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THE INTERACTION EFFECTS OF WORKING CAPITAL MANAGEMENT ON THE RELATIONSHIP BETWEEN KEY DETERMINANTS OF WORKING CAPITAL AND FIRM PERFORMANCE

By

CHOONG YUEN LENG

Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
in Partial Fulfillment of the Requirement for the Doctor of Business Administration
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ABSTRACT

The current global economy uncertainties have led to the reduction in the accessibility to trade credit facilities imposed on firms by banks and financial institutions. Critically, firms are keen to look internally to working capital management as a key source of finance. Among the main goal of this research is to evaluate the moderating role of the working capital management on the relationship between key determinants of working capital and firm performance. The population for this study covers manufacturing firms listed on the main market of Bursa Malaysia Securities Berhad. This study covers eleven sectors classification based on the criteria established by Malaysia Investment Development Authority. All data is extracted from Bloomberg database. The multivariate analysis of this study is carried out using Statistical Package for the Social Sciences in order to test the hypotheses. The findings have shown that the relationship between key determinants of working capital and firm performance are moderated by working capital management and they form a contemporary working capital management model. Likewise, days sales outstanding and net liquid balance serves as alternative measures of a firm efficiency and liquidity position. Also, it was found that working capital requirements moderate all the relationships between the key determinants of working capital and firm performance. Except for firm size, it was also found that net liquid balance moderates the relationships between the key determinants of working capital and firm performance. This study concludes that the interaction effects of working capital management in listed manufacturing firms as modifying either the strength or direction of relationships between predictors and criterion. Therefore, it provides a comprehensive research framework for listed manufacturing firms to gain competitive advantage in terms of operational analysis, resource management and profitability.

Keywords: working capital management, working capital requirements, net liquid balance

Kata kunci: pengurusan modal kerja, keperluan modal kerja, baki kecairan bersih
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In memory of two persons who passed away during my DBA journey, Messrs. Lee See Lon @ Lee Bee Lon (1949-2015) and Dr.S.Shanmugam M.D. (1949-2016). For both of them who were never meant for this world, it is unselfish to confess their souls suddenly having a hard time leaving it. Of course, they say every atom in our bodies was once part of a star. Maybe they are not leaving... maybe they are going home instead (Adapted from Gattaca quotes, 1997).

I would like to thank all the academic and administrative staffs (past and present) of UUMKL for their untiring and unreservedly patience and compassion with me during my DBA journey (2012-2016). To all my classmates, especially Messrs. Dr. Ahmad Fiaza Bin Abdul Shukor, Dr. Normala A/P S. Govindarajo, Dr. M. Saravananbavan and my VUMBA classmate Ms. Sara Ooi Bee Soo, you guys have inspired me to complete this DBA journey and will always be part of me. Lastly, special thanks to my family members and siblings for their invaluable support and encouragement during this fruitful journey!
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<tr>
<td>A</td>
<td>Age</td>
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<tr>
<td>ACP</td>
<td>Average collection period</td>
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<tr>
<td>AFC</td>
<td>Asian financial crisis</td>
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<tr>
<td>AR</td>
<td>Accounts receivable</td>
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<tr>
<td>AP</td>
<td>Accounts payable</td>
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<td>BMSB</td>
<td>Bursa Malaysia Securities Berhad</td>
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<td>BS</td>
<td>Balance sheet</td>
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<tr>
<td>C</td>
<td>Cash and short-term marketable securities</td>
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<td>CA</td>
<td>Current assets</td>
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<td>CAPM</td>
<td>Capital asset pricing model</td>
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<td>CCC</td>
<td>Cash conversion cycle</td>
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<td>CF</td>
<td>Cash flow</td>
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<td>CL</td>
<td>Current liabilities</td>
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<td>Configurational theory</td>
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<td>DPO</td>
<td>Days payable outstanding</td>
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<tr>
<td>DSO</td>
<td>Days sales outstanding</td>
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<td>EBITA</td>
<td>Earnings before interest, tax and amortization</td>
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<td>GDP</td>
<td>Gross domestic product</td>
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<td>Global financial crisis</td>
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GOI  Gross operating income
GOP  Gross operating profit
GWC  Gross working capital
HMR  Hierarchical multiple regression
HHB  Hexagon Holdings Berhad
ICAEW The institute of Chartered Accountants England and Wales
INV  Inventories
ITO  Inventory turnover ratio
LV   Leverage
MIDA Malaysian Investment Development Authority
MR   Multiple regression
NA   Short term net accrual
NLB  Net liquid balance
NOP  Net operating profit
NTC  Net trade cycle
NWC  Net working capital
OC   Operating cycle
OCF  Operating cash flow
OLS  Ordinary least square
PN   Practice note
PLS-SEM Partial least square – structural equation modeling
PWC  Price Waterhouse Coopers
ROA  Return on assets

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<td>ROE</td>
<td>Return on equity</td>
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<tr>
<td>ROS</td>
<td>Return on sales</td>
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<td>S</td>
<td>Size</td>
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<td>SG</td>
<td>Sales growth</td>
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<td>SME</td>
<td>Small and medium enterprise</td>
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<td>SPSS</td>
<td>Statistical package social sciences</td>
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<tr>
<td>STB</td>
<td>Short term borrowings</td>
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<tr>
<td>WACC</td>
<td>Weighted average cost of capital</td>
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<td>WC</td>
<td>Working capital</td>
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<td>WCM</td>
<td>Working capital management</td>
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<td>Working capital requirements</td>
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<td>WW</td>
<td>World war</td>
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<td>UK</td>
<td>United Kingdom</td>
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<td>VIF</td>
<td>Variance inflation factor</td>
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CHAPTER 1

INTRODUCTION

1.1 Introduction

Firstly this chapter starts by capturing the background of this study in terms of the evolution of working capital management (WCM), the contemporary understanding of WCM, the importance of WCM, WCM in non-crisis period, and finally WCM influence on Malaysia manufacturing industry. It is then followed by problem statement, research questions, and research objectives respectively. Subsequently, it presents the scope and limitations of the study, definition of key terms and organization of the thesis.

1.2 Background of the Study

1.2.1 The evolution of working capital management (WCM)

The concept of working capital (WC) was probably first coined by Karl Marx (1818-1883), even though it was used at that time to describe a different meaning (Bhattacharya, 2009). In its infancy, WC was termed as ‘variable capital’ in order to describe payment of wages advanced to workers prior to the goods/products ‘work-in-progress’ completion (Bhattacharya, 2009; Lukkari, 2011). Later, the concept of WC was further developed as a firm ‘safe deposit’ to ensure that a firm was able to
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REFERENCES


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