtained:

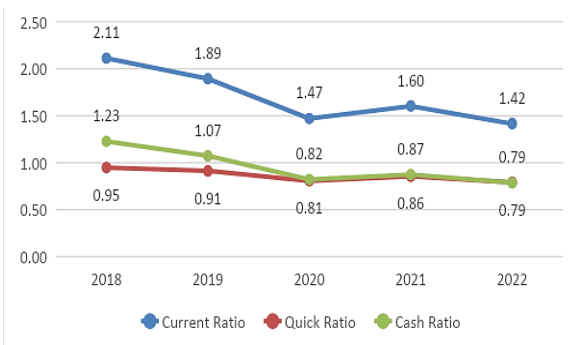


Figure 2. The result of solvency ratio

Figure 2 captures the result of solvency ratio. The data obtained for the total debt to equity ratio was 2.11 in 2018, 1.89 in 2019, 1.47 in 2020 and in 2021 it was 1.60 and in 2022 it was 1.42 with an average of 1.70, meanwhile total The debt to asset ratio was obtained at 0.95 in 2018, 0.91 in 2019, 0.81 in 2020, 0.86 in 2021 and in 2022 it was obtained at 0.79 with an average of 0.86, for long The term debt to equity ratio data obtained in 2018 was 1.23, in 2019 it was 1.07, in 2020 it was 0.82, in 2021 it was 0.87, in 2022 it was 0.79 and the average was 0.96.

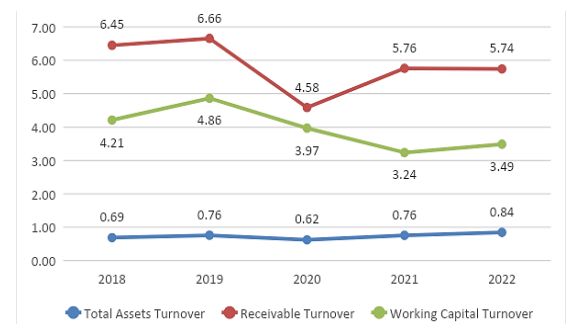


Figure 3. The result of activity ratio

Figure 3 shows the result of activity ratio. The activity ratio is a ratio used to measure and assess a company's

ability to use its assets or utilize the resources it has in the areas of sales, receivables collection, and other areas.

On the basis of result, total assets turnover in 2018 was 0.69, in 2019 it was 0.76m, in 2020 it was 0.62, in 2021 it was 0.76 and in 2022 it was 0.84 where the average for that period was 0.73 which means the company's condition is not good because it is below industry standards. Receivable turnover in 2018 was 6.45, in 2019 it was 6.66, in 2020 it was 4.58, in 2021 it was 5.76, in 2022 it was 5.74 with an average of 5.84, which means that the company is in a bad condition. good because it is below industry standards.

For Inventory turnover, it is known that it will be 1.55 in 2018, 1.64 in 2019, 1.41 in 2020, 1.59 in 2021 and in 2022 it will be 1.73 with an average of 1.59. This means that the company is in a bad condition because it is below industry standards. Working capital turnover in 2018 was 4.21, in 2019 it was 4.86, in 2020 it was 3.97, in 2021 it was 3.24 and in 2022 it was 3.49 with an average of 3.95, this means that the company is in a condition is not good because it is below industry standards.

Financial performance of PT. Steel Pipe Industry of Indonesia Tbk. for the 2018-2022 period on the basis of analysis of financial reports using profitability ratio are Gross Profit Margin is known to show a standard average of 14.74%, which means the company is in a bad condition, if using industry standards, it is 30%, because it is below standard.

Net Profit Margin is known to show a standard average of 5.52%, which means the company is in a bad condition, this is because it is below the industry standard of 20%. This means that the company has not been able to generate profits from net sales of 20% because the greater the value of this ratio, the greater the profits the company will obtain. 7.76 % times which means the company is in a bad condition, this is because it is below standard industry by 40%. This means that the company has not been able to generate profits from the capital owned by the company at the industry standard because the greater the value of this ratio means the company is better at managing its own capital or equity to generate profits.

