

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY-KUMASI
SCHOOL OF BUSINESS

TOPIC:
EFFECTS OF WORKING CAPITAL MANAGEMENT AND
CASH HOLDINGS OF PRIVATE UNIVERSITIES: A CASE STUDY OF
GARDEN CITY UNIVERSITY COLLEGE

BY
ADU GYAMFI OPOKU FRANCIS
(PG 9612613)

A THESIS SUBMITTED TO THE SCHOOL OF BUSINESS, KWAME NKRUMAH
UNIVERSITY OF SCIENCE AND TECHNOLOGY IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS
ADMINISTRATION IN FINANCE

AUGUST, 2015

DECLARATION

While acknowledging information from other sources, I declare that this work herein submitted as a thesis in partial fulfillment for the award of the Master of Business Administration in Finance is the result of my findings and therefore my original work.

ADU GYAMFI OPOKU FRANCIS

Student

.....

Signature

.....

Date

DR DANIEL DOMEHER

Supervisor

.....

Signature

.....

Date

DR KINGSLEY O. APPIAH

Head of School

.....

Signature

.....

Date

DEDICATION

This piece of my research work is dedicated firstly to the God Almighty who has guided me through till date as stated in Psalm 23, “they went through thick and thin to see us through”.

To my lovely Parents Mr Gabriel Kofi Opoku and Margaret Oforiwaa.

To my wife Mrs Elizabeth Yaa Fosuaa. I do appreciate the constant support and encouragement given to me from the beginning of the program to the end.

ACKNOWLEDGEMENT

Glory and honor be to the Supreme God for His love, care and guidance throughout my stay on campus.

I am highly indebted to my supervisor Dr Daniel Domeher for his brotherly guidance and supervision of this thesis.

My sincere gratitude is also extended to the Finance Officer, the President, the Registrar and Account Staff of GCUC for taking time-off their busy schedule to answer some questions concerning my work.

Whilst every name cannot be mentioned, I would like to thank every single individual who contributed to this thesis in one way or the other in the course of the study.

God bless you all.

ABSTRACT

The study aims at assessing the effects of working capital management on cash holdings of Garden City University College (GCUC). The objective of this study is to ascertain how GCUC working capital management practices affect their cash holdings, which influence their operational expansion. The university's six years financial information, 2008- 2013 was used for the analysis. Among the key findings included: 1) The University's cash performance for both 2008 and 2012 years for the period under study was below expectation; compared to the acceptable benchmarks of percentiles (25th, 50th and 75th percentiles). 2) GCUC's short-term liabilities within the balance sheet totals for 2008 to 2013 measure 1%, 3%, 9%, 7%, 6% 5% and respectively depicting an increased trend. This in turn, negatively related to have unsatisfactory on cash holdings level of the university. Researchers' key recommendation is that GCUC must employ the technique of Economic Order Quantity and Just-In-Time as well as policy documentation about working capital

.TABLE OF CONTENT

Contents

DECLARATION.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENT	iv
ABSTRACT.....	5
TABLE OF CONTENT.....	vi
LIST OF FIGURES	ix
LIST OF TABLES.....	x
LIST OF ACRONYMS AND THEIR MEANINGS.....	vi
CHAPTER ONE.....	1
INTRODUCTION TO THE STUDY	1
1.0 Background of the Study	1
1.1 Statement of Problem	3
1.2 Research Objectives.....	4
1.3 Research Question	5
1.4 Scope of the Study	5
1.5 Significance of the Study	6
1.6 Methodology.....	6
Organization for the Study.....	7
CHAPTER TWO.....	9
LITERATURE REVIEW	9
2.0 Introduction.....	9
2.1 Overview of Private Universities.....	9
2.2 Definition of key Terms and Concepts	10
2.2.1 Working Capital Concept.....	10
2.2.2 Cash.....	11
2.2.3 Marketable Securities.....	12
2.2.4 The Cash Conversion Cycle.....	12
2.3 Keynesian Motives for Holding Cash.....	13
2.3.1 Transactions Motive.....	13
2.3.2 Precautionary Motive	13
2.3.3 Speculative Motive	14
2.4 Strength of the Keynesian Motives.....	14

2.5	Relevance of the Keynesian motives to Private Universities	15
2.6	Working Capital Management.....	15
2.7	Working Capital Management Components	16
2.7.1	Inventory Supervision	17
2.7.3	Cash Management.....	17
2.7.4	Optimal Cash Level	18
2.8	Credit Management	20
2.8.1	Credit Policy	21
2.8.2	Optimal Credit Policy	21
2.8.3	Collection Policy.....	22
2.9	Empirical Literature on Working Capital Management.....	23
CHAPTER THREE		25
METHODOLOGY		25
3.0	Introduction.....	25
3.1	Research Design	25
3.2	Data Collection Procedures	25
3.3	Population and Sample	27
3.4	Data Analysis.....	28
CHAPTER FOUR		29
ANALYSIS AND DISCUSSION OF RESULTS		29
4.0	Introduction.....	29
4.1	Interview Respondents.....	31
4.2	Trend Analysis of Net Working Capital	31
4.3	Cash Management and Cash Substitute.....	33
4.4	Trend of Cash and Cash Equivalent	35
4.5	Working Capital Management Policies	37
4.6	Short-term Liabilities and Inventory Turnover Ratios	37
4.7	Warning Signs Associated with Working Capital Problems	39
4.8	The Management of Working Capital of GCUC.....	40
4.8.1	Days Sales Outstanding	41
4.8.2	Days Payables Outstanding (DPO).....	41
4.8.3	Cash Conversion Cycle	42
4.8.4	Cash Management.....	44
4.9	Other working capital management measures worth mentioned.....	44
Improved Financial Management Practices.....		44

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS.....46

5.0 Introduction.....46

5.1 Findings46

5.2 Summary and Conclusions47

5.3 Conclusion48

5.4 Recommendations.....49

5.5 Policy implications and Area of Further Research51

REFERENCES52

APPENDIX.....56

LIST OF FIGURES

Figure 1: Graphic determination of the optimal cash level	19
Figure 2: Graphic determination between current assets and costs	22
Figure 3: Respondents Ages	30
Figure 4: Trend Analysis of Working Capital 2008 – 2013	32
Figure 5: Trend of net working capital depicted in a line graph form.....	36
Figure 6: Cash Conversion Cycle for 2008 to 2013 of GCUC.....	43

LIST OF TABLES

Table 1: Respondents Age for Questionnaire	30
Table 2: Trend Analysis of Short-term Liabilities and Inventory Turnover ratios.....	38

LIST OF ACRONYMS AND THEIR MEANING

C.C.C	Cash Conversion Cycle
DPO	Days Payable Outstanding
DSI	Day of Sales in Inventory
DSO	Days Sales Outstanding
EOQ	Economic Order Quantity
EFT	Electronic Funds Transfers
GCUC	Garden City University College
JIT	Just-In-Time
OECD	Organization for Economic Co-operation and Development
WC	Working Capital

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.0 Background of the Study

During the course of economic meltdown businesses begin to search for ways to progress and reinforce their actions. Outside factors have an enormous shock to business operations, and in this position improving the success of inside function becomes progressively more significant. Highlight the task of working capital is important in this difficult period and of late various businesses have rewarded lot of thoughts to humanizing and supervising working capital. In particular in big firm's hard work ended to optimize cost-effectiveness narrate to working capital management. As a result of efficient working capital management, liquidity troubles can be prohibited which reinforce businesses capability to cope with unforeseen adjustment.

Financial predicament has prejudiced the outside funding ability as lenders desire the object savings added cautiously, forcing businesses to find support within. The case business of this study use efficient capital management to guarantee operational sustainability and aggressive arrangement in spite of the economic atmosphere. Due to the economic reason the role of supervising working capital has turn into an important component of businesses monetary strategy. As funding process proceeds, the businesses are difficult to let go money from their personal process which outcome is useful for management of working capital. The focus of this thesis is how management of working capital is deliberate from the operational viewpoint; implication is how much a business has joined up its capital in operational role.

The holding business has commenced a coordination process called “one integrated business,” and the aim of this practice is to slash along the number of dealers and to decrease the number of numerous analogous IT agenda and as a result locate conduct to set aside expenses in its practice. Working capital scheme is one component of this one united business practice.

Working capital as a subject matter has been extensively considered so restraining the topic ought to be made perfectly to circumvent apart from significant issue outer the study. With the material that has survived before now shaped has to be considered cautiously and reflect on if the formerly concern suggestion are appropriate for the holder business. Affiliation among working capital management and effectiveness was the most frequent focus between latest pieces of writing; Mojtahedzadeh et al. (2011) are example of numerous researchers who have deliberated on this topic.

Management of present assets and present liabilities has existed and deliberate on it largely, and the subject is extremely significant in corporate finance since it concern the liquidity and profitability of the business. Working capital and profitability were not studied in this thesis, but a lot of essential substance was originated from this piece of writing for this study. This proposal contemplates more on working capital management on a useful strength, and on this exacting subject piece of writing and writing were not accessible. Several articles consider account receivables or account payables only, so to widen up the subject; a lot of preceding studies, piece of writing and literature were explored.

Private universities are being measured as “key source of ability and knowledge, improvement and suppleness in conditions of a source of mutually academic and useful

superior information for our retail commerce development path and emergent market like Ghana's (OECD, 2006) carefully strategy guidelines. The financing problems that private universities frequently have to face have affected their working capital which impacts their cash holding level; hence its operational difficulties like reaching full sponsorship for their staff lecturers to pursue their educational career, prompt payments of short-term commitment and infrastructure development to take care of increasing enrolment.

1.1 Statement of Problem

Notwithstanding the colossal and growing significance of private universities pro the Ghanaian market, they are features of monetary anomalies and not much financial management theory exists with special interest to the dilemmas of private universities. The significant task played by private universities in emergent state like Ghana has been progressively more realized over the ancient times.

