

A Study on Working Capital Management at Tube Products of India Limited

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ABSTRACT: This study delves into the intricate dynamics of working capital management at Tube Products of India Limited (TPI), a leading player in the Indian manufacturing sector. With a focus on optimizing liquidity and operational efficiency, the research aims to analyse the company's strategies, challenges, and outcomes regarding working capital management. The methodology involves a comprehensive review of TPI's financial statements, particularly focusing on key working capital components such as accounts receivable, inventory, and accounts payable. Various financial ratios and performance indicators will be employed to evaluate the effectiveness of TPI's working capital management practices.

Keywords: Working capital management, Ratio analysis, Changes in working capital, Trend.

INTRODUCTION: In an era marked by intense global competition and economic volatility, the imperative for robust financial management has never been greater, particularly for manufacturing firms operating in capital-intensive industries. Working capital management (WCM) stands at the forefront of financial strategies that significantly influence the operational efficiency and economic stability of such enterprises. This study delves into the working capital management practices at Tube Products of India Limited (TPI), a leader in the manufacturing of precision tubes and various engineered products. The research aims to provide a detailed analysis of the current strategies employed by TPI to manage its working capital, identify the challenges faced, benchmark these practices against industry standards, and propose recommendations for optimization and enhanced financial performance. Tube Products of India Limited, part of the prestigious Murugappa Group, is known for its excellence in manufacturing precision-engineered products crucial for various sectors including automotive, construction, and energy. As a key player in the industry, TPI's financial strategies, particularly its approach to working capital management, play a pivotal role in maintaining its operational continuity and strategic expansion. In manufacturing, where production cycles and investment in raw materials demand substantial capital, the efficacy of working capital management can determine the financial health and agility of the company.

INDUSTRY PROFILE: Tube Products of India Limited (TPI), a significant entity within the Indian manufacturing landscape, operates under the umbrella of the Murugappa Group, one of India's leading business conglomerates. TPI specializes in the production of precision tubes and related products, catering primarily to the automotive, construction, and general engineering industries. The company's reputation for quality and innovation is well-recognized across the sector, bolstering its position as a key player in both national and international markets.

Established in the mid-20th century, Tube Products of India Limited has grown from a modest enterprise into a pioneering leader in the precision tubes market. The company was founded with the vision to support India's burgeoning industrial needs, particularly in the automotive and construction sectors. Over the decades, TPI has expanded its operations, scale, and technological base, continually adapting to the evolving demands of its industrial customers and the global market.

OBJECTIVES OF THE STUDY

1. To study the working capital management of Tube products of India
2. To measure the liquidity solvency and profitability of Tube products of India
3. To study the optimum level of current assets and current liabilities of the company
4. To access the efficiency of working capital management by applying ratio Analysis.

REVIEW OF LITERATURE:

1. Miller, R. & Jones, L. (2010). "Impact of Working Capital Management on Firm Profitability: An Empirical Study." This study examines the correlation between effective working capital management and increased profitability in the manufacturing sector.
2. Singh, A. & Agrawal, N. (2011). "Working Capital Trends and Liquidity Analysis in the Indian Telecom Sector." Analyzes working capital strategies in the rapidly growing telecom industry in India.
3. Zhang, H. & Li, S. (2012). "Effects of Working Capital Management on SME Performance." Focuses on small and medium enterprises, investigating how various working capital components affect their financial health.
4. Edwards, J. & Hughes, T. (2013). "Cash Conversion Cycle Management in Retail Chains." Studies the optimization of cash flow in large retail chains through efficient management of the cash conversion cycle.
5. Reed, L. & Kumar, N. (2013). "Supply Chain Finance: Innovations and Developments." Details the evolution of supply chain finance as a critical area within working capital management, focusing on innovations that enhance transparency and efficiency.

RESEARCH METHODOLOGY

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done systematically. In that various step, those are generally adopted by a researcher in studying his problem along with the logic behind them. It is important for research to know not only the research method but also know methodology. The procedures by which researchers go about their work of describing, explaining and predicting phenomenon are called methodology.

RESEARCH DESIGN

A research design is the arrangement of the condition for collection and analysis of data. Actually, it is the blueprint of the research project. Research design is a statement or specification of procedure for collecting and analysing the information required for the solution of a specific problem. It provides a scientific framework for conducting some research investigation. The conception of research of the research design plan is a critical step in the research process. The design of the study constitutes blue print for the collection, measurement, and analysis of the data.

DATA COLLECTION

There are two types of data collection methods available Primary data collection & Secondary data collection.

Primary Data: The primary data is that data which is collected fresh or first hand, and for first time which is original in nature. Primary data can collect through personal interview, questionnaire etc. to support the secondary data.

Secondary Data Collection Method: The secondary data are those which have already collected and stored. Secondary data easily get those secondary data from records, journals, annual reports of the company etc.

SOURCES OF DATA

Secondary Data has been collected from the company annual reports, records, journals, annual reports of the company supported by various books and internet sides.

TOOLS USED FOR THE STUDY

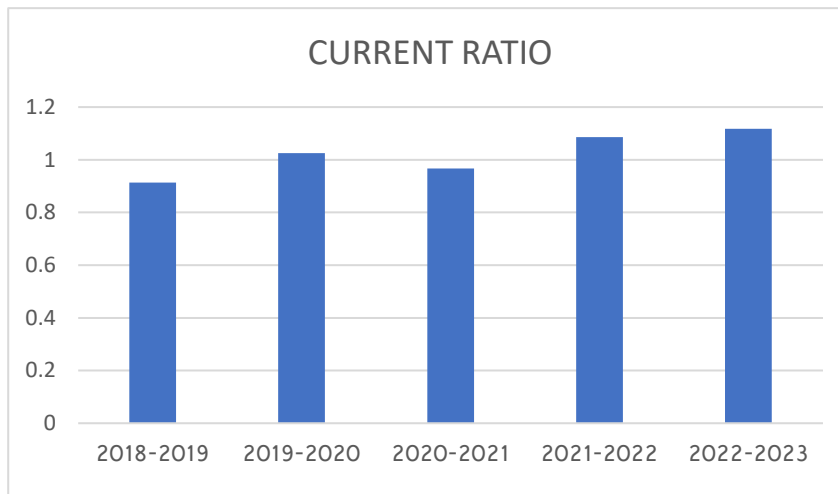
FINANCIAL TOOLS

- Ratio analysis
- Statement of changes in working capital
- Comparative Balance Sheet
- Trend analysis

DATA ANALYSIS AND INTERPRETATIONS:

Table no: 4.1 Current Ratio: Current Assets/Current Liabilities. (Rupees in crore)

Year	Current Assets	Current Liabilities	Ratios (In Rupees)
2018-2019	1312.05	1436.56	0.913328
2019-2020	1030.06	1004.45	1.025497
2020-2021	1502.64	1554.82	0.96644
2021-2022	1776.14	1635.84	1.085766
2022-2023	1760.96	1575.60	1.117644

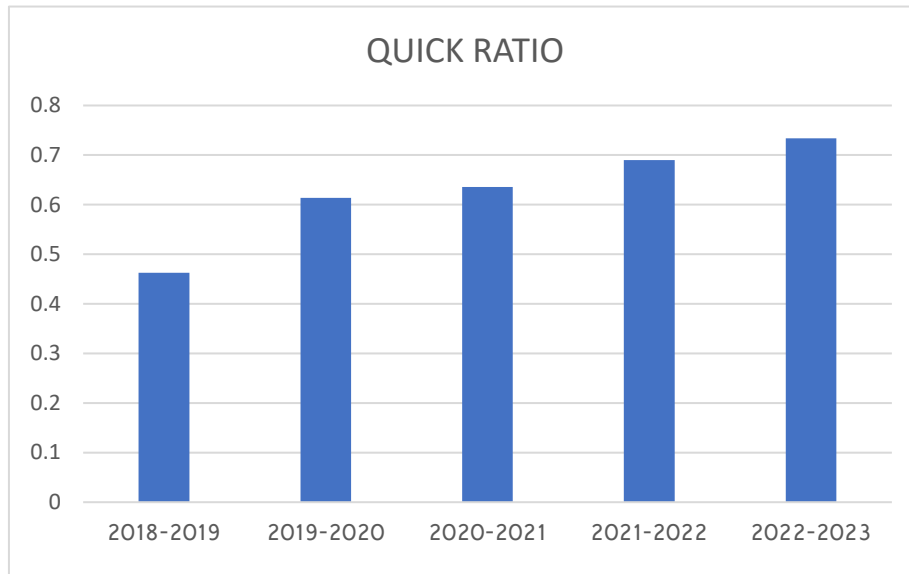


Interpretation:

From the above table it is inferred that, the current ratio is increased in the year 2022-2023 with 1.117. Whereas, exceptionally low in the years of 2018-2019 with 0.913. It is noticed that year after year the Current ratio is Fluctuating.

