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Optimal working capital management: balancing liquidity and profitability in financial management

Gestión óptima del capital circulante: equilibrio entre liquidez y rentabilidad en la gestión financiera

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Shyamsunder Chitta

Symbiosis Institute of Business Management -Hyderabad, Symbiosis International (Deemed University), Lavale, Mulshi, Pune, Maharashtra 412115, India.

shyam.chitta@sibmhyd.edu.in

<https://orcid.org/0000-0002-6266-47563>

Hariprasad Soni

Symbiosis Institute of Business Management -Hyderabad, Symbiosis International (Deemed University), Lavale, Mulshi, Pune, Maharashtra 412115, India.

hr.soni@sibmhyd.edu.in

<https://orcid.org/0000-0001-9147-44012>

KDV Prasad

Symbiosis Institute of Business Management -Hyderabad, Symbiosis International (Deemed University), Lavale, Mulshi, Pune, Maharashtra 412115, India.

kdv.prasad@sibmhyd.edu.in

<https://orcid.org/0000-0001-9921-476X3>



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Resumen

Este artículo ofrece un examen exhaustivo de la importancia de la gestión del capital circulante en el ámbito de la gestión financiera. Este documento examina la importancia del capital de trabajo en el sostenimiento de las operaciones de una empresa y su papel en la facilitación del éxito empresarial. La investigación también subraya la diferenciación entre capital circulante bruto y neto, así como las características de la gestión del capital circulante, con especial atención a la interconexión entre activos y pasivos corrientes. El estudio tiene como objetivo evaluar la situación financiera de la empresa azucarera y ofrecer información sobre su eficiencia operativa y sostenibilidad financiera a largo plazo. Los autores también han destacado la necesidad de realizar este estudio en el marco de la situación económica de la India tras la liberalización. La sección de metodología de la investigación dilucida los orígenes de los datos primarios y secundarios empleados en el estudio, ofreciendo así transparencia en el proceso de recolección de datos. El estudio proporcionó un análisis de varios ratios financieros relacionados con la liquidez, la rotación de existencias, la rentabilidad del período de tenencia, los cambios en las existencias y la rotación de los deudores. Los autores han llevado a cabo un análisis exhaustivo de los ratios a lo largo de varios años, proporcionando información significativa sobre el rendimiento financiero de la empresa azucarera. Los hallazgos han llamado la atención sobre aspectos importantes, incluida la dependencia de la empresa de fuentes de financiamiento a corto plazo y el impacto sustancial de las existencias y varios deudores en el capital de trabajo bruto. El análisis también ha puesto de manifiesto la adherencia de la empresa a los ratios actuales y rápidos aceptables, las fluctuaciones en el ratio de líquido absoluto, así como las oscilaciones en la rotación de inventarios y los ratios de rotación de deudores. La sección de ideas ofrece consejos prácticos para la organización, que abarcan el mantenimiento de los procesos de gestión del capital de trabajo existentes, la mejora de la gestión del inventario y la gestión eficaz de los flujos de caja. En conclusión, se resume sucintamente la importancia de la gestión del capital circulante, con especial énfasis en su papel fundamental para mejorar el rendimiento empresarial, fomentar el crecimiento y facilitar la modernización. El artículo de estudio presenta un examen exhaustivo de la gestión del capital de trabajo de la empresa

azucarera y ofrece información significativa para la toma de decisiones financieras de la empresa.

Palabras clave: Gestión del Capital de Trabajo, Liquidez y Rentabilidad

Abstract

This paper offers a comprehensive examination of the significance of working capital management within the realm of financial management. This paper examines the significance of working capital in sustaining a corporation's operations and its role in facilitating business success. The research also underscores the differentiation between gross and net working capital, as well as the characteristics of working capital management, with a particular focus on the interconnectedness between current assets and liabilities. The study aims to evaluate the financial situation of Sugar firm and offer insights into its operational efficiency and long-term financial sustainability. The authors have also highlighted the necessity of conducting this study within the framework of India's economic situation following liberalization. The research methodology section elucidates the origins of primary and secondary data employed in the study, so offering transparency into the process of data collecting. The study provided an analysis of several financial ratios pertaining to liquidity, inventory turnover, holding period return, changes in stock, and debtor turnover. The authors have conducted a comprehensive analysis of the ratios throughout multiple years, providing significant insights into the financial performance of the Sugar company. The findings have brought attention to important aspects, including the company's dependence on short-term sources of finance and the substantial impact of inventory and various debtors on gross working capital. The analysis has also highlighted the company's adherence to acceptable current and quick ratios, fluctuations in the absolute liquid ratio, as well as swings in inventory turnover and debtor turnover ratios. The ideas section offers practical advice for the organization, encompassing the maintenance of existing working capital management processes, enhancement of inventory management, and effective management of cash flows. In conclusion, the significance of working capital management is succinctly summarized, with a particular emphasis on its pivotal role in enhancing business performance, fostering growth, and facilitating modernization. The study article presents a comprehensive examination of the

