

Working Capital Management of Small and Medium-Sized Enterprises (SMEs) in Accra, Ghana: The Perspective of Owner Managers' Behavioral Biases

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Doctor of Philosophy 2023

# Working Capital Management of Small and Medium-Sized Enterprises (SMEs) in Accra, Ghana: The Perspective of Owner Managers' Behavioral Biases

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## A thesis submitted

In fulfillment of the requirements for the degree of Doctor of Philosophy

(Finance)

Faculty of Economics and Business
UNIVERSITI MALAYSIA SARAWAK
2023

## **DECLARATION**

I declare that the work in this thesis was carried out in accordance with the regulations of
Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the
work is that of the author alone. The thesis has not been accepted for any degree and is not
concurrently submitted in candidature of any other degree.

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## ACKNOWLEDGEMENT

I owe a debt of my gratitude to Almighty God and Our Lord Jesus Christ whose grace and providence sustained my life and endowed me with the knowledge for a successful academic career. Special appreciation goes to my supervisor Dr. Asri Bin Marsidi for his supervision and motivation throughout the study period at UNIMAS. Your valuable contributions have made this thesis possible.

My sincere thanks and appreciation go to members of the Church of Christ, Kuching for their prayers and support. I also express my profound gratitude to the leadership of the Church of Christ, Kaneshie for their encouragement and diverse support. Special thanks go to Elder Douglas Boateng, Elder; Kissi Adofo, Lydia Naa Abia Lamptey; Ibrahim Lamptey, Francis Nti; Brother James Kofi Anani, Daniel Ekrah; Mr. and Mrs. Eric Asare, Mr. and Mrs. Akuamoah; Mr. and Mrs. Okoh Addo and all brethren for their diverse support.

I especially thank my family for their prayers. Finally, I sincerely appreciate the effort and assistance of my friends: Wei Quay Kwang, Dr. Anjad Khan, and Daniel Amoo-Nelson.

## **ABSTRACT**

This thesis aims to investigate the working capital management of Small and Medium-Sized Enterprises (SMEs) in Accra, Ghana from the perspective of owner managers' behavioral biases. Knowledge about behavioral biases in working capital management has lagged despite the fact that most Small and Medium Enterprises (SMEs) managers who employed a subjective approach to working capital management may expose themselves to overconfidence, Loss aversion, anchoring, and adjustment biases. To address this concern, this thesis employed qualitative designs and obtained textual data through telephone interviews with thirty-five (35) SME owner-managers to obtain their perspective on these biases by exploring the basic assumptions of overconfidence theories (Better- than average effect; the illusion of control and excessive optimism and over the precision of knowledge), Loss aversion theory and anchoring and adjustment theory. Based on the thematic data analysis, this study finds support that SMEs owner-managers exhibit overconfidence, loss aversion, anchoring, and adjustment, influencing working capital management. Specifically, the results suggest that overconfident SME owner-managers believe that they possess superior financial ability, perfect industry knowledge and are optimistic about business success and wish to overinvest in working capital inventory if they have enough internal funds. Furthermore, the finding suggested that loss-averse SME owner-managers exhibited the fear of loss and costs disposition effects to the extent that highly loss-averse SMEs owner managers tend to underinvest in working capital inventory while low loss-averse SMEs managers tend to overinvest in working capital inventory. In terms of anchoring and adjustment bias, the results show that managers rely heavily on mental shortcuts or heuristics: self-generated and provided anchors in working capital management. More specifically, SME owner-managers rely on customer trust, initial offers (price list,

quotation), and market trends and demand (past and current sales). The premium managers attached to these anchors led them to either overinvest or underinvest in working capital. Specifically, low anchor (low initial offers and high growth market) tends to induce managers to increase working capital investment inventories while high anchor (high initial offer and declined market growth) discouraged SMEs managers to curtail working capital investment. Meanwhile, managers tend to grant more accounts receivable to highly trusted customers because of longstanding business relationships, taken as low default risk, than customers with a short-term business relationship. The study findings contribute by adding to the limited empirical evidence that exists on the influence of SMEs owner-manager overconfidence and inventory management, cash management, financing; SMEs owner managers' loss aversion and inventory management and anchoring and adjustment bias of SMEs owner-managers, and inventory management, accounts receivable. By implication, the findings of this study support the theories of overconfidence, loss aversion theory, anchoring, and adjustment and add to broaden the scope of working management practices in SMEs. Finally, the study concludes that SMEs managers' behavioral biases matter in working capital management.