Table No: 4.2 Quick Ratio: Current Assets-Inventories/Current Liabilities (Rupees in crore)

Year	Current Assets	Inventories	Current Liabilities	Ratios (In Rupees)
2018-2019	1312.05	647.17	1436.56	0.462828
2019-2020	1030.06	413.82	1004.45	0.61351
2020-2021	1502.64	514.14	1554.82	0.635765
2021-2022	1776.14	647.88	1635.84	0.689713
2022-2023	1760.96	604.37	1575.60	0.734063

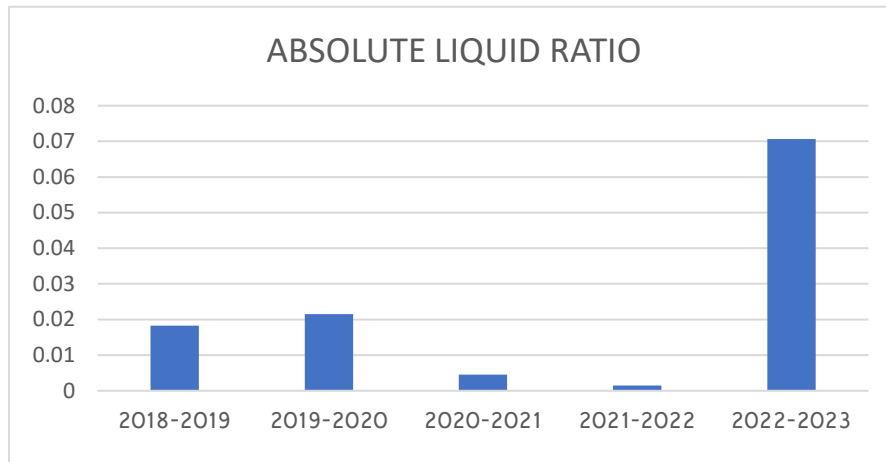


Interpretation:

From the above table it is inferred that, the Quick ratio is increased in the year 2022-2023 with 0.734. Whereas, exceptionally low in the years of 2018-2019 with 0.462. It is noticed that year after year the Current ratio is increasing.

Table No: 4.3 Absolute liquid Ratio: Cash/Current Liabilities (Rupees in crore)

Year	Cash	Current Liabilities	Ratios (In Rupees)
2018-2019	26.28	1436.56	0.018294
2019-2020	21.64	1004.45	0.021544
2020-2021	7.09	1554.82	0.00456
2021-2022	2.36	1635.84	0.001443
2022-2023	111.27	1575.60	0.070621

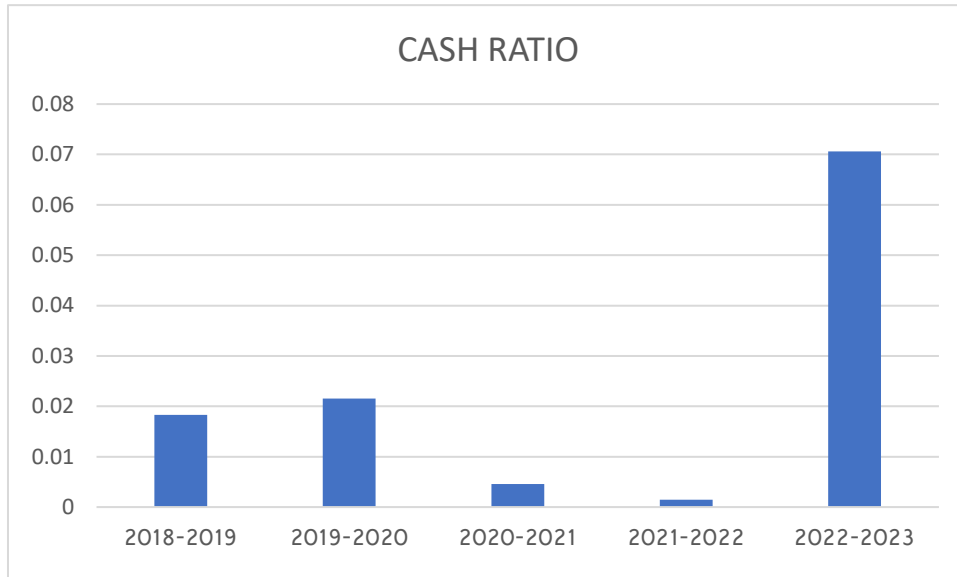


Interpretation:

From the above table it is inferred that, the absolute liquid ratio is increased in the year from 2022-2023 with 0.070 whereas, slightly low in the year 2021-2022 with 0.001. It is noticed that year after year the Absolute Liquid ratio is fluctuating.

Table No: 4.4 Cash ratio: Cash and Cash equivalent/Current liabilities (Rupees in crore)

Year	Cash	Current Liabilities	Ratios (In Rupees)
2018-2019	26.28	1436.56	0.018294
2019-2020	21.64	1004.45	0.021544
2020-2021	7.09	1554.82	0.00456
2021-2022	2.36	1635.84	0.001443
2022-2023	111.27	1575.60	0.070621

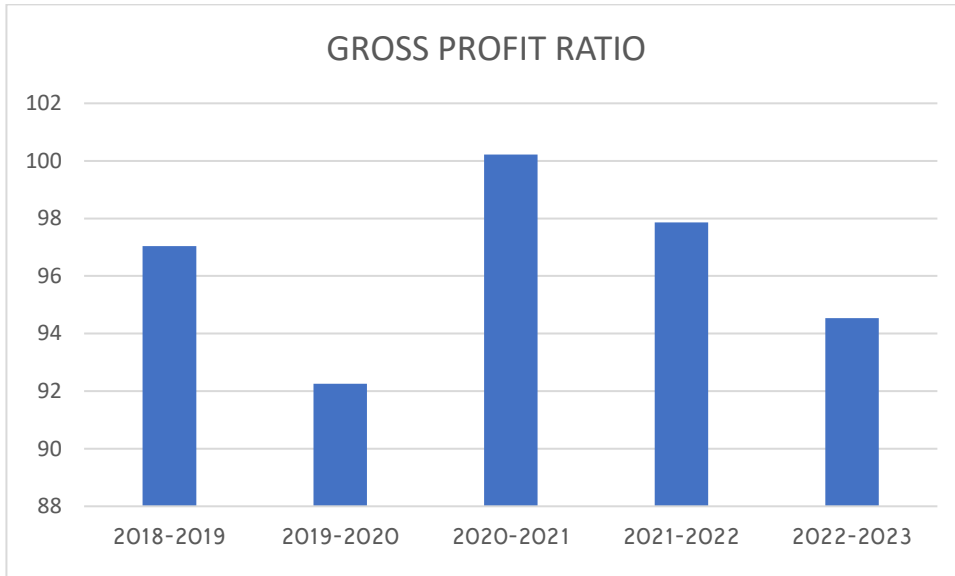


Interpretation:

From the above table it is inferred that, the cash ratio is increased in the year from 2022-2023 with 0.070 whereas, exceptionally low in the year 2021-2022 with 0.001. It is noticed that year after year the Cash ratio is fluctuating.

Table No: 4.5 Gross Profit Ratio: $\text{Gross profit/Sales} \times 100$ (Rupees in crore)

Year	Gross Profit	Sales	Ratios (In Percentage)
2018-2019	4835.52	4983.05	97.03936
2019-2020	3738.93	4052.67	92.25844
2020-2021	4034.89	4026.23	100.2151
2021-2022	5858.99	5986.79	97.8653
2022-2023	6420.95	6791.61	94.54238

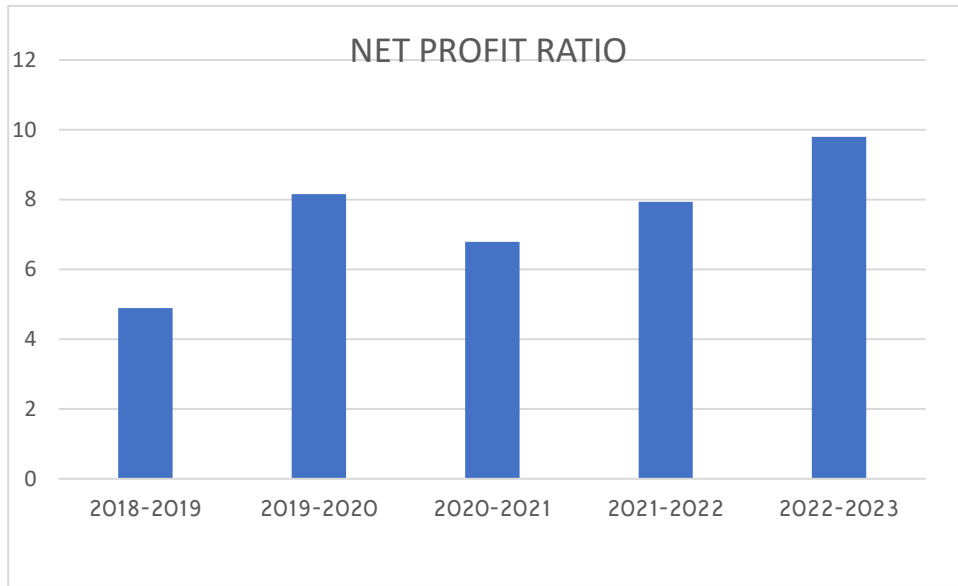


Interpretation:

From the above table it is inferred that, the Gross Profit ratio is increased in the year from 2020-2021 with 100.21 whereas, exceptionally low in the year 2019-2020 with 92.258. It is noticed that year after year the Gross Profit ratio is fluctuating.