Return on Investment is known to show an average of 4.11%, which means the company is in a bad condition, this is because it is below the industry standard of 30%. This means that the company has not been able to generate profits from the capital invested in total assets because the greater the value of this ratio means the company is better at managing invested capital to generate profits or profits.

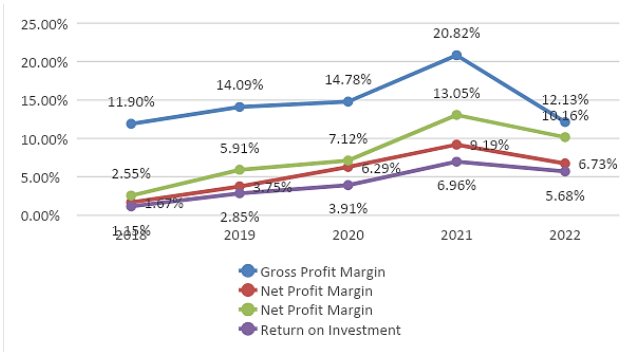


Figure 4. Summary of financial performance

From profit and loss report data from PT Steel Pipe Industry of Indonesia Tbk. For 2018 - 2022, sales data was obtained and projected sales turnover for 2023-2027 was calculated using the least squares method as follows:

Table 4. Summary of projected sales turnover for 2023-2027

Year	Sale	Up and down	Percentage
2018	4,467,590	0	0
2019	4,885,875	418,285	9.36%
2020	3,775,530	-1,110,345	-22.73%
2021	5,378,808	1,603,278	42.46%

Year	Sale	Up and down	Percentage
2022	6,255,945	877,137	16.31%
2023	6,173,643	-82,303	-1.32%
2024	6,580,607	406,964	6.59%
2025	6,987,571	406,964	6.18%
2026	7,394,535	406,964	5.82%
2027	7,801,500	406,964	5.50%

Table 4 shows the sales turnover of PT Steel Pipe Industry of Indonesia Tbk. from 2018 to 2019 it increased by 9.36%, while in 2020 it experienced a drastic decline to minus 22.73%, due to the impact of Covid-19. Meanwhile, the largest percentage is in 2021, namely 42.46%, this is due to PT Steel Pipe Industry of Indonesia Tbk. had products that their customers needed, while other similar companies were not ready at that time, This in 2022 there will be an increase of 16.31%. To predict sales turnover in the next 5 years using the least squares of sales projection data for 2023 to 2027 can be obtained as follows: In 2023 there will be a decrease of 1.32%, then in 2024 it will increase by 6.59%, in 2025 it will increase by 6.18%, in 2026 it will rise 5.82% and in 2027 it will rise 5.50%.

