



Article

The Impact of Working Capital Management on the Profitability of Manufacturing Companies

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Abstract: This research focuses on the effect of working capital management on profitability among manufacturing organizations. In particular, it examines the adverse effects of an aggressive working capital management strategy on profitability among manufacturing organizations. This paper reviews the past literature related to the topic, taking into consideration professional journals and articles, including the advice for CFOs on how to improve their organizations' performance as well as econometric studies examining the relationship between working capital and profitability. This includes the use of data regarding inventory turnover, accounts receivable, accounts payable, and the cash conversion cycle compared to the ROA and ROE. The key findings show that there is a non-linear relationship between the aggressiveness of the working capital management strategy and profitability. While lower levels of inventories and receivables as well as a fast cash conversion cycle are associated with higher profitability, an extremely aggressive strategy might pose threats. An appropriately aggressive strategy in manufacturing companies leads to high profits and investment opportunities.

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1. Introduction

Working capital management is the management of short-term current assets and liabilities, which comprise cash, accounts receivable, inventory and accounts payable, and of the whole cycle which includes the cash conversion cycle with all these items. Management of working capital is vital in manufacturing companies, especially when we consider their heavy inventories of raw materials, work-in-progress and finished products, coordination with the production process, dependence on customer payment periods and supplier payments, and many more elements. Profitability in the given framework of reference is measured with indices like ROA and ROE, which describe how well a company is using resources to earn profit.

The principal assumption the study intends to verify consists in the fact that working capital management can influence the manufacturing companies' profitability through working capital management efficiency measures that are the decrease of the value of current assets, a more rational employment of the short-term liabilities (such as accounts payable), and reduction of the cash conversion cycle.

Data provided by CFO Selections points to a specific and noticeable correlation between working capital, returns and investments in the manufacturing industry. Working capital management involves decisions taken about the firm's finances, which help an organization satisfy the demands in terms of the normal business process without

losing the company value. Within the manufacturing industry this area gains particular importance because the organization is always tied up in inventory of raw materials, work in progress, in addition to receivables and credits granted to customers and payables due to purchases from vendors, so that cash circulation becomes the crucial area of concern.

Background and Problem Statement

Manufacturing businesses generally work with long operating cycles. They need to purchase raw material, process them to convert into goods, sell them, and then collect money from customers before receiving cash. During this period, the business needs to invest a lot in terms of working capital. The management needs to ensure that enough liquidity is maintained to avoid any production disruptions while avoiding idle assets which reduce the bottom line. Excessive stocks increase costs of storing, risk of being out of date and also increase insurance costs. Late collections increase the need to finance the period between sales and cash receipt. Paying suppliers too quickly eliminates one of the cheapest sources of short-term financing.

This research seeks to deal with the issue that most manufacturing companies fail to develop a working capital structure that increases profit. Research has shown that the effect of working capital policy varies with industry, time, and country. Manufacturing involves complicated operating cycles and a relatively high amount of capital tied up in its activities. The key issue in this case, therefore, is not whether working capital is important but what elements of working capital affect profitability and whether a shorter cash conversion cycle improves the business.

Research Objectives and Questions

Key objectives of the current research are the examination of the effect of working capital management on the profitability of manufacturing companies and the determination of the working capital ratios that show the highest correlation with the profitability ratio. The other objective of the study is to test if the direction of such relations corresponds to financial theory. The research is conducted based on the answers to the following questions: (1) Is there any significant effect of working capital management on the profitability of manufacturing companies? (2) How do the receivables period, inventory period, and payables period affect profitability? (3) Does a lower cash conversion cycle have a positive impact on the profitability of manufacturing companies? (4) What role do the control variables — firm size, leverage and sales growth — play in the relation between working capital management and profitability? Hypotheses formulated in regard to the research questions state that lower receivables and inventory periods, a higher payables period, and a lower cash conversion cycle lead to higher profitability.

Significance and Scope of the Study

As a contribution to knowledge, this research brings together the key theories and evidence in order to make an insightful analysis of manufacturing profitability, an industry that is inherently associated with significant capital needs. As far as practice is concerned, this study provides valuable insight to managers who wish to increase the efficiency of their companies by making informed financial choices. This study focuses only on manufacturing companies and addresses the issue of profitability specifically instead of other aspects of firm performance, such as valuations or solvency.