working capital management of Sugar firm and offers significant insights for the company's financial decision-making.

Keywords: Working Capital Management, Liquidity and Profitability

Introduction

The management of working capital holds considerable importance within the realm of financial management. It serves a crucial function in sustaining the operational continuity of the firm. Capital is an essential requirement for the establishment and promotion of any business. Without sufficient capital, the successful promotion of a firm becomes unattainable. The field of investment decisions pertains to the allocation of resources towards both current assets and fixed assets. Working capital is a crucial component within a company organization, analogous to the vital function of the heart within the human body. It functions as a lubricant to facilitate the operation of immovable items. The successful implementation of a business's concept can significantly contribute to its success, but ineffective management can result in not just financial loss but also the eventual collapse of a potentially promising enterprise. The operational effectiveness of a company organization is predominantly contingent upon its capacity to effectively manage its working capital. Working capital management is a crucial aspect of a firm's comprehensive financial management.

In order to enhance shareholder wealth, it is imperative for a corporation to conduct an analysis of the impact of fixed assets and current assets on its return and risk. The management of working capital pertaining to current assets. This paper examines the management of current assets, focusing on the following key points:

- Current assets are often held for a short amount of time, whereas fixed assets are intended to be held for a duration exceeding one year.
- The presence of a substantial amount of current assets, particularly cash, enhances the liquidity position while simultaneously diminishing overall profitability.

In order to sustain an ideal balance between liquidity and profitability, the management must consider the risk-return tradeoff associated with holding current assets.

In the short term, adjustments to sales can only be made to present assets. Consequently, the organization possesses a heightened level of adaptability in effectively managing its existing assets. The effective management of existing assets plays a crucial role in establishing a favorable market reputation with respect to the business and economic circumstances.

First, let us commence a discussion on the paradigms of working capital management.

Nature of working capital

Working capital management refers to the difficulties experienced in efficiently managing the current assets and current liabilities, as well as the interdependencies between them. The term "current" refers to assets that possess the capacity to be turned into cash within a year, without incurring a decline in value or creating any disruption to the activities of the organization, as part of its ordinary course of business. The main current assets consist of cash, marketable securities, accounts receivables, and inventory. Current liabilities are defined as the financial obligations that are anticipated to be resolved within the normal course of a business's activities, often within a one-year timeframe. These obligations are intended to be settled using the entity's current assets or earnings.

The core primary responsibilities consist of accounts payable, bills payable, bank overdrafts, and outstanding expenses. The primary aim of operational management is to efficiently manage an organization's assets and liabilities, with the goal of maintaining a sufficient amount of working capital. The probable insolvency and eventual bankruptcy that organizations may encounter might be attributed to their inability to maintain a sufficient amount of operational capital. To ensure a reasonable level of security, it is crucial for the value of current assets to be adequately significant to counterbalance the value of current obligations.

The effective administration of each individual source of short-term finance is essential in order to secure their acquisition and assure their proper deployment. The fundamental emphasis of working capital management pertains to the dynamic relationship among current liabilities.

Objectives of the study

Working capital is a highly used and influential method of financial analysis. The primary aim of the current investigation is to ascertain the financial state of the organization.

- In order to gain a comprehensive understanding of the operational efficiency and performance of the Sugar company.
- In order to determine the appropriateness of interpreting a company's financial status.
- In order to evaluate the company's long-term financial sustainability. To ascertain the extent to which the management demonstrates a consistent commitment to the overall profitability of the organization.

