

## Chapter 2

# Strategic Data–Based Optimization of Working Capital Management in Medium–Sized Firms: A Real–World Case Study

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### ABSTRACT

*The chapter explores whether and to what extent a systemic approach to optimal management of working capital stemming from database wisdom exists in medium enterprises in Serbia as a transition economy. The chapter portrays the level of optimization of all key components of working capital management and addresses indispensable strategic directions for Serbian entrepreneurs and managers that could have broader application in transition context. Ultimately, the chapter explores how to achieve better and more effective results in the development of medium enterprises by optimizing database wisdom for working capital management. As a research paper, the chapter reviews the experiences from Serbia and compares them with achievements in other transition and more advanced economies. In a case study undertaken in Serbia with semi-structured interviews in medium-sized enterprises, the author examines the specific preconditions for increasing the current perceived inefficient use of working capital and extend for discussion an optimization model based on tested hypotheses.*

### INTRODUCTION

The central approach of the chapter is to detect working capital management (herein after: WCM) determinants and factors in the context of database wisdom in medium enterprises in the Serbian context when compared to both transition and

developed economies. As a secondary focus, it is expected that the research will reveal maneuvering space for applying normal WCM models applied in large enterprises whose corporate social responsibility fails to recognize that supporting medium enterprises is in the function of both large and small firm growth.

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## BACKGROUND ON THEORIES OF WORKING CAPITAL MANAGEMENT

In the second half of the twentieth century application of scientific methods of explicative analysis of individual WCM database wisdom factors in enterprises has begun more actively. The classification of these methods can be surely performed in a variety of ways, and using a number of different principles. One approach would be to use different portfolio models to determine how the company planned working capital for operational supply chain decisions. This is discussed and examined by authors such as KPMG International Cooperative [KPMG], (2012) and Shapiro (2001). Other notable researchers discussed if it has several products that are introduced to the market, how it carries out the allocation of resources at the strategic level for product positioning and how decisions are made to determine the strategic business units in conditions of limited working capital Neubauer (1991).

Related to optimization is a method based on optimal individual financial policies, such as borrowing and investing own resources or reinvesting profit as observed by eminent Knight (1972). The next possible avenue could be to explicatively use one form of a SWOT analysis (strengths, weaknesses, opportunities, threats) with assumptions, capabilities, future goals and current strategy

for competitor analysis with which an enterprise can actually balance the business sustainably and optimize business behavior in relation to the features and condition of the environment Porter (1998, pp. 47-74).

Finally, in a holistic approach which is closest to our research and philosophy, integration of all WCM components within a cash-to-cash cycle is advocated as used in more recent annual working capital survey of top companies (CFO magazine/REL Working Capital Scorecard [CFO], 2013; CFO 2014). A somewhat broader literature review on the subject matter of this chapter is also summarized in Table 1.

More detailed classification involving internal and external WCM factors with a subdivision on micro and macro level database wisdom will be explored further in some of our next research papers.

## MAIN FOCUS OF STRATEGIC DATA-BASED OPTIMIZATION OF WORKING CAPITAL FOR MEDIUM-SIZED FIRMS

Using the target group of 62 medium enterprises from Serbia the chapter will analyze, elaborate data-based wisdom for management of working capital leading towards optimization of this aspect

Table 1. Broader literature review

Research Categories	Most Significant Authors
Enterprise capital structure	Modigliani & Miller (1958,1963); Knight (1972); Kraus & Litzenberger (1973); Ross (1977); Bradley, Jarrell, & Kim (1984); Majluf (1984); Jensen (1986); Masulis (1988); Wessels, Titman, Stulz (1990); Harris & Raviv (1991); Berger & Udell (1994, 1998); Leland (1994); Fluck (1998); Miller (1998); Myers (1977, 2001); Westphalen (2002); Frank & Goyal (2006);
Integration of receivables and inventories	(Beranek, 1963); (Shapiro, 1973, 2001); (Bierman, Chopra, & Thomas, 1975); (Sartoris et al., 1983); CFO scoreboard 2007,2013, 2014.
Integration of inventories and payables	(G. Hadley, 1964); (Beranek, 1967); (Haley & Higgins, 1973), CFO scoreboard 2013 & 2014.
Integration of all WCM components	(Damon & Schramm, 1972); (Baker & Damon, 1977); (Crum et al., 1983); (Thompson, 1986); (Kim & Chung, 1990) KPMG (2012); Aberdeen Group (2008); Danske Bank & Ernst & Young, 2009, 2013.

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