Table No: 4.6 Net Profit Ratio: Net profit/Sales*100(Rupees in crore)

Year	Net Profit	Sales	Ratios (In Percentage)
2018-2019	243.51	4983.05	4.886766
2019-2020	330.55	4052.67	8.156351
2020-2021	273.18	4026.23	6.785007
2021-2022	475.17	5986.79	7.936975
2022-2023	665.20	6791.61	9.794438

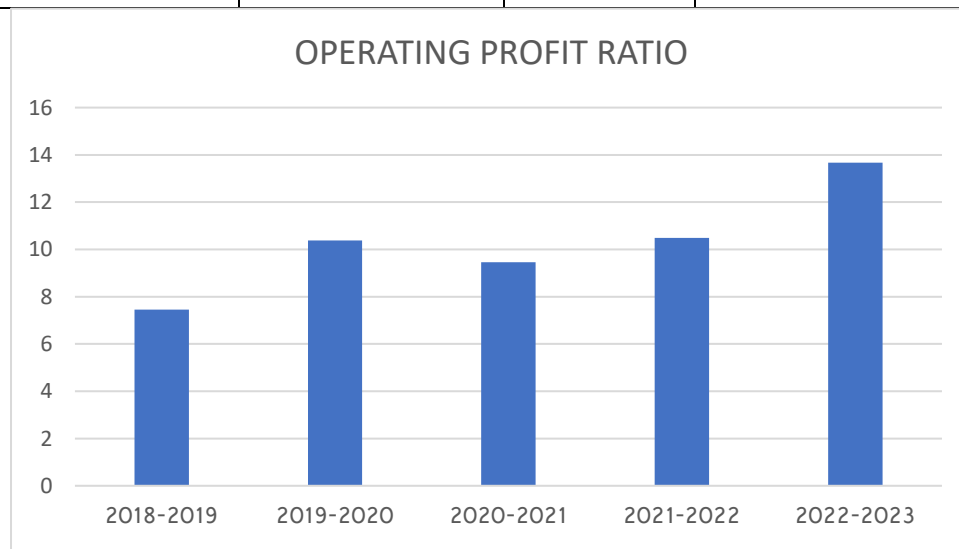


Interpretation:

From the above table it is inferred that, the Net Profit ratio is increased in the year from 2022-2023 with 9.794 whereas, low in the year 2018-2019 with 4.886. It is noticed that year after year the Net Profit ratio is fluctuating.

Table No: 4.7 Operating Profit Ratio: Operating profit/Sales*100(Rupees in crore)

Year	Operating Profit	Sales	Ratios (In Percentage)
2018-2019	371.08	4983.05	7.446845
2019-2020	420.72	4052.67	10.3813
2020-2021	380.71	4026.23	9.455744
2021-2022	628.04	5986.79	10.49043



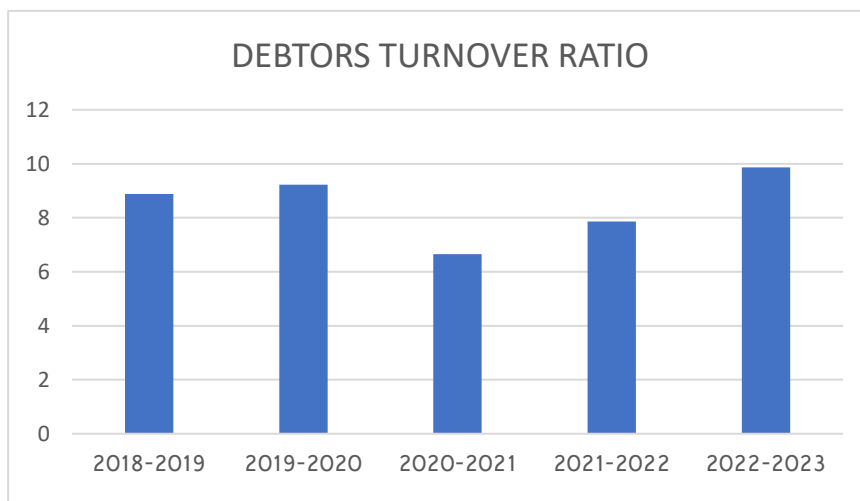
2022-2023	928.29	6791.61	13.66819
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Interpretation:

From the above table it is inferred that, the Operating Profit Ratio increased in the year from 2022-2023 with 13.668 whereas, exceptionally low in the year 2018-2019 with 7.446. It is noticed that year after year the Operating Profit ratio is fluctuating.

Table No: 4.8 Debtor's Turnover Ratio: Net Credit Sales/Average Trade Receivables
(Rupees in crore)

Year	Credit Sales	Trade Receivables	Ratios (In Times)
2018-2019	4983.05	561.13	8.880384
2019-2020	4052.67	439.15	9.228441
2020-2021	4026.23	605.47	6.64976
2021-2022	5986.79	761.23	7.864627
2022-2023	6791.61	688.22	9.868371

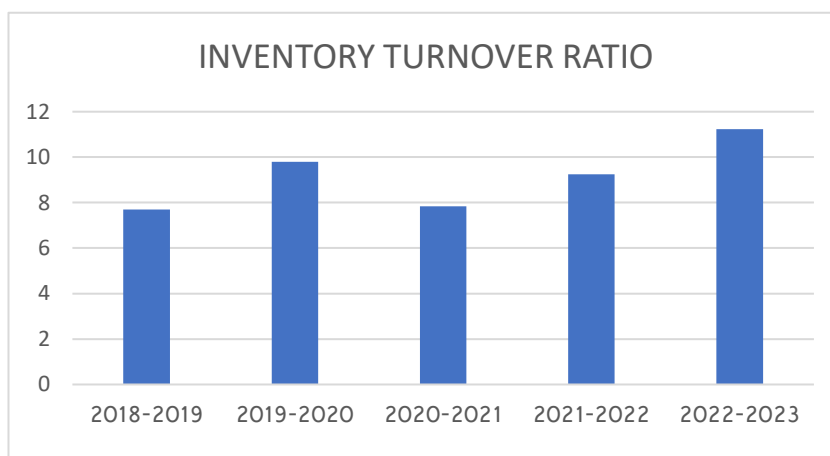


Interpretation:

From the above table it is inferred that, the Debtor's Turnover Ratio increased in the year from 2022-2023 with 9.868 whereas, exceptionally low in the year 2020-2021 with 6.649. It is noticed that year after year the Debtor's Turnover ratio is fluctuating.

Table No: 4.9 Inventory Turnover Ratio: Sales/Average Inventories (Rupees in crore)

Year	Sales	Inventories	Ratios (In Times)
2018-2019	4983.05	647.17	7.699754
2019-2020	4052.67	413.82	9.793316
2020-2021	4026.23	514.14	7.830999
2021-2022	5986.79	647.88	9.240585
2022-2023	6791.61	604.37	11.2375

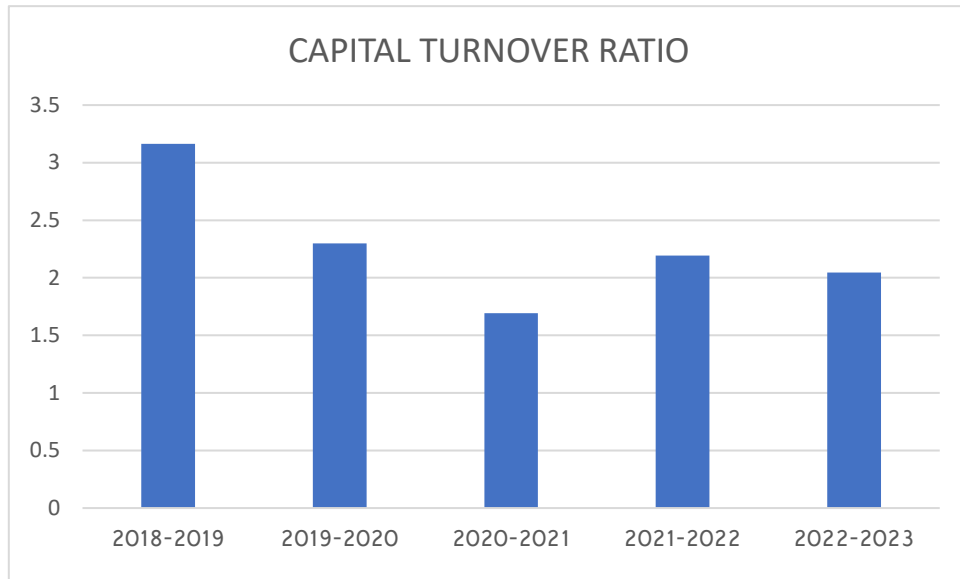


Interpretation:

From the above table it is inferred that, the Inventory Turnover Ratio increased in the year from 2022-2023 with 11.237 whereas, exceptionally low in the year 2018-2019 with 7.699. It is noticed that year after year the Inventory Turnover ratio is fluctuating.