Not only are they significant for strength of knowledge and commerce segment, but they also offer new employment for people in the country. "The management of working capital success can cover a noteworthy effect on profitability with liquidity of a business" (Shin & Soenen, 1998). Deficient working capital can bring about inefficiencies in a business process which will affect liquidity while it is not capable of paying its commitment when they fall due. Without adequate working capital management, the institution resolve not be able to meet its operational needs and the institutions prosperity can be at risk as an outcome. It was explained by Lamberson (1995) "that management of working capital is of significance during supervision monetary aspects of an institution". Several managers who

have finance background find it hard to recognize the key components of management of working capital that can improve institutions performance.

Majority of the studies are directed in large government supported and traditional universities in Ghana. Obviously financial management in private universities and traditional universities depict some similarities. In most cases, there are considerable differences that have a tendency to buttress the study of working capital management in private universities asserted by (Weston and Copeland, 1986). Since private universities experience complexity in accessing outside funding, they rely more robustly on Internally Generated Funds (IGFs) of their small number of students' enrollment. However, such difficulties in accessing external finance to support operation of private universities have not been recognized for Ghanaian private universities.

There has not been much research made concerning the effect of management of working capital and cash holdings of private universities within Ghana. Howard stated that "Working capital may be observed as the life blood of business" of which private universities are of no exemption. While working capital is not handling efficiently, businesses may not be able to have sound cash holdings for survival.

1.2 Research Objectives

In examining the above problem statement, the general idea of the study is to look at the working capital management practices of Garden City University College. To appear at the above idea, the subsequent research questions are developed:

- To evaluate the contribution of sound management of working capital on the operational expansion of Garden City University College.
- To examine the cash management practices pursued by the university college and its cash holding decisions.
- To examine the working capital management measures that Garden City University College has employed to pave way for improving cash flows.

1.3 Research Question

- What accounted for the sound working capital management of Garden City University College and its operational expansions?
- What ways have cash management practices pursued by the Garden City University College affected its cash holding decisions?
- What are the working capital management measures that Garden City University College has employed to pave way for improving cash flows?

1.4 Scope of the Study

It is importance to state that, the study is restricted to Garden City University College since it is near and it will save cost to the researcher. The fact is that chosen this university is found on the premise that it have many distinct courses in terms of private universities in the Ashanti Region such as Physician Assistantship studies, BSc Midwifery and BSc Medical Laboratory and Technician studies, BSc Nursing and Diploma in Nursing.

It is expected at getting important information connected to working capital management practices of private universities in Ghana specifically Garden City University College. The restrictions of this work are due to the problems and practices connected by the stock

management, employee's advances and receivables and loans, cash and deposits accounts. Six (6) years was chosen to cover this work.

1.5 Significance of the Study

The finding from this research will be useful not only to Garden City University College in the Ashanti Region but will also benefit all private universities in the country. It will also help stakeholders to put together and execute strategies that will help them to efficiently manage working capital. It will enable them to determine ways management can efficiently progress their working capital management.

There has been concentration on management of working capital in the private universities, which ultimately will benefit the researcher, students, government, policy formulators and managers. This study will serve as an instrument of study for auxiliary research work, mainly in the area of working capital management in private universities. The work will support students to attain extra comprehension in that field.

This study will help and assist those in charge of policy and build understanding to the entire community in the private university commerce within Ghana. Adding up, the work may possibly provide an instrument on behalf of recently conventional private universities pro an efficient cash flow management.

1.6 Methodology

Primary data and secondary data would be used for the study. In the case of the primary data, the study will use structured interview which will be designed to cover all salient questions to obtain information from the Finance Officer, Accountant, Cashier and the

President of the University. Marshan-Piekkari (2004) stated in her book that interviews are potentially a rich source of data but they endure biases and restrictions which can, nonetheless be the case regardless of the research method. Qualitative interviews are strongly prejudiced by the relationship that develops between the researcher and research participant.

Interviews in this research are structured by outsider of the business; nevertheless, as the task is long, associations form logically. Though, as the topic is based on specifics and means of acts, individual thoughts have minor effects in the interviews. Since one private university is being selected for the study, the researcher used extensive period of six (6) years that is 2008 - 2013.

Secondary data will include applicable textbooks, articles on the topic, connected journals, newspaper reports, published financial statements of Garden City University College, and other relevant materials in working capital management. Other applicable data accessible in the university such as cash flow statements and other temporary management reports would be deliberated to augment the sincerity and consistency of the information acquired.

1.7 Organization for the Study

To guarantee coherent and efficient flow of thoughts, the study will be categorized in to five (5) chapters and also will be given into a sequential manner. The Chapter (1) one will give broad synopsis of the entire work. The chapter (1) one will comprised the background of the study, the problem statement, the scope and objectives of the work, significance of the work, the methodology, and limitation of the work and chapter organization. Chapter (2) two summarizes the key literatures of the preceding researchers concerning the subject areas.

Chapter (3) three brings out comprehensive means with measures used for the study and a brief background of the company for the study. Chapter four (4) represents data arrangement and breakdown of the respondent's outcome based on questionnaire and interview administration. Chapter five (5) climaxes the whole study and was centered on the summary of findings, conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

It is relevant to note that ‘short-term management of finance’ also known as management of working capital from the accounting perspective has enjoyed much more attention than it had been given in the past. In this particular chapter, detailed findings of related literatures about the topic will be presented.

2.1 Overview of Private Universities

Private University could be described as any Universities owned by an individual or family-members or group of persons through acquisition of shares. And they are usually accredited to provide tertiary education to students who for one reason or the other could not gain admission/enrolment into the public universities. The Valley View University is the first university initiated in the country to serve this objective. The thought provoked the interest of other parties, of which Garden City University College owner is of no exception. Various studies have attest that private universities are currently the originators of human capacity development and for that reason becomes an essential part in human development in a country’s capital strategy and university industry planning activities.

Since their inception, individual owned universities have played many roles in the country.

This could include the following:

1. to answer ‘the huge undergraduate demand programme with credentials within Ghana as required by the modern owners,

2. to offer alternate services and superior expertise that government support Universities are not able to access.

3. for creating unwarranted suffering on worker-students and students, who regularly have to move from far and near to attend lectures,

As a result of unsuccessful management of working capital these private owned universities have had restricted outreach. There is an unpleasant outcome for their financial performance, and it has exaggerated their level of cash holdings to appraise disappointment in several of them. They have to partner some of the foreign based universities to initiate innovative fresh programmes. These partnerships will bring cash injections to the individual owned universities; it will also improve their liquidity situation thereby intensifying their activities.

2.2 Definition of key Terms and Concepts

This subsection presents descriptions of the various conditions and ideas that have been used in this project work. The purpose is to evade the confusion in the minds of the reader; it could also assist the reader to appreciate the vital formation upon which this project work is stand.

2.2.1 Working Capital Concept

According to Ross et al (1996), “working capital” is a business short-term asset such as stock and it short-term responsibilities such as cash payable to suppliers. From Ross’s definition of working capital, one can deduce that working capital is how short-term liabilities and that of short term assets of a firm within an industry are managed.

Dunn, (2001) asserts that working capital is made up of debtors, cash, short-term net assets, inventory, and less creditors. Hence, ‘working capital signify an investment of the firm in profitable securities, accounts receivable, inventories, and cash, less its current liabilities that are used to finance its current assets’. Various writers define working capital as the amount of “current assets less current liabilities”. They often describe the “disparity (current assets less current liabilities) as net working capital” Dunn (2001) went further to say that “working capital management has to do with the management of all feature of mutually current assets minus liabilities so as to decrease the possibility of bankruptcy and also take advantage of profits on asset.”

For the purpose of this study, working capital was simply perceived as the surplus of current assets over current liabilities. This could be considered by subtracting current liabilities from current assets from university’s point of view. It actually presents: a catalog of cash holding soundness”. In Ghana, it is on record that numerous privately owned universities, regardless of size have not been working adequately. This is due to the poor management of their working capital, and this has negatively affected their cash holding intensity.

2.2.2 Cash

Cash is the most liquid of assets (Horne, 1995)”. As stated by Weston and Copeland (1986) cash is made up of “money market accounts and demand deposits as sound as cash holdings”. In this project work, cash will be defined as “cash and cash equivalents, which is a vastly short-term liquid savings such as profitable securities”. The supposition is attributed to the reality that this extensive description of cash outlines the starting point for the successive premise. Furthermore, the features of the practical information for this work do not permit for the separation linking cash and cash equivalents.

2.2.3 Marketable Securities

Weston and Copeland describe marketable securities as a “portfolio of highly liquid, near-cash assets which provides a support to the cash account”. Here are numerous category of marketable securities (Horne, 1995), such as ‘Agency securities’ or ‘Commercial papers ‘Repurchase agreements’, Treasury securities’,. Hornes (1995) went on to explain that “Marketable securities with a ripeness of less than three months are explained to mean ‘cash equivalents’ on the balance sheet, those with a longer ripeness as ‘investments of short-term’”.

2.2.4 The Cash Conversion Cycle

Cash conversion cycle was described by the Bloomsbury Business Library (2007), as “the time linking the acquisition of the receipt of payment and a raw material for the ended product”. The conversion cycle of cash is therefore appraised for the effectiveness of management of working capital as it signifies how swiftly current assets are transformed into cash. An enterprise in general would desire to decrease the extent of its working capital cycle and in so doing dropping its exposure to liquidity troubles. Peterson (1994) stated how much liquid a firm need depends on its cash conversion cycle.

Elijelly, (2004) defined cash conversion cycle (CCC) as “the length of time between real cash expenditures on useful wherewithal and actual service or cash receipts from the sale of products”.

Obviously, the longer it obtains for cash to be collected from credit sales and the greater cash flows troubles encountered by the organization.

The acceptable formula for computing CCC is:

$$\text{Cash Conversion Cycle} = \frac{\text{Days of Sales Outstanding} + \text{Days of Inventory} - \text{Days of Payables}}{\text{Conversion Cycle}}$$

Cash conversion cycle is possible to be positive as well as negative, although the eventual objective is having low CCC, if feasible negative. In view of the fact that the shorter the CCC, the more capable the business is managing its cash flow (Elijelly, 2004).

2.3 Keynesian Motives for Holding Cash

John Maynard Keynes (1936) dedicates one whole chapter to elaborate the cash holding motives to include these items: the transactions-motive, the speculative-motive and the precautionary-motive.

