The Impact of Working Capital Management on Future Profitability in Japanese Companies

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Abstract

Working capital management is a very important element of financial management because many firms require large amounts of cash for working capital and hold large amounts of short-term debt as a source of financing. The Cash Conversion Cycle is the time lag between the expenditure for the purchases of raw materials and the collection of sales of finished goods. It can be obtained by adding the number of days inventories to number of days accounts receivable and subtracting number of days accounts payable. What is the relationship between working capital management and profitability? In other words, does the profitability of a firm increase the more efficiently it manages its working capital? One of the factors that may affect the profitability of working capital management is that working capital management is efficient when inventories are sold quickly, leaving the firm with a large amount of cash. In such a situation, the company can use the cash to purchase and sell more profitable products and services. Studies that have demonstrated whether CCC and its components increase profitability have found that CCC has a negative impact on profitability. However, the results are not consistent, with half of the previous studies showing a positive impact of number of days accounts payable on profitability and the other half showing a negative impact. In addition, with the exception of one study, the validity of the results in other previous studies remains problematic due to small sample sizes. Furthermore, previous studies have examined the relationship between CCC and profitability in the same period, and it is not clear which is the result, and which is the cause. The purpose of this study is to determine how firms' working capital management affects their profitability. Specifically, we examine the relationship between working capital management in period t and profitability in period t+1 using data from 20,236 (firms/year) firms listed on the Tokyo Stock Exchange. Regression analysis of working capital management in period t and profitability in period t+1 shows that CCC, number of days accounts receivable, and number of days inventories are statistically significant for profitability in period t+1. However, number of days accounts payable is not statistically significant. Therefore, in order to shorten CCC and increase profitability, it is better to shorten number of days inventories and number of days accounts receivable.

Keywords
Cash Conversion Cycle, number of days inventories, number of days accounts receivable, number of days accounts payable

Biographies
Koshiro Shiba is a graduate student of the Department of Industrial Engineering and Management at Kanagawa University, Japan.

Ayuko Komura assisted the Department of Industrial Engineering and Management at Kanagawa University, Japan. Her research topics include operating profit stability and management controls. She earned her Master's degree in business administration at Meiji University. She received a fellowship from the Japan Society for the Promotion of Science between 2017 and 2019.

Hirohisa Hirai is a professor in the Department of Industrial Engineering and Management at Kanagawa University, Japan. He earned his Ph.D. in Engineering at Osaka University. His research is an empirical study of management accounting, firm analysis, and applied statistics, particularly firm valuation. He received awards from several academic societies in accounting and management.