

UNIVERSITY OF EDUCATION, WINNEBA

**FINANCIAL MANAGEMENT PRACTICES OF PHARMACEUTICAL
COMPANIES IN GHANA. THE CASE OF THREE SELECTED
PHARMACEUTICAL COMPANIES IN KUMASI METROPOLIS**



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LYDIA OPOKU AGYEMANG

**A Dissertation in the Department of Accounting Education, Faculty of Business
Education, submitted to the School of Graduate Studies, University of Education,
Winneba in partial fulfilment of the requirements for award of the Master of
Business Administration (Finance) degree**

AUGUST 2017

DECLARATION

STUDENT'S DECLARATION

I, LYDIA OPOKU AGYEMANG, declare that this dissertation with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

SIGNATURE:

DATE:

SUPERVISOR'S DECLARATION

I hereby declared that the preparation and presentation of this work was supervised by me in accordance with the guidelines for supervision of dissertations as laid down by the University of Education, Winneba.

NAME OF SUPERVISOR: REV. DR. JOHN POKU

SIGNATURE

DATE.....

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DEDICATION

The heavens declare the glory of God. And the firmament shows his handiwork. Day unto utter speech, and night unto night reveals knowledge. (Psalm 19:1-2).



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ABSTRACT

The main aim of this study was to examine the challenges of financial management practices of pharmaceutical companies in Ghana using three selected pharmaceutical companies in Kumasi Metropolis. This was as a result of the fact that pharmaceutical firms mainly focus on bank loans and equity as their main source of funds in financing their operations giving less attention to efficient working capital as a feasible option. A set of questionnaires was administered on 25 persons from large and small pharmaceutical firms in Kumasi. Survey monkey and Microsoft excel were used to collect and process the data. The research revealed that pharmaceutical firms face low profitability, liquidity challenges, inability to unlock capital to finance growth and an increased funds tied up in working capital. It is recommended that pharmaceutical firms need to re-analyse the factors that determine their working capital in order to come up with best practices and to lessen the challenges in the financial management. Again the pharmaceutical firms need to change their working capital management policy from informal to formal to improve their management practices.



CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The majority of Ghanaians with access to a health facility receive care from public or non-profit entities which account for 48% and 9% respectively. As is common in our healthcare delivery, the subsidized care at these facilities is far from free. In addition to the lost wages associated with long queues at public facilities, public sector stock outages mean that patients frequently must pay for their own medicines at private sector pharmacies.

In fact, public facilities typically do not have in stock 32% of essential medicines, which are out of stock 37% of the time on average (Management Sciences for Health, 2008). In some cases, patients may be able to get their prescriptions served at private pharmacies when drugs are unavailable at public facilities, but 90% of Ghana's 1,200 registered pharmacists practice in urban areas.

There is no doubt that the Pharmaceutical industry is facing challenging times, and only the companies that are able to (1) execute on the strategy they develop as well as (2) carefully assess and manage the risks, (3) make the right portfolio and business decisions and (4) improve their processes will be able to have long term success (Donald A. Baines, 2010).

One thing that has become clear and is worth to be noted is the fact that like other industries, many things are changing due to global technological advancement and so

pharmaceutical companies in Ghana equally need to modify and change their strategies and follow that with excellent execution strategies to have long term success. The paper tries to identify the common problems facing pharmaceutical companies in Ghana, their current management practices and suggest strategies that can be adopted to ameliorate the situation.

According to Prof. Bradley, Financial management is the area of business management, devoted to a judicious use of capital and a careful selection of sources of capital, in order to enable a spending unit to move in the direction of reaching its goals. Financial management objectives can be classified under two broad functional categories namely recurring finance functions and non-recurring or episodic finance functions. Performing the regular finance functions include financial planning, assessing the funds requirement, identifying and sourcing funds, allocation of funds and income and controlling the use of funds towards achieving the primary goal of profit/wealth maximization whereas non-recurring functions include, financial plan preparation during promotion of the business, financial readjustment during liquidity crisis, valuation of enterprise at the time of merger or reorganization and such other episodic activities of great financial effects.

The major elements of financial management are:

- i. Investment decisions include investment in fixed assets (called as capital budgeting). Investment in current assets are also a part of investment decisions called as working capital decisions.

- ii. Financial decisions relate to the raising of finance from various resources which will depend upon decision on type of source, period of financing, cost of financing and the returns thereby.
- iii. Dividend decision considers the net profit distribution which are generally divided into two namely:
 - a. Dividend for Shareholders-Dividend and the rate of it has to be decided.
 - b. Retained profits- Amount of retained profits has to be finalized which will depend upon expansion and diversification plans of the enterprise.

Some of the functions of financial management include estimation of capital requirements, determination of capital composition, choice of sources of funds, investment of funds, disposal of surplus, management of cash and financial controls.

1.2 Statement of the Problem

Sustainable access to affordable, quality medicines is an important component of health care but in many African countries it continues to be limited. The objective of providing quality, accessible and affordable health care to all residents in Ghana has been a major challenge confronting the country since independence.

It is indubitable that one major function of finance is to raise capital. Finance managers and for that matter most businesses including pharmaceutical companies commonly fall on banks, the stock market and equity capital giving less consideration to efficient working capital as a viable means of raising capital. They seem not to appreciate the feasibility of raising capital through efficient working capital management. However, efficient working capital management is one of the main sources of raising capital

(Nyamao et al, 2012). Nyamao et al (2012) reported that at least sixty percent of businesses fail by year four. The authors attribute working capital management as one of the causes of these failures. In a recent discussion with the managers of some pharmaceutical manufacturing companies in Kumasi Metropolis, they complained that they were facing ever increasing pressure on cost and growing financing requirements on importation of some drugs and raw materials used for the preparation of some drugs thus resulting on pressure on their profit margins. The report was not different from the Drug information unit of the Komfo Anokye Teaching Hospital in Kumasi. According to the Drug Information Unit of Komfo Anokye Teaching Hospital- Kumasi (February, 2017), there are several challenges that are faced in the pharmaceutical industry in Ghana. These affect both manufacturing companies and retailing ones in the industry. Some of these several challenges were enumerated as follows inflation and interest rate fluctuations, exchange rate fluctuations, importation of chemicals for drugs, delayance in payment of health insurance subsidies, high tax importation taxes, cold chain management, expiry of prescription only drugs or ``Class A'' drugs and pilfering. These inherent problems affect the financial and operational efficiency of firms in the industry. It is against this background that this study wishes to analyse the management practices of pharmaceutical companies as a way of identifying challenges as well as measures that would help to reduce trading losses and increase cost efficiency for higher returns.

It is worthwhile to take into consideration an effective way to increase the value of pharmaceutical companies through efficient working capital management but not focus attention on only income and expenditure items, in identifying possible options on the

part of these companies. This can result in release of liquid resources, improvement in fresh cash flow and reduction in both inventory and capital cost.

Additionally, according to Adjei et al (2006), although Ghana has a banking oriented financial system where capital markets are less developed and banks play an important role, nonetheless, how to secure financing from these banks have become very difficult in Ghana.

Today, as part of credit risk management strategy by the banks, collateral in the form of real asset is required before credit is granted. This makes it more difficult to secure the requisite loan. It follows that unlocking of capital for strategic investments and permanent reduction in funds tied up in working capital through excellent working capital management practices cannot be under estimated (Kaleem, 2015).

1.3 Objectives of the Study

The effective development of pharmaceutical companies in Kumasi as well as other regions in Kumasi depends on the complete understanding of its role in the society, its essential challenges and ways in which it could be improved. The research work aims at addressing the challenges concerning the financial management practices related to this industry. Therefore, the specific objectives of this study are stated as follows:

1. To assess the extent of working capital management practices of pharmaceutical companies in Ghana.
2. To examine the factors that influence the choice of financial management practices employed by pharmaceutical companies in Ghana.

3. To analyse the financial management constraints of pharmaceutical companies in Ghana.
4. To assess the management efficiency of pharmaceutical companies in Ghana.
5. To make recommendations aimed at improving the financial management practices of pharmaceutical companies in Ghana.

1.4 Research Questions

The following research questions are put forward to guide the study:

1. What is the working capital management practice employed by pharmaceutical companies in Ghana?
2. What influence the choice of working capital management practices by the Pharmaceutical companies in Ghana?
3. What are the financial management constraints that pharmaceutical companies face in Ghana?
4. To what extent does the financial management practices help to increase or decrease profits?
5. What are the weaknesses of the adopted management practices?

1.5 Justification of the Study

The pharmaceutical industry in Ghana has had a tremendous impact on the quality of healthcare. The study can benefit pharmaceutical businesses in Ghana and specifically those in the Kumasi metropolis by enhancing their knowledge about hedging and enabling them to consider hedging as a good strategy against financial risk.

Since the study is focused on assessing the financial management practices of pharmaceutical companies in Kumasi, it will bring out the weaknesses as well as the strengths of company chosen as case study and take constructive and strategic measures to improve upon its financial performance through effective management practices.

In the face of the difficulty to raise capital from the banks by pharmaceutical firms, in Kumasi, the study would ensure the unlocking of capital for strategic investments and permanent reduction in funds tied up in working capital through excellent working capital management practices by pharmaceutical firms. Also the study could be used as a guide to reduce pressure on cost and growing financing requirements of pharmaceutical companies in Kumasi. These advantages mentioned above would ensure the release of liquid resources, improve fresh cash flow and reduction in both inventory and capital cost.

In addition to that, it is expected to help pharmaceutical firms to adopt new strategies of reducing the risk associated with the industry and or possibly eliminate other operational and financial risks. It is therefore my considered estimation that this study would fill the gap on new methods risk management and risk elimination such as hedging as a method of operation in the retailing and manufacturing of pharmaceutical products in Ghana.

Furthermore, it will help to reduce operational cost, high cost of capital and increase profits through which more research and development could be undertaken to innovate new and better drugs and improve upon their financial systems and operations as well.

More so, to the larger group, cost efficient manufacturing and retailing of pharmaceutical drugs will result in lower prices and would be affordable which will contribute to quality health care of the society.

Finally, the study will serve as a secondary material or source of information to researchers who would do further studies in relation to this area.

1.6 The Scope of the Study

The study will cover one pharmaceutical company in Kumasi which is involved in both the importation, manufacturing and retailing of pharmaceutical drugs and raw materials for pharmaceutical drugs.

Patterson Zocchonis (PZ) Pharmaceutical Company, Sennel and Vicbarns were chosen because of their long years of operational experience in the pharmaceutical industry and their ability to conform to rules and regulations regarding the industry.

1.7 Limitations of the Study

All research activities are weighed down with problems. These may be technical or material. In pursuing this research into the financial management practices of pharmaceutical companies in Kumasi, the researcher encountered the following problems.

Firstly, trustworthiness of interviewees and respondents to reveal the true state of affairs of their firms.

Secondly, unwillingness of pharmaceutical companies to release their financial statements for the research.

Thirdly, the sample that was selected was not done in relation to manufacturing companies against retailing companies and therefore did not give a fair view of practices of manufacturing companies against retailing ones.

The sampling technique and instruments that were employed for the collection of primary data was cost effective which did not compromise on quality of data collected and therefore ensured a true representation of the primary data collected. Efforts were made to collect quality data to enrich the research work.

In a nutshell, the researcher utilised all available opportunities, tapped available strengths, eliminated all weaknesses and circumvented all threats to reach a successful and enriched research to serve posterity.

1.8 Organisation of the Study

The study is organised into five chapters. The first chapter is devoted to the introduction of the study. The chapter involves the background of the study, statement of the problem, objectives of the study, justification of the study, the scope and limitations of the study.

Chapter two focuses on the review of relevant literature on financial management practices of pharmaceutical companies.

The research methodology is discussed in chapter three. It includes the research design, population, sampling and sampling techniques, data collection techniques and data presentation and analysis.

The empirical results of the study are also described and analysed in chapter four.