2.3.1 Transactions Motive

This deals with “bridging the opening linking expenditure and cash collections”. According to Keynes, businesses hold cash for the purpose of bridging the distance connecting “the time of sustaining business costs and that of the receipt of the proceeds of the sales”. Moreover, businesses embrace a definite amount of cash in order to gather the usual operating costs. Consequently, “the higher the businesses ability to programme its cash flows (depending on their certainty) the weaker the ‘transactions-motive’ for cash holding will be (Deloof, 2003).

2.3.2 Precautionary Motive

This talk’s about the business want to offer for unexpected expenses and unexpected chances of acquiring profitably. The potency of the precautionary-motive is resolute by the threat of an unexpected eventuality and the likelihood of making profitable purchases. If a

business function in an exceedingly unpredictable segment of movement, its precautionary holding of cash will be superior to that of businesses which act in a fewer uncertain location.

2.3.3 Speculative Motive

It is a means of holding cash for speculation purposes. This is found on the supposition to “rising interest rates stimulate declining prices of securities and vice versa”. This explains why firms invest their unused cash in securities whilst they anticipate that rates of interest are going to be decreased. Van Horne states that “businesses do not hold cash for the purposes of speculative” (Horne, 1995). This could also be understood that this evaluation is suitable particularly for private universities that generally do not have the capital to make such difficult economic choices. As a result the implication of Keynes speculative-motive is insignificant for this study.

2.4 Strength of the Keynesian Motives

Both the precautionary and transaction motives are said to be sharing the same importance. Both strengths are reliant upon the convenience of the cost of attaining it and cash when required (Keynes, 1973). Expenditure of operation absent of cash (that is shortage costs) is invariably a “significant cause” which manipulates the potency of the two first motives of Keynesian. During the tremendous case of highest relieve of admission and no shortage overheads coupled, then, the costs of operation out of cash by a business would be higher therefore; there will not be holding of cash at all by the firm. Within the occurrence of a rising expenditure, it would merely recover the requisite sum because of its portfolio of short-term investments (Horne, 1995).

Hitherto, another reason which is believed to strengthen the two motives of Keynesian is the portion of the charges by the bank that could be evaded by cash holdings (Horne, 1995).

2.5 Relevance of the Keynesian motives to Private Universities

Weston and Copeland (Ross et al., 2008) assert (2) two additional motives to the Keynesian ‘precautionary’ and ‘transactions’ motives for holding cash and marketable securities. The researcher is of the view that this concept is relevant to Private Universities as they really need cash for (Ross et al., 2008), envisaging important investments like infrastructure expansions in the near future. The second motive for cash holdings is that the researcher envisages reimbursing stability necessities which submit to the lowest stability that a bank desires its skilled clientele to safeguard in their existing account. This piece is not an intrinsic motive excluding quite an extrinsic commitment which provides as a guarantee toward the university (Ross et al., 2008).

Keynes’ motives are said to be “very extensive advance in theory of finance in classify to clarify holding cash behaviours of business” (Ross et al., 2008). This also represents the origin for an enormous transaction of management of cash form. The motive three is immaterial whilst learning the holding cash performance of private universities as well. Though, the precautionary-motive and transactions-motive’ signify an extremely essential advance to exemplifying firms performance of holding cash. Consequently, these two motives are predominantly appropriate to private universities, haughty that private universities administer their finance in a fewer intricate conduct than big traditional universities in Ghana.

2.6 Working Capital Management

Management of working capital is believed to be of a particular significance to the private universities. This is because they tend to have restricted admission to the long-term funds to

finance their needed savings in cash. Statistics from the USA and the UK comprises a “fragile management of finance and lengthy term financing are primary cause of failure among small businesses”, which private universities are of no exception (Berryman, 1983). Thus, ‘management of working capital’ imitates a short-term finance of firm’s presentation. Granted that current assets generally are receivable accounts, account for more than two-thirds of a Garden City University’s entire assets. As a result, the researcher sees the learning of working capital management on private universities cash holding deserves special attention.

Peel and Wilson (1996) stresses that good credit management practice arising from the competent management of working capital are fundamental to the strength and performance of the little businesses, of which private universities of small sizes are of no exception.

Research has shown that there is a tough considerable correlation linking the actions of management of working capital and corporate prosperity (Deloof, 2003; Shin and Soenen, 1998).

Kieschnick, Laplante and Moussawi (2006) study proved that business practices, firm size, future firm growth, independent directors, executive compensation, share ownership of CEO significantly influence the efficiency of working capital management. The researcher believes that management belief and talent influence firm’s working capital supervision.

2.7 Working Capital Management Components

The three components of working capital supervision which would be the areas of this study include: inventory supervision, cash management and debtors management:

2.7.1 Inventory Supervision

The inventory of private universities can be seen and attributed to such variables as stationery, application forms and others. Hence, the normal point of inventory of private universities can differ considerably among diverse private universities in the private university industry.

Big inventories permit the private universities to sell and acquire efficiently by evading delivery go-slow and taking advantage of diminished transaction expenses. In addition, the private universities can simply adjust to customers' burden and persuade them. The private university's improved flexibility, which is the major improvement of large services offered (Horne, 1995).

Though inventory supervision is said not to be within the ground of accountability of a financial manager (Horne, 1995), the Economic Order Quantity (EOQ) model which is an easy idea for determining a business best inventory point and order size could be employed. This concept could be applied to cash management (Baumol, 1952).

2.7.3 Cash Management

The fundamental intention in cash supervision is to keep the savings in cash as low as achievable while still operating the firm's actions resourcefully and successfully. This aim typically decreases to command "accumulate early and pay late". Hence, cash management is the allocation of cash need for necessary operation and investing provisionally unused cash in short term profitable securities for secured returns.

As stated by Weston and Copeland (1986), cash direction of private universities has appeared from "the relatively high level of interest rates on short-term investments which

has elevated the opportunity cost of holding cash (Horne, 1995)". According to Van Horne, (1995) "cash management involves managing the monies of the firm in order to capitalize on cash accessibility and interest income on any unused funds". He went further to explain that to attain this, cash management should include the following functions, viz. Supervising Collections, Control of Disbursements, Electronic Funds Transfers (EFT), Harmonizing Cash and Marketable Securities and Investment in Marketable Securities (Horne, 1995; Weston and Copeland, 1986).

There are elements of cash administration which deals with the crisis of shaping the best investment in cash. Cash administration model which is based on the EOQ form are employed. Distinction between cash and cash equivalents is crucial.

2.7.4 Optimal Cash Level

The EOQ model for inventory could be useful to cash administration so as to clarify a firm's claim for cash and find a balance among investment in marketable securities and holding of cash. William Baumol (1952) is said to be the first researcher to present such a cash administration model. The process is quite similar to that of the EOQ model for inventory size but it compact with diverse variables. It is understood that the firm holds a collection of marketable securities which could conveniently be transformed into cash. With the Baumol Model, all that a financial manager has to do is to "make a decision on the repartition of liquid funds between cash and marketable securities". This trade-off could be linked to the opportunity costs of holding cash which enlarge along with the cash level and the trading costs which acquire with every transaction and which decline when the cash level enhances (Ross et al., 2008).

If a business chooses to uphold a little cash level, it would be in its own interest to carry out many transactions that would lead to soaring trading costs but small opportunity costs. This is because there are little unused cash funds. If it then decides to preserve a high level of cash, then its opportunity costs will be superior due to the comparatively large amount of on- invested cash but the trading costs will dwindle since only little transactions will be crucial. In stroke with the EOQ model for stock, the graph for determining the best level of cash appears as follows:

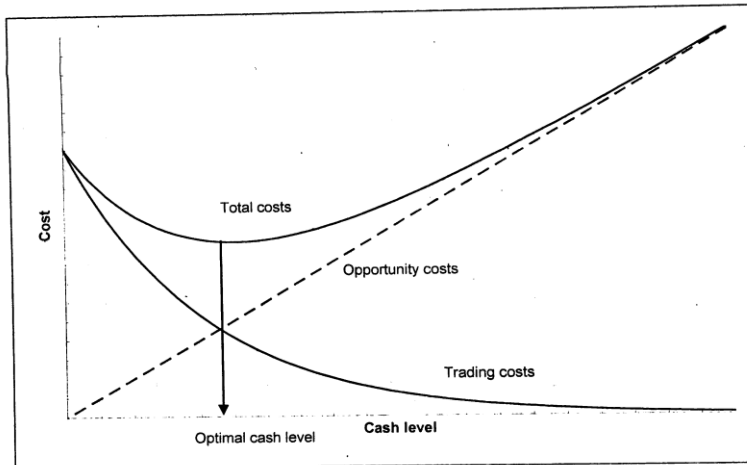


Figure 1: Graphic determination of the optimal cash level

Source: Working Capital Management on Cash Holdings of Swedish SMEs, (2008)

The best cash level has been unyielding graphically by recognizing the least position of the total costs curve which again is distinct by the calculation of the opportunity costs and trading costs as depicted in figure 1.

2.8 Credit Management

This deals with the private university's resolution on whether to award credit to its student clientele? If so, to decide the credit strategy as well as the collection strategy (Brealey and Myers, 2003). In this admiration, decisions concerning credit administration will have a contact on collecting the university's intensity of receivables and services. It is due to the fact that the conditions of credit have a shock on its customers' with less charitable terms leading to eased payment impediment.

2.8.1 Credit Policy

Credit strategies could differ considerably. This depends on the industry sector, the country of basis or the business' seasonality (Justitia, 2005). The terms of collecting the university account receivables point the due date for disposable payment and a possible cash discount for payments within a convinced time. The longer the payment goal and the superior the cash discount, the more liberal the terms of sale.

2.8.2 Optimal Credit Policy

Compromise credit is believed to result in a constructive shock on the private university's revenue by inspiring income but it could also produce costs of holding accounts receivable and generate the risk of losses due to bad debts (Ross et al., 2008). The extra generous the credit policy, the stronger the positive force on the university's income as well as on the connected costs. Consequently, the financial manager's duty is to find the best credit policy which diminishes the total costs of credit. The total costs of credit are clear as the addition of opportunity costs which start from lost sales and carrying costs of accounts receivable. Opportunity costs diminish when credit is comprehensive to customers as more and more customers are engrossed to the business which produce growing sales and therefore diminish opportunity costs of predetermined sales.