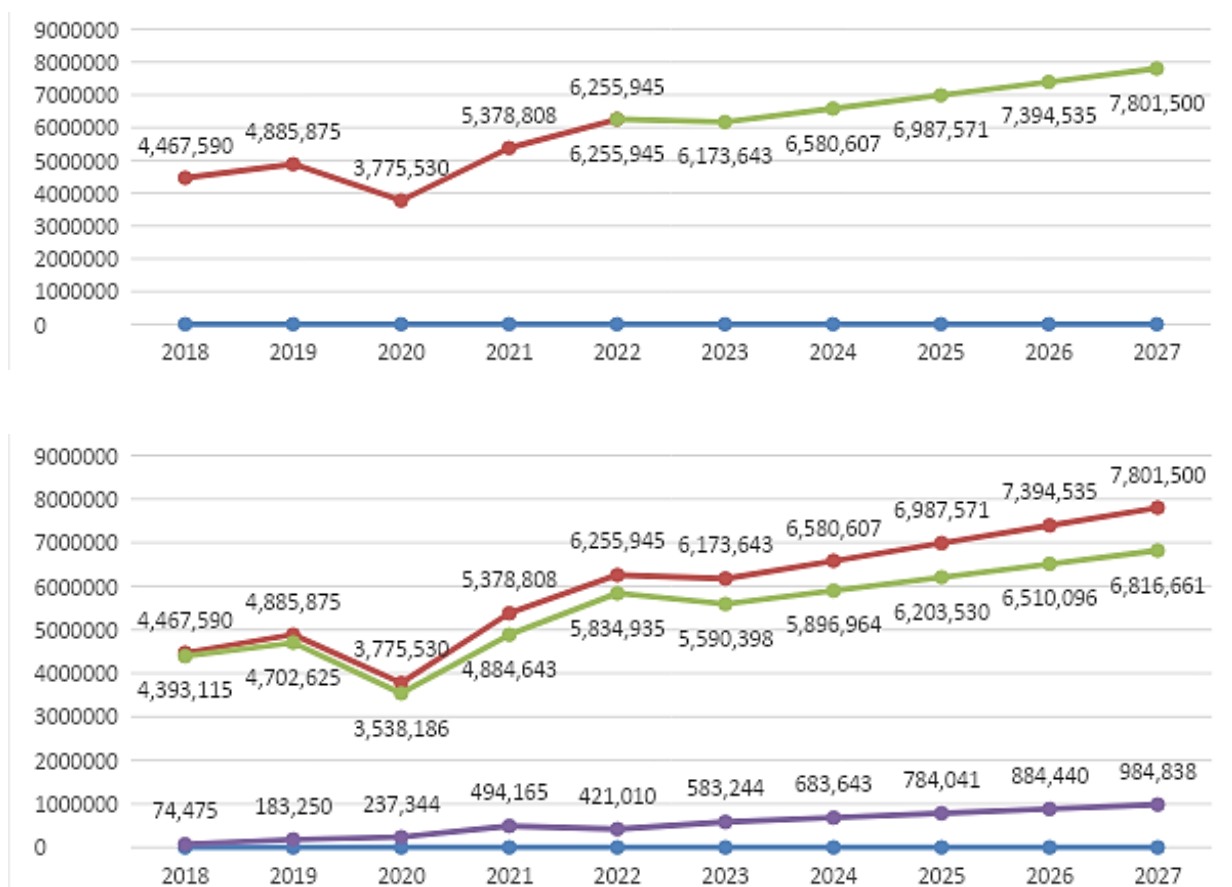


Figure 5. Prediction of sales turnover in the next 5 years using the least squares method, sales projection data for 2023 to 2027

4. Conclusions

In conclusion, the analysis of liquidity ratios for PT. Steel Pipe Industry of Indonesia Tbk. over the period from 2018 to 2022 reveals concerning findings. With an average Current Ratio of 1.51 times, Quick Ratio of 0.44 times, and Cash Ratio of 0.05%, the company falls short of meeting the industry standard for financial ratios. These results signify a significant liquidity challenge for the company, indicating its incapacity to readily fulfill short-term financial obligations, including settling short-term debts, utilizing its existing assets or wealth. As such, these findings underscore the necessity for strategic measures to enhance liquidity management within the organization, ensuring its financial resilience and sustainability in the face of short-term financial demands. The analysis of solvency ratios for PT. Steel Pipe Industry of Indonesia Tbk. spanning from 2018 to 2022, employing metrics such as Total Debt to Equity Ratio, Total Debt to Total Asset Ratio, and Long-Term Debt to Equity Ratio, reveals an average of 1.70 times, 0.86 times, and 0.96 times, respectively. These results indicate that the company's financial position is robust, as the ratios fall within the industry standard for financial ratios. Consequently, the company demonstrates its ability to fulfill all financial obligations, encompassing both short-term and long-term, utilizing its assets and capital effectively.

The financial performance evaluation of PT. Steel Pipe Industry of Indonesia Tbk during the period 2018-2022, focusing on activity ratios such as Total Assets Turnover, Receivable Turnover, Inventory Turnover, and Working Capital Turnover, indicates an average of 0.73 times, 5.84 times, 1.59 times, and 3.95 times, respectively. These figures suggest the company's performance falls below the industry standard for financial ratios. Consequently, it can be deduced that the company is facing challenges in effectively managing its assets or wealth. This can be attributed to suboptimal performance in areas such as accounts receivable collection, inventory management, and asset utilization, where the company's management may not be maximizing operational efficiency.