Chapter five concludes the research with summary of the main findings and recommendation.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

According to Baines (2010), the United States is by far the biggest market for Pharmaceuticals. Many companies recognize the need to start putting more resources and infrastructure in other regions and countries that have the potential to become significant sources of growth in the very near future. China and India are the countries that readily come to mind, but countries like Brazil, Russia and even Poland are being looked at as markets that still have significant areas where the needs of patients with certain diseases are not being met.

In figures 2.1 and 2.2 below, the IMS research identifies the following countries as the E7: China, India, Brazil, Russia, Turkey, Poland, South Korea while others include Mexico or Indonesia in the place of Poland or S. Korea. Regardless of what countries are identified as the E7, these are meant to define the non-industrialized countries with significant economic, political, developmental and other growth potential that need to be included in their business planning to achieve success on a global scale.

Many regions have diseases which are not fully understood and may have different medical needs because of differences in genetics, diet, climate or other factors which are unique to their environment. It is important that companies recognize that they need to invest in clinical trial and other investigative work before they attempt to introduce their portfolio of current products to the region. This like the other problems listed requires rigorous assessment and understanding of the ways of doing business, culture and a host of other physiological and social factors, especially in places where people have practiced

one form of medicine for years. In these cases, the solution may be a combination of current and new approaches and therapies and not simply going in with the goal of replacing treatments that have been used for generations.

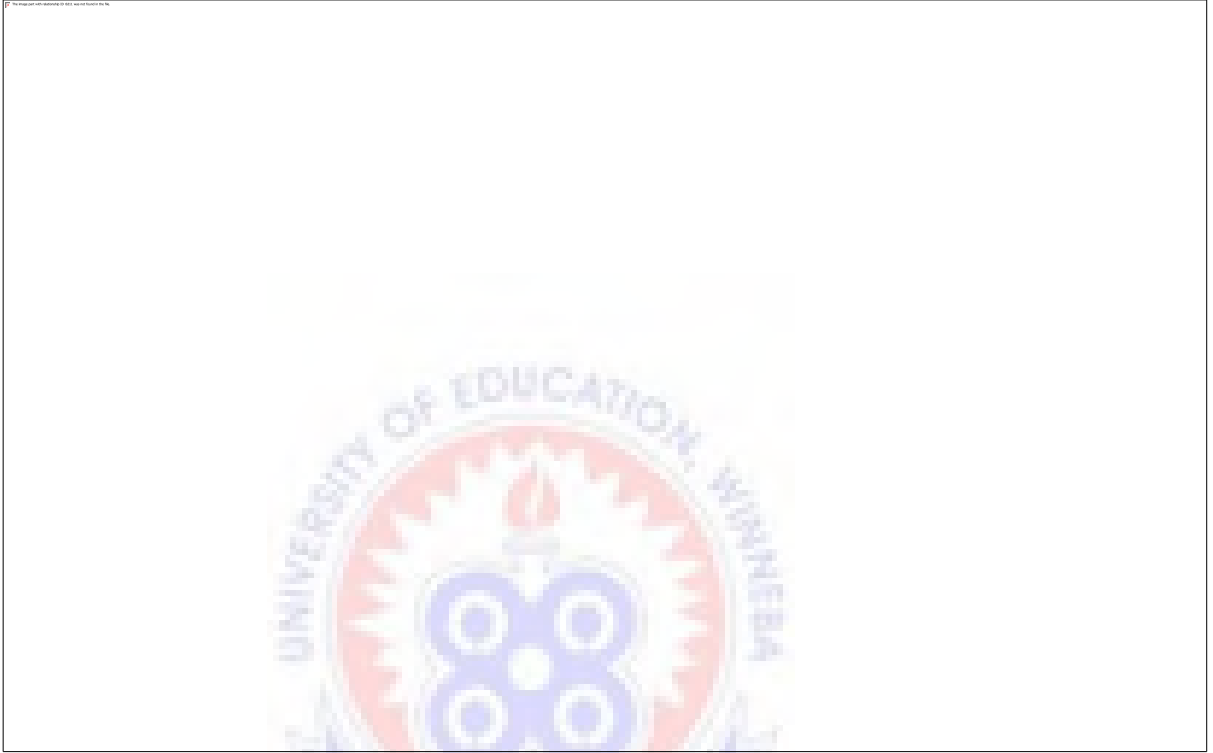


Figure 2. 1 : E 7 Health Demographics

Source: WHO World Health Statistics; Economist Intelligence Unit, 2008



Figure 2. 2 : E7 Therapy Classes

*Source: IMS Health, MIDAS, MAT Jun 2008*Leading 5 therapy classes ranked by CAGR 2004-2004- 2008 (Const. Us\$ and size.*

The April 16, 2008 edition of Piribo, the online destination for business intelligence for the biotech and Pharmaceutical industry made the following points:

- The Pharmaceutical markets in India, China and Turkey are expected to grow the fastest among all the E7 nations.
- The E7 nations are expected to account for nearly half of the 6.99 Billion global populations in 2012.
- Cardiovascular, cancer and other chronic diseases have taken over communicable diseases as the biggest killers in these nations.
- The Pharmaceutical market in most of these regions is still dominated by acute therapies, but with the growth rate of chronic therapies far exceeding that of acute therapies, the therapy mix of the market will be much different in the next five years from what it is today.

Many companies have made the first step of recognizing that there is a need to change. The problem however comes with ensuring that the proper due diligence is done and the right decisions are made based on their specific situation.

Andrew Jack, a multiple award winning journalist has been writing for the Financial Times since 1990, specializing in health and pharmaceuticals since 2004. In March 12, 2009 edition of the Financial Times article titled, "Pharmas try different routes to survive' Andrew Jack wrote, "Rarely in the field of pharmaceuticals have so many companies adopted such varied strategies in order to survive the intensifying structural pressures in their industry" He then goes on to describe what he sees as the three main approaches namely:

- 1: Acquisitions like the Pfizer and Merck.
- 2: Specialization by companies like Shire and AstraZeneca that previously concentrated on 'small molecules' with limited benefits.
- 3: Geographical Diversification as mentioned above by GlaxoSmithKline and AstraZeneca.

The rest of this is chapter is structured under the following main headings:

- 2.2 Overview of Pharmaceutical Industry in Ghana.
- 2.3 Problems faced by Pharmaceutical industry in Ghana.
- 2.4 Nature and Scope of Financial Management

2.2 Overview of the Pharmaceutical Industry in Ghana

In Ghana, the pharmaceutical sector comprises producers of drugs, wholesalers, distributors, retailers and consumers. According to the Centre for Pharmaceutical Management (2003) the pharmaceutical market in Ghana on the demand side was worth about 90 million United States dollars (US\$) in the year 2001. The size of the pharmaceutical industry was estimated by Seiter & Gyansa-Lutterodt (2009) to be of the magnitude of US\$300 million in terms of sales for both locally and imported pharmaceuticals in the year 2008. Within this market, the government of Ghana is a major player, both as a regulator of the market and as a buyer involved directly in the wholesale and supply of drugs and healthcare services. The private sector wholesale market is often to be an important player in the sector. However, its role and functions beyond narrow commercial interests are not well known. The private sector wholesalers are clearly an important part of the supply chain from the pharmaceutical producers to the ultimate consumers of drugs and other pharmaceutical products (Annum et al., 2010).

The current number of pharmaceutical manufacturers including those also engaged in importation, wholesale or other areas of the supply chain is between 25 and 30. Seiter and Gyansa-Lutterodt (2009) outline the structure of the pharmaceutical wholesale market in the year 2008. They indicate that about 150 companies are licensed or registered national or regional wholesalers of pharmaceutical products. Further, about 60 companies act as importers of pharmaceutical products and they sell these products to local distributors based on their own networks. The authors report that the total number of businesses involved in active drug import and distribution is between 200 and 300. These numbers are similar to those of registered wholesalers of pharmaceutical products in Ghana for the

year 2000 as reported by Centre for Pharmaceutical Management (2003). Given the moderately high economic growth of Ghana over the last 25 years, the local pharmaceutical market has become increasingly attractive for both wholesale and retail suppliers. Local producers account for about 30% of market share with the remaining 70% share supplied mainly by Indian and Chinese pharmaceutical firms.

In principle, a retail pharmacy in a small-localized area can act as a wholesaler for local chemical sellers or local clinics and hospitals (Seiter & Gyansa-Lutterodt, 2009). This means that potentially pharmaceutical wholesalers can run into several hundred given the number of districts and local council areas in Ghana and the dominance of one pharmaceutical retailer in a given area, especially for remote parts of the country. Therefore, from an economic analytical viewpoint, the pharmaceutical wholesale market in Ghana has a monopolistic competitive market structure on the supply side; that is, the market is characterized by many sellers who distinguish themselves from each other through branding and selective advertising (Agbeko, April 2012).

2.3 Problems Faced by the Pharmaceutical Industry in Ghana

A comprehensive review of the pharmaceutical sector was undertaken in 1994, which identified a number of major problems within the sector. Principal among these were inappropriate use of drugs, poor procurement, storage and distribution practices, inadequate financial management systems for drugs, leading to erosion of capital of the revolving drug funds and inappropriate quality assurance. The review further identified that wholesalers and retailers of pharmaceutical products had not been able to extend their reach to the rural parts of the country, for they found it difficult in assessing capital

to expand their business and a reluctance to franchise their businesses due to little knowledge about its operation and prospects. For most of these wholesalers and retailers their inability to expand have mainly been as a result of regulatory requirements by the pharmacy council, getting a pharmacist to superintend their facilities especially in the other regions in Ghana apart from Greater Accra and Ashanti, and their inability to attract the right staff and training them (MOH, 2002). These problems resulted in the formulation of a master plan for the sector that formed the basis for the setting up of the Ghana National Drugs Program (GNDP) in 1997.

2.4 Nature and Scope of Financial Management

According to Brealey (2011), financial management is the process of putting available funds to the best advantage from the long term point of view of business objectives. Maheshwari (2011) opines that financial management is concerned with raising financial resources and their effective utilization towards achieving the organizational goals. Traditionally, the study of finance looks at funds management in a direction which will ensure the achievement of a particular objective such as the maximization of returns on capital investment as noted by Finau (2011). How such capital will be effectively utilized in financial management is key, in so doing the identifying of the business objective and its financial functions of working capital management is one determinant (Brigham & Ehrhardt, 2010; Chandra, 2008; Keown, Martin, Petty, & Scott, 2002; D. Sharma, 2009). From the above definitions and explanations, it could be maintained that effective financial management involves several activities which working capital management is upheld.

2.4.1 Working Capital Management

According to Ward (2010), Working capital is the net investment as a result of a business in commissioning current assets (such as cash and bank, inventories, and trade receivable) and commissioning current liabilities (such as overdraft and trade payables). Efficient utilization of a company's current assets and liabilities, commonly known as working capital management demands careful consideration (Jose et al. 1996; Malmi and Ikäheimo 2003). Therefore, working capital management practices is essential with regard to its undeviating effect on a firm's liquidity (Chiou and Cheng 2006; Kim et al. 1998; Moss and Stine 1993; Opler et al. 1999; Schilling 1996). Abuzayed (2011) remarked that working capital management practices are of significance to all company sizes operating in both developed and up-and-coming markets. It is even of paramount significance to the companies operating in up-and-coming markets because of the fact that the failure rate among the companies are very high due to poor working capital management practices (Berryman, 1983; Dunn and Cheatham, 1993; Lazaridis and Tryfonidis, 2006). For Singh and Kumar (2014), long-term investment and financial decisions-making, for the past 40years have been a major concern on theoretical developments and that much has not been invested in the aspect of short-term finance, in respect to working capital management. According to Home (2000), working capital management is an important aspect of overall financial management, in such instance it is of necessity to separate the working capital management from financial decisions and fundamental investment. The influence in the size and effectiveness of working capital is primary link to the working capital decisions by management (Kaur, 2010).

Working Capital Management helps to reduce sums of money that are locked up in a firm's contemporary assets through reduction in the cash conversion cycle.