Need of the study

In the aftermath of deregulation, the global economy had substantial difficulties. The present state of affairs in India has exhibited noteworthy advancements and is undergoing swift expansion, hence necessitating the use of sophisticated and efficacious managerial approaches. The major objective is to analyze the influence of the external environment on company operations, so introducing a modern perspective to the subject of business management from a practical position. The resolution of issues encountered in the field of financial analysis is achieved via the identification and implementation of appropriate solutions. The discipline of finance investigates the interdependencies that occur across diverse financial organizations. The financial statements encompass many components that hold significant value in elucidating the company's activities and performance. The diligent monitoring of key performance indicators and the regular comparison with industry competitors are crucial for the company's operations.

The thorough assessment of past outcomes enables the examination of probable causal linkages among numerous factors through a complete financial analysis of accounting statistics. This study facilitates the managerial process of budget development, company policy formulation, and future action plan preparation. The core emphasis of this examination refers to the company's performance with regards to sales growth, profit margins, and asset management. This tool functions as a mechanism for a corporation to perform an internal audit, facilitating the evaluation of internal strengths and weaknesses within the framework of strategic planning.

Materials and Methods

For the purpose of the study necessary information has been collected through primary and secondary sources.

PRIMARY DATA:

Primary data refers to information that is obtained for the first time, directly from its source, and possesses an original and unique nature. Primary data refers to the information that is obtained directly from authoritative sources, such as officials and established companies, through the process of conversations.

SECONDARY DATA:

Secondary data is defined as information that has been collected by individuals or organizations other than the researcher and has already undergone statistical analysis. The secondary data consists of information obtained from company annual reports, namely financial records such as balance sheets and income statements. Furthermore, pertinent literature from academic textbooks on the subject of financial management, along with scholarly newspapers and reputable magazines, has been collected.

Limitations of the study

The study conducted and done is analytical, subject to the following limitations.

- The research mostly relies on the analysis of secondary data derived from the financial accounts.
- This study relies on historical data and information presented in the annual reports, hence its predictive value for the future may be limited.
- It is possible that there exist fractional discrepancies in the computed ratios.
- Due to the limited duration of the study, which spanned only 8 weeks, insufficient time was available to adequately address additional areas of interest.

Result and discussion

Table 1: Liquidity ratio

| Year | Current assets | Current liabilities | Ratio |
|-----------|----------------|---------------------|-------|
| 2017-2018 | 1368 | 462.32 | 3.21 |
| 2018-2019 | 1633 | 522.09 | 2.89 |
| 2019-2020 | 1895 | 720.56 | 2.53 |
| 2020-2021 | 2490 | 868.21 | 2.62 |
| 2021-2022 | 1894.4 | 657.72 | 2.84 |

The measure pertains to the short-term solvency of a corporation. According to customary norms, a current ratio of 2:1 is deemed acceptable. The sugar company exhibited a current ratio of 3.11 in the fiscal year 2018-2019, which then decreased to 2.99 in the next fiscal year 2019-2020. However, despite this declining tendency, the current ratio remained above the standard ratio at 2.94 over the aforementioned period.