**Keywords:** Anchoring and Adjustment Bias, overconfidence, Loss Aversion Bias, Working Capital Management, SMEs owner managers.

## Pengurusan Modal Kerja Perusahaan Kecil dan Sederhana (PKS) di Accra, Ghana: Perspektif Bias Tingkah Laku Pengurus Pemilik

#### **ABSTRAK**

Tesis ini bertujuan untuk menyiasat pengurusan modal kerja Perusahaan Kecil dan Sederhana (PKS) di Accra, Ghana dari perspektif bias tingkah laku pengurus pemilik. Pengetahuan tentang kecondongan tingkah laku dalam pengurusan modal kerja telah ketinggalan walaupun kebanyakan pengurus Perusahaan Kecil dan Sederhana (PKS) yang menggunakan pendekatan subjektif terhadap pengurusan modal kerja mungkin mendedahkan diri mereka kepada terlalu yakin, mengelak kerugian, berlabuh dan berat sebelah pelarasan. Untuk menangani kebimbangan ini, tesis ini menggunakan reka bentuk kualitatif dan memperoleh data teks melalui temu bual telefon dengan tiga puluh lima (35) pengurus pemilik PKS untuk mendapatkan perspektif mereka tentang berat sebelah ini dengan meneroka andaian asas teori terlalu yakin (Lebih baik daripada kesan purata; ilusi kawalan dan keyakinan yang berlebihan dan ke atas ketepatan pengetahuan), teori keengganan kerugian dan teori penambat dan pelarasan. Berdasarkan analisis data tematik, kajian ini mendapat sokongan bahawa pemilik-pengurus PKS menunjukkan terlalu yakin, mengelak kerugian, berlabuh, dan pelarasan, mempengaruhi pengurusan modal kerja. Secara khususnya, keputusan menunjukkan bahawa pengurus-pengurus PKS yang terlalu yakin bahawa mereka memiliki keupayaan kewangan yang unggul, pengetahuan industri yang sempurna dan optimis tentang kejayaan perniagaan dan ingin melabur secara berlebihan dalam inventori modal kerja jika mereka mempunyai dana dalaman yang mencukupi. Tambahan pula, penemuan mencadangkan bahawa pemilik-pengurus PKS yang elak kerugian mempamerkan ketakutan terhadap kerugian dan kesan pelupusan kos sehingga ke tahap pengurus pemilik PKS yang mengelak kerugian cenderung untuk kurang melabur dalam inventori modal kerja manakala pengurus PKS yang mengelak kerugian yang rendah cenderung untuk terlebih melabur. dalam inventori modal kerja. Dari segi kecenderungan berlabuh dan pelarasan, keputusan menunjukkan bahawa pengurus sangat bergantung pada pintasan mental atau heuristik: sauh yang dijana sendiri dan disediakan dalam pengurusan modal kerja. Lebih khusus lagi, pengurus pemilik PKS bergantung pada kepercayaan pelanggan, tawaran awal (senarai harga, sebut harga), dan arah aliran dan permintaan pasaran (jualan masa lalu dan semasa). Pengurus premium yang melekat pada sauh ini menyebabkan mereka sama ada terlebih melabur atau kurang melabur dalam modal kerja. Khususnya, sauh rendah (tawaran awal yang rendah dan pasaran pertumbuhan tinggi) cenderung mendorong pengurus untuk meningkatkan inventori pelaburan modal kerja manakala sauh yang tinggi (tawaran awal yang tinggi dan pertumbuhan pasaran yang merosot) tidak menggalakkan pengurus PKS untuk mengurangkan pelaburan modal kerja. Sementara itu, pengurus cenderung untuk memberikan lebih banyak akaun belum terima kepada pelanggan yang sangat dipercayai kerana hubungan perniagaan yang telah lama terjalin, diambil sebagai risiko lalai yang rendah, berbanding pelanggan yang mempunyai hubungan perniagaan jangka pendek. Penemuan kajian menyumbang dengan menambah kepada bukti empirikal terhad yang wujud terhadap pengaruh keyakinan berlebihan pengurus-pengurus PKS dan pengurusan inventori, pengurusan tunai, pembiayaan; Keengganan pengurus pemilik PKS dan pengurusan inventori serta penambat dan berat sebelah pelarasan pengurus pemilik PKS, dan pengurusan inventori, akaun belum terima. Secara implikasinya, dapatan kajian ini menyokong teori terlalu yakin, teori penghindaran kerugian, berlabuh, dan pelarasan serta menambah meluaskan skop amalan pengurusan kerja dalam PKS. Akhir sekali, kajian menyimpulkan bahawa berat sebelah tingkah laku pengurus PKS penting dalam pengurusan modal kerja.