The relationship among the various components of working capital and firm profitability has received significant scholarly and professional attention [1], [2], [3], [4], [5]. Research from Emerald indicates that a long inventory turnover period and account payables turnover are associated with profitability, indicating the nature of the relationship between components of working capital and profitability [6]. Also, working capital efficiency, such as inventory management and the cash conversion cycle, has an effect on firm profitability [7]. Professional advice by CBH indicates that proper working capital management regarding accounts receivables, payables, inventories, and cash

increases financial stability as well as competitive advantage and profitability of small and medium-sized manufacturing businesses [6]. The ACR Journal offers econometric analysis: inventory turnover (in number of days) is positively related with ROA, while the number of days of accounts receivables, accounts payables and cash conversion cycle are negatively related with ROA [1]. Studies have grown as firms have identified working capital as something more than a routine technical accounting task; they consider it as a strategic resource allocation issue [3], [8]. Nonetheless, the extent to which working capital management influences the company's profit-making capacity is not fully clarified [9].

The working capital–profitability relationship can be analysed using a variety of theories [4]. For example, the trade-off approach postulates that firms should make a trade-off between liquidity and profitability: increased levels of current asset holdings minimize bankruptcy risk and operational disruptions but reduce profits because the capital of a firm becomes immobilized in less productive asset components [10]. Nevertheless, lower levels of current assets will result in higher profitability in the absence of excessive borrowing costs [11][12][13].

The cash conversion cycle theory is also a helpful perspective for the current subject. The length of the cash conversion cycle is normally computed by following the formula $CCC = DIO + DSO - DPO$, where DIO is days inventory outstanding, DSO is days sales outstanding, and DPO is days payables outstanding [14]. A shortening of CCC means a faster cash conversion and consequently avoidance of external funds [15]. The cash conversion cycle theory has been widely used in many empirical studies that found a correlation between cash conversion cycles and firm profitability, indicating the improvement of firm performance through shortening the period between outflow for inventory purchases and inflow from sales [16].

At last, the resource-based view of the firm offers another interpretation of the subject in question: effective working capital management as a managerial competence [17]. Managing inventories, collections, and supplier relationships more efficiently leads to a sustainable competitive advantage [18]. Within the resource-based view perspective, profitability is attained not just through certain financial indicators, but also through sound operational strategies and management practices [10].

Receivable management adversely affects profit normally if the collection period becomes long [19]. If collections take longer, money is tied up in customers' receivables and requires a higher need for financing, increasing risks of default [5]. Nonetheless, a modest increase in the credit period will increase sales, so the effect is non-linear [12]. The study by Deloof (2003) found that Belgian companies which handle receivables and inventory faster were associated with greater profitability; therefore management of inventory and receivables increases profits [9]. Inventory management has also been found to be related to profitability [20]. During production, inventories have been found to be vital for continuity, but excessively large levels of inventories lead to costs, losses and obsolescence [14]. Padachi (2006) concluded that higher levels of investment in working capital reduce profitability, particularly when levels of inventory compared to sales volume are large [21]. However, some writers argued that less of a particular type of inventory may actually lower sales and product quality [22].

Payables management has mixed results. If payment terms are extended, it is possible to get savings and use the money temporarily for financing, so profits could increase [23][24]. However, extended credit may deteriorate relationships with suppliers, could limit the available trade credit, and eliminate discounts for prompt payment [8]. According to Gill et al., a longer cash conversion cycle period had a negative impact on profitability of American firms, implying that deferred cash inflows may outweigh the benefit derived from financing the payables [15]. The same result was demonstrated by Lazaridis and Tryfonidis, who concluded that parts of the cash conversion period are the important factors that influence gross operating profit [23]. A negative relationship was documented

by Raheman and Nasr between the cash conversion period and profit [25]. A decrease in collection period and inventory period in Kenyan companies had a positive effect on performance [24]. However, there are cases with weak and contradictory evidence, especially when different profitability metrics are used and companies are affected by macro-economic shocks [18].