The management of working capital involves managing inventories, accounts receivable and payable, and cash. Thus some of the major activities carried out in the management of working capital are:

- i. Cash management –identifying the cash balance to allow for the business to meet day to day expenses to reduce cash holding costs.
- ii. Inventory management –identifying the level of inventory to ensure uninterrupted production but reducing the investment in raw materials and minimizing reordering costs to result in increase in cash flows.
- iii. Debtors management- identifying the appropriate credit policy such that any impact on cash flows and the cash conversion cycle will be offset by increased revenue and hence Return on Capital (or vice versa)
- iv. Short term financing-identifying the appropriate source of financing, given the cash conversion cycle: the inventory is ideally financed by credit granted by the supplier, however it may be necessary to utilize a bank loan (or overdraft), or to convert debtors to cash through factoring.

Debt management is a unique strategy developed to help a debtor manage their debt. This strategy is usually developed and implemented by an outside company or organization on behalf of the debtor, usually because the debtor is unable to sufficiently manage their debt on their own, due to lack of knowledge or because they are overwhelmed by the amount of debt.

With respect to a firm's profitability as a key result of effective working capital management, Gill et al (2010) shared similar opinion with other researchers like Falope and Ajilore (2009).

Meanwhile, Wang (2002) noted that aggressive liquidity management promotes operating performance and is typically associated with higher corporate values.

Looking at the factors such as corporate viability, performance and sustainability and competitive the element of working capital cannot be disputed in the management of business (Pieterse, 2012). It could therefore be emphasized that management of a firm's receivables, inventory and payables are major determinants of the viability of the firm. Padachi (2006), added that the financial health of an organization in respect of its size is affected in poor managerial decisions on working capital management. Good managerial decision is very important in the effective utilization of working capital as the level of investment of such capital is of a high proportion to the total assets employed. Gitman (2009) and Kytönen (2004) shared similar thought that the point of entry of cash to a firm till it exits from a firm in payment signifies what is called cash management which comprises the collection and disbursement of cash. Figure 2.1 below illustrates the concept of working capital management.



Figure 2.3 : The Concept of Working Capital Management
Source: Adapted from Mengesha, 2014

2.4.2. Inventory Management

According to Arsham (2006), inventory management is the procedure for the minimization of the entire cost of inventory. This means keeping the general costs linked with having inventory as little as possible devoid of creating troubles. Wild (2002) explained that stock and inventory are often used interchangeably to attribute to the same thing but as it stands when inventory management is mentioned there is a slight difference with stock: the scope of inventory management is quite broad than stock: as it is defined as management of materials either in motion and at rest (Coyle et al; 2003). A company's working capital consists of its reserves in current assets, which includes short-term assets cash and bank balance, inventories, market securities and receivables.

According to Wild (2002), inventory control organizes the convenience of items to the customers. It coordinates the purchasing, manufacturing and distribution purpose to congregate the marketing needs. This responsibility includes available current sale items, new products, consumables: spare parts, obsolete items and all other supplies.

For effective inventory management practices, quantity to be ordered and time or period of order, are two key factors which need to be considered (Adu, 2013). Thus, the questions of how much and when it should be ordered. The economic order quantity model is a determinant of optimal inventory level, which takes into account total cost, inventory carrying and shortage cost (William, 2014). Gourdin (2001) observed that inventory is one spot of logistics that has received enormous deal of management's awareness over the years and that Executives currently realize that holding extreme stocks is purely too costly.

Clodfelter (2003), also remarked that inventory control system offers succeeding benefits to sales. But not for inventory control events in place, stores can turn out to be overstocked or under stocked.

This means that inventory could be costly if not well managed. On the issue of the purpose of inventory management, Reid & sanders (2007) explained that there are two goals that inventory management practice seek; first, a good practice of inventory management must ensure the availability of goods. Second, not all items can be held in stock against every cost. The usual objective of an inventory control system can be summarized as providing an agreed level of customer service for the cheapest price (Kaleem, 2015).

The three key aspects in an inventory control system are also interrelated namely: forecasting future demand, deciding when and how much to re-order and deciding where stocks should be held. Lawrence, (1977) also gave a practical explanation that computer aided forecasting which includes routine management review and adjustment provides a better, more reliable and more consistent forecast than either a statistical or a subjective

forecast alone. All products must be forecasted statistically based on its marketing, product and customer experience and knowledge.

Re-Order Point

The factors that go into re-order decision include forecast accuracy, customer service level desired, distribution of lead time for manufacturing re-orders and distribution of lead time for branch re-orders. All these factors are product dependent. Rabinovich (2002) observed that the Economic Order Quantity (EOQ) is a recognized and long-established method for determining the most favourable reorder quantity. Harmonizing total ordering costs with total carrying costs, its applicability has become suspect over time with the implementation of mechanized ordering systems. Since most automated systems, such as internet-based or electronic data interchange systems, are intended to coerce the cost of placing an order to zero, a result of their implementation should be an optimal order quantity approaching one. As a result, EOQ usage may be rarely found in practice as one-for-one and lot-for-lot replenishment systems are used instead. On this edge it becomes questionable as to whether the EOQ model is not obsolete.

Lawrence (1977) opined that the approach of using simple Economic Order Quantity model to calculate re-order quantity on an approximate basis would lead theoretically to a too low re-order quantity when compared to an "exact" solution, the lack of accuracy of the re-order cost estimate make a more refined computational procedure seem a waste of time. Meanwhile, research maintains that whereas inventory management ensures forecasting accuracy, inventory re-order point and re-order quantity calculations help to increase customer service level, reduce stock and cost.

2.4.3 Cash Management

According to Investopedia, Cash management is the corporate process of collecting and managing cash, as well as using it for short term investment. It is a key component of ensuring a company's financial stability and solvency. Kytönen (2004) remarked that cash and treasury management seem to be an important function in most firms. In such respect it is much expected to identify the role of financial transaction in cash management process as it adds value to the firm, and has seen a direction of change in firm's behaviour. Whereas Briggs and Singh (2000) noted that the ability of a firm to hold small amount of cash depends upon its access to money and the capital market or a possible sale of assets. Ward (2010) added that Cash management should maximize equity and holder return and that maximizing profit can be obtained from investing cash and keeping an appropriate level of liquidity.

Cash management forms an aspect of working capital management which encompasses the manner in which cash undergoes different process and procedures of handling a firm's liquidity in its monitoring and planning (Lamberg & Vålming, 2009). An effective monitoring of cash management ensures an improved profit margins and higher earnings ratio which in turn can lead to higher profitability (Larsson & Hammarlund, 2005). The figure 2.4 below gives an overview of how cash is converted from its inflow to an outflow of a firm. In such regards the shorter cash convention the better for the company (Maness & Zietlow, 2005). Such changes in the time line critically depend on management in their critical understudy of its timeline (Kaleem, 2015).



Figure 2. 4 : Conversions of Cash from the Inflow to the Outflow

Source: Adapted from Maness & Zietlow

Larsson (2000) opined that for firms to ensure control that can adjust its financial routine the level of efficiency in its value chain can be improved. One among such control which has a great potential but often neglected is the management of liquid capital, or cash management by organizational management. Working capital management is evolving in a cycle around certain factors of control, which serve as an attribute and benchmark of determinant. Such factors comprise four principal elements: trade debtors, trade creditors, stock, and incoming cash among all debtors are vital in the aspect of cash conversion cycle. For Wilson (2008) the causes of business failures are due to poor working capital management, with late payment being an anchor. Researchers like Filbeck and Krueger (2005), Lazaridis and Tryfonidis (2006), Padachi (2006), Raheman and Nasr (2007), Teruel and Solano (2007) have undertaken several studies on the topic under discussion which in each case comprise a harmony on conceptualizing working capital management as the setting up and management of payables, receivables, inventory, and cash, is sought to maximize profitability and eliminate the threat of illiquidity.

Zaugg (2003) discussed the five C's of credit namely collateral, conditions, capital, capacity, and character. According to the author, the five C's of credit provide credit

managers with the needed framework for carrying out a controlled investigation process in order to deliver a credit evaluation that considers each component of credit risk related to credit approval. Meanwhile, it considers the other C's of credit which are competition, computers, and common sense. Once a customer is considered creditworthy, then credit limits can be ascertained and subsequent procedures put down to ensure that these limits and procedures are complied with accordingly.

The point is that an organization granting credit runs the risk of not receiving payment of goods or services supplied. Hence maximum vigilance should be taken over the kind of customers to whom credit facilities are granted to. It is in view of this that, credit management practitioners consider the concept of 'five Cs of credit' very useful checklist and vital in appraising the request from a customer for supply on credit (Kaleem, 2015). However, Jim (2003) had argued that there are 7Cs of credit adding that always one should keep his or her company business credit policy in mind as the 6th, look at the first six Cs and do a final cost-benefit analysis before granting the credit.

2.4.4 Accounts Payable Management

According to an anonymous researcher (2012), Accounts payable is money owed by a business to its suppliers (trade creditors) shown as a current (short-term) liability on a company's balance sheet. Kaleem (2015) explained further that payables are often categorized as Trade Payables, payables for the purchase of physical goods that are recorded in Inventory, and Expense Payables, payables for the purchase of goods or services that are expensed. Common examples of Expense Payables are advertising, travel, entertainment, office supplies and utilities. Other examples of accounts payable

include: Sales taxes payable - sales taxes collected from customers that must be paid to the state department of revenue. Payroll taxes payable - amounts withheld from employee pay for income taxes and employment taxes, and amounts owed by the employer for that payroll and which must be paid to the IRS for withholding. Loans payable and mortgages payable - total amounts due, and amounts currently due for loans and mortgages. Account payable is a form of credit that suppliers put forward to their clients by allowing them to reimburse for a product or service after it has already been received.

In the work of Salek (2005), it was established that in ensuring a system of prompt payment or a discount and late payment for fees there are five best ways that such practices could be handled. These are:

- i. **Commitment:** For such practices of prompt payment discount and late payment fees there should be a total commitment of all management and all key stake holders for such policy to hold. The sharing of such commitment must be very proactive at the level of senior staffs and which also need to affect every functional activity within the company especially of sales, customer service and management in general.
- ii. **Automation:** This enables transaction of determining and handling late payment fees and unearned prompt payment discount which takes a great deal of staff time due to its high volume and low value transactions. The automation of such system enables such transactions to be handled easily in such development activities such as the following will be fast track easily: a) Notification to customers b) Transaction write-off or adjustment.

- iii. **Giving a stipulated grace period for due dates**-This is of a great challenge to enforce charges Is of a great challenge to enforce charges for payment that is few days late, therefore there is the need to give a stipulated grace period which will still be considered on time for the purpose of accessing late payment fees.
- iv. **Using late payment fees and / or prompt payment discount as a collection tool:** This helps in a proactive customer contact as it alert customers service of a proactive call. This call prompts the customer and alerts him of an opportunity to save money.
- v. **Recording late payment fees to a suspense account,** in addition to prompt payment discount, instead of directly to interest income or revenue (Salek, 2005).

Schaeffer (2007) reminds us that accounts payable consists of both cash management/cash flow components and there are several techniques accounts payable practitioners can employ to improve their firm's cash flow drawing attention the following tactics:

- Take all early-payment discount presented by your suppliers. Unless interest rates increase significantly, this is a no-lose proposition for all companies, even those in a borrowing position. Taking the discount on 2/10 net 30 terms translates into a 36 percent rate of return, something few organizations are earning today.
- Do everything feasible to reduce the number of priority (rush) checks
- Don't forget to occasionally ask for statements from vendors, insisting that the statements show all activity, including open credits.

- Payments should be planned according to the payment terms negotiated with the supplier allowing your organization to sustain good relations with your vendors and not find put on credit hold.
- Stretching payments also known by some as payment timing, is an issue that has both hard-core proponents as well as those who fervently object to the practice. You may resort to this tactic when undergoing temporary cash crunch. While some perceive payment stretching almost as breaking a promise to their suppliers, others see it as a normal business practice.

In a survey gathered by Schaeffer (2007), respondents never stretch payments if not forced to do so by cash flow considerations. These are what the respondents said: 42.5 percent said they do not stretch payments.

20 percent said they stretched payments in periods of tight cash flow but instantaneously revert to paying at or near terms when cash is not in short supply

15 percent responded that they had in place a formal (monitored) payment stretching policy as part of our cash management policy.