However, carrying costs is said to "increase in line with the credit extension". This could be explained as: "since these costs incur due to the cash collection delay, the relative cost of capital tie-up, the increased probability of bad debt losses and the costs of managing credit, all of which are absolutely linked to credit addition." In this admiration, the EOQ model is appropriate to credit management by involving credit policy to related costs. Figure 2 exemplify this connection in a way related to the mold for inventory and cash.

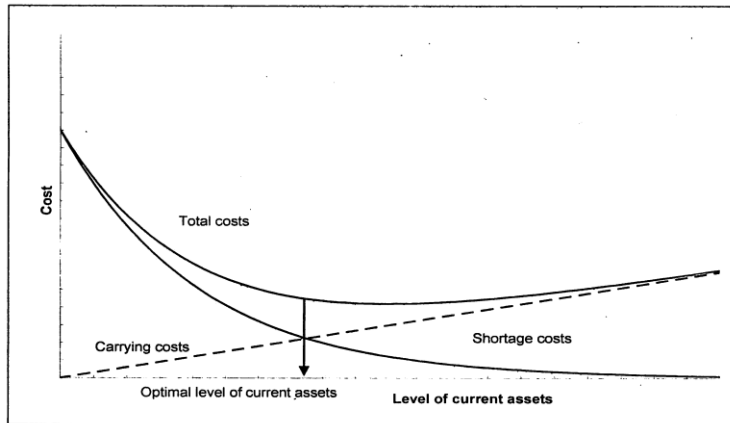


Figure 2: Graphic determination between current assets and costs

Source: Working Capital Management on Cash Holdings of Swedish SMEs, (2008)

Figure 2 is a graph that depicts the relationship between ‘credit policy kindness’ and ‘related costs’ which also again reflects the ‘trade-off’ among risk and return which is familiar to all types of current asset and current liabilities which are managed in working capital administration variables. Nonetheless, the reason of the above diagram is merely to display the basic effect of credit policy on the connected carrying and opportunity costs and hereby ascertain a correlation between these costs.

2.8.3 Collection Policy

This kind of strategy handles the matter of collecting unpaid school fees and other receivables. This feature manages with scrutinizing fees and receivables and pleasing suitable measures after the account is in arrears (Ross et al., 2008). If the university has an efficient collection strategy, this will ease the likelihood of bad debts and reduce the cash collection period, thus declining the carrying costs of accounts receivable. In other words, if the universities collect its overdue fees and accounts receivable competently, more beneficial credit policy can be a remedy. “Collection policy usefulness is determined by the

standard amount of time required to collect overdue fees and an account receivable which normally replicate collection period of financial ratios” (Ross et al., 2008).

2.9 Empirical Review on Working Capital Management

Raheman and Nasr (2007) analyzed the relationship between working capital management and corporate profitability for 94 firms listed on Karachi Stock Exchange using ordinary least square method. They have used the static measure of liquidity and ongoing operating measure of working capital management during 1999- 2004. The findings of study suggested that there exist a negative relation between working capital management measures and profitability.

Researchers have focused to evaluate the working capital management and profitability relationship which include Gill et al., 2010; Sen and Oruc, 2009; Uyar, 2009; Falope and Ajilore, 2009; Mathuva, 2009; Samiloglu and Demirgunes, 2008; Vishnani and Shah, 2007; Garcia-Teruel and Martinez-Solano, 2007; Lazaridis & Tryfonidis, 2006; Padachi, 2006; Deloof 2003; Ghosh and Maji, 2003; Wang 2002; Shin and Soenen, 1998; Smith et al., 1997 and Jose, Lancaster and Stevens, 1996 among others.

One of the recent studies on the relationship between working capital management and profitability was conducted by Gill et. al., (2010) for American firms listed on New York stock exchange. They used the data for a sample of 88 American firms’ for a period of three years from 2005 to 2007. They found statistically significant relationship between working capital management and firm’s profitability.

The impact of working capital management on firm profitability was also examined by Falope and Ajilore, (2009) using data for fifty Nigerian non financial listed firms on Nigerian Stock Exchange during period 1996 to 2005. They used combined time series and cross sectional observations in a pooled regression to estimate the relationship between working capital measures and firm's profitability. They found significant negative relationship between profitability and working capital measures such as average collection period, inventory turnover in days, average payment period and cash conversion cycle. They also compared this impact between large and small firms but did not find significant variations among these firms.

Pass and Pike (1984) emphasized that short term finance area particularly working capital management was given very less attention in contrast to long term investment. Working capital management played a very vital and important role in the growth of firm and in enhancement of profitability. Pass & Pike (1987) in continuation of their work (Pass and Pike, 1984) have discussed that deficiency in the planning and control of working capital management is one of the main causes of business failure and it is a neglected subject which has been all too little investigated or written about. Pass and Pike (1987) also explained that the two main objectives need to be satisfied by working capital management are liquidity and profitability but not at the cost of one and another. There should be a trade-off balance between these two objectives.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

Chapter three essentially clarifies actions during which data collection is accepted and measures during which the research will be accomplished. While this study appeared at the management of working capital in individual owned university cash holding, hard work will be ready by the researcher as to the realistic applications of the diverse means.

3.1 Research Design

The researcher adopted quantitative research design. The study is concerned with how working capital management and cash holdings affect the operational expansion of GCUC. It tends to highlight the need to examine cause-effect relations. The exact outcome of the case is that, the university's level of cash and the investigation is besieged on recognizing the important reasons that cash level determinants is linked to management of working capital. Also evocative study advance of quantifying positive individuality and their interrelation is labeled. Many studies have been carrying out in the level of cash and offered information and another approach has been developed. Many different approaches will be experienced in the precise atmosphere of Ghanaian individual owned Universities.

3.2 Data Collection Procedures

The researcher has identified the following methods of obtaining information for the study as:

Primary Data

An attempt will be made by the researcher to obtain first hand information for the prime purpose of this study. This will be done mainly through the following:

Questionnaire

A well-structured questionnaire will be made available to the Accounts office staffs and the finance officer who will envelop all the significant questions intended to acquire data of the university. This action will permit respondents to present data devoid of being influence. Also the finance officer, accountant, internal auditor and three account officers will be selected to answer to the survey. If questions are not clear a follow-ups will be accepted by the researcher to clarify the issue to agree to corroboration and affirmation in admiration of data supplied by the questionnaire.

Interview

The researcher will employ personal face to face interaction with the respondent to get the information. A sequence of inquiry will be posing and responds will be attaining on the spot and further clarifications will be required for solutions afforded by the respondents which are not opposing and obvious. Further data accessible in the case university such as monthly and interim reports, cash control sheet, cash flow statements, and final accounts of the university will be used by the researcher. Five (5) key management people will be interrogated by the researcher, which is people in the entire staff, mainly persons who are in charge of finances at the GCUC.

Secondary Data

By investigating the academic thoughts with forms, the researcher will make use of newspapers, journals, reports and other earlier studies on working capital management on individual owned universities, applicable textbooks and articles on the subject matter. The researcher will make use of the internet search concerning the work to harmonize the audited financial reports concerning Garden City University College. The researcher will use information which covers **six** year period that is 2008 - 2013.

3.3 Population and Sample

Population refers to all the members of a real or hypothetical set of people, events or objects to which I wish to generalize the results of our research. The population of this study comprised the number of individual owned universities in the Ashanti region. Garden City University College is selected for this research, but the researcher used **six** years operational actions below the trend of working capital on cash holding point. The interest of the researcher in choosing GCUC has been owed to the reality that, he has being working for GCUC for the past eight years in the Account Department and is conscious of working capital difficulties it faced on its cash holding. Purposive sampling technique is used to administer the questionnaire for the respondents. This means that, individual staffs who are suitable to analyze information for management decision making objective and who are in charge of managing treasury control will be selected. Persons who have in-depth knowledge in accounting and finance will be selected for the interview.

3.4 Data Analysis

Data used for the study is from the case university. Employee's attitudes will be observed, awareness and practices with the view to management of working capital as goings-on in individual owned universities will be prepared and fused into the study of the data offered before acquired by the vision to impartially drawing the procession among the ultimate and what actually is happening. For instance, cash control practices or systems in use will be analyzed for effectiveness and possible weakness and how they influence the operations of cash position of the universities. The financial statements accessible were being examined with the quick or acid text ratio, current ratio, service/ products turnover ratio and what have you.

CHAPTER FOUR

ANALYSIS AND DISCUSSION OF RESULTS

4.0 Introduction

The chapter centered on key arrangement of facts that have been unruffled in the suitable shapes, suppositions commencing the meeting to harmonize them by the preceding researcher's analysis to accept on the plan of this work. The chapter questions the information to calculation of working capital displays for relevant periods and assumption of deductions of the drift on the cash holdings of Garden City University College. The researcher draws implications on the Garden City University College and private university business as a whole.

The investigator is engrossed in determining whether working capital of Garden City University College influences their profitability and liquidity and thus could concern its cash holdings point. Furthermore, conscious of its consequence on the business procedure, the studies appreciate the determinants of working capital of individual owned universities ultimately. Garden City University College financial information for the period between 2008 and 2013 were used for the study. For that matter, face-to-face interviews and questionnaire administration were used by the researcher in gathering information from GCUC. The researcher used figures (data) for variables that have been used by other highly regarded researchers who have authority in the subject area. The previous researchers provided the variables to embrace ratio of cash to include: account receivables, stock turnover, short term liabilities ratio, creditors' days and others for working capital trend analysis on cash holding, debtors' days and cash conversion cycle.

