Value-Based Working Capital Management Determining Liquid Asset Levels in Entrepreneurial Environments

Habilitation Thesis

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Report

The issues analysed in the habilitation thesis relate to interesting areas of finance related to firms' behaviour and can be useful in helping protect firms against bankruptcy. It is also linked to behavioural changes brought about by the economic and financial crisis. In addition, during such a crisis bankruptcies tend to increase and thus the work can have a beneficial impact in helping firms avoid bankruptcy and thus limit the damage done to the economy during an crisis.

The habilitation thesis consists of four chapters. It primarily focuses on working capital and liquidity management. Working capital is viewed as a buffer against risk, and it is argued, has a special role during a crisis. Much of the thesis concentrates on both developing theoretical aspects and their practical implications and secondly on examining trends both before, during and after the recent economic crisis.

Chapter 1 discusses the objectives and nature of the enterprises focusing on their risk sensitivity and the relationships between managerial objectives and the characteristics of the enterprise. The argument is made that the business's individual characteristics influence its risk sensitivity and this has consequences for the level of working capital. It is argued that risk sensitivity has grown in the crisis period something which is reflected in the levels of working capital investment relative to total assets that we now see. It is further argued that inventories' investment in relation to total assets and levels of cash investment relative to total assets can serve as a forecasting tool with respect to the economy as a whole. *This is a nice idea which could be developed further in future work*. The empirical work in this chapter is based on data from manufacturing firms operating in the Czech Republic, Poland and Slovakia relating to more than 2820 manufacturing firms. The data covers the period 2004-2012, which the author divides into three intervals: 2004-2006, 2007-2009 and 2010-2012. These are categorised as before the crisis, during the crisis and after the crisis respectively.

Chapter 2 presents financial liquidity definitions and measures of liquidity levels. It comprises four subchapters which relate to (i) the specific role of short term financial decisions, (ii) a classification of financial liquidity definitions, (iii) sources of information about liquidity level and (iv) aspects related to measuring liquidity levels. In doing this the chapter critical reviews fairly standard measures of solvency, flexibility and liquidity. In addition, the author claims that the work in this chapter is the 'first known attempt at implementation of the actual Nita's synthetic liquidity meter' and also that it presents original work in using the Lambda liquidity ratio to assess enterprise liquidity. In both of these senses it is making an original contribution to the literature. The empirical work is based on the Osiris and Amadeus databases and further datasets developed from a National Research Center project.

Chapter 3 discusses intrinsic and external values of liquidity. The concepts discussed include: net working capital, the cash conversion cycle and strategies of net working capital management and their role in firm value creation. They form the basis for the optimal management of net working capital. An interesting part of the thesis relates to the discussion that maximizing the value of enterprises is, or at least should be, done in relation to risk sensitivity, reflected by the interest cost of capital. The analysis thus has relevance for the issue of the target level of liquidity in an enterprise. The argument is then made that businesses have a higher level of risk sensitivity compared to the start of the crisis. As a consequence working capital levels during the crisis time were larger than before the crisis time. This therefore affects the growth of the enterprise and by implication the economy. There is here the potential for the author to build upon this in subsequent work by discussing the wider economic implications of this in more detail. Can it, e.g., be having an impact on the economic recovery from the crisis?

Chapter 4 is about working capital components management. It discusses inventory management and its influence on a firm's value and value creation. In doing this it examines in more depth the practical implications of the arguments and analysis that were developed in Chapter 3. It contains a number or original proposals. For example, the author proposes modifying the choice of the optimal trade credit granting policy from the perspective of maximizing the value of the enterprise. It expands on this by showing how to calculate the impact of this, and other, decisions on the value of the enterprise. This perspective is also applied to cash management and contains the author's suggestion for an algorithm to select the cash management model based on a forecast relationship between inflows and outflows of cash.

The basic argument that business perceptions of risk have been changed by the economic crisis is surely right, although there must be questions as to how permanent a change this will prove to be. The further argument that inventory and cash management strategies should be adjusted to take account of perceived risk is also a correct one. The thesis therefore makes a contribution to the literature, primarily the financial management literature. In addition this work can be built upon in the future. Data is presented for Slovakia, the Czech Republic and Poland in particular. There are substantial differences between these, sometimes just one being greater or less than another, but sometimes with them actually moving in different directions. Does this signal a different attitude to risk in these countries and if so is it in part based on institutional factors?

There are certain things which could be improved, particularly before it is published, as the author indicates it will be. Figures, such as Figure 1.8 should be self-explanatory, but they are not. In part this relates to poor labelling. The various tables refer to countries, such as Estonia and Bulgaria, as Central European when in reality they are not. The references at the end are not written in accordance with the usual format. Finally, I have indicated in this report ways in which the work could be expanded. In addition to those suggestions, the role of income and other taxes on the analysis could be expanded upon in more detail.

QUESTIONS

I have the following three questions I would like answered.

1. In Figure 2.2, relating to Central European quick liquidity ratio (WPP) levels before the crisis (2003-2006), during the crisis (2007-2009) and after the crisis (2010-2012). Why are the trends for Slovakia so different for the Czech Republic and Poland both before the crisis and after it? With respect to Slovakia is this a good thing or a bad one? Why two were these curves rising for the other two countries before the crisis? Was this a sign of changing risk perceptions or simply the evolution of markets to long-term equilibria? Did the author explore more what was happening in Western Europe?

2. Why call the period 2010-12, the post-crisis period? Do you believe this is a time of normality equivalent to the period 2004-6? And why do you date the crisis from 2007, rather than 2008 which is the date of the Lehman's Brothers closure. Linked to this, the argument is made that businesses have a higher level of risk sensitivity compared to the start of the crisis. Is this a permanent change or does the author think that attitudes to risk will gradually change back to their pre-crisis level?

3. Does the author think that the development of IT and the Internet, which facilitates communication between firms, will have any impact on the issues analysed in the habilitation thesis? In addition, the argument has been developed with respect to manufacturing. Are there any implications for service and primary industries? [For example primary industries often supply manufacturing and retail shops of course have substantial inventories, although IT is changing the nature of shopping].

CONLUSIONS

However, overall the habilitation thesis meets the necessary substantive and procedural requirements. Mgr. Grzegorz Mikulski, PhD. has demonstrated that he has considerable knowledge and skills in the area of finance. Thus I recommend that the habilitation be proceeded with and that following a successful defence, the candidate be awarded the title of associate professor – docent - in the fields of study 3.3.6. Finance, banking and investment.

Done in Banská Bystrica,
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