15 percent said they also had an informal payment stretching policy in place.

7.5 percent replied that they stretched payments only when they desired to window-dress the financial statements.

None said they stretched payments in periods of tight cash and to window-dress financial Statements.

About 14 percent (13.64%) responded that payment stretching is a legally recognized cash management initiative.

Again, about eleven percent (10.61%) percent answered that stretching payments is a requisite in a competitive environment because everyone is doing it.

Also about eight percent (7.58%) responded that it was okay to stretch payments if you want to hold on to cash longer, even if there are no cash flow issues.

About five percent (4.55%) said it was okay to stretch payments as a cash management initiative without informing suppliers: If the vendor notices an issue with a particular invoice, it is okay to stretch the payment until the issue is resolved. If, however, the invoice is legitimate as well as accurate, it is wrong to stretch the payment. I can appreciate stretching payments, even though I don't agree with the practice.

Vendors need their money to pay their vendors and on down the line. If you agree with the 30-day terms, then that's when you should pay (Kaleem 2015).

In analyzing the responses, it could be found that while almost two-thirds either never stretch or only do so if they are forced by cash flow considerations, only eighteen (18%) considered the practice to be morally wrong. Meanwhile, only about five percent (4.55%) thought that it was acceptable to stretch as a cash management initiative without informing suppliers. Various laws provide for automatic late-payment interest payments, making stretch payment unattractive. It is an indubitable fact that, this is a matter where no consensus exists within the industry.

2.4.5. The Choice of Working Capital Management Practices

According to Horne (2000), functioning capital management is the organization of current assets in the name of money, saleable securities, receivables and inventories. Hillier et al. (2010) noted that working capital is seen as the net working capital, which is

defined as the current assets less current liabilities (Net working capital = Current assets – current liabilities). For Block and Hirt (1992) working capital management involves the financing and management of the current assets of the organization. To Jeng Ren et al. (2006), the ability of a firm to ensure its wellbeing in the market in respect to liquidity depends on the choice of working capital practices.

According to Baig (2009), the choice of a working capital management practices can be viewed in two dimensional perspectives which take a look at the internal and external perspective. The internal perspective deals with the management of investment in relation to current assets and short-term financing in addition to operational functions that interfere with the balance of current assets and liabilities. This ensures the maximization of benefits and minimizing of the working capital assets cost with short term financing. The external management, on the other hand, deals with firm's supplier and corporation with customers. In a bid to minimize cost related to firms inter relations transactions, an effort (a synergy) is created on firm value, by taking care of external generated problems. An effort in attainment of that is achieved by ensuring a reduction in cost related to firms-inter transactions, thereby creating firm value in a win-win condition. (Baig, 2009).

2.4.6 What influences the choice of working capital management practices?

For the purpose of complete understanding of working capital management practices that are adopted by firms, it requires an expressive elaboration on the various causes for a firm's decision and choices in relation to the topic. Hill et al. (2010) commented that for effective and efficient management of firms, managers are encouraged to reflect on various factors in decision making processes, for the reason that the more unstable market

conditions are, the more resources and the bigger harmonization is required to manage Working Capital Managements components. The choice of practices in the management of the working capital of a firm is dependable on the operational cycles it undergoes in a firm's daily activity which Pieterse (2012) identified such cycle as working capital cycles as the various elements are interrelated. Figure 2.5 below shows the working capital cycle.

Credit for suppliers



Figure 2. 5 : Operating (Working Capital) Cycle

Source: Adapted from Pieterse, 2012

In perspective of Working capital cycle furthermore recognized as operating cycle, by means of recent alteration to cash, renovation cycle reflects the net time interval connecting distinct cash expenditure on a firm's acquisition of production. Cash gets

transformed and added to inventory which includes procurement of raw materials, alteration of raw materials into work-in-progress, completed goods and at last the convey of goods to stock at the conclusion of the mechanized procedure (Pieterse, 2012). In stage two of the sequence, the inventory is transformed into receivables as credit sales are prepared to clientele. Organizations which do not put up for sale on credit clearly do not have segmented two of the operating cycle (Pieterse 2012). Last of all, phase three represents the period when receivables are composed. Such phase finalizes the working cycle and consequently, such firms have to move from hard cash to inventory, to receivables and to hard cash again.

Banos-Caballero et al. (2010) also observed such influences with the purpose of influencing firms' working capital policy whereas Hill et al. (2010) added five more determinants in his work after he had tested earlier writings. Chiou & Cheng (2006) have also understudied the same subject in relation to profitability and a number of determinants of firms studied namely:

- **Manufacturing Cycle**

Requirements of working capital is in straight proportion to duration of manufacturing cycle i.e. longer the procedure period of manufacture, outsized is the quantity of working capital requests (Virendra, 2007). The longer manufacturing time blocks money in acquiring raw material and supplementary suppliers, labor and service costs for long phase sooner than the over and done with product is finally obtained.

- **Contribution Margin**

According to Hill et al. (2010), a larger contribution margin in both units sold contribute to an improved working capital; nevertheless, the authors did not discover pragmatic support for this in their study.

- **Ability to create Internal Resources**

Result propose that firms with a superior capacity to produce internal resources, include high current asset levels, this possibly will subsist because of the lower cost of finances invest in working capital for these firms generate by immense cash flows. Banos-Caballero et al. (2010) and Chiou & Cheng (2006) establish those firms contain well-organized working capital management while working cash flow increase. Hill et al. (2010) and Banos-Caballero et al. (2010) initiate that, firms by means of better operating cash flows deal with working capital more predictably than those with inverse result.

- **Industry**

Manufacturing Trade credit conditions lean to have extensive variation among industries but little dissimilarity within industries. Moreover, there are differences in the levels of the books of payable and accounts involving industries. A pragmatic study institute huge differences amid industries (Banos Caballero et al., 2010). Salawu (2006) similarly observed significant variances among industries.

- **Sales unpredictability**

Hill et al. (2010) established that sales unpredictability has a downbeat relative in the direction of the sum of working capital. Such conclude that managers act in response to larger sales volatility via forceful working capital management.

- **Production Policy**

The requests of working capital depend upon the manufacture guidelines followed by the business unit. If a firm follows stable manufacture policy, yet when order is irregular by accumulating inventories throughout stock phase with observation to meet high request throughout the crest season it will entail higher working capital (Virendra, 2007). Even a firm may accept the policy of varying its production program in harmony with the different demand. Thus, manufacture policies may be different from firm to firm, depending upon the circumstances. Hence, the possibility of variance in the working capital requirements (Kaleem, 2015).

- **Firm Size**

The price tag for credit by and large is bigger for minor firms. This results that small firms hold more forceful working capital policies than large firms. Big firms with improved opportunity into capital markets expand more credit in trading and minor firms use extra credit from Suppliers. Banos-Caballero et al. (2010), Chiou & Cheng (2006), and Hill et al. (2010) maintained that firm size is optimistically connected to the total of working capital.

- **Fixed Financial Assets**

Relation of fixed financial resources to whole assets has a depressing relation to the cash conversion cycle among three studies (Deloof 2003, Dong&Su 2010, Mathuva 2010). It is argued that big firms possibly will achieve benefits of scale although it is not being experienced, possibly explained by what Banos-Caballero et al. (2010) noted.

- **Enlargement opportunity**

Practical industry behavior maintains that firms increase their inventories when they anticipate sale to increase. Also high enlargement firms are liable to use trade credit more as a form of financing. Again firms might give extra payment time to their customers to increase their sales in period of low demand. (Banos-Caballero et al., 2010). In the same vein, Hill et al. (2010) established a downbeat relation between sales expansion and the total of working capital which was also the result of Banos-Caballero et al. (2010). Sales expansion has a negative relative to the cash conversion cycle in two studies (Deloof, 2003, Garcia-Teruel & Martinez-Solano, 2007) and an optimistic relation in two studies (Amir Shah&Sana, 2006, Falope&Ajilore 2009).

- **Other Factors**

Certain other factors such as operating efficiency, management ability, irregular supply, import policy, assets structure, importance of labor, banking facilities etc. moreover affect the working capital needs of a business.

Darun (2011) revealed in his work that factors that influence the choice of working capital practice according to can be grouped into internal and external factors. Table 2.1 below shows these factors.

Table 2. 1 : Factors that influence the choice of working capital practice and Effect on Working Capital Management

Factors	Effect on Working Capital Management	References
External Factors	<ul style="list-style-type: none"> • Political circumstances 	Carey, 1949; Ketchum, 1942, 1943
	<ul style="list-style-type: none"> • Economic and business atmosphere 	(Ben-Horim & Levy, 1983; Claessens, et al., 2000)
	<ul style="list-style-type: none"> • Industrial effects 	(Filbeck & Krueger, 2005; Raheman, Qayyum, & Afza, 2011)
	<ul style="list-style-type: none"> • Legislation 	(Peel, et al., 2000)
	<ul style="list-style-type: none"> • Competition 	(Filbeck & Krueger, 2005)
	<ul style="list-style-type: none"> • Financing/interest • rates/regulations 	(Cocheo, 2004; Striscek, 2001)
Internal Factors	Managerial practice / working capital policy	(Boisjoly & Izzo, 2009; Deloof, 2003; García-Teruel & Martínez-Solano, 2007; Hill, et al., 2010; Johnson & Soenen, 200; Lazaridis & Tryfonidis, 2006; Sathya moorthi, 2002)
	<ul style="list-style-type: none"> • Performance measurement system 	(Srisvastava, 2004)
	<ul style="list-style-type: none"> • Information technology 	(Fairchild, 2005; Jaiswal & Kaushik, 2005)
	<ul style="list-style-type: none"> • Employees behaviours 	(Krishna, Dmitri, & Victor, 1993)
	<ul style="list-style-type: none"> • Investment policy 	(Appuhami, 2009;)
	<ul style="list-style-type: none"> • Production and Supply Chain management 	(Bartezzaghi, et al., 1992)

	• Shareholders wealth	(Filbeck, Krueger, & Preece, 2007)
	• Inventory management	(Raman & Kim, 2002; Yang, et al., 2005)
	• Payable management	(Rafuse, 1996), • Credit policy (Ooghe, 1998;)
	• Employees financial knowledge	(Cheatham & Cheatham, 1993)

Source: Adapted from Daron, 2011

In discussing the effectiveness of working capital management, Panwala (2009) noted that liquidity and profitability are the two very important aspects of corporate business existence. Liquidity measures the capacity of a company to meet all the growing obligations. The efficient management of working capital is the most crucial factor in ensuring the survival, liquidity, solvency and profitability of a business organization (Samuel, 2011). Moreover, two differing notions are recognized within this period, believed to contribute to effective Working Capital Management: that is financial viewpoint and organizational context.

More emphatically efficient working capital management involves preparation and scheming current assets and current liabilities to put off the hazard of a company's incapability to meet due short period obligations on the one hand, and to keep away from unnecessary venture in these assets on the other hand (Eljelly, 2004). To some extent, working resources is associated with daily operations of a business. This makes working capital management very essential in day-to-day activities. Practically, it is the excess of current assets over current liabilities. Working capital management consequently deal with the tribulations which happen to administer the current assets, current liabilities and the inter relationship exists sandwiched between them.

Samuel (2011) remarked that the consequence of working capital to the achievement of any business cannot be overemphasized. One of the serious predicaments faced by the majority monetary managers is how to effectively and efficiently manage working capital to the advantage of their organization. This is because working capital comprises a number of different items and its administration is complicated since these are often linked. Therefore, changing one item may impact unfavourably upon other areas of the business (Kaleem, 2015). An acceptable level of working capital is to be maintained as the basic goal of working capital management since both circumstances is for a business unit i.e. insufficient working capital and excessive working capital. Insufficient working capital possibly will show the way of the firm to liquidation and extreme working capital implies idle money which earns more income for the business. Operational capital management policies of a firm have a great consequence on its profitability, liquidity and structural health of the organization (Virendra, 2007). Moreover, working capital has been acknowledged as the consequence of the time lag between the disbursement for purchasing raw materials and the collection from the sale of the complete good (Dong & Su, 2010). Consequently, the Cash Conversion Cycle is a prevailing measure for assessing how well a company is running its working capital (Kaleem 2015).