Table No: 4.10 Capital Turnover Ratio: Sales/Capital Employed (Rupees in crore)

Year	Sales	Capital Employed	Ratios (InTimes)
2018-2019	4983.05	1575.94	3.161954
2019-2020	4052.67	1762.05	2.299974
2020-2021	4026.23	2377.18	1.6937
2021-2022	5986.79	2731.55	2.191719
2022-2023	6791.61	3318.23	2.046757

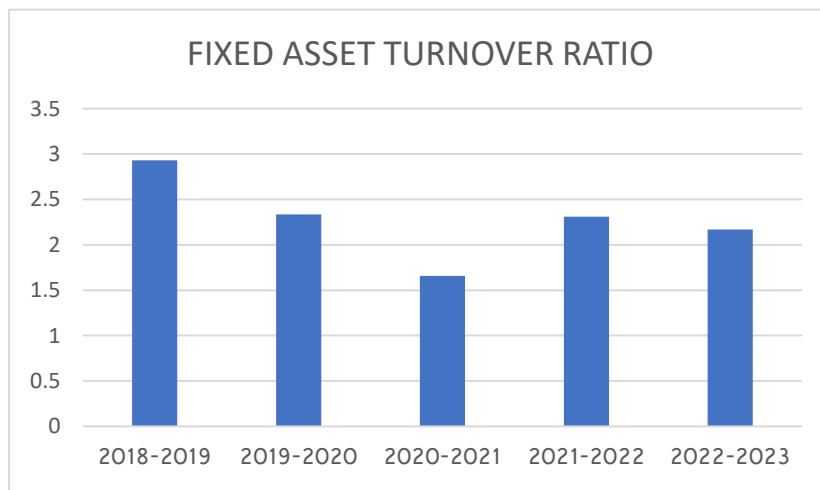


Interpretation:

From the above table it is inferred that, the Capital Turnover Ratio increased in the year from 2018-2019 with 3.161 whereas, exceptionally low in the year 2020-2021 with 1.693. It is noticed that year after year the Capital Turnover ratio is fluctuating.

Table No: 4.11 Fixed Asset Turnover Ratio: Sales/Average Fixed Asset (Rupees in crore)

Year	Sales	Fixed Asset	Ratios(InTimes)
2018-2019	4983.05	1700.45	2.93043
2019-2020	4052.67	1736.44	2.333896
2020-2021	4026.23	2429.36	1.657321



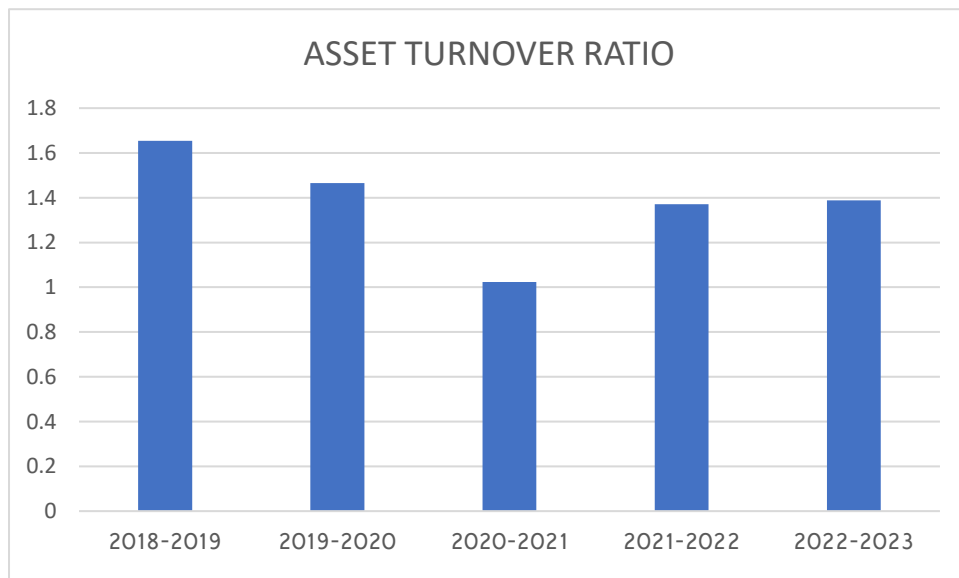
2021-2022	5986.79	2591.25	2.310387
2022-2023	6791.61	3132.87	2.167856

Interpretation:

From the above table it is inferred that, the Fixed Asset Turnover Ratio increased in the year from 2018-2019 with 2.930. whereas, exceptionally low in the year 2020-2021 with 1.657. It is noticed that year after year the Fixed Asset Turnover ratio is fluctuating.

Table No: 4.12 Asset Turnover Ratio: Net sales/Average Total Assets (Rupees in crore)

Year	Sales	Average Total Assets	Ratios (InTimes)
2018-2019	4983.05	3012.5	1.654124
2019-2020	4052.67	2766.5	1.464909
2020-2021	4026.23	3932	1.023965
2021-2022	5986.79	4367.39	1.370794
2022-2023	6791.61	4893.83	1.38779

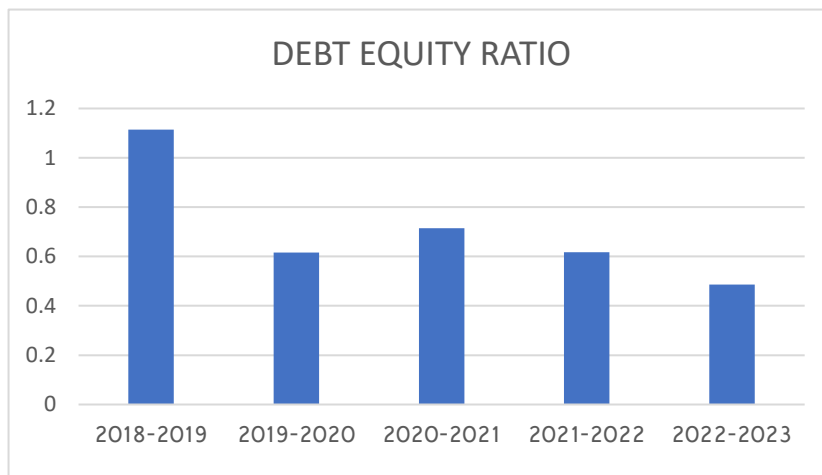


Interpretation:

From the above table it is inferred that, the Asset Turnover Ratio increased in the year from 2018-2019 with 1.654 whereas, exceptionally low in the year 2020-2021 with 1.023. It is noticed that year after year the Asset Turnover ratio is fluctuating.

Table No: 4.13 Debt Equity Ratios: Long Term Debt/Shareholders Fund (Rupees in crore)

Year	Long Term Debt	Total Shareholder's fund	Ratio (In Rupees)
2018-2019	1587.48	1425.02	1.114005
2019-2020	1053.96	1712.54	0.615437
2020-2021	1638.87	2293.13	0.714687
2021-2022	1666.08	2701.31	0.616767
2022-2023	1601.36	3292.47	0.48637

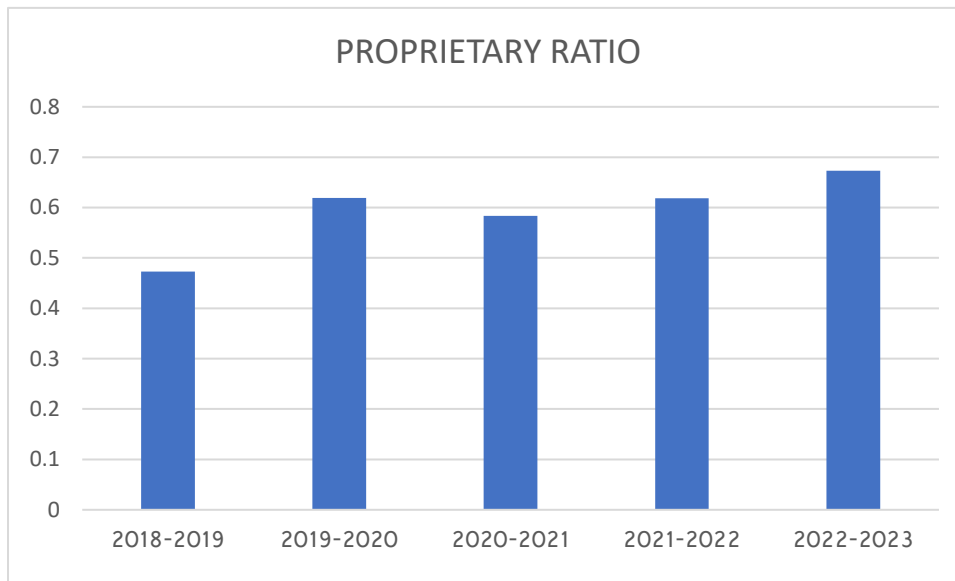


Interpretation:

From the above table it is inferred that, the Debt Equity Ratio increased in the year from 2018-2019 with 1.114 whereas, exceptionally low in the year 2022-2023 with 0.486. It is noticed that year after year the Debt Equity Ratio is decreasing.

Table No: 4.14 Proprietary Ratios: Shareholders' Funds/Total Tangible Asset (Rupees in crore)

Year	Total Shareholder's fund	Total Asset	Ratios (In Rupees)
2018-2019	1425.02	3012.5	0.473036
2019-2020	1712.54	2766.5	0.619028
2020-2021	2293.13	3932	0.583197
2021-2022	2701.31	4367.39	0.618518
2022-2023	3292.47	4893.83	0.67278



Interpretation:

From the above table it is inferred that, the Proprietary Ratio increased in the year from 2022-2023 with 0.672 whereas, exceptionally low in the year 2018-2019 with 0.473. It is noticed that year after year the Proprietary Ratio is fluctuating.

