
The Effect of Managing Receivables and Inventory on Profitability: A Case Study of a Multifinance Company in Medan

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ABSTRACT

This research aims to investigate the impact of accounts receivable management and inventory management on the profitability of a multi-finance company in Medan, both separately and together. The study employs a quantitative research approach, focusing on the financial reports of a selected multi-finance company in Medan. The sample includes income statements and balance sheets spanning twelve quarters. Data is collected through both primary and secondary sources, including interviews and observations. The analysis reveals that, when considered simultaneously, both accounts receivable management and inventory management significantly affect profitability, with a determination value of 82.2%. Specifically, accounts receivable management independently contributes to profitability, as does inventory management. These findings have crucial implications for financial management practices within organizations.

By highlighting the importance of effective accounts receivable and inventory management, companies can enhance their financial performance, emphasizing the need for strategic approaches in these areas. This research underscores the necessity for multi-finance companies to develop and implement robust management practices to achieve long-term financial stability and growth. Future research should explore the impact of technology on these management practices to further refine strategies for maximizing profitability. In conclusion, focusing on optimizing accounts receivable and inventory management not only improves profitability but also establishes a solid framework for sustainable business success in a competitive financial landscape.

Keywords: *Accounts Receivable Management, Inventory Management, Profitability*

INTRODUCTION

Companies are established with various primary goals, including achieving optimal profits, increasing sales volumes, and ensuring their sustainability. There are numerous strategies that a company can implement to reach these objectives, one of which is effective management that allows for efficient and productive operations. (Sidharta & Affandi, 2016) It is imperative for companies to strive toward achieving their goals. To attain maximum performance or outcomes, a measurement system is essential. Measuring performance or success is often challenging and complex, as it involves assessing the effectiveness of invested capital, profitability, and the security against various demands faced by the company. (Foster & Sidharta, 2019) Achieving exemplary performance or success in fulfilling corporate objectives necessitates a robust performance measurement system. One of the tools utilized for this purpose is ratio analysis. The ratios used for analysis vary depending on the aspect being measured, such as profitability, liquidity, or operational efficiency. By leveraging ratio analysis, companies can gain valuable insights into their financial health and operational effectiveness, enabling informed decision-making for sustained growth and success.

Companies not only have the ability to enhance cash flow and mitigate the risk of losses, but they can also foster stronger relationships with customers and improve their market competitiveness. Therefore, it is crucial for companies to continually develop and implement effective accounts receivable management strategies to achieve sustainable financial success. However, the challenges associated with accounts receivable management cannot be overlooked. Kureljusic and Metz (2023) observe that the application of machine learning algorithms in accounts receivable management can assist companies in identifying customer payment patterns and predicting the likelihood of defaults. By leveraging this technology, businesses can optimize their collection strategies and minimize the risks of bad debts.

For instance, a company that utilizes data analytics to monitor customer payment behaviors can adjust its approach accordingly, effectively avoiding unnecessary losses. This proactive strategy not only supports financial stability but also enhances overall performance,

allowing companies to focus on growth and customer satisfaction in a competitive marketplace.

Owuor et al. (2021) found that effective accounts receivable management contributes to enhanced financial performance. Universities that can manage receivables from students and sponsors effectively are better positioned to allocate resources for academic development and facilities. This indicates that accounts receivable management is not only pertinent to profit-oriented companies but also to educational institutions that rely on timely payments for their operational continuity.

As we move into the era of Industry 4.0, inventory management is increasingly influenced by technological advancements. Kulshrestha et al. (2024) explain that efficient spare parts management is becoming increasingly crucial in this context. By leveraging technologies such as the Internet of Things (IoT) and big data analytics, companies can monitor their inventory in real-time and make more informed decisions regarding procurement and distribution. For instance, a company using a cloud-based inventory management system can significantly reduce storage costs and improve accuracy in demand forecasting.

Another factor that contributes to the relationship between inventory management and profitability is information control. Putra et al. (2023) emphasize the importance of information control in inventory management within the garment industry. By having a robust information system, companies can effectively track the movement of goods and analyze sales data. This capability allows them to identify demand patterns and optimize inventory levels, thereby minimizing the risk of overstock or stockouts that could adversely impact the company's finances.

