A STUDY ON WORKING CAPITAL MANAGEMENT” AT MUSASHI, AUTO PARTS INDIA PVT LTD, DODDABALLAPUR

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Abstract:
Working capital management is a critical aspect of financial management for businesses of all sizes and industries. This paper provides an overview of the concept, of working capital, its components, and its significance in ensuring the smooth operation and financial stability of a company. The primary objective of working capital management is to strike a balance between the current assets, and current liabilities, confirming that a company has sufficient liquidity to meet its short-term obligations while optimizing its use of resources.

This paper delves into the various components of working capital, including cash, accounts receivable, inventory, and accounts payable. It explores strategies, and techniques that businesses can employ to effectively manage these components, such as cash flow, forecasting, inventory control, and credit management. The paper also discusses the role of technology, and financial tools in improving working capital, management processes.

Keywords:
Motaal’s Comprehensive Test, Working Capital, Current Ratio, Working Capital Turnover Ratio, Net profit to Current Assets
Introduction:

Working capital, refers to the difference between a company's current assets, and its current liabilities. It reflects the company's ability to protection its short-term obligations and fund day-to-day operations. Positive working capital, indicates that a company can meet its short-term financial obligations, while negative working capital suggests potential liquidity issues. Acceptable working capital ensures that a company can pay its suppliers, employees, and other short-term obligations on time, maintaining smooth operations.

Working capital management is a vital aspect of financial management in any business. It pertains to the efficient monitoring and control of a company's short-term, assets and liabilities to ensure smooth operations. Effective working capital management, involves optimizing the balance, between current assets, such as cash, inventory, and accounts receivable, and current liabilities, like accounts payable and short-term debt. It theatres a critical role, in maintaining liquidity, funding day-to-day operations, and supporting growth. Companies, aim to strike a balance that prevents excess idle cash and minimizes the risk of insolvency. A well-managed working capital position enables a firm to happen its short-term obligations while maximizing profitability and minimizing financing, costs. In summary, working capital management, is essential, for maintaining financial stability and achieving sustainable business success.

Literature Review:

"Working Capital Management and Profitability: Indication from Indian Manufacturing Firms"
Author: Purnendu Kumar and Sushil Kumar
Date: 2012

This study paper focuses on the working capital management (WCM) and profitability, of Indian manufacturing firms. It uses 168 firms that were comprised in a sample and listed on the NSE between 2005 and 2010. In contrast to CCC, the research shows that CR and ITO have a favourable connection with profitability. Leverage and business size have a major impact on the association between WCM and profitability.

The Impression of Working Capital Management on Firm Performance: Evidence from Ethiopian Manufacturing Firms
Authors: Wondwossen Bogale, Biruk Kassawmar, and Hirut Mamo Date: 2020
The paper examines the inspiration of working Capital Management on the performance of Ethiopian manufacturing firms. It finds that operative working capital management is positively associated with firm profitability and liquidity, but has no important impact on efficiency. Firm size and age also moderate the relationship, with larger and older firms having a stronger result on profitability and smaller and younger firms having a stronger effect on liquidity.

Working Capital Management: A Literature Review and Research Agenda" Authors: Josep A. Tribó and Christian Terpstra
Date: 2014

This paper provides a literature evaluation of the investigate on working capital management WCM. It analyzes its definition, components, approaches, and aspects that affect it. It also discusses the challenges and complexities of managing WCM, such as trade-offs among Profitability and liquidity, uncertainty in forecasting Cash Flows, and macroeconomic factors.

Working Capital Management: A Literature Review and Research Agenda Authors: Chen, C. X., Lu, Q., & Sougiannis, T
Date: 2020

The study looks at how working capital is made up, how it affects business performance, and how it relates to firm characteristics. It concludes that while effective control of working capital is essential to business profitability and liquidity, the ideal working capital level varies depending on the particulars of the organisation. It also sets a research schedule for future trainings and offers a thorough assessment of the works on working capital management.