Table No: 4.15 Debt to Asset Ratio: Total debts/Total assets (Rupees in crore)

Year	Total Debt	Total Assets	Ratios (In Rupees)
2018-2019	1587.48	3012.5	0.526964
2019-2020	1053.96	2766.5	0.380972
2020-2021	1638.87	3932	0.416803
2021-2022	1666.08	4367.39	0.381482
2022-2023	1601.36	4893.83	0.32722



Interpretation:

From the above table it is inferred that, the Debt to Asset Ratio increased in the year from 2018-2019 with 0.526 whereas, exceptionally low in the year 2022-2023 with 0.327. It is noticed that year after year the Debt to Asset Ratio is fluctuating.

4.2 COMPARATIVE BALANCE SHEET

COMPARATIVE BALANCE SHEET OF 2018-2019 (in Rs. Cr.)

Particulars	2019	2018	Absolute change	Percentage Change
ASSETS				
Non-Current Assets				
Property, Plant and Equipment	980.63	913.1	67.53	7.395685029
Capital Work-in-Progress	68.68	89.6	-20.92	-23.34821429
Investment Property	4.93	5.01	-0.08	-1.596806387
Intangible Assets	0.21		0.21	
Financial Assets				
(a) Investments	548.7	560.7	-12	-2.140181915
- Investment in Subsidiaries and Joint ventures	8.6	11.12	-2.52	-22.6618705
- Other Investments	18.24	17.58	0.66	3.754266212
(b) Other Financial Assets	2.12		2.12	
(c) Derivative Instruments	51.72	30.72	21	68.359375
Non-Current Tax Assets	1,700.45	1,641.28	59.17	3.605113082
Other Non-Current Assets				
Current Assets				
Inventories	647.17	607.23	39.94	6.57740889
Financial Assets				
(a) Loans	1.58	1.45	0.13	8.965517241
(b) Trade Receivables	561.13	575.44	-14.31	-2.486792715
(c) Derivative Instruments	7.16		7.16	
(d) Cash and Cash Equivalents	26.28	19.25	7.03	36.51948052
(e) Bank Balances other than (d) above	3.47		3.74	
(f) Other Financial Assets	24.37	23.55	0.82	3.481953291
Other Current Assets	40.89	65.33	-24.44	-37.41007194
	1,312.05	1,292.25	19.8	1.532211259
Total Assets	3,012.50	2,933.53	78.97	2.691978606
EQUITY AND LIABILITIES				
Equity				
Equity Share Capital	18.77	18.75	0.02	0.106666667
Other Equity	1,406.25	1,194.39	211.86	17.7379248
Total Equity	1,425.02	1,213.14	211.88	17.46542031
Non-Current Liabilities				
Financial Liabilities				
(a) Long Term Borrowings	100	200	-100	-50

Long Term Liabilities	9		9	
Deferred Tax Liabilities	41.92	28.21	13.71	48.59978731
	150.92	228.21	-77.29	-33.86792866
Current Liabilities				
Financial Liabilities				
(a) Short Term Borrowings	313.13	228.86	84.27	36.82163768
(b) Trade Payables				
- total outstanding dues of micro enterprises and small enterprises	0.48	0.4	0.08	20
- total outstanding dues of creditors other than micro enterprises and small enterprises	883.35	887.44	-4.09	-0.460876228
(c) Derivative Instruments		0.31	-0.31	
(d) Other Financial Liabilities	156.57	296.23	-139.66	-47.14579887
Government Grants	3.21	1.08	2.13	197.2222222
Short Term Provisions	59.87	58.99	0.88	1.491778268
Other Current Liabilities	19.95	18.87	1.08	5.723370429
	1,436.56	1,492.18	-55.62	-3.727432347
Total Liabilities	1,587.48	1,720.39	-132.91	-7.725573852
Total Equity and Liabilities	3,012.50	2,933.53	78.97	2.691978606

Source: balance sheet of Tube Products of India ltd.

COMPARATIVE BALANCE SHEET OF 2019-2020 (in Rs. Cr.)

Particulars	2020	2019	Absolute change	Percentage Change
ASSETS				
Non-Current Assets				
Property, Plant and Equipment	1,012.13	980.63	31.50	3.212220715
Right-of-use assets	43.35		43.35	
Capital Work-in-Progress	52.11	68.68	-16.57	-24.12638323
Investment Property	4.84	4.93	-0.09	-1.825557809
Intangible Assets	1.34	0.21	1.13	538.0952381
Financial Assets				
(a) Investments				
Investment in Subsidiaries and Joint ventures	522.46	548.7	-26.24	-4.782212502
Other Investments	16.48	8.6	7.88	91.62790698

(b) Other Financial Assets	17.67	18.24	-0.57	-3.125
(c) Derivative Instruments		2.12	-2.12	-100
Non-Current Tax Assets	24.92	16.62	8.30	49.93983153
Other Non-Current Assets	41.14	51.72	-10.58	-20.45630317
	1736.44	1700.45	35.99	2.116498574
Current Assets				
Inventories	413.82	647.17	-233.35	-36.05698657
Financial Assets			0.00	
(a) Loans	3.09	1.58	1.51	95.56962025
(b) Trade Receivables	439.15	528.63	-89.48	-16.92677298
(c) Investments	90		90.00	
(d) Derivative Instruments	1.06	7.16	-6.10	-85.19553073
(e) Cash and Cash Equivalents	21.64	25.4	-3.76	-14.80314961
(f) Bank Balances other than (e) above	1.89	4.35	-2.46	-56.55172414
(g) Other Financial Assets	19.78	24.37	-4.59	-18.83463275
Other Current Assets	39.63	40.89	-1.26	-3.081438004
	1,030.06	1,279.55	-249.49	-19.49826111
Total Assets	2,766.50	2,980.00	-213.50	-7.16442953
EQUITY AND LIABILITIES				
Equity				
Equity Share Capital	18.79	18.77	0.02	0.10655301
Other Equity	1,693.75	1,406.25	287.50	20.44444444
Total Equity	1,712.54	1,425.02	287.52	20.17655893
Non-Current Liabilities				
Financial Liabilities				
(a) Long Term Borrowings		101.95	-101.95	-100
(b) Lease Liabilities	35.54			
(c) Derivative Instruments	0.36			
Long Term Liabilities		9	-9.00	-100
Deferred Tax Liabilities (Net)	13.61	41.92	-28.31	-67.53339695
	49.51	152.87	-103.36	-67.61300451
Current Liabilities				
Financial Liabilities				
(a) Short Term Borrowings	165.93	313.76	-147.83	-47.11562978
(b) Trade Payables				
total outstanding dues of micro enterprises and small enterprises	0.78	0.48	0.30	62.5
total outstanding dues of creditors other than micro enterprises and				
Small enterprises	630.2	850.85	-220.65	-25.93289064
(c) Lease Liabilities	5.75		5.75	

(d) Other Financial Liabilities	135.11	153.99	-18.88	-12.2605364
Government Grants	2.19	3.21	-1.02	-31.77570093
Short Term Provisions	50.56	59.87	-9.31	-15.55035911
Other Current Liabilities	13.93	19.95	-6.02	-30.1754386
	1004.45	1,402.11	-397.66	-28.36154082
Total Liabilities	1053.96	1,554.98	-501.02	-32.2203501
Total Equity and Liabilities	2,766.50	2,980.00	-213.50	-7.16442953

Source: balance sheet of Tube Products of India ltd.

COMPARATIVE BALANCE SHEET OF 2020-2021 (in Rs. Cr.)

Particulars	2021	2020	Absolute change	Percentage Change
ASSETS				
Non-Current Assets				
Property, Plant and Equipment	953.66	1,012.13	-58.47	-5.776925889
Right-of-use assets	37.57	43.35	-5.78	-13.33333333
Capital Work-in-Progress	126.32	52.11	74.21	142.4102859
Investment Property	4.75	4.84	-0.09	-1.859504132
Intangible Assets	1.12	1.34	-0.22	-16.41791045
Financial Assets				
(a) Investments				
- Investment in Subsidiaries and Joint ventures	1,214.14	522.46	691.68	132.3890824
- Other Investments	16.04	16.48	-0.44	-2.669902913
(b) Other Financial Assets	16.14	17.67	-1.53	-8.658743633
Deferred Tax Assets	2.61		2.61	
Non-Current Tax Assets	23.79	30.73	-6.94	-22.58379434
Other Non-Current Assets	33.22	41.14	-7.92	-19.2513369
	2,429.36	1,742.25	687.11	39.43808294
Current Assets				
Inventories	514.14	413.82	100.32	24.24242424
Financial Assets				
(a) Loans	1.93	3.09	-1.16	-37.54045307
(b) Trade Receivables	605.47	439.15	166.32	37.87316407
(c) Investments	304.3	90	214.30	238.1111111
(d) Derivative Instruments		1.06	1.06	100
(e) Cash and Cash Equivalents	7.09	21.64	-14.55	-67.23659889
(f) Bank Balances other than (e) above	1.65	1.89	-0.24	-12.6984127
(g) Other Financial Assets	19.39	19.78	-0.39	-1.971688574
Other Current Assets	48.67	39.63	9.04	22.81100177
	1,502.64	1,030.06	472.58	45.87888084