According to Nobanee (2009), Cash conversion cycle can be shortened by reducing the inventory conversion period by means of processing and selling merchandise further quickly; or by lessening the receivables compilation phase through speeding up collections; or by increasing the payables deferral period through slowing down payments to suppliers This increases companies' efficiency of internal operations and consequences on higher profitability and higher market value.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This Chapter discusses the research design and the procedures that were adopted to carry out the research. It outlines the population, sampling and sampling techniques, data collection techniques, data procedure and data presentation and analysis.

3.1 Research Design

According to Burns and Grove (2003, p.195), research design is a “blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings”.

Parahoo (1997, p.142) also describes it as “a plan that describes how, when and where data are to be collected and analysed”. In addition, Polit et al, (2001) define research design as “the researcher’s overall for answering the question or testing the research hypothesis”.

To obtain reliable results from the study data was sought from Sennel Pharmaceuticals, VicBarns and Patterson Zochonis (PZ) who undertakes the manufacturing, importation, wholesaling and retailing of pharmaceutical drugs and pharmaceutical raw materials.

3.2 Population

The population of Sennel Pharmaceuticals is about 20 but for PZ and VicBarns Pharmaceuticals it is unknown. However, Smith (2013) postulates that one should not worry if he or she is unsure about this number because it is not uncommon for the

population to be unknown. The Survey strategy like the one employed by this study ignores the population size when it is unknown. Population size is only likely to be a factor when you work with a relatively small and known group of people.

3.3 Sampling and Sampling Techniques

The main sampling technique for the allocation or administration of the questionnaire was Expert sampling. This is a technique where respondents are chosen in a non-random manner based on their expertise on the phenomenon being studied to enable consistent comparison. This technique was used to ensure that the selection of cases that helped in the answering of the research questions met the objectives of the study.

3.4 Data Collection Techniques

The researcher employed a mixed approach; that is a combination of both quantitative and qualitative approaches. This was done for complementary purposes. Combining these approaches enable researchers to obtain a more suitable and consistent results compared to what would have being achieved by using a single method (Creswell, 2003; Sarantakos, 2005; Bergman, 2008). The quantitative method was used to obtain data from managers and accountants of the firms whereas the qualitative was used for obtaining relevant information to enrich the data from the questionnaire. Hence the instrument that was used for the quantitative aspect of data collection was questionnaire administered by the researcher on the Chief Executive Officer of Sennel Pharmacy and the accounts officer in PZ Company Limited.

3.5 Procedure for Data Collection

The questionnaire was organised into four sessions to reflect the research questions and objectives. The questionnaires were administered on twenty-five (25) employees selected from the three pharmaceutical firms in the Kumasi metropolis. Ten (10) were selected from PZ whereas six (6) and nine (9) from VicBarns and Sennel Pharmaceuticals respectively. Nonetheless, twenty-one (21) responses were obtained which represents eighty-four (84%) of the total expected responses. Respondents sampled were variable because of the differences in sizes amongst the firms being studied. PZ is comparatively larger than Sennel and VicBarns. The period for the collection of data was ten (10) days. The employees consisted of accountants and officers in the managerial position of their firms. In most cases, questionnaire was administered personally to the respondents in order to guide and explain to the respondents portions of the questionnaire that was difficult for them to understand whilst in few cases, special arrangements were made to contact some respondents on phone. The data collection techniques in addition to the questionnaire were documentary analysis and unstructured interviews. In effect, the study relied on primary and secondary data from the pharmaceutical firms.

3.6 Data Presentation and Analysis

Exploratory data analysis technique was used which include the use of diagrams, charts and tables to give meaning to the data collected. According to Saunders et al (2009), the exploratory data allow flexibility to introduce previously unplanned analyses to respond to new findings which can give way for the researcher to look for and describe other statistical relationships in the data which the study was not initially designed to test. Thus

patterns, trends and key influencers of working capital management practices were detected in order to ensure that the data and information produced answered the research questions. Additionally, Monkey and Microsoft Excel are the software that were used for the analysis of the data gathered. The result from the exploratory analysis was subjected to evaluation and synthesizing of ideas, summarizing, categorizing and the structuring of meanings from the data. The analysis was structured into the following main blocks of issues. The working capital management practices of each of the four major components of working capital would be established from the responses of the firms. Also, the factors that contribute to influence the choice of the Working Capital Management practices adopted by these companies would be confirmed or debunked based on the response data from the firms. Finally, on the bases of their final working capital management practices of the firms under study, the companies themselves would tell whether the outcome of their choice of Working Capital Management practices was excellent or poor using performance indicator.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSIONS

4.1 Introduction

Patterson Zocchonis (PZ) and VicBarns Pharmaceutical companies undertakes manufacturing of pharmaceutical drugs, importation of pharmaceutical materials for drugs manufacturing as well as wholesaling and retailing of drugs. Sennel company also undertakes importation, wholesaling and retailing of pharmaceutical drugs. The three pharmaceutical companies (that is PZ, VicBarns and Sennel), that were selected for study have a common aim of providing quality health care products to all residents in Ghana as well as maximising profitability. A firm cannot maximise profit without taking into consideration financial efficiencies as a way of ensuring effectiveness in its operations.

This chapter analyse the data collected from the field with the use of analytical tables and charts and presented in such a way that would easily be understood to draw meanings by readers.

4.2 Background Information

Table 4. 1a : Annual Sales of Firms (Responses from all the Three Selected Firms)

No.	Options	Respondents Frequency	Percentage (%)
a.	GH¢0.5million - GH¢2million	6	28.6%
b.	GH¢2.1million - GH¢4million	7	33.3%
c.	GH¢4.1million - GH¢6million	2	9.5%
d.	GH¢6.1million and above	6	28.6%
	Total	21 Responses	100%

Source: Field Study, April 2017

Table 4. 1b : Age of Firms (Responses from all the Three Selected Firms)

No.	Options	Respondents Frequency	Percentage (%)
a.	1year-10 years	6	28.6%
b.	11 years -50 years	8	38.1%
c.	51years and above	7	33.3%

Source: Field Study, April 2017

4.3 Working Capital Policy

According to forty-three percent (42.9%) of respondents, most of the pharmaceutical firms studied operated with an informal working capital policy. However, the bigger firms among them were operating formal working capital policy. About twenty-four percent (23.8%) of the respondents did not have any idea of the use of working capital policy. Figure 4.3 below shows the working capital policy of the firms diagrammatically.

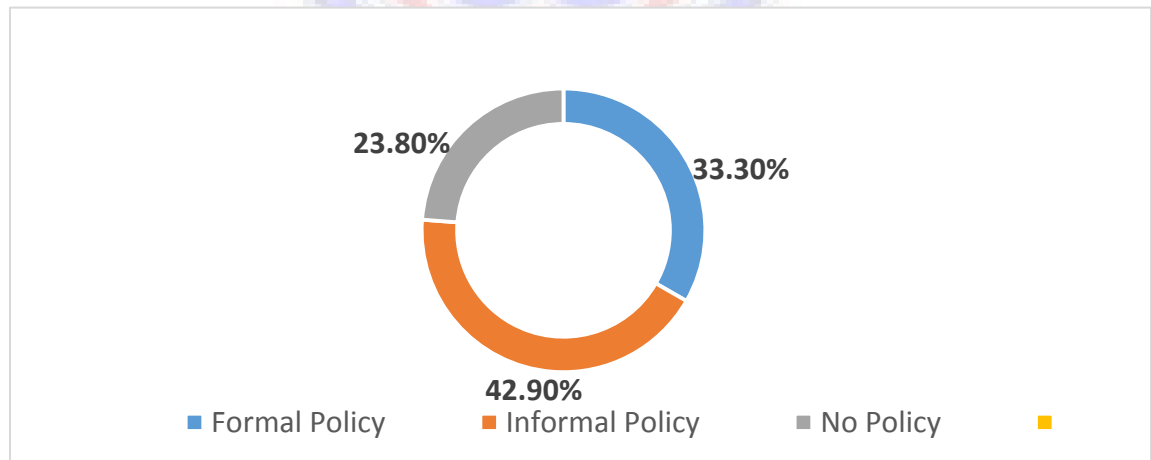


Figure 4. 1 : Working Capital Policy

Source: Field Study, April, 2017

4.4 Working Capital Formulation

According to the respondents (66.7%), the responsibility of setting the policy for working capital largely rest with the managing director. Respondents representing nineteen percent (19.00%) confirmed that the Board of Directors, some of the respondents (14.3%) of the respondents however, indicated that setting the working capital policy rests with the vice president, accountant or the finance officer. It can be drawn from the analysis that working capital formulation revolves around the senior employees.

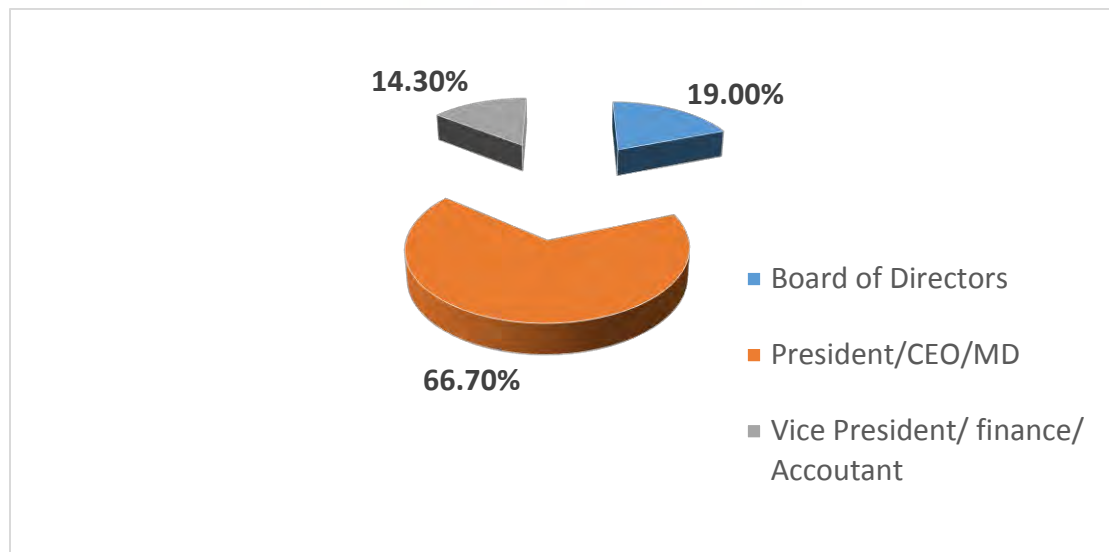


Figure 4. 2 : Working Capital Formulation
Source: Field Study, April, 2017

4.5 Nature of Risk Policy

The type of risk policy that the pharmaceutical firms employ for the management of working capital was described by sixty-seven percent (66.7%) of the respondents of the firms as risk avoiding. Notwithstanding this, nineteen (19%) of the respondents indicated that the policy changes over time and to about ten percent (9.5%) of the respondents, the risk policy is situational and about five percent respondents (4.8%) were accepting risk.