Kata kunci: Bias Berlabuh dan Pelarasan, keyakinan terlalu, Kecondongan Kerugian, Pengurusan Modal Kerja, pengurus pemilik PKS.

## TABLE OF CONTENTS

		Page
DECLA	ARATION	i
ACKNO	OWLEDGEMENT	ii
ABSTR	RACT	iii
ABSTR	AK	ν
TABLE	E OF CONTENTS	viii
LIST O	OF TABLES	xv
LIST O	OF FIGURES	xvi
СНАРТ	TER 1: INTRODUCTION	1
1.1	Introduction	1
1.2	Background of the Study	2
1.2.1	Managerial Behavioural: Overconfident Bias	5
1.2.2	Loss Aversion	8
1.2.3	Anchoring and Adjustment Bias	10
1.2.4	Managerial Behavioural Bias (Small and Medium Enterprises)	13
1.2.5	Working Capital Management	15
1.2.6	Overview of Ghanaian Small and Medium-Sized Enterprises	18
1.3 I	Problem Statement	21

1.4	Research Questions	26
1.5	General Objectives	26
1.5.1	Specific Objective	26
1.6	Significance of the Study	27
1.7	Scope of the Study	28
1.8	Organization of the Study	28
1.9	Chapter Summary	28
CHAI	PTER 2: LITERATURE REVIEW	30
2.1	Introduction	30
2.2	Theoretical Review	30
2.2.1	Loss Aversion (Prospect Theory)	30
2.2.1	Overconfidence Bias	36
2.2.2	Anchoring and Adjustment	40
2.3	Empirical Literature Review	44
2.3.1	Working Capital Management	44
2.3.2	Loss Aversion Bias	56
2.3.3	Overconfidence Bias	61
2.3.4	Anchoring and Adjustment Bias	65
2.3.5	Working Capital Management Among Ghanaian Small and Medium Sized	
	Enterprises	70

2.4	Conceptual Framework	79
2.5	Chapter Summary	81
CHA	PTER 3: METHODOLOGY	82
3.1	Introduction	82
3.2	Research Philosophical Worldview	82
3.3	Interpretive Paradigm	82
3.4	Qualitative Research Method	84
3.5	Research Design (Case Study Method)	85
3.5.1	Exploratory Case Study	87
3.5.2	Case Study	87
3.5.3	Case Study Approaches	88
3.6	Participants and Sample Selection	89
3.6.1	Recruitment of Participants and Sample size (Data Saturation)	89
3.6.2	Sampling Procedures for Selection of Participants	91
3.7	Data Collection Process and Instrument	94
3.7.1	Data Collection Instrument	94
3.7.2	Research Interview (Telephone Interview)	96
3.7.3	Interview Protocol (In-depth Interview Guide)	102
3.8	Ethical Consideration	107
3.9	Qualitative Data Analysis Process	108

3.10	Thematic Data Analysis	109
3.10.1	Data familiarization	109
3.10.2	Generation of Codes	110
3.10.3	Search for Initial Themes	111
3.10.4	Review of Themes	117
3.10.5	Theme Definition	118
3.11	Trustworthiness and Dependability	120
3.12	Credibility	121
3.13	Dependability	123
3.14	Transferability	123
3.15	Conformability	124
3.16	Researcher's Role (Reflexivity)	125
3.17	Chapter Summary	127
СНАР	TER 4: RESULTS AND DISCUSSIONS	128
4.1	Introduction	128
4.2	Overconfidence Behaviors of SMEs Managers	130
4.2.1	Superior Financial Ability	130
4.2.2	Optimism in Business Success	138
4.2.3	Perfect Industry Knowledge	141
4.3	SME Owner- Managers' Loss Aversion behavioural	143