Total Assets	3,932.00	2,772.31	1,159.69	41.8311805
EQUITY AND LIABILITIES				
Equity				
Equity Share Capital	19.28	18.79	0.49	2.60777009
Other Equity	2,273.85	1,693.75	580.10	34.24944649
Total Equity	2,293.13	1,712.54	580.59	33.90227382
Non-Current Liabilities				
Financial Liabilities				
(a) Long Term Borrowings	51.03		51.03	
(b) Lease Liabilities	33.02	35.54	-2.52	-7.090602138
(c) Derivative Instruments		0.36	-0.36	-100
Deferred Tax Liabilities (Net)		13.61	-13.61	-100
	84.05	49.51	34.54	69.7636841
Current Liabilities				
Financial Liabilities				
(a) Short Term Borrowings	207.03	165.93	41.10	24.76948111
(b) Trade Payables				
- total outstanding dues of micro enterprises and small enterprises	29.55	0.78	28.77	3688.461538
- total outstanding dues of creditors other than micro enterprises and small enterprises				
	1,116.25	630.2	486.05	77.12630911
(c) Derivative Instruments	1.43		1.43	
(d) Lease Liabilities	3.8	5.75	-1.95	-33.91304348
(e) Other Financial Liabilities	115.12	135.11	-19.99	-14.79535194
Government Grants	18.5	2.19	16.31	744.7488584
Short Term Provisions	42.47	50.56	-8.09	-16.00079114
Current Tax Liability	5.82	5.81	0.01	0.17211704
Other Current Liabilities	14.85	13.93	0.92	6.604450826
	1,554.82	1,010.26	544.56	53.90295567
Total Liabilities	1,638.87	1,059.77	579.10	54.64393217
Total Equity and Liabilities	3,932.00	2,772.31	1,159.69	41.8311805

Source: balance sheet of Tube Products of India Ltd.

COMPARATIVE BALANCE SHEET OF 2021-2022 (in Rs. Cr.)

Particulars	2022	2021	Absolute change	Percentage Change
ASSETS				
Non-Current Assets				
Property, Plant and Equipment	985.15	953.66	31.49	3.302015393

Right-of-use assets	32.08	37.57	-5.49	-14.61272292
Capital Work-in-Progress	55.57	126.32	-70.75	-56.00854972
Investment Property	4.67	4.75	-0.08	-1.684210526
Intangible Assets	1.23	1.12	0.11	9.821428571
Financial Assets				
(a) Investments				
- Investment in Subsidiaries, Joint venture and Associate	1,377.30	1,214.14	163.16	13.43831848
- Other Investments	8.52	16.04	-7.52	-46.88279302
(b) Loans	64.39		64.39	
(c) Other Financial Assets	15.02	16.14	-1.12	-6.939281289
Deferred Tax Assets (Net)		2.61	-2.61	
Non-Current Tax Assets	16.4	23.79	-7.39	-31.06347205
Other Non-Current Assets	30.92	33.22	-2.3	-6.923540036
	2,591.25	2,429.36	161.89	6.663895018
Current Assets				
Inventories	647.88	514.14	133.74	26.01237017
Financial Assets				
(a) Loans	2.17	1.93	0.24	12.43523316
(b) Trade Receivables	761.23	576.43	184.8	32.0594001
(c) Investments	280.45	304.3	-23.85	-7.837660204
(d) Derivative Instruments	1.02		1.02	
(e) Cash and Cash Equivalents	2.36	7.09	-4.73	-66.71368124
(f) Bank Balances other than (e) above	2.46	1.65	0.81	49.09090909
(g) Other Financial Assets	13.49	19.39	-5.9	-30.4280557
Other Current Assets	65.08	66.33	-1.25	-1.88451681
	1,776.14	1,491.26	284.88	19.10330861
Total Assets	4,367.39	3,920.62	446.77	11.39539155
EQUITY AND LIABILITIES				
Equity				
Equity Share Capital	19.29	19.28	0.01	0.05186722
Other Equity	2,682.02	2,273.85	408.17	17.9506124
Total Equity	2,701.31	2,293.13	408.18	17.80012472
Non-Current Liabilities				
Financial Liabilities				
(a) Long Term Borrowings		51.03	-51.03	-100
(b) Lease Liabilities	28.21	33.02	-4.81	-14.56692913
Deferred Tax Liabilities (Net)	2.03		2.03	
	30.24	84.05	-53.81	-64.02141582
Current Liabilities				
Financial Liabilities				

(a) Short Term Borrowings	348.07	258.06	90.01	34.87948539
(b) Trade Payables				
- total outstanding dues of micro enterprises and small enterprises	27.01	29.55	-2.54	-8.595600677
- total outstanding dues of creditors other than micro enterprises and small enterprises				
	1,113.74	1,087.21	26.53	2.440190947
(c) Derivative Instruments	-	1.43	-1.43	
(d) Lease Liabilities	4.62	3.8	0.82	21.57894737
(e) Other Financial Liabilities	39.72	64.09	-24.37	-38.02465283
Government Grants	17.87	18.5	-0.63	-3.405405405
Short Term Provisions	37.37	42.47	-5.1	-12.00847657
Current Tax Liability	6.44	5.82	0.62	10.65292096
Other Current Liabilities	41	32.51	8.49	26.11504153
	1,635.84	1,543.44	92.4	5.986627274
Total Liabilities	1,666.08	1,627.49	38.59	2.371135921
Total Equity and Liabilities	4,367.39	3,920.62	446.77	11.39539155

Source: balance sheet of Tube Products of India Ltd.

COMPARATIVE BALANCE SHEET OF 2022-2023 (in Rs. Cr.)

Particulars	2023	2022	Absolute change	Percentage Change
ASSETS				
Non-Current Assets				
Property, Plant and Equipment	960.5	985.15	-24.65	-2.502157032
Right-of-use Assets	27.18	32.08	-4.9	-15.27431421
Capital Work-in-Progress	96.68	55.57	41.11	73.97876552
Investment Properties	4.59	4.67	-0.08	-1.713062099
Intangible Assets	2.24	1.23	1.01	82.11382114
Financial Assets				
(a) Investments				
- Investment in Subsidiaries, Joint venture and Associate	1,739.10	1,377.30	361.8	26.26878676
- Other Investments	8.74	8.52	0.22	2.582159624
(b) Loans	225.75	64.39	161.36	250.5979189
(c) Other Financial Assets	17.34	15.02	2.32	15.4460719
Deferred Tax Assets (Net)	3.62		3.62	
Non-Current Tax Assets	11.71	16.4	-4.69	-28.59756098
Other Non-Current Assets	35.42	30.92	4.5	14.55368693
	3,132.87	2,591.25	541.62	20.90188133
Current Assets				
Inventories	604.37	647.88	-43.51	-6.71574983

Financial Assets				
(a) Loans	2.07	2.17	-0.1	-4.608294931
(b) Trade Receivables	688.22	708.84	-20.62	-2.908978049
(c) Investments	293.3	280.45	12.85	4.581921911
(d) Derivative Instruments		1.02	-1.02	
(e) Cash and Cash Equivalents	111.27	2.36	108.91	4614.830508
(f) Bank Balances other than (e) above	2.85	2.46	0.39	15.85365854
(g) Other Financial Assets	9.56	65.88	-56.32	-85.48876746
Other Current Assets	49.32	58.27	-8.95	-15.35953321
	1,760.96	1,769.33	-8.37	-0.473060424
Total Assets	4,893.83	4,360.58	533.25	12.22887781
EQUITY AND LIABILITIES				
Equity				
Equity Share Capital	19.31	19.29	0.02	0.103680664
Other Equity	3,273.16	2,682.02	591.14	22.04084981
Total Equity	3,292.47	2,701.31	591.16	21.88419693
Non-Current Liabilities				
Financial Liabilities				
(a) Lease Liabilities	24.69	28.21	-3.52	-12.47784474
(b) Derivative Instruments	1.07		-1.07	
Deferred Tax Liabilities (Net)		2.03	2.03	
	25.76	30.24	-4.48	-14.81481481
Current Liabilities				
Financial Liabilities				
(a) Short Term Borrowings	473.21	348.07	125.14	35.95253828
(b) Trade Payables				
- total outstanding dues of micro enterprises and small enterprises	20.14	27.01	-6.87	-25.43502407
- total outstanding dues of creditors other than micro enterprises and small enterprises				
	910.54	1,113.74	-203.2	-18.24483273
(c) Derivative Instruments	0.15		0.15	
(d) Lease Liabilities	3.78	4.62	-0.84	-18.18181818
(e) Other Financial Liabilities	48.45	37.6	10.85	28.85638298
Government Grants	18.5	17.87	0.63	3.525461668
Short Term Provisions	53.75	37.37	16.38	43.83195076
Current Tax Liability	11.6	6.44	5.16	80.1242236
Other Current Liabilities	35.48	36.31	-0.83	-2.285871661
	1,575.60	1,629.03	-53.43	-3.279865932
Total Liabilities	1,601.36	1,659.27	-57.91	-3.490089015
Total Equity and Liabilities	4,893.83	4,360.58	533.25	12.22887781

Source: balance sheet of Tube Products of India Ltd.