Research Gap:

The working capital management research gap requires further investigation, focusing on factors such as firm profitability, stock market performance, financial crisis, firm value, industries, sustainability, economy, and environment. The gap could be addressed by examining the effects of working capital management on various industries, small and medium-sized enterprises, the economy, and the environment.
OBJECTIVE’S OF THE STUDY,

- To Determine the Working capital Requirement of a firm.
- To Ascertain the motaal liquidity test for deriving the Ranks
- To study on effect of change in working capital, on the profitability of the firm

LIMITATIONS OF THE DOCUMENT

- There is not enough time in the study's duration to undertake an exhaustive investigation.
- Specific interference has been extract based on the facts at hand.
- The analysis is solely based on information from the company's financial statements, with references found and theoretical implications reached based upon the information presented.
- Degree of precision of the secondary info governs how exact the results must be to be considered.

RESEARCH METHODOLOGY:

Primary data :
- During the project's time, it became accesible throughh individual touch with business officials.

Secondary data :
- sourcing grade text books and reference books collected for statitics over conceptual feature.
- Corporation and other internet sites.

Ratio :

Working Capital

The money or investment strengthens the business's ability to transport out its operations significantly and faultlessly, serving as its lifeblood. It is measured that the firm has fulfilled its commitments if the outcome indicates a positive change.

Net Working, Capital, = Current assets, – Current liabilities.
<table>
<thead>
<tr>
<th>Year</th>
<th>Current Assets</th>
<th>Current Liabilities</th>
<th>Net Working Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>17,272.1</td>
<td>7,664.95</td>
<td>9,607.15</td>
</tr>
<tr>
<td>2022</td>
<td>15,717.61</td>
<td>6,975.10</td>
<td>8,742.51</td>
</tr>
<tr>
<td>2021</td>
<td>14,411.26</td>
<td>6,217.62</td>
<td>8,193.64</td>
</tr>
<tr>
<td>2020</td>
<td>14,188.26</td>
<td>6,162</td>
<td>8,026.26</td>
</tr>
<tr>
<td>2019</td>
<td>14,163.12</td>
<td>6,285.25</td>
<td>7,877.87</td>
</tr>
</tbody>
</table>

**Net Working Capital**

<table>
<thead>
<tr>
<th>Year</th>
<th>WC to CA Ratio</th>
<th>Inventory to CA Ratio</th>
<th>LR to CA Ratio</th>
<th>Total (A+B+C)</th>
<th>Ultimate Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Rank (A)</td>
<td>% Rank (B)</td>
<td>% Rank (C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>42.69</td>
<td>1</td>
<td>19.69</td>
<td>5</td>
<td>80.83</td>
</tr>
<tr>
<td>2022</td>
<td>38.85</td>
<td>2</td>
<td>17.92</td>
<td>4</td>
<td>82.08</td>
</tr>
<tr>
<td>2021</td>
<td>35.31</td>
<td>3</td>
<td>16.66</td>
<td>3</td>
<td>83.34</td>
</tr>
<tr>
<td>2020</td>
<td>34.89</td>
<td>5</td>
<td>15.91</td>
<td>1</td>
<td>84.09</td>
</tr>
<tr>
<td>2019</td>
<td>35.01</td>
<td>4</td>
<td>16.15</td>
<td>2</td>
<td>83.85</td>
</tr>
</tbody>
</table>
**ANALYSIS**

In the provided table, which displays key financial ratios for a company over the years 2019 to 2023, it is apparent that the company has consistently improved its working capital to current assets ratio (WC to CA Ratio), inventory to current assets ratio (Inventory to CA Ratio), and long-term liabilities to current assets ratio (LR to CA Ratio), resulting in an overall upward trend in its financial performance and securing the top rank in 2020.

**INTERPRETATION**

The table presents a five-year trend analysis of various financial ratios for a company, with rankings for individually year, indicating that in 2020, the company achieved the highest overall ranking due to its superior Working Capital to Current Assets, Inventory to Current Assets, and Long-term Liabilities to Current Assets ratios compared to the other years.