Figure 1: Liquidity ratio

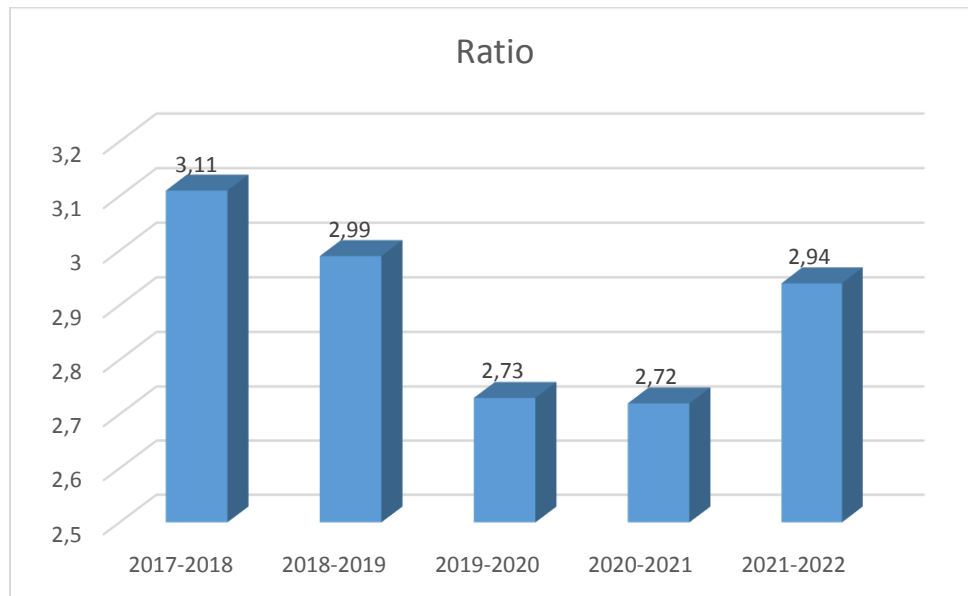


Table 2: Quick ratio

| Year | Quick assets | Current liabilities | Ratio |
|-----------|--------------|---------------------|-------|
| 2017-2018 | 834.61 | 452.31 | 1.76 |
| 2018-2019 | 816.01 | 510.8 | 1.63 |
| 2019-2020 | 1002.91 | 720.50 | 1.35 |
| 2020-2021 | 958.56 | 868.22 | 1.10 |
| 2021-2022 | 819.74 | 657.72 | 1.21 |

This ratio provides a relationship between fast assets and current obligations. An asset is considered to be liquid if it has the ability to be readily changed into cash, either immediately or within a short period of time, without incurring any significant loss in value. The prevailing norm is a ratio of 1:1.

The quick ratio of the Sugar company shown a beneficial trend throughout the periods of 2018-2019 and 2019-2020, with values of 1.79 and 1.61 respectively. However, in the years 2007-2006, the quick ratio declined to 1.37. Furthermore, in the year 2020-2021, the quick ratio experienced a further decline. Finally, the company's overall liquidity condition is unfavorable.

Figure 2: Quick ratio

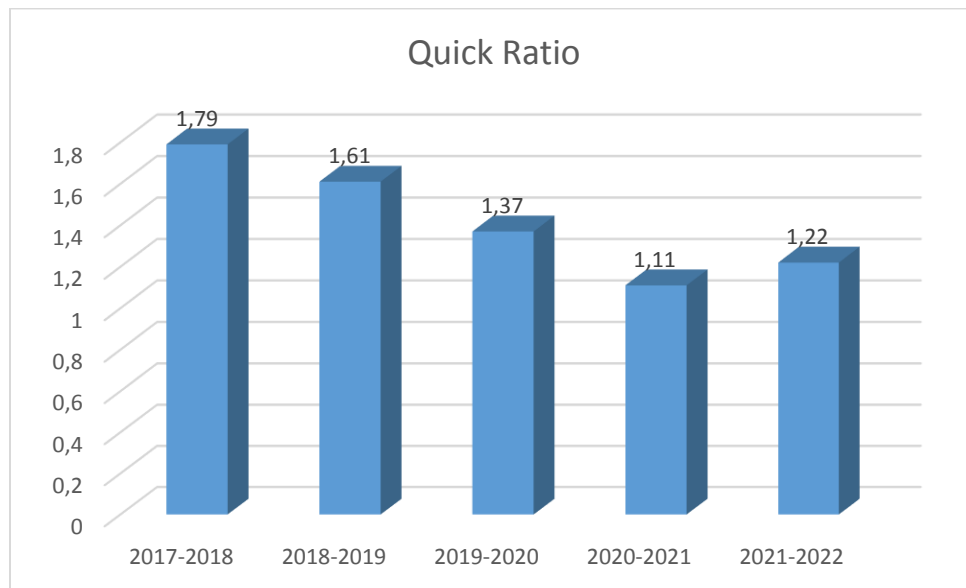


Table 3: Absolute liquid ratio

| Year | Cash | Current Liability | Ratio |
|-----------|--------|-------------------|-------|
| 2017-2018 | 104.58 | 462.31 | 0.21 |
| 2018-2019 | 153.90 | 542.8 | 0.32 |
| 2019-2020 | 215.39 | 732.57 | 0.31 |
| 2020-2021 | 106.58 | 876.23 | 0.10 |
| 2021-2022 | 160.31 | 675.73 | 0.22 |

The ratio serves to illustrate the correlation between cash and current obligations. Cash is widely regarded as the preeminent and highly liquid asset within the context of any organization. The ratio that is widely recognized and acknowledged as the acceptable standard. The absolute liquidity ratio of the Sugar company had subpar performance for the entirety of the years 2018-2019, with a noticeable upward trend observed in the subsequent year. The years 2019 and 2020 are identical.