4.3 STATEMENT OF CHANGES IN WORKING CAPITAL FOR THE YEAR 2018-19 (In Rs. Cr.)

Particular	2018	2019	Increase	Decrease
Current Assets				
Inventories	607.23	647.17		-39.94
Financial Assets				
(a) Loans	1.45	1.58		-0.13
(b) Trade Receivables	575.44	561.13	14.31	
(c) Derivative Instruments		7.16		-7.16
(d) Cash and Cash Equivalents	19.25	26.28		-7.03
(e) Bank Balances other than (d) above		3.47		-3.47
(f) Other Financial Assets	23.55	24.37		-0.82
Other Current Assets	65.33	40.89	24.44	
	1,292.25	1,312.05	38.75	-58.55
Current Liabilities				
Financial Liabilities				
(a) Short Term Borrowings	228.86	313.13		-84.27
(b) Trade Payables				
- total outstanding dues of micro enterprises and small enterprises	0.4	0.48		-0.08
- total outstanding dues of creditors other than micro enterprises and small enterprises	887.44	883.35	4.09	
(c) Derivative Instruments	0.31		0.31	
(d) Other Financial Liabilities	296.23	156.57	139.66	
Government Grants	1.08	3.21		-2.13
Short Term Provisions	58.99	59.87		-0.88
Other Current Liabilities	18.87	19.95		-1.08
	1,492.18	1,436.56	144.06	-88.44
NET WORKINGCAPITAL(A-B)	-199.93	-124.51	29.89	-105.31
Increase in Working Capital		-75.42	75.42	

Total	199.93	199.93	105.31	105.31
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Source: balance sheet of Tube Products of India Ltd.

STATEMENT OF CHANGES IN WORKING CAPITAL FOR THE

YEAR 2019-2020 (in Rs. Cr.)

Particular	2019	2020	Increase	Decrease
Current Assets				
Inventories	647.17	413.82	233.35	
Financial Assets				
(a) Loans	1.58	3.09		-1.51
(b) Trade Receivables	528.63	439.15	89.48	
(c) Investments		90		-90
(d) Derivative Instruments	7.16	1.06	6.1	
(e) Cash and Cash Equivalents	25.4	21.64	3.76	
(f) Bank Balances other than (e) above	4.35	1.89	2.46	
(g) Other Financial Assets	24.37	19.78	4.59	
Other Current Assets	40.89	39.63	1.26	
	1,279.55	1,030.06	341	-91.51
Current Liabilities				
Financial Liabilities				
(a) Short Term Borrowings	313.76	165.93	147.83	
(b) Trade Payables				
total outstanding dues of micro enterprises and small enterprises	0.48	0.78		-0.3
total outstanding dues of creditors other than micro enterprises and Small enterprises	850.85	630.2	220.65	
(c) Lease Liabilities		5.75		-5.75
(d) Other Financial Liabilities	153.99	135.11	18.88	
Government Grants	3.21	2.19	1.02	
Short Term Provisions	59.87	50.56	9.31	
Other Current Liabilities	19.95	13.93	6.02	
	1,402.11	1004.45	403.71	-6.05
NET WORKINGCAPITAL(A-B)	-122.56	25.61	-62.71	-85.46

Increase in Working Capital		-148.17	-148.17	
Total	-122.56	-122.56	-85.46	-85.46

Source: balance sheet of Tube Products of India Ltd.

**STATEMENT OF CHANGES IN WORKING CAPITAL FOR THE
YEAR 2020-21 (in Rs. Cr.)**

Particular	2020	2021	Increase	Decrease
Current Assets				
Inventories	413.82	514.14		-100.32
Financial Assets				
(a) Loans	3.09	1.93	1.16	
(b) Trade Receivables	439.15	605.47		-166.32
(c) Investments	90	304.3		-214.3
(d) Derivative Instruments	1.06		1.06	
(e) Cash and Cash Equivalents	21.64	7.09	14.55	
(f) Bank Balances other than (e) above	1.89	1.65	0.24	
(g) Other Financial Assets	19.78	19.39	0.39	
Other Current Assets	39.63	48.67		-9.04
	1,030.06	1,502.64	17.4	-489.98
Current Liabilities				
Financial Liabilities				
(a) Short Term Borrowings	165.93	207.03		-41.1
(b) Trade Payables				
- total outstanding dues of micro enterprises and small enterprises	0.78	29.55		-28.77
- total outstanding dues of creditors other than micro enterprises and small enterprises				
	630.2	1,116.25		-486.05
(c) Derivative Instruments		1.43		-1.43
(d) Lease Liabilities	5.75	3.8	1.95	
(e) Other Financial Liabilities	135.11	115.12	19.99	
Government Grants	2.19	18.5		-16.31
Short Term Provisions	50.56	42.47	8.09	
Current Tax Liability	5.81	5.82		-0.01
Other Current Liabilities	13.93	14.85		-0.92

	1,010.26	1,554.82	30.03	-574.59
NET WORKINGCAPITAL(A-B)	19.80	-52.18	-12.63	84.61
Increase in Working Capital	71.98		71.98	
Total	52.18	52.18	84.61	84.61

Source: balance sheet of Tube Products of India Ltd.

**STATEMENT OF CHANGES IN WORKING CAPITAL FOR THE
YEAR 2021-22 (in Rs. Cr.)**

Particular	2021	2022	Increase	Decrease
Current Assets				
Inventories	514.14	647.88		-133.74
Financial Assets				
(a) Loans	1.93	2.17		-0.24
(b) Trade Receivables	576.43	761.23		-184.8
(c) Investments	304.3	280.45	23.85	
(d) Derivative Instruments		1.02		-1.02
(e) Cash and Cash Equivalents	7.09	2.36	4.73	
(f) Bank Balances other than (e) above	1.65	2.46		-0.81
(g) Other Financial Assets	19.39	13.49	5.9	
Other Current Assets	66.33	65.08	1.25	
	1,491.26	1,776.14	35.73	-320.61
Current Liabilities				
Financial Liabilities				
(a) Short Term Borrowings	258.06	348.07		-90.01
(b) Trade Payables				
- total outstanding dues of micro enterprises and small enterprises	29.55	27.01	2.54	
- total outstanding dues of creditors other than micro enterprises and small enterprises				
	1,087.21	1,113.74		-26.53
(c) Derivative Instruments	1.43		1.43	
(d) Lease Liabilities	3.8	4.62		-0.82
(e) Other Financial Liabilities	64.09	39.72	24.37	
Government Grants	18.5	17.87	0.63	
Short Term Provisions	42.47	37.37	5.1	
Current Tax Liability	5.82	6.44		-0.62

Other Current Liabilities	32.51	41		-8.49
	1,543.44	1,635.84	34.07	-126.47
NET WORKINGCAPITAL(A-B)	-52.18	140.30	1.66	-194.14
Increase in Working Capital	-192.48		192.48	
Total	140.30	140.3	194.14	194.14

Source: balance sheet of Tube Products of India Ltd.

STATEMENT OF CHANGES IN WORKING CAPITAL FOR THE

YEAR 2022-23 (in Rs. Cr.)

Particular	2022	2023	Increase	Decrease
Current Assets				
Inventories	604.37	647.88		-43.51
Financial Assets				
(a) Loans	2.07	2.17		-0.1
(b) Trade Receivables	688.22	708.84		-20.62
(c) Investments	293.3	280.45	12.85	
(d) Derivative Instruments		1.02		-1.02
(e) Cash and Cash Equivalents	111.27	2.36	108.91	
(f) Bank Balances other than (e) above	2.85	2.46	0.39	
(g) Other Financial Assets	9.56	65.88		-56.32
Other Current Assets	49.32	58.27		-8.95
	1,760.96	1,769.33	122.15	-130.52
Current Liabilities				
Financial Liabilities				
(a) Short Term Borrowings	473.21	348.07	125.14	
(b) Trade Payables				
- total outstanding dues of micro enterprises and small enterprises	20.14	27.01		-6.87
- total outstanding dues of creditors other than micro enterprises and small enterprises	910.54	1,113.74		-203.2
(c) Derivative Instruments	0.15		0.15	
(d) Lease Liabilities	3.78	4.62		-0.84
(e) Other Financial Liabilities	48.45	37.6	10.85	
Government Grants	18.5	17.87	0.63	