4.3.1	Fear of Loss	144
4.3.2	Cost disposition effect	149
4.4	SMEs Managers Anchoring and Adjustment Behaviours	152
4.4.1	Provided Anchor	152
4.4.2	Self-Generated Anchor	153
4.5	Overconfident SME Owner -Managers and Working Capital Management	155
4.5.1	Overinvestment in Inventory (Underinvested SMEs Firms)	159
4.5.2	Overinvestment in inventory (Overinvested SMEs Firms)	162
4.5.3	Cash Holding	164
4.6	Overconfident SMEs Managers and Working Capital Financing	166
4.7	Loss Averse SME Managers and Working Capital Management	168
4.7.1	High Loss Averse SME Owner -Managers and Working Capital Management	169
4.7.2	Low loss Averse SME Owner-Managers and Working Capital Management	170
4.7.3	Cost Disposition Effects of SMEs Owner Managers and Working Capital	
	Management	172
4.8	Anchoring and Adjustment Biased SMEs Owner Managers and Working	
	Capital Management	174
4.9	Discussion of Results	178
4.9.1	SMEs Managers Overconfidence Behavioural	179
4.9.2	SMEs Manager's loss Aversion Behaviours	181

4.9.3	SMEs Manager's Anchoring and Adjustment Behavioural		
4.9.4	Overconfident SMEs Owner Managers and Working Capital Management		
4.9.5	SMEs Managers Loss Aversion and Working Capital Management	191	
4.9.6	SMEs Managers Anchoring and Adjustment and Working Capital		
	Management	194	
CHAI	PTER 5: CONCLUSION	199	
5.1	Introduction	199	
5.2	Summary of Results	199	
5.3	Conclusion	203	
5.3.1	SME Managers' Overconfidence Behavioral Biases in Working Capital		
	Management	204	
5.3.2	SMEs Managers' Loss Aversion Bias in Working Capital Management	206	
5.3.3	SMEs Managers Anchoring and Adjustment and Working Capital		
	Management	208	
5.4	Contributions of the Study	210	
5.4.1	Methodological contributions	210	
5.4.2	Empirical Contributions	211	
5.5	Theoretical Contribution	214	
5.5.1	Overconfident SME Owner-Managers and Working Capital Management	214	
5.5.2	Loss Averse SME Owner-Managers and Working Capital Management	218	

5.5.3	Anchoring and Adjustment Biased SME Owner Managers and Working Capital Management	222
5.6	Implications of the Study to Practice and Stake holders	225
5.7	Limitation of the Study and Future Research	230
REFE	REFERENCES	
APPE	APPENDICES	

## LIST OF TABLES

		Page
Table 3.1:	Social demographic of Participants	93
Table 3.2:	A Sample of an interview Protocol	104
Table 3.3:	A Sample of Open Coding on Excerpts of Interview on Overconfidence behavior	111

## LIST OF FIGURES

		Page
Figure 2.1:	Prospect Theory Value Function	32
Figure 2.2:	Components of Working Capital Management	45
Figure 2.3:	Proposed Conceptual Framework of Behavioral biases of SME Managers	79
Figure 3.1:	Thematic analysis process of Braun & Clarke's, 2006	109
Figure 3.2:	Initial theme of Initial themes of SME Owner- managers' Overconfidence behaviors.	114
Figure 3.3:	Initial theme of SME manager's loss Aversion behavioral bias	115
Figure 3.4:	Initial theme of SME Owner- managers' Anchoring Behaviors	116
Figure 3.5:	Final Themes of SME Owner-Managers Overconfidence and Outcomes of Working Capital Management.	119
Figure 3.6:	Final Themes of SME Owner- Managers Loss Aversion and Outcomes Working Capital Management.	119
Figure 3.7:	Final themes of SME Owner- Managers Anchoring and Adjustment and Outcomes of Working Capital Management.	119
Figure 4.1:	Findings on Overconfidence Behaviours of SMEs Managers	130
Figure 4.2:	Findings on SMEs Managers Loss Aversion Behaviour	144
Figure 4.3:	Findings on Anchoring and Adjustment SME Owner Managers	152
Figure 4.4:	Findings on Overconfident SME Owner-Managers and Working Capital Management.	156
Figure 4.5:	Finding of Loss Averse SME Owner-Managers and Working CapitaL Management	168
Figure 4.6:	Findings of Anchoring and Adjustment Biased SMEs Owner Managers and Working Capital Management.	175