In the period spanning 2020-2021, it was seen that there was a fall in the metric under consideration, indicating that it did not attain the established threshold of 0.5. The current predicament arises from the firm's minimal cash balance, which is intended to meet its working capital needs. During the fiscal year 2021-2022, the company exhibits a discernible upward trajectory.

Figure 3: Absolute liquid ratio

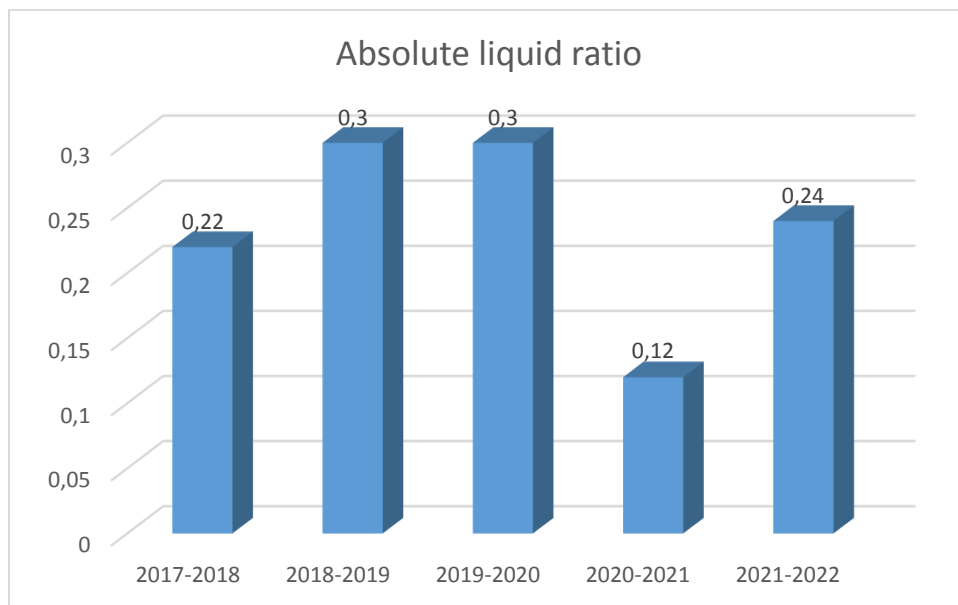


Table 4: Inventory turn over ratio

| Year | Cost of goods sold | Average stock | Ratio |
|-----------|--------------------|---------------|-------|
| 2017-2018 | 2937 | 545.74 | 5.36 |
| 2018-2019 | 3954.18 | 555 | 7.11 |
| 2019-2020 | 5206.7 | 703 | 7.39 |
| 2020-2021 | 7037.89 | 1022.21 | 6.88 |
| 2021-2022 | 1810.89 | 1100.72 | 1.64 |

The ratio serves as a measure of the firm's effectiveness in selling its product, and is derived by dividing the cost of goods sold by the average inventory.

The efficiency of the Sugar firm is experiencing a decline. During the academic year 2019-2020. The current time is 7.39, which represents the highest recorded value. Subsequently, it had a downward trend, reaching its nadir at 1.64 during the period of 2021-2022. The evidence suggests that there is a lack of effective inventory control by the management.

