Working Capital Management and Firms’ Profitability in the Midst of an Economic Crisis

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ABSTRACT

The purpose of this article is to identify the relationship between working capital management and corporate performance in adverse economic circumstances. The results show positive relationship between profitability and cash conversion cycle, firm’s size, growth and leverage and negative relationship between profitability and components of cash conversion cycle. Analysing the impact of the crisis it can observe that the companies can increase their profitability by reducing the period of credit granted to customers. The significance of this study stems from the fact that it sheds light for the desirable firms’ policy during the period of financial constraints. Prior research on this subject has looked into various issues related to the linkage between working capital management and profitability, however, none has examined what this relationship looks like following a prolonged economic crisis.

KEYWORDS
Crisis, Greece, Pharmaceutical Industry, Profitability, Working Capital

1. INTRODUCTION

In the last years working capital management has become the integral part of companies’ financial management. Decisions on working capital management are not made on the same basis as long-term financial decisions. Working capital planning and control attempts trade-offs between liquidity and profitability. In other words, the basic objective of the working capital management is to maintain a balance between the company’s security (financial liquidity) and the profitability of operations. Four basic elements of working capital management can be distinguished: 1) Cash management - company should keep the amount of cash that allows timely payment of liabilities, but should also not keep excess cash, which can be used, for example, for investments, 2) Inventory management - it is necessary to maintain the level of inventories allowing for smooth production and satisfying the demand for products, but at the same time, the costs of orders, transport or storage should be minimized, 3) Receivables management - this element of management consists company’s credit policy which on the one hand should increase demand, but on the other hand, minimize the impact of extended payment terms, 4) Short-term debt management - company should choose the structure of short-term financing sources (including, among others, credit lines, trade credits, factoring), which will enable minimization of debt servicing costs. This structure must also ensure the safety of financial liquidity.

The economic crisis of the last years has affected businesses in Greece changing a smooth business and financial environment to an environment of strong economic volatility and pressure.

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(Ganas and Hyz, 2015). The deep economic crisis that hit Greece is reflected, inter alia, in the main macroeconomic ratios, like Gross Domestic Product and unemployment and some indicators of the banking sector, like deposits, total loans and non-performing loans (NPLs). Greece is characterized today by borrowing problems, high public debt, serious lack of competitiveness, unsustainable social security system, particularly poor public administration and a large and wasteful public sector. Even though the other countries return to the before crisis levels increasing jobs and value added, reducing unemployment etc, Greece still faces problems. Economic crisis decreased firms’ profitability and increased needs in finding ways to gain funds.

The Greek pharmaceutical industry is one of the leading industries in Greece. Its total impact on Gross Domestic Product is estimated at 7.5 billion euros in 2013 (i.e., about 3.5% of Greek GDP). The economic impact is important also in terms of employment, with an overall impact of more than 132,000 jobs. With investment per employee nine times the corresponding figure for total manufacturing, the industry tops European rankings. Also, the pharmaceutical industry ranks fourth in exports, after refined petroleum products, precious and other non-ferrous metals, and wearing apparel and accessories.

Over the years, many studies have been done about the proper management of working capital and how it affects business profitability. Comparing the results of previous research we can observe significant differences in the way in which management of working capital, expressed by the cash conversion cycle and its components influence firm’s profitability. The aim of our study is to examine the relationship between working capital management and the profitability using as an example pharmaceutical companies in Greece for the decade 2005-2014. In the study we divide this period into two sub periods: before crisis and after crisis. We investigate what the management of working capital look like, following six years of economic recession, high unemployment and socio-political upheaval, characterizing Greece, since 2008 and if there are any changes in the relationship between working capital management and companies’ profitability in the midst of an economic crisis.

The paper is organized as follows: in the next section we briefly review the literature on the subject. In section three we present the research methodology and the data sources used in the analysis. The results are presented and discussed in section four. In the last section, we present conclusions and directions for further research.

2. BACKGROUND

There is a vast literature describing different aspects of the management of working capital. Singh and Kumar (2014) in their review included 126 articles from referred journal and international conferences published on working capital management. A large number of scholars focused on the impact of working capital on profitability of firm and working capital practices. Deloof (2003) used sample of 1009 large Belgian non-financial enterprises for the period 1992-1996 and found that managers can increase corporate profitability by reducing the days inventory and sales outstanding. He showed also that less profitable firms wait longer to pay their bills. Lazaridis and Tryfonidis (2007) used a sample of listed in the Greek Stock Exchange companies. They showed that managers can generate profits for their businesses properly handling the cash conversion cycle and keeping accounts receivables, inventories and liabilities at optimal levels. Gill et al. (2010) used a sample of 88 American companies listed on the New York Stock Exchange for a period 2005- 2007. They found a statistically significant relationship between the cash conversion cycle and profitability measuring by the gross operating profit. They concluded that managers can generate profits for their business from the proper level of the cash conversion cycle and keeping accounts receivable collection period at optimal level. Garcia-Teruel and Martinez-Solano (2007) used as a sample 8872 Spanish SMEs for the period 1996-2002. According to their research there is a significant negative relationship between profitability, accounts receivable collection period and days inventories outstanding. SMEs should be interested in the management of working capital and can create value by reducing the cash conversion cycle to a minimum reasonable