From efficient inventory control to the adoption of modern technology, every aspect contributes to enhanced financial performance. Companies that excel in inventory management will not only boost profitability but also establish a strong foundation for future growth and sustainability. Therefore, it is essential for businesses to continuously develop and implement innovative and sustainable inventory management practices to achieve long-term success. Staying ahead in a rapidly changing market requires a commitment to improvement and adaptability, ensuring that companies can respond effectively to evolving customer demands and operational challenges. (Manik et., 2023) Ultimately, prioritizing

effective inventory management is key to achieving resilience and competitive advantage in today's business landscape.

In exploring the relationship between financial management practices and a company's profitability, several key questions arise. First, we seek to determine whether accounts receivable management has a significant impact on the company's profitability. Understanding this relationship can shed light on how effectively managing receivables influences the bottom line. Next, we turn our attention to inventory management and its effects on profitability. It is essential to investigate how the management of inventory levels and turnover rates can contribute to or detract from overall financial performance. Finally, we consider the combined influence of both accounts receivable management and inventory management on profitability. By examining these two factors together, we aim to uncover whether their interaction produces a compounded effect on the company's profit margins.

This set of inquiries provides a comprehensive framework for analyzing how effective management of receivables and inventory can drive profitability, ultimately supporting informed decision-making for enhancing financial performance.

METHOD

This research approach is designed to facilitate the smooth execution of the study. The study employs quantitative research methodology. Quantitative research can be defined as a method rooted in positivist philosophy, aimed at examining a specific population or sample. It involves data collection using research instruments, with data analysis being quantitative or statistical in nature, and its primary objective is to test established hypotheses. This methodology is termed quantitative because the research data consists of numerical values, and the analysis employs statistical techniques.

In this study, the population consists of financial reports from a certain multi-finance company in Medan. The samples utilized include the Income Statement and Balance Sheet spanning three years. The data sources for this research are quantitative in nature, derived from both primary and secondary data.

By adopting this quantitative approach, the study aims to present findings that are objective and measurable, contributing to a better understanding of the financial dynamics within the selected company. The methodical nature of this approach ensures that the results can be analyzed statistically, providing a solid foundation for drawing conclusions and making informed recommendations.

RESULT AND DISCUSSION

Before conducting hypothesis testing using multiple linear regression analysis, certain assumptions must be satisfied to ensure that the conclusions drawn from the regression are unbiased. These assumptions include normality testing, multicollinearity testing (for multiple linear regression), and autocorrelation testing (for time series data). In this study, all three assumptions have been examined due to the presence of multiple independent variables and the time series nature of the collected data.

Normality is a critical requirement for testing the significance of the regression coefficients. If the regression model does not follow a normal distribution, the conclusions drawn from both the F-test and the t-test are questionable, as these tests are derived from normal distribution statistics. In this research, the Kolmogorov-Smirnov one-sample test and the normal probability plot were utilized to assess the normality of the regression model. The normality test was conducted using a significance level (α) of 5%. If the significance value from the Kolmogorov-Smirnov test is greater than 0.05, the data is considered normally distributed. Based on the normalization analysis, the statistical test result shows a value of 0.395, which is greater than 0.05, indicating that the data distribution is indeed normal. Additionally, the Variance Inflation Factor (VIF) was employed as an indicator to assess the presence of multicollinearity among the independent variables. The obtained VIF values were 2.183 for both variables, suggesting that multicollinearity is not a concern in this study, as VIF values below 10 are typically considered acceptable.

In the assessment of autocorrelation, the Durbin-Watson test is employed to determine the presence or absence of autocorrelation within the regression model. The Durbin-Watson statistic obtained from the regression model estimation is essential for this analysis. For the

regression model involving accounts receivable management and inventory management as predictors of profitability, the Durbin-Watson statistic calculated is 1.813.