Figure 4: Inventory turnover ratio

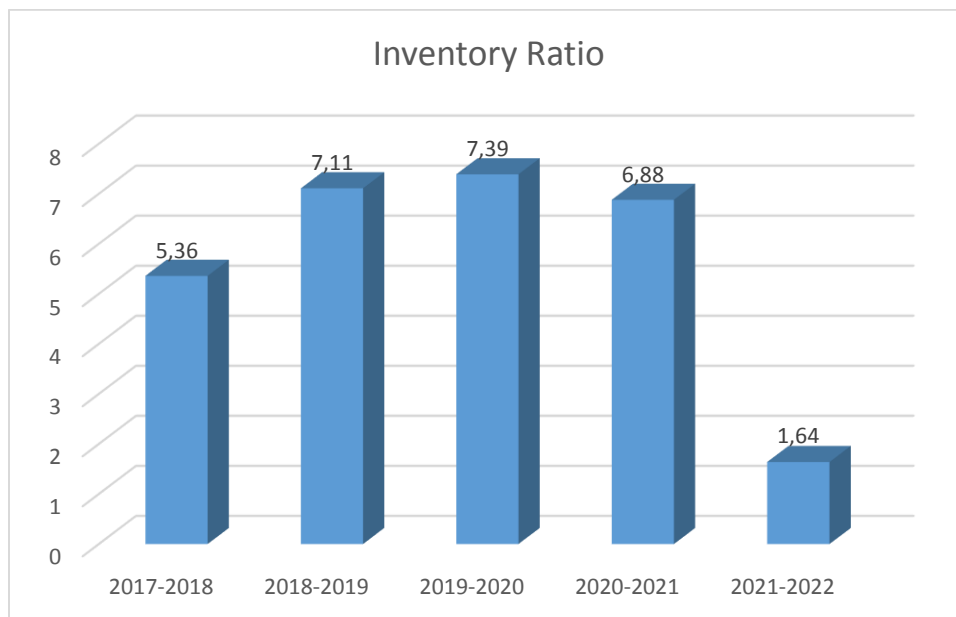


Table 5: Holding period return

| Year | Inventory turnover ratio | Holding period return |
|-----------|--------------------------|-----------------------|
| 2017-2018 | 5.35 | 68.08 |
| 2018-2019 | 7.10 | 51.32 |
| 2019-2020 | 7.40 | 49.37 |
| 2020-2021 | 6.82 | 53.04 |
| 2021-2022 | 1.30 | 222.51 |

The ratio serves as a measure of the efficiency at which stock or inventory is converted into cash, specifically through sales. A smaller period signifies a more favorable level of liquidity for the inventory.

The sugar company had a holding period return of approximately 37 days during the 2018-2019 fiscal year, which is comparatively superior than previous years. However, this figure gradually grew to 98 days in the 2021-2022 fiscal year, indicating a decline in inventory liquidity.

Figure 5: Holding period return

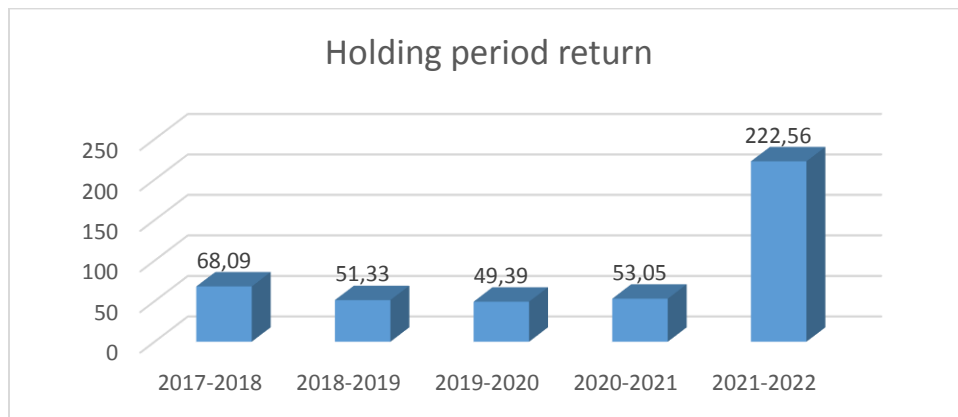


Table 6: Changes in stock at the end of the year

| Year | Opening stock | Closing stock | Increase/decrease |
|-----------|---------------|---------------|-------------------|
| 2017-2018 | 623.38 | 706 | 83.61 |
| 2018-2019 | 706 | 990.05 | 284.06 |
| 2019-2020 | 990.05 | 141041 | 420.35 |
| 2020-2021 | 1412.41 | 1163.56 | 246.85 |
| 2021-2022 | 1163.56 | 1315.70 | 152.13 |

The aforementioned statement provides information regarding the stock's opening and closing figures at the beginning of the year. During the academic year of 2018-2019, there was a decline observed towards the conclusion of the year.