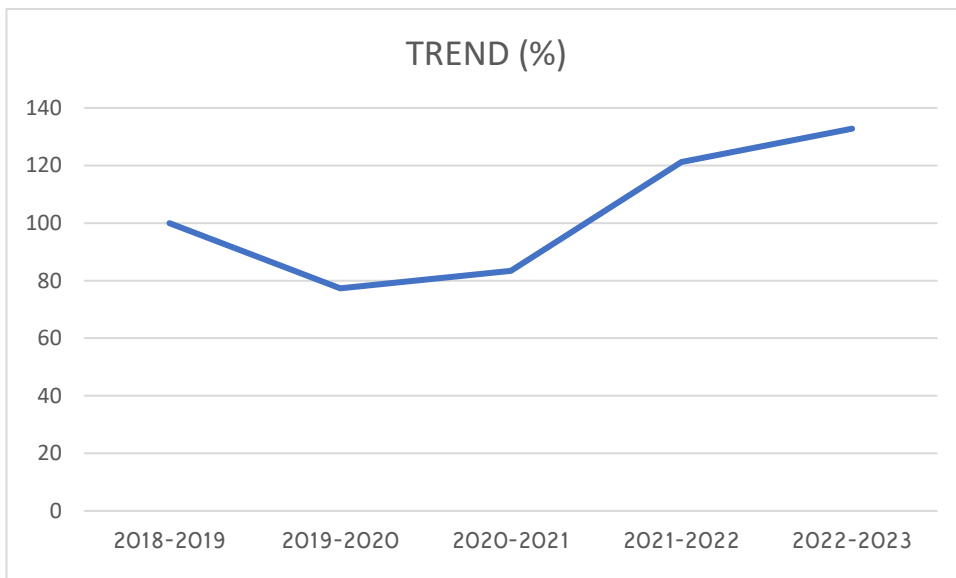
Short Term Provisions	53.75	37.37	16.38	
Current Tax Liability	11.6	6.44	5.16	
Other Current Liabilities	35.48	36.31		-0.83
	1,575.60	1,629.03	158.31	-211.74
NET WORKINGCAPITAL(A-B)	185.36	140.30	-36.16	81.22
Increase in Working Capital		45.06	45.06	
Total	185.36	185.36	81.22	81.22

Source: balance sheet of Tube Products of India ltd.

TREND ANALYSIS:

Trend Percentage of Gross Profit Ratio (Rupees in crore)

Year	Gross Profit	Trend (%)
2018-2019	4835.52	100
2019-2020	3738.93	77.32
2020-2021	4034.89	83.44
2021-2022	5858.99	121.16
2022-2023	6420.95	132.78

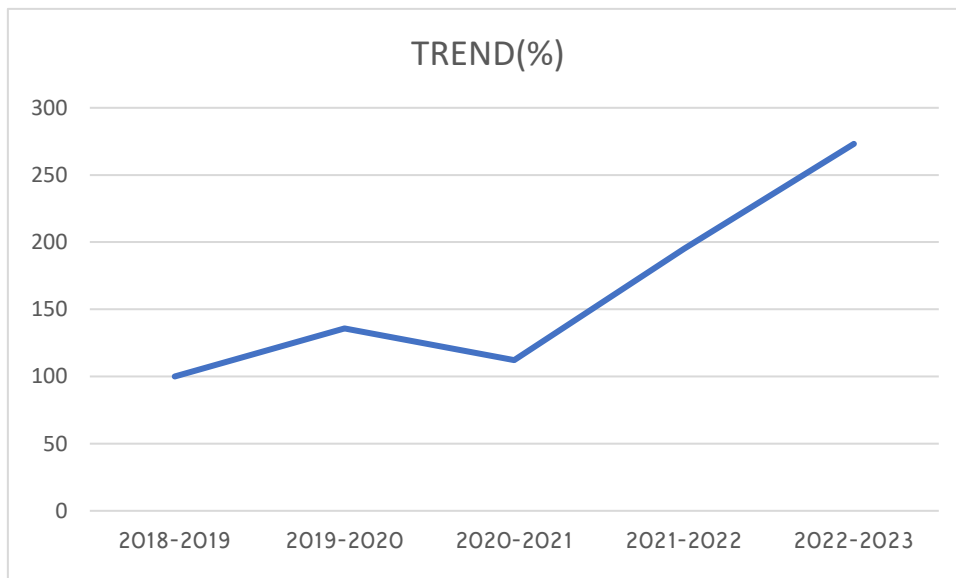


Interpretation:

It can be inferred from the above table that the gross profit has gradually increased in the following years. On the whole, the graph shows an upward moving slope portraying a positive growth in the gross profit.

Trend Percentage of Net Profit Ratio (Rupees in crore)

Year	Net Profit	Trend (%)
2018-2019	243.51	100
2019-2020	330.55	135.74
2020-2021	273.18	112.18
2021-2022	475.17	195.13
2022-2023	665.20	273.17

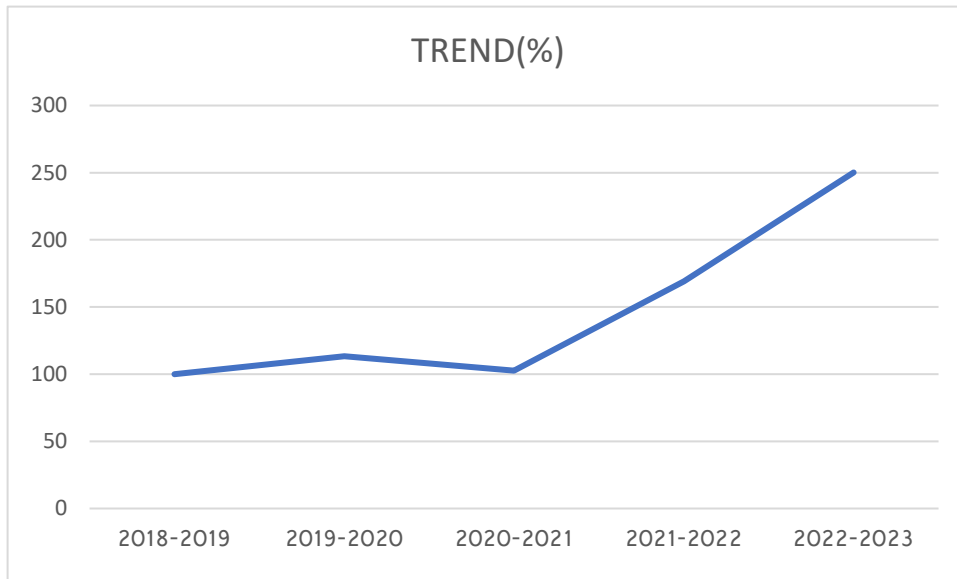


Interpretation:

It can be inferred from both the table and graph that the company's highest Net profit has been achieved in the period 2022-2023. The Net profit has seen a decline in the following years but has slowly picked up in the year 2020-21. The above analysis portrays a fluctuating Net profit; however, the company might expect an upward moving slope in the upcoming years.

Trend Percentage of Operating Profit Ratio (Rupees in crore)

Year	operating profit	Trend (%)
2018-2019	371.08	100
2019-2020	420.72	113.37
2020-2021	380.71	102.59
2021-2022	628.04	169.24
2022-2023	928.29	250.15



Interpretation:

It can be inferred from both the table and graph that the company's highest operating profit has been achieved in the period 2022-2023. The operating profit has seen a decline in the following years but has slowly picked up in the year 2020-21. The above analysis portrays a fluctuating operating profit; however, the company might expect an upward moving slope in the upcoming years.

SUGGESTIONS:

- Fluctuating current and quick ratios indicate inconsistencies in managing short-term assets and liabilities. To improve these ratios, focus on optimizing cash flow by managing accounts receivable and payable more efficiently. Implement stricter credit policies to reduce outstanding receivables and negotiate favourable payment terms with suppliers to extend payment deadlines without incurring penalties.
- Fluctuations in the Absolute Liquid Ratio and Cash Ratio suggest challenges in maintaining sufficient liquid assets. To enhance liquidity management, consider implementing cash flow forecasting to anticipate cash needs and ensure adequate cash reserves are maintained. Additionally, explore options to diversify short-term investments to earn higher returns while maintaining liquidity.
- Fluctuations in gross profit, net profit, and operating profit ratios indicate inconsistencies in generating profits. To improve profitability, focus on cost management strategies such as reducing production costs, optimizing pricing

strategies, and increasing operational efficiency. Invest in technology and process improvements to streamline operations and reduce overhead expenses.

- Fluctuations in inventory turnover and debtor's turnover ratios suggest inefficiencies in managing inventory levels and collecting receivables. Implement inventory management techniques such as just-in-time inventory and ABC analysis to optimize inventory levels and reduce carrying costs. Additionally, streamline accounts receivable processes by implementing automated invoicing and collection systems to accelerate cash inflows.
- Fluctuations in capital turnover, fixed asset turnover, debt equity ratio, and debt to asset ratio indicate inconsistencies in capital utilization and financing decisions. Evaluate the company's capital structure to ensure it aligns with its long-term financial goals and risk tolerance. Consider refinancing high-cost debt, optimizing the mix of debt and equity financing, and disposing of underutilized assets to improve overall financial stability and efficiency.

CONCLUSION:

Based on the analysis of working capital management indicators for Tube Products of India Limited, it's evident that the company faces challenges in maintaining consistent performance across various financial metrics. Fluctuations in liquidity ratios, profitability ratios, turnover ratios, and capital structure ratios indicate the need for strategic intervention to improve overall financial stability and efficiency. To address these issues, Tube Products of India Limited should focus on optimizing cash flow through efficient management of accounts receivable and payable, implementing cash flow forecasting, and diversifying short-term investments. Additionally, the company should prioritize cost management strategies, streamline inventory and accounts receivable processes, and evaluate and optimize its capital structure to align with long-term financial goals. By implementing these measures, Tube Products of India Limited can enhance its working capital management practices, improve financial performance, and strengthen its position in the market.

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