This D-W value is then compared against the Durbin-Watson table values. Given a sample size of 12 observations and 2 independent variables in the regression model, the Durbin-Watson table provides a lower bound (dl) of 0.8112 and an upper bound (du) of 1.5794. Based on these findings, we observe that ($du < dw < (4 - dl)$), which indicates that there is no autocorrelation present in the residuals of the regression model.

Furthermore, a multiple regression analysis is conducted to examine the effect of independent variables, specifically inventory turnover and accounts receivable turnover, on working capital. The linear multiple regression model estimation yields results that can be referenced in Table 1 below. This thorough examination using the Durbin-Watson test and multiple regression analysis contributes to a clearer understanding of the relationships among the variables, providing insights into the factors that influence working capital management within the context of profitability analysis.

Table 1. The Results of The Regression Analysis Encompass the ANOVA And the Coefficients of Determination

Variable	B	t	Sig.
a	0.045		
X1	-0.005	3.719	0.005
X2	0.044	6.306	0.000
Model Summary	R=0.907	R Square=0.822	

Based on Table 1, it can be observed that the calculated t-value for variable X1 is 3.719, with a significance level of 0.005. The calculated t-value for variable X2 is 6.306, with a significance level of 0.000. When comparing the calculated t-values of these variables against the table value (0.05/2) for ($n - k = 10$), which is 2.22814, we find that the calculated t-value for variable X1 is greater than the t-table value. This indicates that accounts receivable management (X1) has a significant influence on profitability (Y). Similarly, the calculated t-value for variable X2 is also greater than the t-table value, suggesting that inventory management significantly affects profitability.

To determine whether all independent variables have a collective influence on the dependent variable, an F-test is performed by comparing the F-table value with the calculated F-value found in the Analysis of Variance table. The significance level used for

finding the F-table value is set at 5%, with degrees of freedom calculated as $(n - k)$ and $(k - 1)$, where n represents the number of observations and k represents the number of independent variables. The hypothesis is formulated as follows: $H_0: b_1, b_2 = 0$, indicating that there is a positive and significant simultaneous effect from the independent variables on the dependent variable.

This analysis reinforces the significance of both accounts receivable and inventory management as critical factors influencing profitability, underscoring the importance of strategic financial management within the organization. The research findings indicate that accounts receivable management significantly impacts profitability. Companies that implement effective accounts receivable practices tend to experience superior financial performance and higher profitability. This aspect is particularly crucial in the business world, especially within industries that heavily rely on cash flow and customer relationships. Effective accounts receivable management is a vital component of working capital management.

As highlighted by Asare et al. (2024), sound working capital management practices in the construction industry in Ghana demonstrate that companies proficient in managing their receivables not only minimize the risk of defaults but also enhance liquidity and profitability. For instance, construction firms that adopt a systematic and transparent billing process can expedite payment collection from clients. This acceleration in cash inflow boosts liquidity, allowing the company to invest more resources into new projects.

Overall, the ability to manage accounts receivable effectively serves as a key driver of financial stability and growth, underscoring the importance of prioritizing this practice within organizational strategies. Investing in robust accounts receivable management systems can lead to sustainable profitability and competitive advantages in the marketplace.

Accounts receivable management goes beyond just collecting payments; it significantly involves the relationships established with customers. Singh et al. (2021) indicate that effective receivables management can enhance customer relationships and boost sales performance. When a company demonstrates a commitment to transparent and fair accounts receivable practices, customers feel valued and are more likely to engage in repeat transactions.

Additionally, Dan (2020) found that good accounts receivable management is directly linked to company performance in the manufacturing sector in Nigeria. Companies that

employ effective receivables management practices not only increase their profitability but also strengthen their competitive position in the market. For instance, businesses that manage to reduce their receivables cycle can reinvest the funds collected into enhancing production capabilities or expanding product lines, thereby improving their competitiveness.

The intertwined nature of receivables management and customer relationships plays a critical role in driving both financial performance and market standing. By prioritizing strong accounts receivable practices, companies can foster loyalty and increase sales, ultimately contributing to their long-term success.