Figure 6: Changes in stock at the end of the year

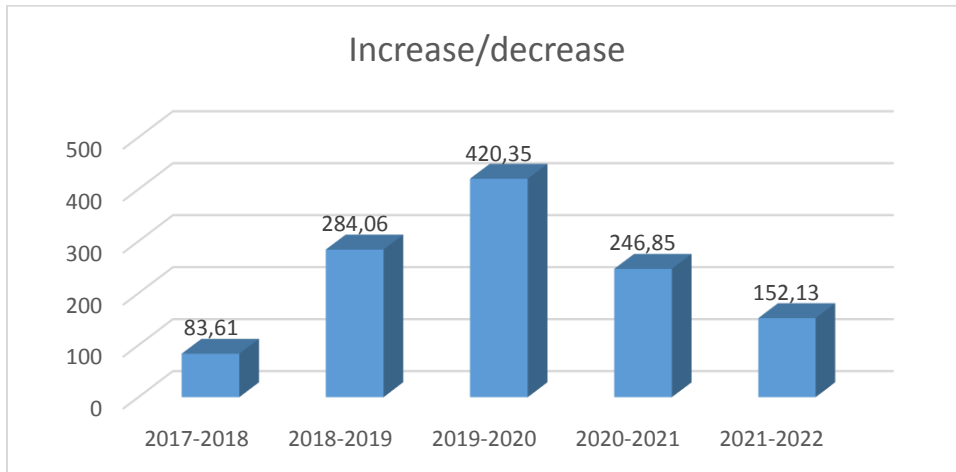
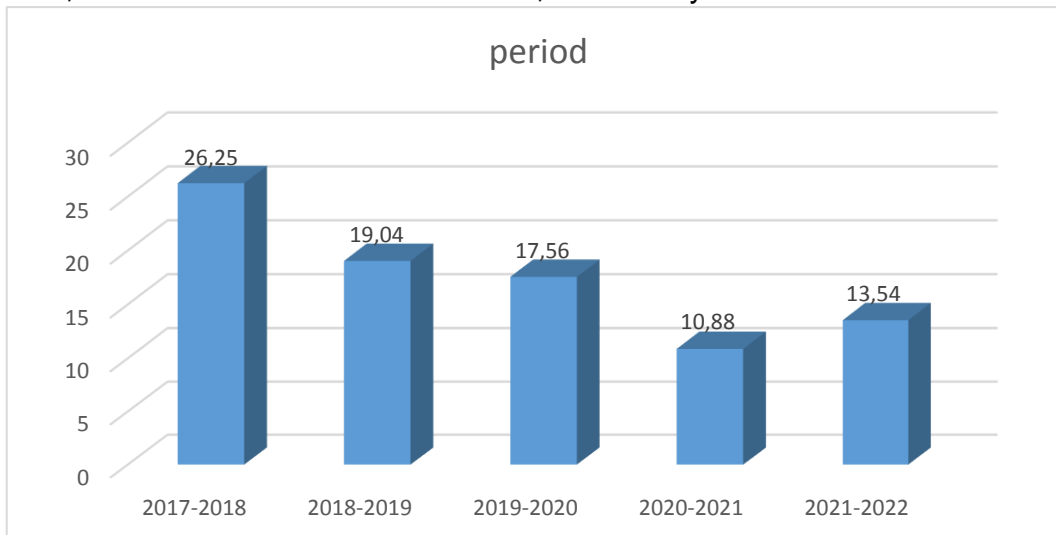


Table 7: Average collection period

| Year | Dtr | period |
|-----------|-------|--------|
| 2017-2018 | 14.91 | 24.25 |
| 2018-2019 | 18.17 | 18.04 |
| 2019-2020 | 21.78 | 16.56 |
| 2020-2021 | 32.52 | 11.88 |
| 2021-2022 | 25.94 | 12.54 |

The ratio serves as an indicator of the timeframe during which debt can be recuperated. According to the data presented in the aforementioned table, the value for the year 2018-2019 stands at 26.25, indicating a positive outcome. However, in the subsequent year of 2020-2021, there was a decline in this value, which may be considered unfavorable.