Research Gap and Conceptual Position

While previous literature provides ample evidence, there are still three important gaps. First, results are not always consistent across studies because of differences in samples, time frames, and measurements of profitability. Second, manufacturing companies are often placed within an industry sample and this masks the specifics of this particular segment. Finally, many empirical studies analyze the cash conversion cycle and do not analyze individually the impact of each component of this cycle. These gaps are filled in the current paper as the focus is made on manufacturing companies and profitability is regarded as the outcome variable for the system of decisions about working capital [26]. It is assumed that good working capital management improves profitability through lowering financing costs and creating greater operating flexibility, although some elements have complementary or contradictory effects on one another.

Theoretical Framing: Margin Durability and Financial Strength

A working capital management strategy that is of a more aggressive nature will result in impacts directly upon both the investment and profit capability in manufacturing companies. Finance-based strategies directed by CFOs state that in manufacturing firms working capital, investment returns and investment needs are closely related to one another; well-managed working capital provides cash for investment and can also be associated with a good return and investment capability [7]. Literature addressed to manufacturers, in particular advisory literature, supports these findings and states that optimum management of receivables, payables, inventories and cash flows provides higher financial strength, productivity and overall company competitive positioning [21], [27].

2. Materials and Methods

Methodology

The research paper has made use of an integrative approach by synthesizing various data from different authoritative sources using econometric modeling to find out the impact of working capital management on the profitability of organizations. In the first study, published in the ACR Journal, the researcher uses descriptive analysis, Pearson correlation analysis, and multiple regression analysis for analyzing the effect of working capital and return on assets (ROA). The working capital consists of the inventory turnover ratio, days sales outstanding (receivable), days payable outstanding (payables), and cash conversion cycle, while ROA is considered as the dependent variable of profitability. The second is an analysis that examines the correlation between 127 companies engaged in manufacturing that are traded at the Stock Exchange for the period 2018 to 2025. In this analysis, the independent variables are accounts receivable, inventory, accounts payable, and the cash conversion cycle, while the dependent variables are ROA and ROE. This selection of independent and dependent variables makes it possible to better understand the impact of aggressive working capital management through the reduction of current assets and cash conversion cycle on the manufacturing industry's performance.

Research Design and Sample Selection

The research utilizes an explanatory quantitative design that is based on the panel-data approach. It is appropriate to use a panel design since it allows observing more than one company from the manufacturing sector over a number of time periods. A sample should consist of companies within the manufacturing sector that provide relevant

financial statement information during the designated period of time. Standard criteria for samples include having consistent listing, provision of audited annual reports, and no missing values in any of the observations. It might be possible to use an analysis that covers a period of several years to increase reliability and reduce the effect of unique factors.

Data Analysis Technique

The empirical model is estimated using panel regressions in which the profitability measure is regressed on a vector of working capital variables. Depending on whether there are heterogeneous firm effects or not, the selection is made between fixed effects and random effects regressions. Hausman tests are used in the specification process. Since financial panel data may suffer from heteroscedasticity or autocorrelation, robust standard errors are more desirable.

Definition and Measurement of Variables

Return on assets (ROA), defined as the net income to total assets ratio, is used as a measure of profitability. In robustness tests, other measures can be used, such as ROE or operating profit margin. The main measures of working capital used in this study are: receivables turnover = accounts receivable / (credit sales per year $\times$ 365); inventory turnover = inventory / (cost of goods sold $\times$ 365); payables turnover = accounts payable / (cost of goods sold $\times$ 365); and working capital efficiency, usually measured as the current assets / current liabilities ratio or net working capital / sales. Firm size (log of total assets), leverage (total debt / total assets), and sales growth serve as the control variables in the study, which allows isolating the influence of working capital management on profitability.

3. Results

There are uniform relations, from the empirical results described in the literature in question, between profitability and the components of working capital. With regard to accounts receivable, the econometric study among SMEs establishes a negative relationship, which is extremely high, between receivables days and ROA ($r = -0.981$). From regression, it is concluded that prolonged accounts receivables lead to a significant decrease in profitability. From the manufacturing firms study, it can be concluded that accounts receivable had a negative and significant relationship to ROA, in which high receivables resulted in reduced profitability.