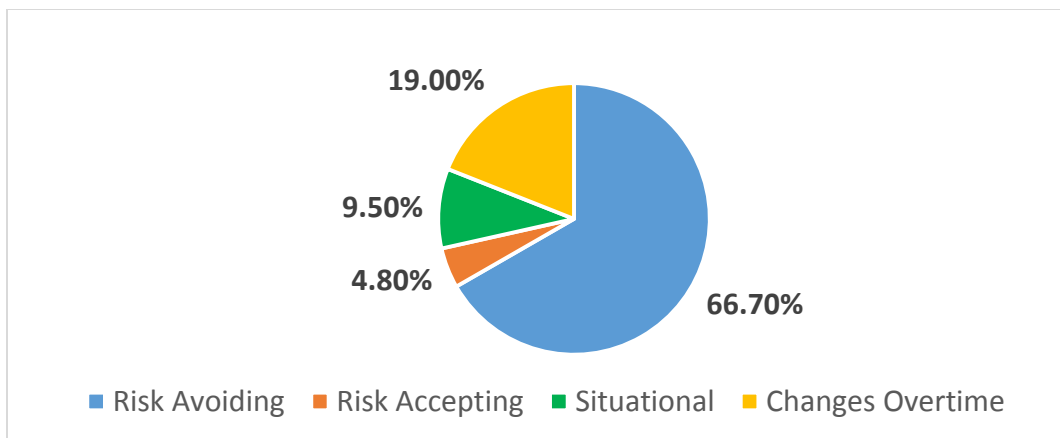


Figure 4. 3 : Nature of Risk Policy

Source: Field Study, April 2017

4.6 Review of Working Capital Policy

According to about forty-three percent (42.90%) of the respondents, the working capital policies of the pharmaceutical firms were reviewed annually, for fifty-seven (57.14%) review it was reviewed as and when necessary whereas for about five percent (4.8) it was done bi-annually. None of the respondents answered that it was done quarterly or monthly. Figure 4.6 below illustrates the above description.

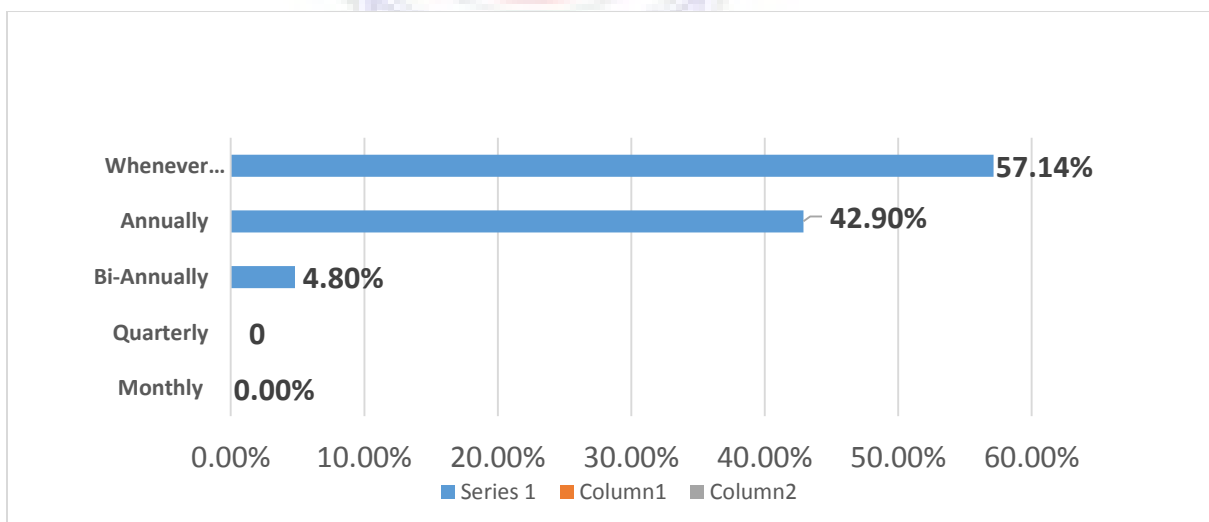


Figure 4. 4 : Review of Working Policy

Source: Field Study, April, 2017

4.7 Cash and Cash Equivalent Management Practices

4.7.1 Decision on Funds Transfer Between Cash and Short Term Investment

In a situation where the firms have surplus cash and want to invest this cash in short term instruments, or where the firms want to convert their short term instruments to cash, sixty-seven (66.7%) of the respondents held that the firms resort to subjective judgment to do so. Only few (28.6%) of them said the firms make use of established guidelines. For about five percent (4.7%) based on cost balancing model to do so. Figure 4.7 below demonstrates the above picture.

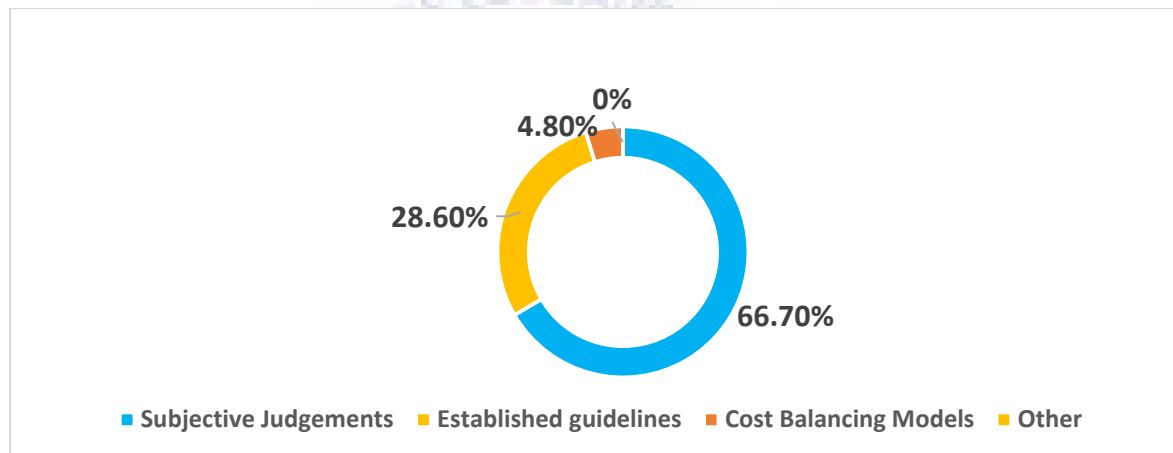


Figure 4. 5 : Decision on Funds Transfer between Cash and Short Term Investments

Source: Field Study, April, 2017

4.7.2 Strategies for management of portfolio on marketable securities

The pharmaceutical firms settle on ad hoc decisions as the overall strategy for managing their portfolio of short term investments. With the highest ranking of 1.38 being the most popular strategy for the pharmaceutical firms. Buying the instruments and holding them to maturity is the strategy with the second highest ranking of 1.47 by the respondents. Playing the yield curve and portfolio perspective were foreign to respondents.

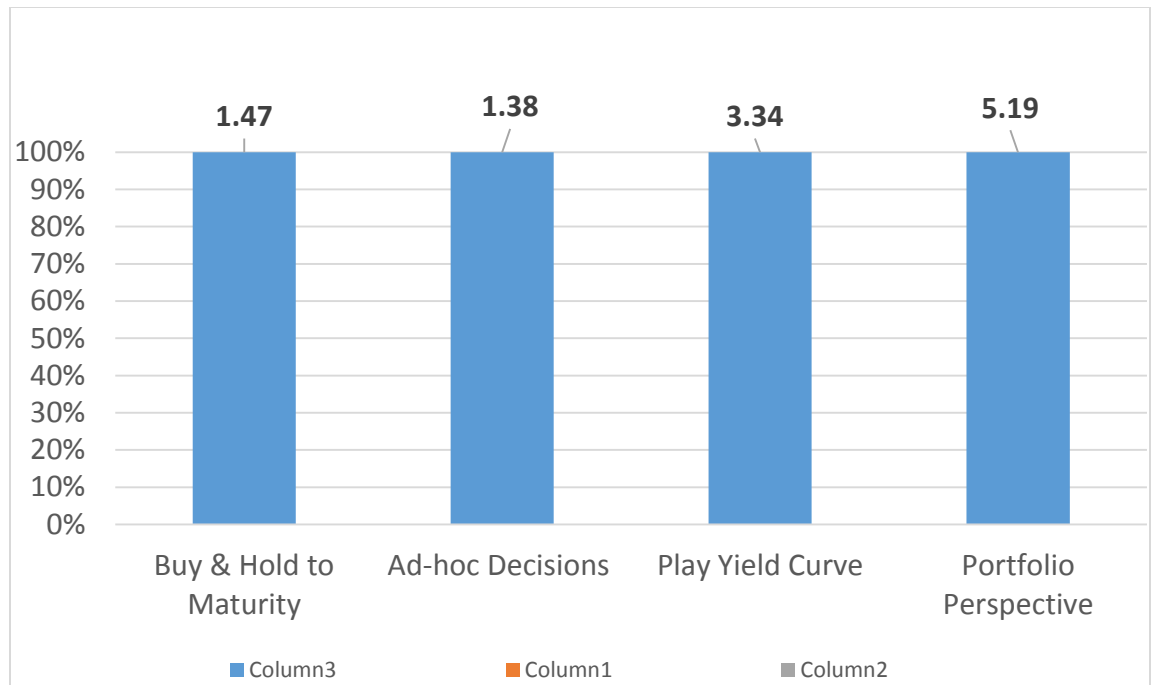


Figure 4. 6 : Strategies for Management of Marketable Securities
Source: Field Study, April 2017

4.7.3 Cash Budgeting Interval

The shortest possible of time for which the pharmaceutical firms use cash budgeting is on monthly basis. Some of the pharmaceutical firms do cash budgeting on weekly basis whereas a small segment of the pharmaceutical firms does it on quarterly basis. Figure 4.9 below shows the above description pictorially.

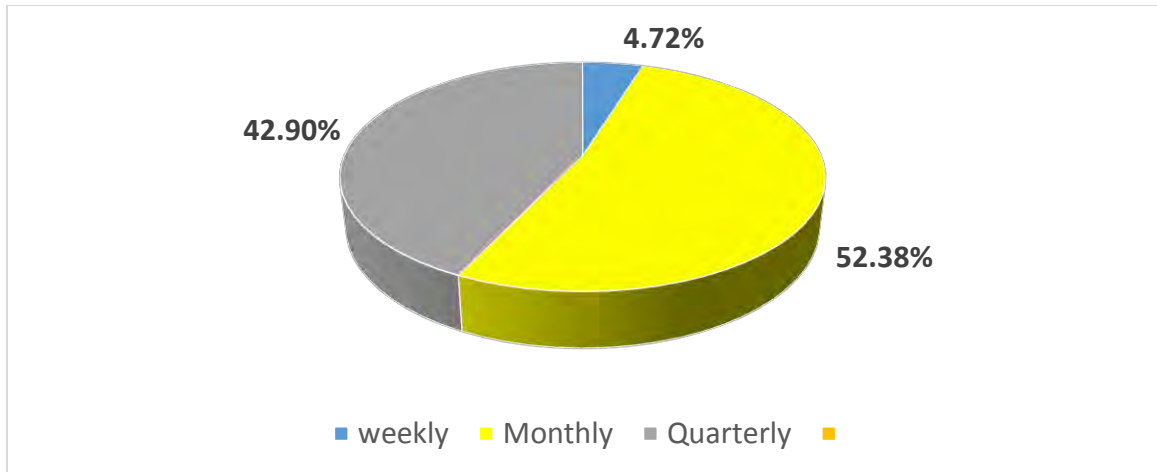


Figure 4. 7 : Cash Budgeting Interval
 Source: Field Study, April 2017

4.7.4 Management of Surplus Cash

When the pharmaceutical firms realize surplus cash, sixty-two percent (62%) of the respondents claim that they plough it back to the business, twenty-nine percent (28.5%) claim they acquire capital asset with it and finally, about ten percent (9.5%) of them invest it in short term instruments. According to the results, they do not consider diversification. Figure 4.10 below illustrates the above findings.