In a broader context, Salehi et al. (2019) explored the relationship between the availability of financial resources and working capital management, including accounts receivable, with surplus stock returns in Iran. Their findings indicate that companies with effective accounts receivable management are likely to receive positive recognition from investors, which can subsequently enhance the market value of the firm. Investors tend to favor companies that display stable and reliable cash flows, often viewed as indicators of effective accounts receivable practices.

From improved cash flow management to stronger customer relationships, effective accounts receivable management significantly contributes to better financial performance. Companies that successfully navigate the challenges of managing receivables and leverage appropriate technologies and strategies will be better positioned for long-term success. By building robust accounts receivable processes, businesses not only enhance their financial health but also strengthen their appeal to potential investors, paving the way for sustained growth and profitability.

The research findings indicate that inventory management significantly influences profitability. Companies that implement effective inventory management practices tend to demonstrate stronger financial performance and higher profitability. In this context, it is crucial to understand how effective inventory management contributes to a company's financial success and the key factors that support these practices.

Effective inventory management encompasses various aspects, including inventory control, demand planning, and the use of information technology. A clear example of the importance of good inventory management can be observed in companies within the automotive sector. In a study conducted by Ramos et al. (2020), it was found that the

application of a lean supply chain inventory management model can enhance service levels, which in turn increases profitability. By minimizing waste and improving efficiency, companies are able to allocate their resources more effectively and become more responsive to market demand.

Ultimately, this underscores that a strategic approach to inventory management is not just a logistical concern but a vital component of a company's overall financial strategy. Businesses that prioritize and optimize their inventory practices can expect to see significant benefits in their profitability and market competitiveness.

Furthermore, the significance of inventory management is also reflected in the implementation of Total Quality Management (TQM) practices. Mahajan et al. (2024) demonstrate that companies integrating TQM with inventory management tend to achieve better performance. TQM emphasizes continuous improvement and customer satisfaction, which can be realized through efficient inventory management. For instance, companies that maintain optimal inventory levels are better positioned to meet customer demand, ultimately enhancing customer loyalty and profitability. (Rahiminezhad Galankashi & Mokhatab Rafiei, 2022)

Additionally, effective inventory management is closely linked to sustainability. Gardas et al. (2019) indicate that practices such as reusable plastic packaging management can support a sustainable supply chain. In this context, companies that prioritize sustainability can not only reduce their environmental impact but also attract customers who are increasingly aware of environmental issues. Therefore, sustainable inventory management can contribute to long-term profitability while aligning business practices with eco-conscious consumer preferences. By focusing on both quality and sustainability in inventory management, companies can create a robust framework that enhances financial performance and fosters positive customer relationships, ensuring success in today's environmentally aware market. (Kabuye, Kato, Akugizibwe & Bugambiro, 2019)

Inventory management extends beyond financial aspects; it encompasses broader strategic dimensions as well. Effective inventory management enables companies to respond swiftly to market changes, which is crucial in today's dynamic business environment. (Piotrowicz, Ryciuk & Szymczak, 2023) By implementing a robust inventory management strategy, businesses can mitigate risks and capitalize on emerging opportunities, thereby enhancing their competitiveness in the market.

A well-structured inventory management system allows organizations to maintain optimal stock levels, streamline operations, and reduce costs, all while ensuring that they can meet customer demands efficiently. This strategic approach not only supports financial stability but also positions the company to adapt effectively to shifting consumer preferences and market dynamics. Ultimately, by prioritizing proactive inventory management, companies can gain a significant advantage and improve their overall market standing.

CONCLUSION

The research findings reveal that, based on partial tests conducted, accounts receivable management significantly affects profitability. Additionally, inventory management also shows a significant influence on profitability. The calculations indicate that the impact of all independent variables on the dependent variable is substantial; however, there are other factors outside the independent variables explored in this study that also affect profitability. Despite these valuable insights, the study has its limitations. One major weakness is that it focuses solely on accounts receivable and inventory management without considering other critical financial management practices that may also influence profitability. Additionally, the analysis does not account for external factors such as market conditions or economic fluctuations that could impact on the results.