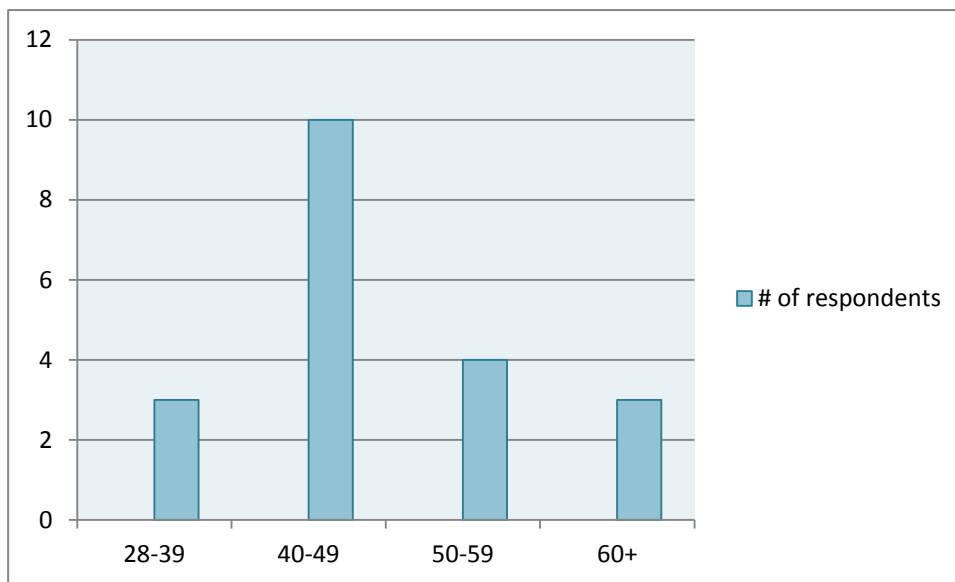
RESPONDENTS PROFILE

Table 1: Respondents Age for Questionnaire

Age Profile	Respondents of Questionnaire
28 – 39	3
40 – 49	10
50 – 59	4
60+	3
TOTAL	20

Most respondents of the questionnaire are in the age bracket of 40 - 49. Looking at table one, 20 people responded to the questionnaire, out of this only three people were in the 28-39 age group, 10 people were in the age group of 40-49, 50-59 age group were 4 people and 60+ age group were three (3) people. The bar graph of figure 3 explains the people who responded in the age group. It reiterates the explanation made previously. The bar graph demonstrates that many people who responded were in the 40-49 age groups.

Figure 3: Respondents Ages



4.1 Interview Respondents

The educational profile of interviewees indicate that one (1) of the respondents has masters degrees, one (1) having doctoral degree, three (3) having/pursuing undergraduate degrees in varying disciplines, and one (1) having Higher National Diploma Certificate.

In order to determine whether Garden City University College management has adequate liquid resources and understand that positive net working capital is the blood stream of efficient maintenance of day to day cash flow, the researcher surveyed people who have knowledge and expertise in the business financial information about existing assets and existing liabilities.

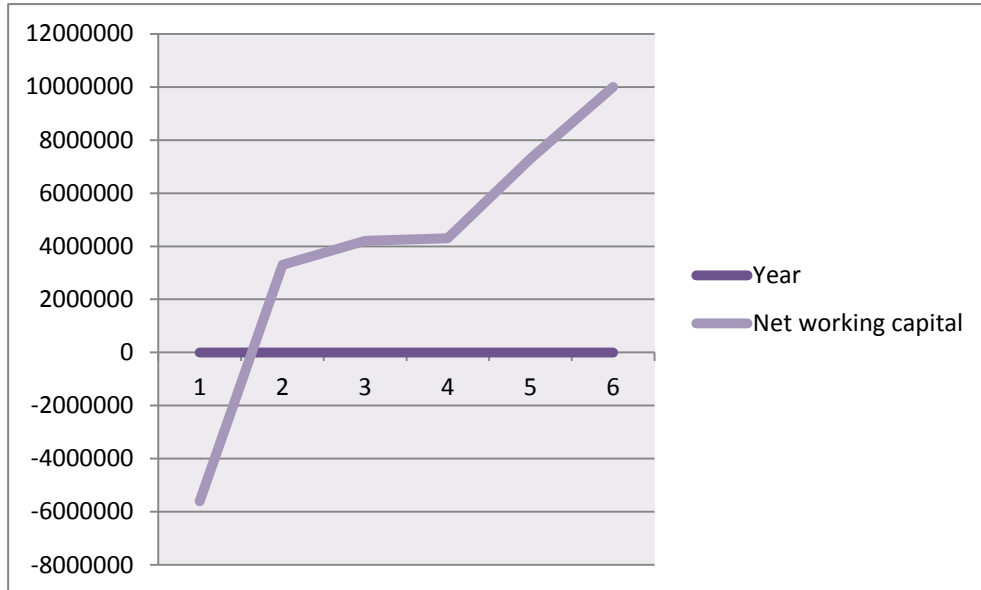
The researchers' plan of the work is to ascertain how working capital trends of the institution under discussion has influenced the institution's liquid resources and profitability, which in turn affect its cash holding level (Shin and Soenen, 2003).

To achieve this, a face-to-face interview involving the key management staff, was conducted, the focus of which was to come out with what they believe to be the factors influencing the working capital of the university, which eventually impact its liquidity and cash holding position.

4.2 Trend Analysis of Net Working Capital

The university's financial reports obtained and questionnaire administered on the respondents revealed the components of working capital as aggregated by the researcher into a trend form as shown by figure 4 below.

Figure 4: Trend Analysis of Working Capital 2008 – 2013



Trend of Net Working Capital for 2008-2013

It is evident from figure 4 that Garden City University College (GCUC) experienced favourable trend of net working capital throughout the period under study with exception of 2008 (year 1). There is positive indication of net working capital and has shown an increased trend between 2009 and 2013. This trend reflected positive effects on the university's cash and cash equivalent holdings and position up to the 2013 year. The situation improved the university's working capital management efficiency, which positively serves to better the cash holdings levels within that period.

This result implies to cash point as completely linked to net working capital administration effectiveness with hence the objective be able to established. Current liabilities in 2008 total are further than gross capital and the surplus of current liabilities above current assets is measured pessimistic net working capital as depicted in the line graph above. The researcher could deduce that the GCUC is poorly inhibited to efficiently run the daily profitable

operations in 2008, as there would be inadequate cash resource to meet the payment obligations of the university. Garden City University College has a larger investment in working capital than to require, given the large scale of its operations, but with some non-lucrative large areas of its operations.

Generally, a current ratio of 2:1 is measured to be the standard to signify sound liquidity situation. Looking at GCUC, it is far beyond the standard current ratio from 2009 onwards. There is tremendous improvement of its cash holding position.

Interview results

The responses seemed to be that GCUC total investment in working capital for the era under study is so much that, it has resulted to overtrading. Garden City University debtors' management has exhibited slow tuition income, leading to high costs of overdraft arrangements from banks, and retarding of earnings, hence fluctuating liquidity and profitability levels. The interview respondent was not convinced about an excessively high volume of overdue academic tuition fee, which could lead to high levels of bad debts if late payers are not chased for the debts they owe. Respondents articulated that GCUC could prevent this problem by adherence to the university credit policy guidelines that highlight on efficient tuition fee debt collection.

4.3 Cash Management and Cash Substitute

Van Horne stated that "cash management entails managing the monies of the firm in order to exploit cash availability and interest income on any unused funds".

The practical outcome validate the theoretical suppositions that cash and short-term fund and advance accounts in addition to short term marketable securities represent substitutes for

cash in a private university. The findings entails that private university which have less considerable amounts of cash and short-term fund and advance accounts want to hold more cash.

This is owed to the reality that short-term fund and advances accounts represent extremely liquid assets. They can be swiftly and simply changed into cash when required. Private universities with extremely little short-term fund and few advances will lean to seize additional cash since they acquire less alternates for cash. This phenomena breeds grounds for cash shortage, which tend to establish as one of the factors for some private universities liquidation in Ghana.

The cash position of GCUC is measured in relation to the university's liquid funds and the balance sheet total. Cash position analysis depicts the following trend: Min 0.296, Ave 0.446 and Max 0.612. The university's cash performance for both second and third quarters for the period under study was below expectation, if these indicators are measured against the acceptable benchmarks of percentiles (25th, 50th and 75th percentiles). However, its cash holding level in the first quarter was a little above the 25th percentile, therefore it shows better cash holding level. The absolute figures clearly reaffirmed this statement. The researchers could infer that generally, GCUC has relatively low cash holding levels in relation to its balance sheet total for the period under study.

Interview Results

Regarding this issue, the interview results revealed that some of the reasons accounted for included lack of clear lines of policies for school fees default recovery. The schools fees

default contain some element of interest on fees serving as investment income to increase the university cash position.

Those implications researcher could infer include greatly shortage costs are higher in operation and are absent from cash and they may resort in borrowing outside funds in array to meet their debt commitments and other short-term commitments. Therefore efficient working capital management on cash holding becomes critical for achieving surplus funds. Apparently, short-term funds have a more significant impact than advances accounts, because short-term funds are so close to cash and less cumbersome to convert into real cash for business operations. It is true to reaffirm that immediate commitments signifies the conflicting of cash alternates owed to the truth so as to communicate toward the opposite part of current assets, specifically current liabilities (Baumol, 1952, Keynes, 1973, Weston and Copeland, 1986).

4.4 Trend of Cash and Cash Equivalent

Weston and Copeland (1986) explained cash to mean “deposits and cash in hand available on demand and cash equivalents as short-term very liquid investments that are willingly adaptable to known amounts of cash and which are focus on immaterial threat in value of alterations”. Figure 5 shows the trend analysis of GCUC for the period under study. The general pattern of cash movement is highly fluctuating to depict negative behavior in both extreme 2008 (year 1) and 2012 (year 5), but exhibited positive increasing trend in between, with 2011 (year 4) measuring first highest cash and cash equivalent.