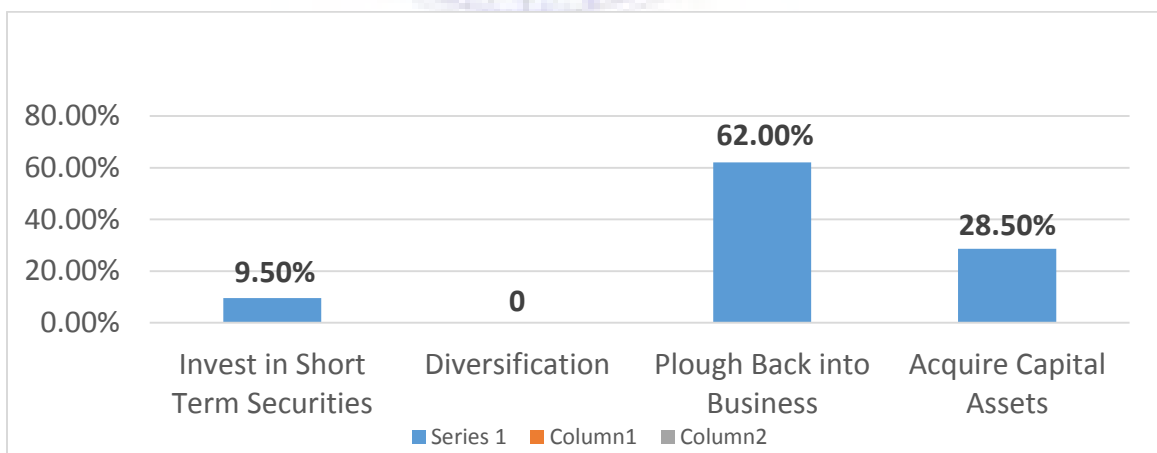


Figure 4. 8 : Management of Surplus Cash
 Source: Field Study, April 2017

4.8 Account Receivable Management

4.8.1. Techniques used in granting credit

The five C's of credit was the principal technique used by the pharmaceutical firms when granting credit. The average ranking for the five C's of credit is 1.34. The next technique is sequential credit analysis with an average ranking of Credit scoring was the least used technique.

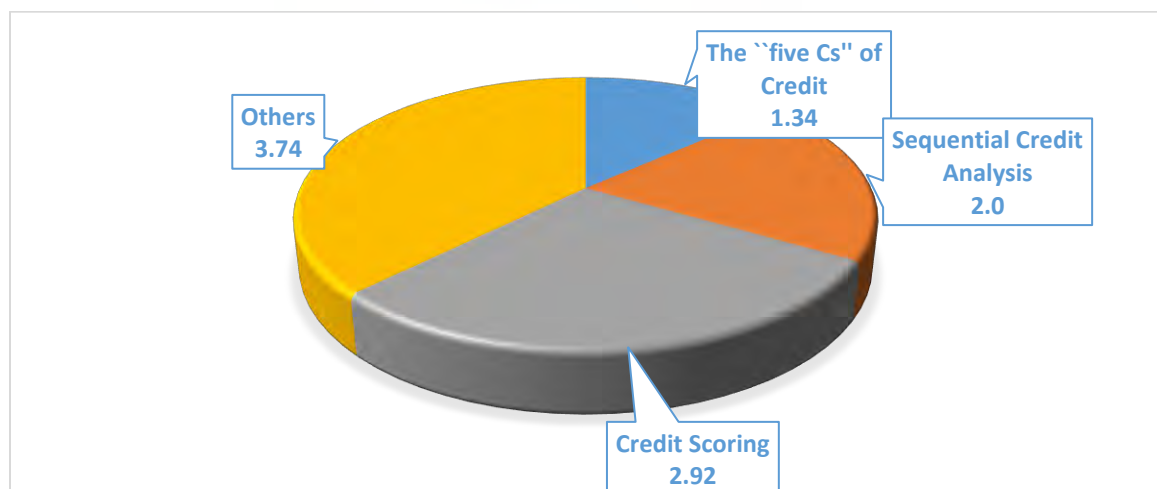


Figure 4. 9 : Techniques Used in Granting Credit
Source: Field Study, April 2017

4.8.2 Strategies used in monitoring customers' payment behaviour

In monitoring the payment behaviour of their credit customers, the firms that were studied relied on the aging schedule which was ranked at almost two (1.93). Others were account receivable turnover and collection period with the ranking of 1.97 and 2.21 respectively. Figure 4.12 below illustrates the picture described above.

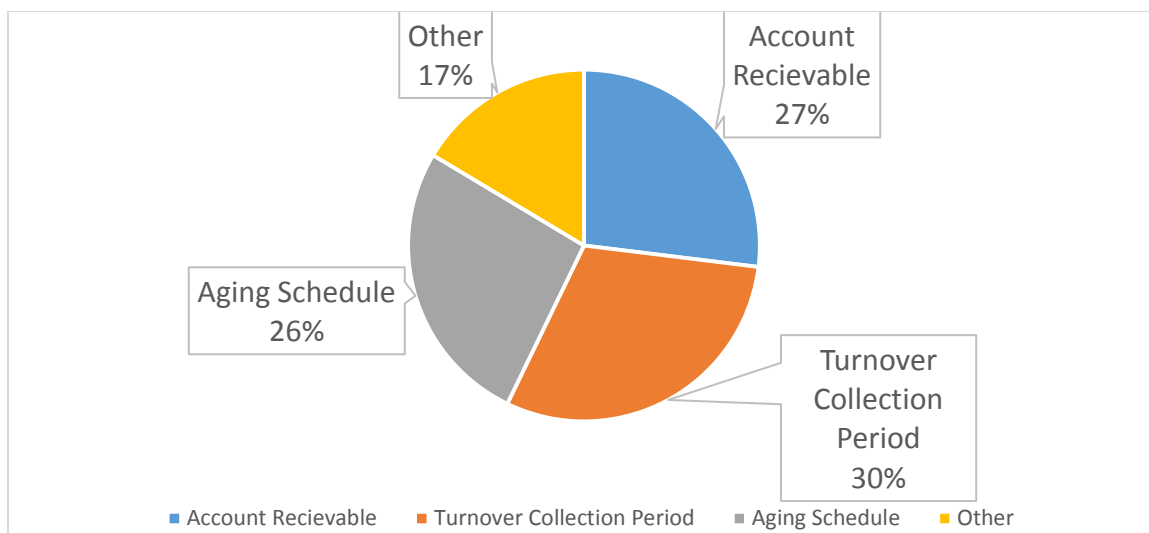


Figure 4. 10 : Strategies Used in Evaluating Proposed Changes
 Source: Field Study, April 2017

4.8.3 Strategies Used in Evaluating Proposed Changes

The major criteria that the pharmaceutical firms employ in evaluating proposed changes in their credit terms is by considering the effect of the credit on the level of accounts receivable with the highest average ranking of 1.43. Others that the firms viewed it to be worth considering were the effect of the credit on sales and the effect of the credit on the profit of the pharmaceutical firms.

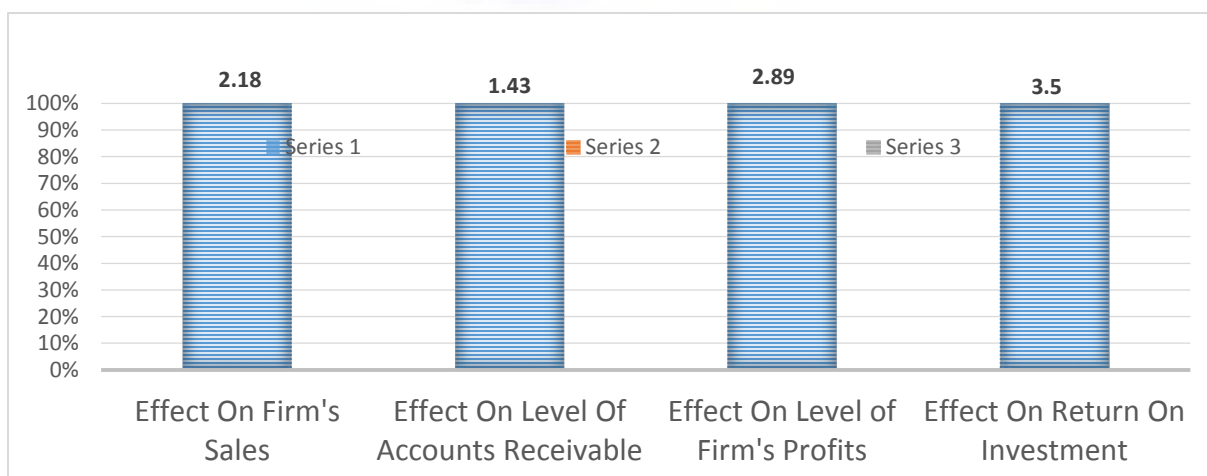


Figure 4. 11 : Strategies Used in Evaluating Proposed Changes
 Source: Field Study, April 2017

4.9 Inventory Management Practices

4.9.1. Replenishing inventory

With respect to managing inventory, sixty-seven percent (67%) of the respondents noted that the pharmaceutical firms decide on the appropriate amount to replenish their warehouses and other inventory storage points by means of ad hoc decisions. Again thirty-three (33%) of the respondents confirmed that computerized inventory control system is also very popular among them. Figure 4.14 below illustrates the techniques for replenishing inventory

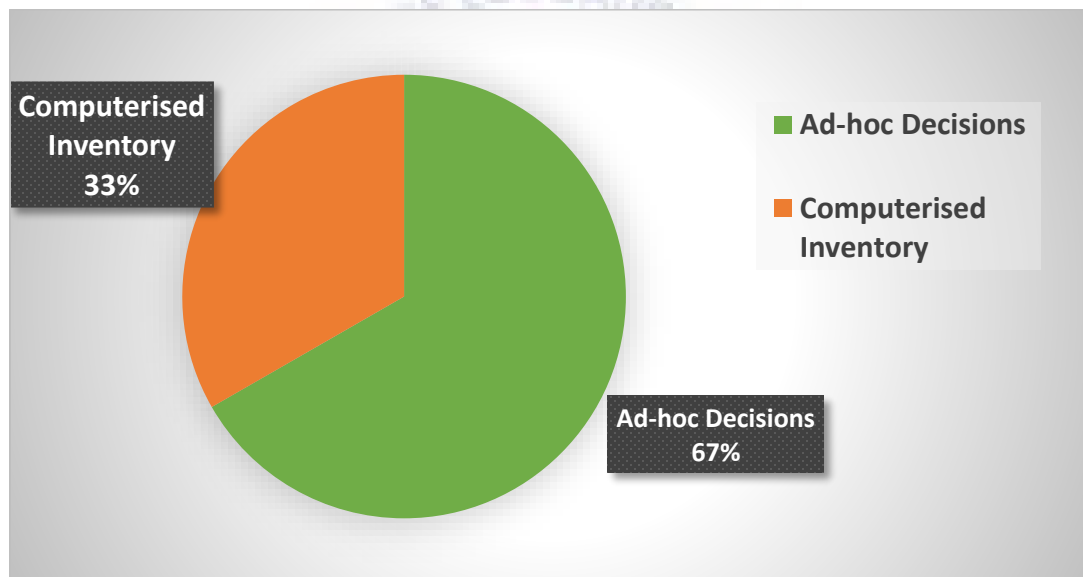


Figure 4. 12 : Techniques for Replenishing Inventory
Source: Field Study, April 2017

4.9.2 Parameters for purchasing inventory

In deciding on replenishment quantities for inventory purchased by the pharmaceutical firms, it was found that firms highly consider **shortage costs (1)**. Availability of parts and materials, possible price discount and credit terms offered by their supplier were also

considered as important parameters. Figure 4.15 below illustrates the parameters for purchasing inventory.