## LIST OF ABBREVIATIONS

CAPM Capital Asset Pricing Model

CEO Chief Executive Officer

CFO Chief Financial Officer

EOQ Economic Order Quantity

EPQ Economic Production Quantity

EPS Earnings Per Share

ERP Enterprise Resources Planning

EU European Union

EUT Expected Utility Theory

GDP Gross Domestic Product

GHS Ghana Cedis

JIT Just –In-Time

MRP Material Resources Planning

MSMEs Micro, Small and Medium Enterprise

OECD Organisation for Economic Cooperation and Development

ROI Return on Investment

SME Small and Medium –Sized Enterprise

WCM Capital Asset Pricing Model

## **CHAPTER 1**

## INTRODUCTION

## 1.1 Introduction

Working capital management is a financial decision concerning current asset and current liabilities to support daily operation of the firm (Banos-Caballero et al., 2014; Onalopo et al., 2015). Small and Medium Enterprises (SMEs) managers are highly expected to manage working capital efficiently to create value for their firms. In doing this, they decide how much to invest in cash, inventories; receivables, and how much credit is needed to finance current assets (Baños-Caballero et al., 2010; Elbadry, 2018) while ensuring proper planning, control, and monitoring of the levels of working capital investment.

Such decisions enable SMEs to prioritize investment in cash, inventories, receivables, and financing needs for transactional, speculative, and precautionary purposes to maintain an appropriate level of investment in current assets for daily operations. Whether the decision is to buy inventories on either cash or credit, sell on either cash or credit to customers, or some other working capital management decisions, managers are expected to follow the standard finance practice for optimal solutions (Baumol, 1952).

Unfortunately, most managers lack knowledge of the standard financial practices and thus adopt a subjective approach to the working capital decisions (Filbeck & Lee, 2000; Howorth & Westhead, 2003; Khoury et al., 1999). For this reason, SMEs regard owner managers' experience and personal attributes to be more important in making working capital decisions to attain their expected results than using theories (Agyei -Mensah, 2012; Bandara & Rathnasiri, 2016).

However, the social psychology and behavioral finance literature indicate that the domain of subjective decision extends beyond personal attributes to psychological factors: cognitive and emotional factors. The cognitive and emotional-based decision-making may lead to systematic errors or biases including overconfidence bias, anchoring and adjustment bias, loss aversion bias and mental accounting, confirmation bias, and others (Malmendier & Tate, 2011, 2015; Pompian, 2012; Tversky & Kahneman, 1974).

Some scholarly works show that individual investors and managers of large corporations make investment and financing decisions based on their behavioral biases to maximize corporate performance (Malmendier & Tate, 2018). The most widely explored behavioral biases included overconfidence, loss aversion, and anchoring bias (Heaton, 2002; Malmendier & Tate, 2015; Tversky & Kahneman, 1974), which are relevant to this study. However, there is a lack of knowledge of how SME managers susceptible to such behavioural biases manage working capital because past studies have overlooked their significance (Lyngstadaas & Berg, 2016; Tran et al., 2017).

Therefore, the purpose of this research is to investigate how SME owner-managers are prone to behavioral biases (e.g., overconfidence, loss aversion, and anchoring and adjustment biases) manage the working capital of SMEs and contribute to theory, empirical, and practice.

## 1.2 Background of the Study

There is a growing research interest in behavioral biases. The psychology and behavioral corporate finance literature suggest people make subjective financial decisions (Liu & Jiang, 2012) based on how they actually behave or think (Ackerts & Davis, 2010; Pompian, 2012) and not how they should act or behave as suggested by the standard

traditional finance paradigms anchored on the concept of rational individual and rational market.