**Paired sample Test :**

<table>
<thead>
<tr>
<th>Pair</th>
<th>WC to CA ratio – Inventory to CA ratio</th>
<th>WC to CA ratio – LR to CA ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>20.08400 1.87030 83642 17.76171 22.40629</td>
<td>24.012 4 &lt;.001 &lt;.001</td>
</tr>
</tbody>
</table>
Interpretation:

The table presents the consequences of paired samples t-tests between different ratios for six pairs of data, revealing highly significant changes between the ratios within each pair, signifying that there are significant variations in the "WC to CA ratio" and "Inventory to CA ratio" as well as "WC to CA ratio" and "LR to CA ratio" and "Inventory to CA ratio" and "LR to CA ratio" between the paired samples, with p-values less than 0.001 for both one-sided and two-sided tests.
Paired Samples Effect Sizes

<table>
<thead>
<tr>
<th>Pair</th>
<th>Ratio Comparison</th>
<th>Cohen's d</th>
<th>Hedges' correction</th>
<th>Point Estimate</th>
<th>95% Confidence Interval, Lower</th>
<th>95% Confidence Interval, Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>WC to CA ratio – Inventory to CA ratio</td>
<td>1.87030</td>
<td>2.34408</td>
<td>10.738</td>
<td>3.670</td>
<td>17.969</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Pair 2</td>
<td>WC to CA ratio – LR to CA ratio</td>
<td>4.75837</td>
<td>5.96373</td>
<td>-9.560</td>
<td>-16.007</td>
<td>-3.252</td>
</tr>
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<tr>
<td>Pair 3</td>
<td>Inventory to CA ratio – WC to CA ratio</td>
<td>1.87030</td>
<td>2.34408</td>
<td>-10.738</td>
<td>-17.969</td>
<td>-3.670</td>
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<td></td>
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<tr>
<td>Pair 4</td>
<td>Inventory to CA ratio – LR to CA ratio</td>
<td>2.92379</td>
<td>3.66442</td>
<td>-22.427</td>
<td>-37.454</td>
<td>-7.772</td>
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<tr>
<td>Pair 5</td>
<td>LR to CA ratio – WC to CA ratio</td>
<td>4.75837</td>
<td>5.96373</td>
<td>9.560</td>
<td>3.252</td>
<td>16.007</td>
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</tr>
<tr>
<td>Pair 6</td>
<td>LR to CA ratio – Inventory to CA ratio</td>
<td>2.92379</td>
<td>3.66442</td>
<td>22.427</td>
<td>7.772</td>
<td>37.454</td>
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</tbody>
</table>

Interpretation:

The table displays the effect sizes, measured by Cohen's d and Hedges' correction, for the paired samples comparisons between different ratios for six pairs of data. The effect sizes indicate the magnitude and direction of the alterations between the ratios within individual pair, with positive values showing a larger result of the first ratio over the second and negative values indicating a larger upshot of the second ratio over the first, and the confidence intervals provide a range of likely effect size values within 95% certainty.
Findings

- The findings indicate a consistent improvement in the Working Capital to Current Assets (WC to CA) ratio over the past five years, along with a steady reduction in Inventory to Current Assets (Inventory to CA) ratio, and a fluctuating trend in the Long-Term Debt to Current Assets (LR to CA) ratio.
- These improvements in financial ratios suggest effective management of working capital and inventory levels, but attention may be needed to stabilize the Long-Term Debt to Current Assets ratio for better financial stability.
- The financial data for the years 2019 to 2023 shows a consistent increase in net profit, with a positive trend in working capital, indicating the company's improving financial health as its current assets consistently exceed its current liabilities.
- Stable Current Ratio: Done the previous five years, the current ratio has stayed largely constant between 2.25 and 2.32. By keeping a good amount of current assets, the business is able to handle its short-term liabilities successfully, ensuring its financial stability.

Suggestions:

- Based on the financial data provided, it appears that the company has been consistently profitable, over the previous five years while maintaining a positive working capital position, suggesting a stable financial performance.
- These improvements in financial ratios suggest effective management of working capital and inventory levels, but attention may be needed to stabilize the Long-Term Debt to Current Assets ratio for better financial stability.
- Monitoring current asset management is essential to preserving liquidity and meeting short-term obligations, even though the current ratio is a sign of financial soundness. Working capital can be maximized by regularly assessing inventory levels and accounts receivable turnover.

Conclusion:

The company's performance over the preceding five years, has remained inconsistent, with problems shown by dropping overall values counterbalanced by a positive growing trend in its final rank. The company's steady current and quick ratios demonstrate strong financial management techniques, and its efficient working capital turnover ratio shows that resources are being used efficiently to generate income. The business needs to address the overall trend of lowering totals, maintain growth, maintain liquidity, optimize resource management, and ensure efficient working capital turnover, in order to build on strengths and overcome obstacles.
Reference:

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