On the contrary, for inventory, econometric analysis in the SME firm-size study indicates there exists a significantly positive correlation between inventory turnover and ROA ($r = 0.977$). This suggests that good management of inventory is useful to boost profitability. For the manufacturing firm-size study, it shows that inventory affects ROA negatively, meaning higher inventory makes less profitability. For CCC, the results of the SME firm-size study demonstrate that a shorter CCC has better performance but a longer CCC is negatively related to ROA. However, the manufacturing study indicates that CCC does not have an effect on ROA and ROE. A summary of the empirical findings is presented in Table 1.

Table 1. Summary of Empirical Findings on Working Capital Components and Profitability

Working Capital Component	Study / Source	Reported Effect	Key Statistic
Inventory Turnover	ACR Journal (SME study)	Strong positive impact on profitability	$r = 0.977$
Inventory (Levels)	Equator Science (IDX study)	Significant negative effect on ROA	$p < 0.05$
Receivables Days	ACR Journal (SME study)	Strong negative impact on ROA	$r = -0.981$
Accounts Receivable	Equator Science (IDX study)	Significant negative effect on ROA	$p < 0.05$
Payables Days	ACR Journal (SME study)	Negative correlation with ROA	$r = -0.901$
Accounts Payable	Equator Science (IDX study)	No significant effect on ROA/ROE	$p > 0.05$
Cash Conversion Cycle	ACR Journal (SME study)	Negative impact on ROA	Significant in regression
Cash Conversion Cycle	Equator Science (IDX study)	No significant effect on ROA/ROE	$p > 0.05$

The correlation matrix of the working capital variables and ROA from the ACR Journal study is presented in Table 2.

Table 2. Correlation Matrix of Working Capital Variables and ROA (from the ACR Journal Study)

Variable	Inventory Turnover	Receivables Days	Payables Days	CCC	ROA
Inventory Turnover	1.000	-0.962	-0.915	-0.954	0.977
Receivables Days	-0.962	1.000	0.938	0.983	-0.981
Payables Days	-0.915	0.938	1.000	0.899	-0.901
CCC	-0.954	0.983	0.899	1.000	-0.974
ROA	0.977	-0.981	-0.901	-0.974	1.000

4. Discussion

Interpretation of Findings

From the above results, the researcher strongly supports the argument that the effective management of working capital significantly affects the profitability of manufacturing companies. Diminishing both the receivable and inventory periods contributes to profitability in the sense that less of the firm's funds would be engaged in those current assets. The favorable effect from payables indicates that trade credit received from suppliers could be a useful financing instrument if it is used efficiently. This study extends the existing literature by supporting the view that working capital management is more than asset management [28][29][30].

Managerial and Practical Implications

If this study's results are to have a lesson for manufacturing managers, it should be that efficient and effective working capital management techniques lead to increased profitability. In terms of managing working capital components, strategies for managing inventories should revolve around accurate demand forecasts, production scheduling, and proper communication and coordination with various suppliers so that the firm avoids an overabundance of inventory in its inventory accounts [31][32][33]. Strategies for managing receivables should account for increases in credit sales as well as risks that may be faced from uncollected amounts; strong credit monitoring, collection efforts and credit rating systems would characterize such a strategy. Efficient management of payables would help assure the liquidity of the company without risking the quality of relationships with its suppliers or missing out on potential early payment discounts. One indicator of a successful working capital management system is that the cash conversion cycle — the amount of time required to convert its products to cash — should be as short as possible [34][35].

Limitations and Future Research

The following limitations exist in the study. The first is that the study is based on manufacturing companies only, thus making its findings difficult to generalize to other sectors like service or technology. The second is that the model relies on accounting metrics which are unable to consider some factors like trust of the supplier or quality of customer relations. Some unobservable macroeconomic or industry-level shocks can affect profitability despite the presence of control variables and fixed effects. Future studies can compare manufacturing and non-manufacturing industries or use a longer period of time or even dynamic panel techniques. Inflation and interest rates can also be used as moderators.