Figure 5: Trend of net working capital depicted in a line graph form

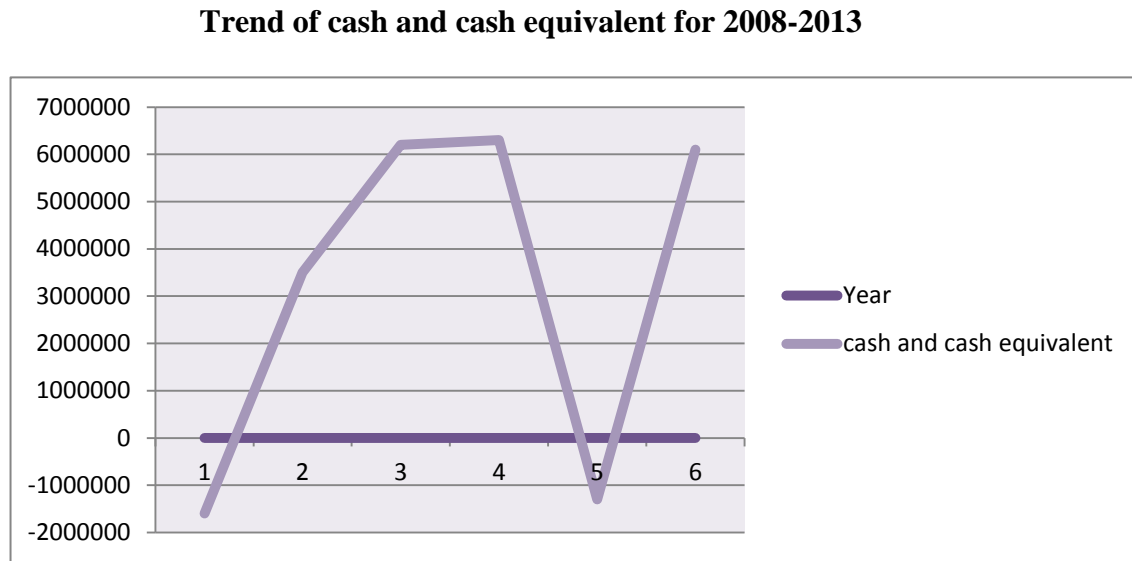


Figure 5 revealed that there was little uncertainty surrounding cash holding levels of the university. Researchers could attribute this condition to perhaps turbulent nature of the global financial crisis in the money market, which has a spilling over effects on Ghanaian private university industry. Besides, the actual cash payments in all areas by the university were so much, as against the GCUC's cash inflows, the increasing stagnant nature of cash and cash equivalent.

Interview results

Interview respondents reiterated the predominant stagnant nature of cash and cash equivalent condition to poor spending university activities such as unplanned acquisition of inventories, unplanned infrastructural development and recruitment of casual staff that might be out of university's budget estimate for the period. They commented that 'the overall business prospect of GCUC is not bleak' since it is located in the better catchment areas within the Kumasi Metropolis, comparatively with other private universities in the same metropolis. Therefore, the researcher could infer that this increasing stagnant nature of cash

holding position is only for a short run. In the long run, the GCUC could turnaround situations for better.

Looking at the GCUC's cash and cash equivalent trend, researcher could infer that there is poor target return on its working capital, especially on its overdraft and advances, and therefore GCUC's financial objective of making a target return on working capital is more or less defeated.

4.5 Working Capital Management Policies

Interviewees supporting evidence revealed that GCUC has no clear cut working capital policies which should underpin the amount of working capital investment required for generation of cash to improve its earning levels. Therefore, there is lack of proportionate support of the components of working capital to give to the volume of university's business operation. The researcher could deduce that, there is conflict between the policies of low overdraft and advances levels and with policies of high credits. The researcher could confirm that there is lack of policies as to the volume of current assets required for managing the GCUC's short term obligations, so as to have some surplus for improving cash holding levels.

4.6 Short-term Liabilities and Inventory Turnover Ratios

Capital ratios are one of the methods for monitoring and controlling working capital. The firm's financial information under the period of review has portrayed the following indications as shown in table 2.

Table 2: Trend Analysis of Short-term Liabilities and Inventory Turnover ratios

<i>Year</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>
<i>STL=STL/B/S</i>	0.01	0.03	0.09	0.07	0.06	0.05
<i>Total</i>						
<i>Inv TO=Inv/B/S</i>	6.98	0.01	6.71	7.08	6.21	0.04
<i>Total</i>	times	times	times	times	times	times

The literature review on the topic revealed the key major components of short-term liabilities to include – deposits and current account, borrowing, tax liabilities and inventory. Table 2 provides an analysis of every element of capital ratios plus various fascinating drifts can be figure out. Table 2 shows the economic capacity of the university to assemble its current liabilities as well as its effectiveness in managing currents assets for invention of school fees. Garden City University College’s financial information as given in table 2 depicts that, short-term liabilities within the balance sheet totals for 2008 to 2013 measure 1%, 3%, 9%, 7%, 6% and 5% respectively.

They indicated increasing proportions of cash amount within the balance sheet figures for those years. Higher proportions of liabilities take huge cash outflow when fall due. These conditions had negative effect on the university’s cash holdings as reaffirmed by cash and cash equivalent trend analysis. The reverse is the case for other respective years of lower short-term liabilities ratios.

It implies that the university would have current assets to pay all its current liabilities and still has some cash left for supporting its business expansion to improve on its cash holdings.

With the exception of 2008 and 2009 year, which measure inventory turnovers of 1% and 4% respectively, all other years were measuring more than 200% in relation to the balance sheet totals. It signified a huge investment by the university into inventory. GCUC lower

income implies that there was large cash outlay into inventory disposition, which in turn, has negative effect on cash holding levels. The researcher could deduce that GCUC has large piled up unused stationeries in the store that serves to tie-up cash, hence the instability of cash holdings level. The researcher could infer that the above indicators also pinpointed and confirmed that GCUC has a fluctuating net working capital situation, that unstable its cash holdings.

Interview results

The interviewees in conclusion seemed to believe that poor inventory management, shorter period by GCUC to pay its creditors and poor stock turnover and associated lack of clear working capital policy guide have led to a deteriorating situation of GCUC's net working capital situation, leading to poor liquidity levels and sustained fluctuation portrayed at their cash holding level.

4.7 Warning Signs Associated with Working Capital Problems

Based on the financial data and the working capital ratios computed, the researcher revealed a number of issues and warning signs the management of GCUC failed to recognize them for cash improvement. These included the following:

acquire to pay.

- ✓ contract costs to suppliers are increased during late payments, credit restrictions have been obligatory on the business by its suppliers, and concessions are not being accessible whilst stress to pay is escalating.

inventory cycle

- ✓ rising inventory in response to unpredictable sources of supply, without seeing to have used and finished those at the store especially on on-going contract projects.

order to cash

- ✓ increasing bad debts arising from default tuition fees increase in student's complaints about no or poor services to their complaints the GCUC renders on students, value of overdue overdraft is increasing, and quality assurance issues.

Interview Results

Interview respondents revealed to the researcher that management lost focus of the strategic cash decision of the company and had led to the following general issues: payments of inventory supplies not in line with cash earning terms, no key performance financial indicators as performance guide, and no cash flow forecasting and planning.

4.8 The Management of Working Capital of GCUC

Kargar and Blumenthal, (1994) researched about working capital pinpointed that working capital administration may have a resulting collision on private organizations performance levels for survival and growth due to varying management lifestyle of managers. This statement could be applicable to private universities as well, of which GCUC is of no exception. Working capital administration is significant to the economic strength of industries. The literature review revealed that “there is indication that little industries are not capable at running their working capital effectively” (kesseven, 2006).

The researcher is of the view that improving GCUC's cash flow is heavily depending on efficient and effective administration of its working capital. Several of the working capital cogent measures to minimize the GCUC's working capital situation could include the following:

4.8.1 Days Sales Outstanding

It was evident that GCUC has no documented enrolment guidelines as to the number of students to admit for ensuring growth. Those ones the study revealed include lecturers, and non-lecturing staff categories. To guarantee competence in assembling tuition fees, it is imperative for GCUC to evaluate whether the students are capable of paying their fees on time or specified credit terms be given to the students. For proficient administration of working capital, the researcher might deduce a guarantee for resonance cash holding, GCUC must propose fee payment concession for before time cash payment contained by a moderately shorter time of the tuition fee era. It was pointed by interview respondents that, overdraft and school fees management should be coupled with better tuition fees collection policies, which was evidently lacking in the school fee collection process. These techniques must work in collaboration with the tuition fee age analysis which helps to decide what action to take about older fees. GCUC's students' period depicts higher days of receiving tuition income from the students.

4.8.2 Days Payables Outstanding (DPO)

DPO stipulate the instant period obligatory in GCUC pro reconciling its buy and sell accounts payable, generally articulated in time. The payables days depicted by GCUC financial information is relatively shorter (appendix 2). It implies that there would be stress on its inadequate cash inflow situation. In order for GCUC to avoid paying interest on their

debt out standings, they should endeavor to broaden credit terms with suppliers when students are on vacation plus sustained better dealings with vital customers and ought to promote a good credit term which is favourable. In order for GCUC to prevent overtrading there should be agreement with suppliers to purchase on credit which would go a long way to elongate GCUC's essential savings in working capital and provide as basis of short term finance, amid no cost to GCUC.

4.8.3 Cash Conversion Cycle

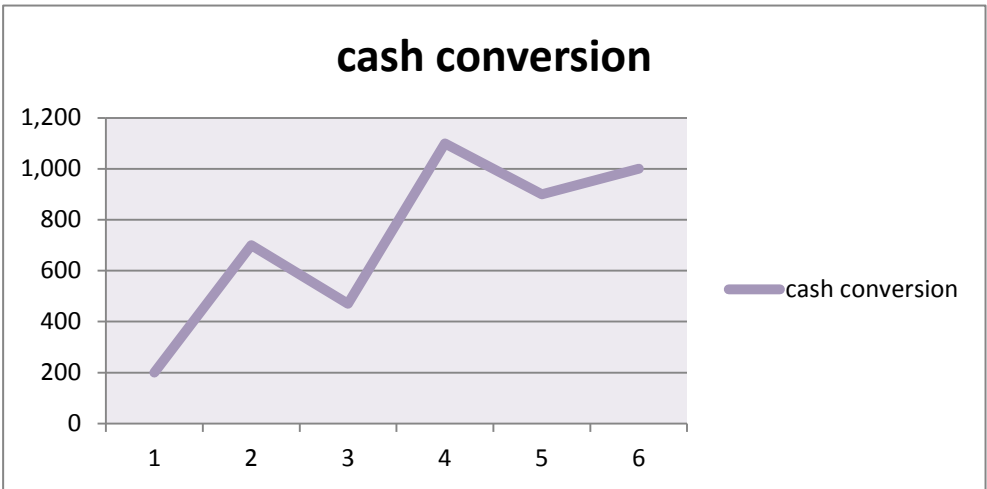
Figure 6 has confirmed and envisages that working capital administration effectiveness calculated by the cash conversion cycle of GCUC revealed an increasingly positive trend and could be harmfully linked to cash holdings of the private universities. The graph depicts constantly high cash days for GCUC for realizing cash from its students, but indicated shorter days to disburse its short-term commitments when fall unpaid. Therefore, it implies that cash holdings of GCUC are both unhelpfully connected to DSI and DSO.