For future research, it is recommended to expand the scope of the study by including additional variables, such as cash management, cost control, and financial leverage, to provide a more comprehensive understanding of factors affecting profitability. Furthermore, longitudinal studies could be beneficial in assessing how changes in management practices over time influence financial outcomes, offering deeper insights for businesses looking to enhance their profitability.

REFERENCES

- Asare, E., Owusu-Manu, D. G., Ayarkwa, J., & Edwards, D. J. (2024). Conceptual review study of working capital management practices in the construction industry: Trends and research prospects in Ghana. *Journal of Engineering, Design and Technology*, 22(4), 1082-1098.
- Dan, P. (2020). Account receivable management and corporate performances: An empirical

- evidence from quoted manufacturing companies in Nigeria. *Inosr arts and management*, 6(1), 116-129.
- Foster, B., & Sidharta, I. (2019). *Dasar-Dasar Manajemen*. Yogyakarta: Diandra Kreatif.
- Gardas, B. B., Raut, R. D., & Narkhede, B. (2019). Identifying critical success factors to facilitate reusable plastic packaging towards sustainable supply chain management. *Journal of environmental management*, 236, 81-92.
- Kabuye, F., Kato, J., Akugizibwe, I., & Bugambiro, N. (2019). Internal control systems, working capital management and financial performance of supermarkets. *Cogent Business & Management*.
- Kulshrestha, N., Agrawal, S., & Shree, D. (2024). Spare parts management in industry 4.0 era: a literature review. *Journal of Quality in Maintenance Engineering*, 30(1), 248-283.
- Kureljusic, M., & Metz, J. (2023). The applicability of machine learning algorithms in accounts receivables management. *Journal of Applied Accounting Research*, 24(4), 769-786.
- Mahajan, P. S., Raut, R. D., Kumar, P. R., & Singh, V. (2024). Inventory management and TQM practices for better firm performance: a systematic and bibliometric review. *The TQM Journal*, 36(2), 405-430.
- Manik, E., Sidharta, I., Coenraad, D. P., Komara, A. T., Satria, R. O., & Riadi, F. (2023). Assessing total quality management and its impact on product quality: A cross-sectional study on textile industries in Bandung, Indonesia. *International Journal of Applied Economics, Finance and Accounting*, 15(2), 71-79.
- Owuor, G. O., Agusioma, N., & Wafula, F. (2021). Effect of accounts receivable management on financial performance of chartered public universities in Kenya. *International Journal of Current Aspects in Finance, Banking and Accounting*, 3(1), 73-83.
- Putra, L. A. B. H., Komara, A. T., Sidharta, I., Roslina, N. Y., & Megawati, I. (2023). Information Control on Inventory Study at In One of The Garment Companies in Bandung. *Informatics Management, Engineering and Information System Journal*, 1(1), 66-76.
- Piotrowicz, W. D., Ryciuk, U., & Szymczak, M. (2023). Lean and agile metrics. Literature review and framework for measuring leagile supply chain. *International journal of productivity and performance management*, 72(6), 1560-1583.

- Rahiminezhad Galankashi, M., & Mokhatab Rafiei, F. (2022). Financial performance measurement of supply chains: a review. *International journal of productivity and performance management*, 71(5), 1674-1707.
- Ramos, E., Pettit, T. J., Flanigan, M., Romero, L., & Huayta, K. (2020). Inventory management model based on lean supply chain to increase the service level in a distributor of automotive sector. *Int. J. Supply Chain Manag*, 9(2), 113-131.
- Salehi, M., Mahdavi, N., Zarif Agahi Dari, S., & Tarighi, H. (2019). Association between the availability of financial resources and working capital management with stock surplus returns in Iran. *International Journal of Emerging Markets*, 14(2), 343-361.
- Sidharta, I., & Affandi, A. (2016). The empirical study on intellectual capital approach toward financial performance on rural banking sectors in Indonesia. *International Journal of Economics and Financial Issues*, 6(3), 1247-1253.
- Singh, R. P., Singh, R., & Mishra, P. (2021). Does managing customer accounts receivable impact customer relationships, and sales performance? An empirical investigation. *Journal of Retailing and Consumer Services*, 60, 102460.



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