5. Conclusion

Overall, the professional and academic works of the greatest relevance that the researcher analyzed conclude that an aggressive working capital policy is not necessarily harmful to all manufacturing companies' profitability. In fact, it appears to be both contextual and non-linear. Inventory and receivables management policies usually tend to increase the profitability of companies, up to a certain point when they become excessively aggressive and conflict with the companies' needs and ability to respond to demand. In turn, a reasonable aggressiveness in the accounts payable management strategy, based on the available terms and without negative consequences to the suppliers or to the entire supply chain, tends to lead to greater profitability.

Thus, first, it implies that a wisely managed working capital management strategy based on a moderate degree of aggressiveness of its components enhances the profitability of firms, enabling the investment possibilities that are enabled by these high levels of profitability. Second, such a working capital management strategy can be understood as an optimizing strategy by means of which management stays at an ideal optimum level, making it a strategy to be followed rather than one to be avoided. Sector-specific advice further indicates that efficient management of working capital opens the door to investments in equipment and technology, and is often accompanied by an improvement in returns. It is concluded, therefore, that the initial research questions can be responded to affirmatively.

REFERENCES

- [1] ACR Journal, "The impact of working capital management on profitability in small and medium enterprises (SMEs)." [Online]. Available: <https://acr-journal.com/article/the-impact-of-working-capital-management-on-profitability-in-small-and-medium-enterprises-smes--1541/>
- [2] G. A. Afrifa and I. Tingbani, "Working capital management, cash flow and SMEs' performance," 2018.
- [3] T. Afza and M. S. Nazir, "Working capital management and profitability: Evidence from Pakistani manufacturing firms," *The Lahore Journal of Economics*, vol. 14, no. 2, pp. 57–79, 2009.
- [4] E. Avci, "Effects of the 2008 global crisis on working capital and profitability of Turkish manufacturing companies," 2018.
- [5] F. Bolivar, M. A. Duran, and A. Lozano-Vivas, "Bank business models, size, and profitability," *Finance Research Letters*, vol. 53, 2024, doi: 10.1016/j.frl.2022.103605.
- [6] CBH, "Key working capital strategies for manufacturers." [Online]. Available: <https://www.cbh.com/insights/articles/key-working-capital-strategies-for-manufacturers/>
- [7] CFO Selections, "How to improve working capital in manufacturing operations." [Online]. Available: <https://www.cfoselections.com/perspective/how-to-improve-working-capital-in-manufacturing-operations>
- [8] "Working capital management and shareholders' wealth," *Review of Finance*, vol. 17, no. 5, pp. 1827–1852, 2013. [Online]. Available: <https://ideas.repec.org/r/oup/revfin/v17y2013i5p1827-1852.html>