Shorter cash conversion cycle of private universities with lofty cash levels demonstrate with short cash levels. The findings entails to facilitate private universities which have a small point fall among expenses for supplies and compilation of tuition fees and overdrafts have soaring cash wealth. The outcome can exist enlighten by the truth to a modest cash conversion cycle specify to promptly transformed current assets into cash and hence it comprises an extra important component of working capital like opposite toward additional current assets, specifically staff advances with tuition accounts in debts. Cash conversion cycle diminishes when repartition of working capital shift from tuition accounts receivable and staff advances towards cash.

Cash conversion cycle of small businesses have superior cash savings because their normal current assets holdings are small owing toward the reality so as to turned over their cash rapidly. A short cash level causes a high level of short-term commitments.

The noteworthy positive interactions which have been establish implies that fairly high level of staff advances come down with high days of advances and account receivables. The problem of day's payable outstanding (DPO) merit exceptional awareness since it implies an opposite relationship.

Figure 6: Cash Conversion Cycle for 2008 to 2013 of GCUC



According to the study, a lower DPO dwindle the cash conversion cycle and hence must decrease cash holdings. GCUC's DPO measured a decreased trend, therefore having a declining impact on the cash conversion cycle, which in turn associates harmfully with its cash holdings. There must be the need by the management of the university to widen their payables in order to free their commitments.

The researcher could infer that the management team of GCUC did not appreciate the dealings among the purchase to pay, order to cash and advance cycles, which is critical and pivotal to sustained victory of cash conversion cycles that underpinned the working capital management.

4.8.4 Cash Management

It is obvious that GCUC has poor cash administration practices like high cash float, loan contract, default tuition fee, a high interest on university's overdraft arrangement and breaching of overdraft limit, and longer credit taken to many students by management than allowed by their bank and contract suppliers. The researcher is of the view that prudent cash management practices should be pursued by the management of the university. This should include loans, and overdrafts received should be paid on the agreed time, shorten float arrangement, has a policy guidelines for using cash, and ensure intensive prompt tuition fees payment from students. It was revealed of interview respondents that cash is king, and therefore efficient and effective cash management enhances working capital, to promote and boast the liquidity and profitability position, which in turn should strengthen GCUC cash holdings.

4.9 Other working capital management measures worth mentioned

Improved Financial Management Practices

GCUC's organizational structure revealed that the firm lacked strong and talented managerial personnel, especially financial management expertise to manage working capital efficiently. This retards proper financial information systems in place; hence management lacks sufficient information about their working capital behaviour. GCUC's should review its recruitment policies to reflect such talented personnel intake. If this is done, this would

go a long way to strengthen the university's financial management to have a positive impact on its working capital.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The main objective here is to briefly comment on each chapter of the whole project, and draw reasonable conclusions thereon. This in turn, should be followed by cogent recommendations that flow from findings under the management of working capital of GCUC on its cash holdings.

5.1 Findings

The findings show that among the factors influencing working capital management of GCUC consist of: operating level, level of operational effectiveness, inventory strategies, debtors' management strategies and the nature of the business.

It was revealed that all components of net working capital ratios of GCUC showed an increased positive trend between 2009 and 2013, with exception of 2008, for the period under study.

Findings also seem to be consistent with Kesseven (2006) research about working capital of heavily mechanized firms; GCUC's has a high fixed assets base, hence low increasing proportion of liquid assets, so as predominant on the large university firms.

Findings revealed that high volume of GCUC's inventory level arising from rampant inventory ordering has eaten into the earnings of the university, hence poor liquidity and profitability of the private, which negatively affect cash holdings of the University for Business Operation Expansion (Deloof, 2003).

Findings revealed GCUC's financial information in table 2 depicts that, short-term liabilities within the balance sheet totals for 2008 to 2013, measure 1%, 3%, 9%, 7%, 6% and 5% respectively showing higher proportions of cash amount within the balance sheet total for those years. These liabilities take huge cash outflow when fall due. These conditions had negative effect on the university's cash holding levels.

More so, with the exception of 2008 and 2009 year, which measure inventory turnover of 1% and 4% respectively, all other years were measuring more than 200% in relation to the balance sheet totals.

The study revealed that there are high fluctuations in cash and cash equivalent depicting negative behavior in both extreme years, but exhibited positive low increasing trend between them, with 2011 measuring first highest cash and cash equivalent figure.

The analysis also revealed that GCUC's cash performance for both second and third quarters for the period under study was below expectation, if measured against the acceptable benchmarks of percentiles. Cash holding level in the first quarter was a little above the 25th percentile, therefore depicts better cash holding level. Interview respondents also revealed that poor cash management practices arising from poor internal checks and financial indiscipline among the management on cash have resulted to the unstable and stagnant cash holding levels.

5.2 Summary of Findings

Chapter one essentially alerts on the backdrop of the work into working capital administration of individual owned universities. In addition the statement of the problem was affirmed the reason working capital administration has accounted for the small

performance of the various individual owned universities in Ghana. The common hub was on advances management performs, cash practice administration, tuition fees, stock supervision and its related troubles. Key proposition of the work was to demonstrate the magnitude of excellent organization of (WC) working capital to the flourishing procedures of individual owned universities, with exacting spotlight on the GCUC.

Chapter two alert on the literature evaluation on (WC) working capital administration in articulate as well as connected parts like cash holding level of individual owned universities. This clarifies the notion of (WC) working capital, cash conversion cycle, troubles encountered by individual owned universities in performance of cash holdings.

Chapter three essentially enlightens the research methodology used by the researcher together with data collection used. Primary data and secondary data were used to attain information. In addition chapter three also portrays a preamble of information selected for the year 2008 – 2013 periods.

Chapter four exposed the analysis of interview respondents' outcome and questionnaire administration below the extensive as well as broad proportions together with cash and cash equivalent, the components of cash conversion cycle and (WC) working capital ratios.

5.3 Conclusion

From the analysis and findings of the study, it could be concluded that:

Garden City University College has no clear cut working capital policies serving as guidelines for all the employees to use to work towards achieving the objective of working capital of liquidity and profitability for improving cash holdings.

Also, GCUC lacked talented managerial persons, particularly financial management expertise to keep and maintain vital information systems required and needed for proper decision making relevant for effective and efficient working capital management.

There must be proper strategies in place to guarantee that working capital management are effectively used. The university should train its staff on working capital management to understand and benefit from it.

5.4 Recommendations

Looking at the findings of the research, the ensuing suggestions can be made to help improve the operations of GCUC and private university industry in Ghana in general.

School fees receipts and staff advance deposits and receipts from debtors must be accurately and promptly recorded in the accounts to reduce the loan and overdrafts balance and also give more room for improving cash position. GCUC should introduce better credit policies to encourage regular business customers to make early tuition fee payment and overdraft payments by direct debits or standing orders. This practice, if adhere to could boast GCUC's revenue earnings level to improve the working capital position, which in turn could better profitability and liquidity level for enhancing cash position. Also internal control measures such as internal check and internal audit unit must be strengthened to check staff financial indiscipline and fraud.

The management of GCUC should ensure to recruit innate, competent and well-qualified persons to manage the affairs of the firm. If recruited, they would assist to keep and maintain better information system, especially those related to the working capital for proper decision making for the GCUC's cash growth trajectory.

The management of GCUC should work towards aiming at achieving the standard current ratio indicator of 2:1 at least. There must be the need to adhere to the debtors' age analysis to guide the management about the older debts and the necessary actions to take thereon. This would go a long way to reduce the risk of bad debts. Again the creditors aged analysis is important. These are recognized effective way to control debtors and creditors to have positive working capital for achieving strong cash holding level of the university.

GCUC must employ the technique of Economic Order Quantity and Just-In-Time to assist the university in terms of best order size for inventories which decrease the cost of ordering inventories in addition to stockholding expenses. By so doing, it would reduce a situation management has to order more inventory unnecessary. This would lead to lower level of investment in working capital required, thereby maintaining a balanced liquidity and profitability levels, paving way for higher cash levels as echoed by one interview respondent.

Without delay, GCUC should develop the policy document about the working capital management policies to serve as a guide for all the operational staff. This document must be in the known by the entire staff team to work within, so as to achieve university's working capital objective of improving liquidity and profitability.

GCUC should incorporate seminars, and short training courses to train staff on working capital issues on cash holdings and reward staff for their contribution to working capital performance. This measure tends to create awareness for the relevance of working capital in university and establish the corresponding alternative actions for management attention.

The management of university should establish the link between working capital management and cash flow to depict the necessity to ensure effective and efficient working capital practices. This must be understood by every staff for its workability.

The industry under study is noted for medium cash conversion cycle, as revealed by the literature (Kesseven, 2006), as this assertion is reaffirmed by this study in the financial ratios provided, hence had unstable liquidity situation (Moss and Stine, 1993).

5.5 Policy implications and Area of Further Research

It is the view of the investigator that inadequate individual owned universities working capital administration strategies are the main causative aspect for a larger rate of turnover of lecturers, which is lecturers leaving the private universities as against lecturers coming into the private universities. Financial limitations are the major failure that account for collapse of individual owned university business in Ghana. Government legislation compels all individual owned universities to have their policy document on working capital administration strategy in place and appropriately stick to it for endurance plus expansion and should be obligatory.