Psychologists argue that people are not perfect or entirely rational in the decision-making process since rationality is bounded (Simon, 1955, 1956). Simon (1955, p.312) pointed out that the "human mind is not like a computer that can be programmed to process and perform all complex optimization processes" such as the Capital Asset Pricing Model (CAPM) (Sharpe, 1964, 1965; Lintner, 1965) Portfolio Theory (Markowitz, 1952) and others, which postulate what "Rational man", or "Efficient Market" is. Moreover, decision-making is time-bound, and individuals are incapable to gather all relevant information before making the final decision.

In this case, when people face complex financial decision-making problems that demand substantial time and cognitive ability, they have difficulty following a rational approach established for analyzing a proper course of action. Instead, they usually adopt a more subjective approach of reasoning to determine the course of action consistent with their desired outcome or preference. In doing so, they may be biased in the decision-making process. These biases may lead to irrational managerial behaviors and distort the outcomes of the decision (Maharani & Witiastuti, 2015; Pompian, 2012). In other words, individuals naturally deviate from the standard finance theories devised for optimal solutions and systematically favor certain outcomes over others based on their intuition, beliefs, or preference. Consequently, irrational behaviors may result in bias or irrational financial decisions due to either "faulty cognitive reasoning" or "reasoning influenced by emotions or feelings" or both (Pompian, 2012).

Cognitive biases come from either faulty cognitive reasoning or cognitive errors, which include Illusion of Control bias, anchoring and adjustment bias and others. This tendency arises when an individual cannot accurately interpret data, process information, or cannot follow the complex mathematical procedure applied (Pompian, 2012) to find, say, the economic order quantity (EOQ), or appraise a customer's creditworthiness, and apply cash models. However, an individual decision-maker understands his processes of making financial decisions to achieve desired results. Moreover, an individual will suffer from emotional biases when his judgment is clouded by his beliefs, intuition, attitudes, and feelings (Birknerová et al., 2017; Graham, et al., 2013) because such emotions stem overconfidence, regret aversion bias, loss aversion bias, and many others (Clarke & Statman, 2000; Tversky & Kahneman, 1974, 1979).

In each case, emotional biases or cognitive biases can distort rational financial decisions and affect the expected outcomes or gains (Tversky & Kahneman, 1974). So, insight into how behavioral biases induce managers in the financial decision-making process is particularly important for SMEs due to their dependence on managers' characteristics to make a decision (Åstebro et al., 2014; Zhang & Cueto, 2017).

Nonetheless, by comparison, the cognitive decision making of SMEs managers has lagged as compared to top corporate managers who have been observed to systematically exhibit symptoms of overconfidence, loss aversion, anchoring bias in investment decisions (Malmendier & Tate, 2015; Rostami, & Dehaghani, 2015). Thus, these behavioral tendencies are relevant to the context of the study.

## 1.2.1 Managerial Behavioural: Overconfident Bias

The general assertion that decision-makers can be overconfident is central in cognitive psychology and behavioral finance literature. The hubris of overconfidence largely stems from how people think or assess their abilities, private information, and the outcome of a future event from a reference point (i.e., Benchmark)( Malmendier & Tate, 2015; Weinstein, 1980).

This intuition makes individuals overconfident and considers themselves better than others (Langer, 1975; Malmendier & Tate, 2015; Svenson, 1981). Consequently, such people expect only favorable outcomes from their decision without considering the expected future failure. This is because such people believe that they have total control of the outcomes of future events (Langer, 1975; Weinstein, 1980). So, these indiividual mostly expect their actions or decisions to bring better results or success to justify their claim of being better. Therefore, overconfident people tend to attribute good things to their actions or abilities but blame others for poor results or attribute their failure to bad omen (Miller & Ross, 1975).

Overconfident people exist in every profession (Bazerman, 1990; Lichtenstein & Fischhoff, 1977). In medicine, for example, overconfidence has been identified as the root cause of diagnostic mistakes in which over 35% of diagnostic errors over the past five years were caused by some overconfident physicians (Berner et al., 2008). Overconfident coaches have been instrumental due to their immense contributions to the National League teams (Zavertiaeva et al., 2018). Even college professors show their confidence in their abilities as 94% believed themselves to do "above average" work (Cross, 1977). Moreover, Svenson