Findings

- The working capital research of a sugar company reveals that the quantity of working capital is mostly influenced by short-term sources of finance.
- A significant portion of the firm's gross working capital is comprised of inventories and miscellaneous accounts receivable. REICE | 65
- The corporation consistently maintains a current ratio of 2:1, surpassing the minimal requirement for current ratio in all financial statements.
- The company has consistently maintained a fast asset ratio of 1:1, meeting this requirement until 2010.
- The absolute liquid ratio does not meet the requirements due to the occurrence of position variations, particularly during the years 2007 to 2008.
- The inventory turnover ratio is currently in a favorable position, exhibiting a high value during the period of 2019-2020. The current year of the study exhibits a significant deficiency with a value of 1.64.
- The debtor turnover ratio is likewise in a favorable position, exhibiting significant improvement for the fiscal year 2020-2021. The present ranking is lower than that of the previous year, specifically 26.94.
- The average collecting period exhibits a peak in 2006 and demonstrates a decline in performance in 2009.
- The utilization of performance appraisal techniques is highly beneficial in attaining the overall objectives of the firm.
- The company has consistently maintained an adequate level of operating capital across all fiscal years.

Suggestions

- It is recommended that the corporation adhere to the current working capital.
- The corporation allocates a suitable budget for inventory management, which is considered a prudent practice.
- The current ratio is being maintained at a satisfactory level. The company allocates a significant portion of its current assets in order to achieve the firm's objectives.

- The company is strategically keeping a significant level of fast assets in order to effectively manage and address its present liabilities, hence aiming to achieve improved outcomes.
- In order to achieve more favorable outcomes, it is imperative for the company to effectively manage cash inflows in order to address the existing obligations of the organization.
- In order to achieve favorable financial returns, it is imperative for a firm to enhance its sales performance through effective inventory management strategies.
- The corporation should make efforts to decrease its external liabilities in order to achieve higher earnings per share (EPS) and dividends per share (DPS).

The organization should implement measures to effectively manage accounts receivable and cash flow.

Conclusion

The analysis of working capital management is a comprehensive examination that encompasses the entirety of financial management, with a focus on integration. Sugar companies are corporations that prioritize the welfare of the general public. Therefore, an integrated approach and consistent measures can be implemented to enhance management performance. The analysis of working capital is a notable and respectable technique used to assess the financial behavior of a corporate enterprise. Therefore, the study of working capital management is considered a strategic assessment in terms of performance, growth, expansion, and modernization of the business. This involves the integration of internal, intermediate, and organization-based financial and analytical measurements.

References

- Akbar, A., Akbar, M., Nazir, M., Poulouva, P., & Ray, S. (2021). Does working capital management influence operating and market risk of firms?. *Risks*, 9(11), 201.
- Appuhami, B. (2008). The Impact of Firms' Capital Expenditure on Working Capital Management: An Empirical Study across Industries in Thailand. *International management review*, 4(1). REICE | 67
- Dash, M., & Ravipati, R. (2009). A liquidity-profitability trade-off model for working capital management. Available at SSRN 1408722.
- Forghani, M., Shirazipour, M., & Hosseini, A. (2013). Impact of working capital management on firms performance. *Journal of Basic and Applied Scientific Research*, 3(7), 943-947.
- Nazir, M. S., & Afza, T. (2009). Impact of Aggressive Working Capital Management Policy on Firms' Profitability. *IUP Journal of Applied Finance*, 15(8).
- Padachi, K. (2006). Trends in working capital management and its impact on firms' performance: an analysis of Mauritian small manufacturing firms. *International Review of business research papers*, 2(2), 45-58.
- Palombini, N. V. N., & Nakamura, W. T. (2012). Key factors in working capital management in the Brazilian market. *Revista de Administração de Empresas*, 52, 55-69.
- Pass, C. L., & Pike, R. H. (1984). An overview of working capital management and corporate financing. *Managerial Finance*, 10(3), 1-11.
- Smith, K. V. (1973). State of the art of working capital management. *Financial management*, 50-55.
- Uremadu, S. O., Egbide, B. C., & Enyi, P. E. (2012). Working capital management, liquidity and corporate profitability among quoted firms in Nigeria: Evidence from the productive sector. *International journal of academic research in accounting, finance and management sciences*, 2(1), 80-97.
- Zariyawati, M. A., Annuar, M. N., Taufiq, H., & Rahim, A. A. (2009). Working capital management and corporate performance: Case of Malaysia. *Journal of Modern Accounting and Auditing*, 5(11), 47.