There is the need to research into the working capital administration of all the government assisted universities in Ghana to know the general working capital management problems so that stakeholders of private universities could tackle them together.

REFERENCES

- Baumol, W. (1952) "The Transactions Demand for Cash: An Inventory Theoretic Approach" *Quarterly Journal of Economics*, Vol. 66, Issue 4, pp. 545-556
- Bloomsbury Business Library - Business & Management Dictionary; 2007,p 1383
- Brealey, R. & Myers, S. (2003) "Principles of Corporate Finance", Seventh Edition New York: McGraw-Hill
- Colquitt, L.; Sommer, D.; Godwin, N. (1999) "Determinants of Cash Holdings by Property-Liability Insurers" *The Journal of Risk and Insurance*, Vol. 66, Issue 3, pp. 401-415
- Deloof, M. (2003) "Does Working Capital Management Affect Profitability of Belgian Firms?" *Journal of Business Finance & Accounting*, Vol. 30, Issue 3/4, pp. 573-587
- Dittmar, A.; Mahrt-Smith, J.; Servaes, H. (2003) "International Corporate Governance and Corporate Cash Holdings" *Journal of Financial and Quantitative Analysis*, Vol. 38, Issue 1, pp. 111-133
- Dunn, E. (2001) Working Capital Management, ACCA July, Newsletter
- Eljelly, A.(2004) "Liquidity-profitability tradeoff: an empirical investigation in an emerging market", *International Journal of Commerce and Management*, Vol. 14 No. 2, pp.48-61
- Emmery D.R and Finnerty J.B (1997) *Corporate Financial Management*, Management International Edition, Irwin McGraw-Hill Inc. Pg. 250
- Englewood Cliffs: Prentice Hall
- Falope OI, Ajilore OT, 2009. Working capital management and corporate profitability: evidence from panel data analysis of selected quoted companies in Nigeria. *Research Journal of Business Management*, 3: 73-84.

Faulkender, M. (2004) "Cash Holdings among Small Businesses" Unpublished Working Paper

Ferreira, M. & Vilela, A. (2004) "Why Do Firms Hold Cash? Evidence from EMU Countries" *European Financial Management*, Vol. 10, Issue 2, pp. 295-319

Frazer, W. (1964) "The Financial Structure of Manufacturing Corporations and the Demand for Money: Some Empirical Findings" *The Journal of Political Economy*, Vol. 72, Issue 2, pp. 176-183

García-Teruel, P. & Martínez-Solano, P. (2008) "On the Determinants of SME Cash Holdings: Evidence from Spain" *Journal of Business Finance & Accounting*, Vol. 35, Issue 1/2, pp. 127-149

Ghosh SK, Maji SG, 2003. Working capital management efficiency: a study on the Indian cement industry. The Institute of Cost and Works Accountants of India. [<http://www.icwai.org/icwai/knowledgebank/fm47.pdf>].

Hall, G. (1992) "Reasons for Insolvency Amongst Small Firms – A Review and Fresh Evidence" *Small Business Economics*, Vol. 4, Issue 3, pp. 237-250

IntrumJustitia (2005), Author unknown "European Payment Index – Spring 2005"

Kargar, J. and Blumenthal, R, (1994) "Leverage Impact of Working Capital in Small Businesses" *TMA Journal*, Vol. 14, No. 6, pp. 46 - 53

Keown, A.; Martin, J.; Petty, J.; Scott, Jr., D. (2006) "Foundations of Finance", Fifth Edition Upper Saddle River: Pearson Education

Kesseven, P. (2006) Trends in Working Capital Management and its Impact on Firms' Performance: *An Analysis of Mauritian Small Manufacturing Firms*, *International Review of Business Research Papers*, Vol. 2, pp. 45 -58

- Keynes, (1936) *The General Theory of Employment, Interest and Money*, Pg. 89
- Keynes, J. (1973) “The collected writings of John Maynard Keynes – Vol. 7: The general theory of employment interest and money”, Fourteenth Edition London: Macmillan
- Longenecker J.G et al (1996) *Small Business Management*. Irwin-McGraw – Hill Inc Pg 542.
- Mathuva, D. (2009). The influence of working capital management components on corporate profitability: a survey on Kenyan listed firms. *Research Journal of Business Management*, 3, 1-11.
- McCosker, P. (2000) ‘The Importance of working Capital’, pg. 31
- Mojtahedzadeh, V., Tabari, S. H. A. &Mosayebi, R. (2011). "The relationship between working capital management and financial performance of the companies (case study: listed companies on TSE)" *International Research Journal of Finance and Economics*, 76, 158-166.
- Moss, J.D. and Stine, B.,(1993) ‘Cash conversion cycle and the firm size: *a study of retail firms*’, *Managerial Finance*, Vol. 19 No. 8. Pp.25 -34
- Myers, S. &Majluf, N. (1983) “Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have” Unpublished Working Paper Source: <http://hdl.handle.net/1721.1/2068> Retrieved on 2008-05-02
- OECD (2000), Author unknown “OECD Small and Medium Enterprise Outlook – Enterprise, Industry and Services” Source:<http://www.oecdbookshop.org/oecd/display.asp?sf1=identifiers&st1=922000021P1R> etrieved on 2008-05-01

Opler, T.; Pinkowitz, L.; Stulz, R.; Williamson, R. (1999) “The determinants and implications of corporate cash holdings” *Journal of Financial Economics*, Vol. 52, Issue 1, pp. 3-46

Pass, C.L. and Pike, R.H. 1984. An Overview of Working Capital Management and Corporate Financing. *Managerial Finance*, 10(3): 1-11

Peterson, P. (1994) *Financial Management and Analysis*, Irwin McGraw- Hill Inc

Peterson, R.; Kozmetsky, G.; Ridgway, N. (1983) “Perceived Causes of Small Business Failure: A Research Note” *American Journal of Small Business*, Vol. 8, Issue 1, pp. 15-19

Raheman, A., & Nasr, M. (2007). Working capital management and profitability case of Pakistani firms. *International Review of Business Research Papers*, 3(1), 279–300.

Ross W. et al (1996) *Essentials of Corporate Finance*, Irwin McGraw Inc. Pg 445

Ross, S.; Westerfield, R.; Jaffe, J.; Jordan, B. (2008) “Modern Financial Management”, Eighth Edition New York: McGraw-Hill

Sherman, W. and Associates (1993) “Cash Budgeting”, in: Rachlin, R. & Sweeny, H. (eds.) (1993), “Handbook of Budgeting”, Third Edition New York: John Wiley & Sons

Shin, H-H. & Soenen, L. (1998) “Efficiency of Working Capital Management and Corporate Profitability” *Financial Practice and Education*, Vol. 8, Issue 2, pp. 37-45

Source: http://www.europeanpayment.com/77_ENG_R.asp Retrieved on 2008-05-23

Steel el Webster (1992) *Small Business Management*, Pg.5

Van Horne, J. (1995) “Financial management and policy”, Tenth Edition

Weston, J. & Copeland, T. (1986) “Managerial finance”, Eighth Edition Hinsdale: The Dryden Press

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

APPENDIX

This research seeks to find out the working capital management of Garden City University College on its cash holding levels and its implication on the operational activities. My intentions are purely for academic purposes and do not in any way attempt to invade the privacy of individuals. All questions asked and any other relevant information or material required is purely for academic purposes only and as a result employees and management are assured of confidentiality and anonymity.

APPENDIX I: QUESTIONNAIRE

INSTRUCTION

Please tick as appropriate

SECTION A

GENERAL INFORMATION

1. Please indicate your gender

(a) Male (b) Female

2 .Indicate your age bracket

(a) 28-39 ☐ (b) 40-49 ☐ (c) 50-59 ☐ (d) 60+ ☐

3. Select your highest level of education qualification

(a)Postgraduate degree (b) Degree (c) Diploma (d) College certificate

4. Does the business keep financial records?

(a)Yes (b) No

5. If yes, which record or records are kept?

(a) Cashbook (b) Sales journal (c) Purchases journal

(d) General ledger (e) Debtors ledger (f) Creditors ledger

(e) Any other

specify.....

6. Do you attend business seminars?

(a) Yes (b) No

7. How long has the business existed?

.....

SECTION B

The weights given for the opinions are as per the following Key: Strongly agree =5,

Agree=4, Neutral=3, Disagree=2, Strongly Disagree=1.

8. What working capital management practices do GCUC adopt?

a) Working capital management practices in relation to cash. To what extent do you agree that your firm adopts the following cash management practices?

Cash management practices that are adopted by GCUC	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The institution maintains optimum cash balance					
The institution accelerates cash collection					
The institution delays payments of liabilities					
The institution prepares cash budgets and forecasts					
The institution keeps proper cash books and petty cashbook					

Any other specify

.....

.....

.....

(b) Working capital management practices in relation to trade credit transactions. To what extent do you agree that your institution adopts the following trade credit management practices?

Trade credit management practices that are adopted by GCUC	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The institution maintains optimum debtors level					
The institution applies stringent credit policy					
The institution ask for longer credit periods from suppliers					
The firm keeps creditors ledgers and control accounts					

Any other specify

.....

.....

(c) Working capital management practices in relation to inventory. To what extent do you agree that your institution adopts the following inventory management practices?

Inventory management practices that are adopted by GCUC	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The institution maintains optimum inventory level					
The institution has set various stock levels					
The institution orders economic quantities when purchasing					
The institution determines stock turnover for each stock item					
The institution keeps stock records. e.g stock ledgers, bin cards					

Any other specify

.....
.....

9. How do cash management impact on GCUC performance? To what extent do you agree that the following are the impacts of cash management practices on your institution's performance?

Impacts of cash management on GCUC's performance	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Sales are high					
Profit are high					
Transaction costs are high					
The institution is highly liquid					

Any other specify

.....
.....
.....
.....

10. What are the impacts of trade credit management on performance of GCUC? To what extent do you agree that the following are the impacts of trade credit management practices on your institution's performance?

Impacts of inventory management on GCUC's performance	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Sales are high					
Profit are high					

Transaction costs are high					
The institution is highly liquid					

Any other specify

.....

.....

.....

.....