The financial performance assessment of PT. Steel Pipe Industry of Indonesia Tbk during the period 2018-2022, focusing on profitability ratios such as Gross Profit Margin, Net Profit Margin, Rate of Return on Net Worth (ROE), and Rate of Return on Investment (ROI), reveals an average of 14.74%, 5.52%, 7.76%, and 4.11%, respectively. Despite the ratio values falling below the industry standard for financial ratios, it is noteworthy that the company has maintained a certain level of profitability. Particularly, in 2021, there was a notable increase of 6% in profit percentage compared to 2020. This can be attributed to consistent profit generation and continuous improvement in the company's earnings, indicating resilience and potential for growth in the face of challenges.

Author Contributions: Conceptualization, B.W. and A.P.; methodology, B.W.; software, B.W.; validation, A.P., A.S. and J.S.; formal analysis, B.W.; investigation, B.W.; resources, B.W.; data curation, A.P., A.S. and J.S.; writing—original draft preparation, B.W. and A.P.; writing—review and editing, B.W., A.P., A.S. and J.S.; visualization, B.W.; supervision, A.P., A.S. and J.S.; project administration, A.P., A.S. and J.S.; funding acquisition, B.W. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Inform Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Acknowledgments: The authors would like to thank Universitas Narotama, Surabaya, Indonesia, for supporting this research and publication. We also thank the reviewers for their constructive comments and suggestions.

Conflicts of Interest: The authors declare no conflict of interest.

References

- De Luca, P., & De Luca, P. (2018). Company profitability analysis. In *Analytical Corporate Valuation: Fundamental Analysis, Asset Pricing, and Company Valuation* (pp. 43–76). Springer.
- Filatovchev, I., & Toms, S. (2006). Corporate governance and financial constraints on strategic turnarounds. *Journal of Management Studies*, 43(3), 407–433.
- Husna, A., & Satria, I. (2019). Effects of return on asset, debt to asset ratio, current ratio, firm size, and dividend payout ratio on firm value. *International Journal of Economics and Financial Issues*, 9(5), 50–54.
- Karadag, H. (2015). Financial management challenges in small and medium-sized enterprises: A strategic management approach. *EMAJ: Emerging Markets Journal*, 5(1), 26–40.
- Palepu, K. G., Healy, P. M., Wright, S., Bradbury, M., & Coulton, J. (2020). *Business analysis and valuation: Using financial statements*. Cengage AU.
- Purnama, O., Hanitha, V., & Angreni, T. A. (2020). Financial Statement Analysis to Assess Company Financial Performance. *ECo-Fin*, 2(3), 168–174.
- Robinson, T. R. (2020). *International financial statement analysis*. John Wiley & Sons.
- Sari, W. N., Novari, E., Fitri, Y. S., & Nasution, A. I. (2022). Effect of Current Ratio (Cr), Quick Ratio (Qr), Debt To Asset Ratio (Dar) and Debt To Equity Ratio (Der) on Return On Assets (Roa). *Journal of Islamic Economics and Business*, 2(1), 42–58.
- Shi, M., & Yu, W. (2013). Supply chain management and financial performance: literature review and future directions. *International Journal of Operations & Production Management*, 33(10), 1283–1317.
- Slamet, R. (2016). Influence of capital structure, size and growth on profitability and corporate value. *International Journal of Business and Finance Management Research*, 4(6), 80–101.

- Waddock, S. A., & Graves, S. B. (1997). The corporate social performance–financial performance link. *Strategic Management Journal*, 18(4), 303–319.
- Wardani, N. K., Afandi, M. R., & Riani, L. P. (2020). Analisis Forecasting Demand Dengan Metode Linear Exponential Smoothing (Studi Pada: Produk Batik Fendy, Klaten). *Jurnal Ekonomi Dan Pendidikan*, 16(2), 81–89. <https://doi.org/10.21831/jep.v16i2.33714>
- Yenni, Y., Arifin, A., Gunawan, E., Pakpahan, L., & Siregar, H. (2021). The impact of solvency and working capital on profitability. *Journal of Industrial Engineering & Management Research*, 2(4), 15–38.
- Zager, K., & Zager, L. (2006). The role of financial information in decision making process. *Innovative Marketing*, 2(3), 35–40.
- Zeff, S. A. (2013). The objectives of financial reporting: a historical survey and analysis. *Accounting and Business Research*, 43(4), 262–327.