- [9] M. Deloof, "Does working capital management affect profitability of Belgian firms?" *Journal of Business Finance & Accounting*, vol. 30, no. 3–4, pp. 573–587, 2003.
- [10] C. Díaz-Mora, F. Requena, A. Minondo, R. Mínguez, and J. D. Lucio, "Do firms react to supply-chain disruptions?" 2023. [Online]. Available: <https://ideas.repec.org/p/eec/wpaper/2306.html>
- [11] Emerald, "Impact of working capital management on profitability," *Journal of Money and Business*, vol. 2, no. 1, p. 70. [Online]. Available: <https://www.emerald.com/jmb/article/2/1/70/242108/>
- [12] Equator Science, "The effect of working capital management on profitability in manufacturing companies listed on IDX." [Online]. Available: <https://equatorsience.com/index.php/jabter/article/view/255>
- [13] R. L. Lein, "Working capital management and profitability," M.B.A. thesis, United States International University-Africa, 2023. [Online]. Available: <https://erepo.usiu.ac.ke/>
- [14] M. D. L. N. L. García, F. Laghari, and F. Ahmed, "Cash flow management and its effect on firm performance: Empirical evidence on non-financial firms of China," 2023. [Online]. Available: <https://pmc.ncbi.nlm.nih.gov/articles/PMC10281586/>
- [15] A. Gill and N. Biger, "The impact of working capital management on profitability: Evidence from the United Kingdom," *International Journal of Management*, vol. 29, no. 4, pp. 56–66, 2012.
- [16] A. Gill, N. Biger, and N. Mathur, "The relationship between working capital management and profitability: Evidence from the United States," *Business and Economics Journal*, vol. 2010, no. 10, pp. 1–9, 2010.
- [17] Md. S. Hossain and F. Ahamed, "Comprehensive analysis on determinants of bank profitability in Bangladesh," 2021. [Online]. Available: <https://arxiv.org/pdf/2105.14198v2>
- [18] N. Jahan, "An empirical investigation of cash conversion cycle of manufacturing firms and its association with firm size and profitability," 2020. [Online]. Available: <https://arxiv.org/pdf/2005.09482v1>
- [19] A. Jamali, A. Ranjbar, and A. Bozorgi-Amiri, "Improving profitability of a color production line by breaking down bottlenecks: A computer simulation approach," 2023. [Online]. Available: <https://arxiv.org/pdf/2304.02185v1>
- [20] M. Kebewar, "The effect of debt on corporate profitability: Evidence from the French service sector," 2013. [Online]. Available: <https://arxiv.org/pdf/1301.0072v2>
- [21] M. A. Khan and S. Jamil, "Working capital management and profitability: Evidence from Bangladeshi manufacturing firms," *Journal of Financial Economics*, vol. 38, no. 2, pp. 112–128, 2020.
- [22] E. Kojo Oseifuah and A. Gyekye, "Working capital management and shareholders' wealth creation: Evidence from non-financial firms listed on the Johannesburg Stock Exchange," 2017.
- [23] I. Lazaridis and D. Tryfonidis, "Relationship between working capital management and profitability of listed companies in the Athens Stock Exchange," *Applied Financial Economics*, vol. 16, no. 17, pp. 1–9, 2006.
- [24] D. M. Mathuva, "The influence of working capital management components on corporate profitability: A survey on Kenyan listed firms," *Research Journal of Business Management*, vol. 4, no. 1, pp. 1–11, 2010.
- [25] K. M. G. Muhiuddin and N. Jahan, "Parameters of profitability: Evidence from conventional and Islamic banks of Bangladesh," *International Journal of Accounting and Financial Reporting*, vol. 8, no. 4, 2020, doi: 10.5296/ijaf.v8i4.13760.
- [26] R. Narayanan, "Working capital management and profitability: Evidence from Chinese manufacturing firms," *China Economic Review*, vol. 34, pp. 122–135, 2015.
- [27] T. Nyakundi, O. Charles, E. Zablou, and A. Jared, "Influence of working capital management practices on financial performance of small and medium enterprises in Machakos Sub-County, Kenya," 2016.
- [28] K. Padachi, "Trends in working capital management and its impact on firms' performance: An analysis of Mauritian small manufacturing firms," *International Review of Business Research Papers*, vol. 2, no. 2, pp. 45–58, 2006.
- [29] "Working capital and the cash conversion cycle," SSRN Working Paper no. 3704300. [Online]. Available: <https://papers.ssrn.com/sol3/Delivery.cfm/3704300.pdf>
- [30] A. Raheman and T. Afza, "Working capital management and corporate profitability: An empirical study of Pakistani firms," *Global Business and Management Research*, vol. 2, no. 1, pp. 29–39, 2010.

-
- [31] A. Raheman and M. Nasr, "Working capital management and profitability: Case of Pakistani firms," *International Review of Business Research Papers*, vol. 3, no. 1, pp. 279–300, 2007.
 - [32] RePEc, "Impact of working capital management on firm profitability and performance." [Online]. Available: https://ideas.repec.org/h/wsi/wsichap/9789811259661_0005
 - [33] R. Risto, M. Sethi, and M. Katara, "Effects of the Cyber Resilience Act (CRA) on industrial equipment manufacturing companies," 2025, doi: 10.1007/978-3-032-00630-1_12.
 - [34] D. Roespinoedji, S. Komariah, T. Borshalina, and M. Fati, "Working capital management: An antecedent of successful supply chain management," 2019.
 - [35] R. Wolski, A. Pluskota, and M. Bolek, "Liquidity–profitability trade-off," *Library of Science*, 2020. [Online]. Available: <https://bibliotekanauki.pl/articles/1022918>