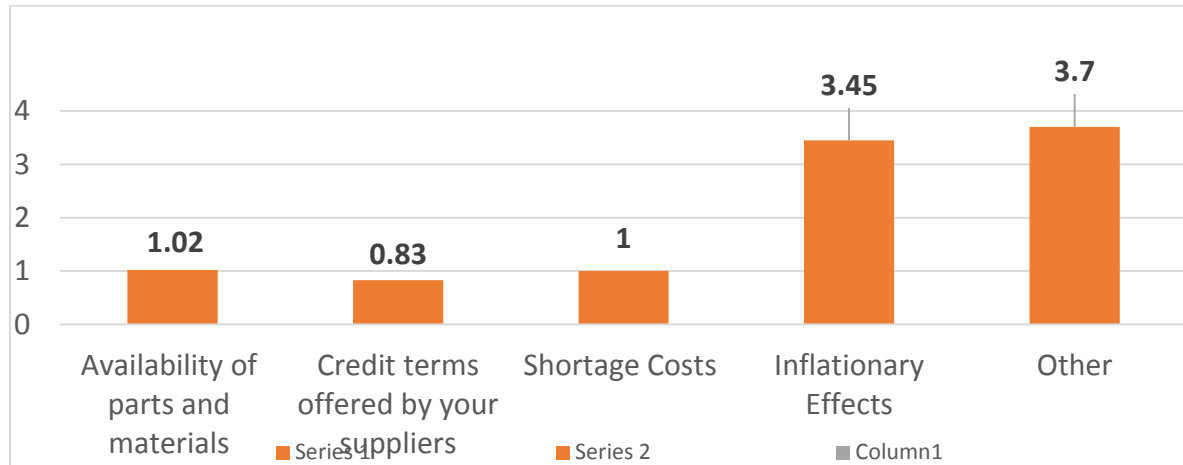


Figure 4. 13 : Parameters for Purchasing Inventory
Source: Field Study, April 2017

4.10 Account and Note Payable Management Practices

4.10.1 Policy/ Practice on suppliers' cash discount

With regards to cash discounts offered to the pharmaceutical firms by their supplier, seventy-one percent (71.4%) of the respondents said the firms always take the discount by paying on the discount date, and about twenty-four percent (23.8%) said the firms pay later than the discount date, but still takes the discount. Again, five percent (5%) of the respondents sometimes take the discount by paying on the discount date and for another five percent (4.8%) never takes a discount.

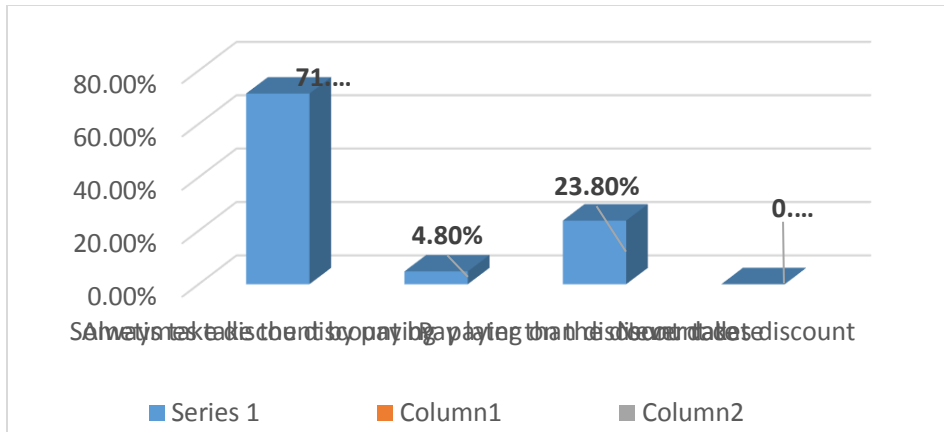


Figure 4. 14 : Policy/ Practice on Suppliers Cash Discount
 Source: Field Study, April 2017

4.10.2 Extent of collateral as part of short term loans

The study decided to establish the extent that collateral form part of the short term loans of the supermarkets. It was discovered from seventy-six percent (76.2%) of the respondents that their loans always require collateral. For fourteen percent (14.3%) of the respondents, loans never require collateral and 9.5% agreed that loans occasionally require collateral. This picture is illustrated in figure 4.17 below.

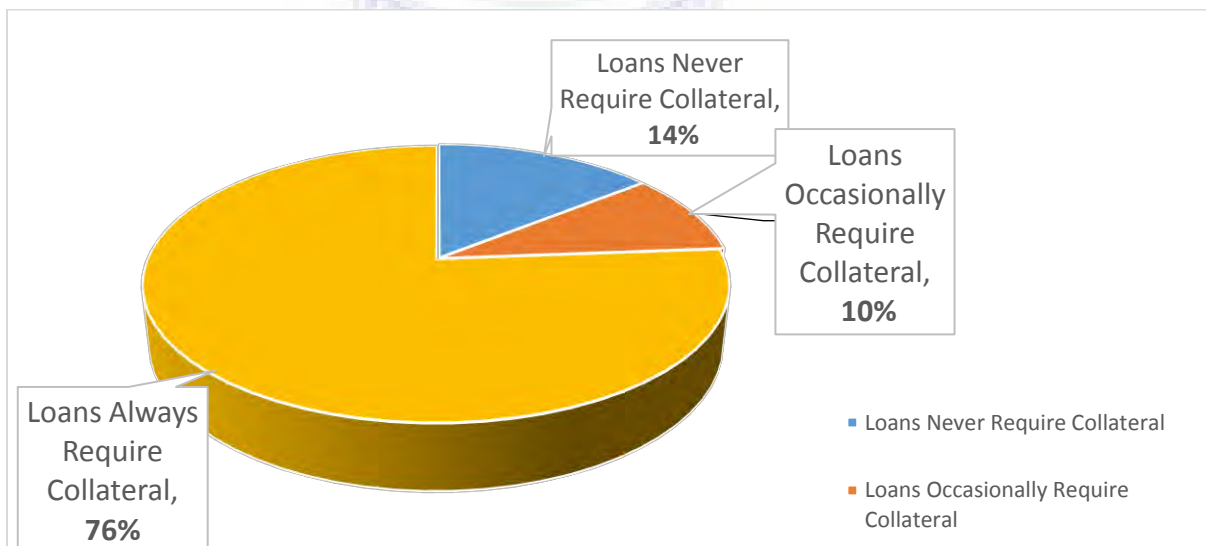


Figure 4. 15 : Extent of Collateral as Part of Short Term Loans
 Source: Field Study, April 2017

4.11 Determinants of Choice of Working Capital Management

4.11.1 Determinants of Working Capital Management-External macro factors

The factors that the pharmaceutical firms consider when choosing working capital management practices were legislation (held by 47.9% of the respondents) and business and economic environment (held by 48.7% of the respondents). The least of the factors they consider were politics (held by 79.8% of the respondents) and industry effect (held by 66.4% of the respondents). This is illustrated in figure 4.18 below.

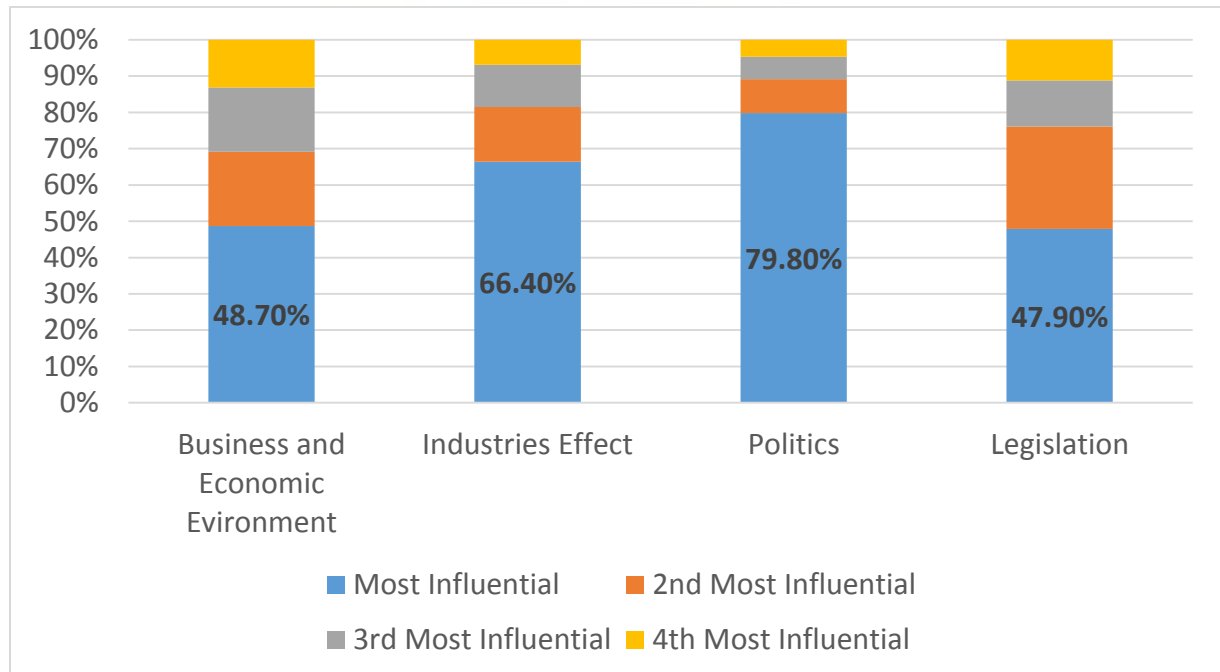


Figure 4. 16 : Determinants of Working Capital Management-External Macro Factors
Source: Field Study, April 2017

4.11.2 Determinants of Working Capital Management-External micro factors

The important factors that the pharmaceutical firms consider when choosing working capital management practices were customer needs/requirement (held by 86.6% of the respondents) and financing requirements/methods (held by 65.9% of the respondents).

The least of the factors they considered were technology (held by 59.1% of the respondents) and supplier influence/collaboration (held by 43.2% of the respondents).

Figure 4.19 below illustrates the pictures.

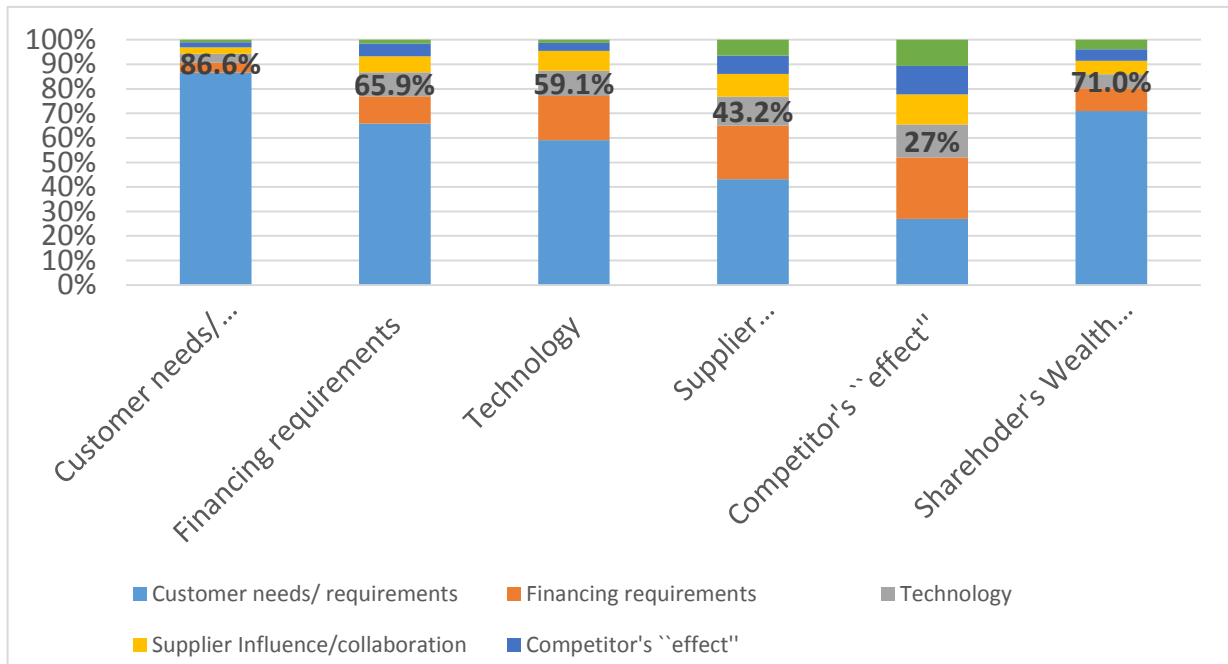


Figure 4. 17 : Choice of Working Capital Management-External Micro Factors
Source: Field Study, April 2017

4.11.3. Choice of Working Capital Management- Internal Macro Factors

The important factors that the pharmaceutical firms consider when choosing working capital management practices were management systems/methods/practice (held by 69% of the respondents). This is followed by Upstream collaboration which is held by 46.9% of the respondents. Meanwhile, Operation management/supply chain management was held by 39.7% of the respondents and management financial capability/knowledge was also held by 50% of the respondents.

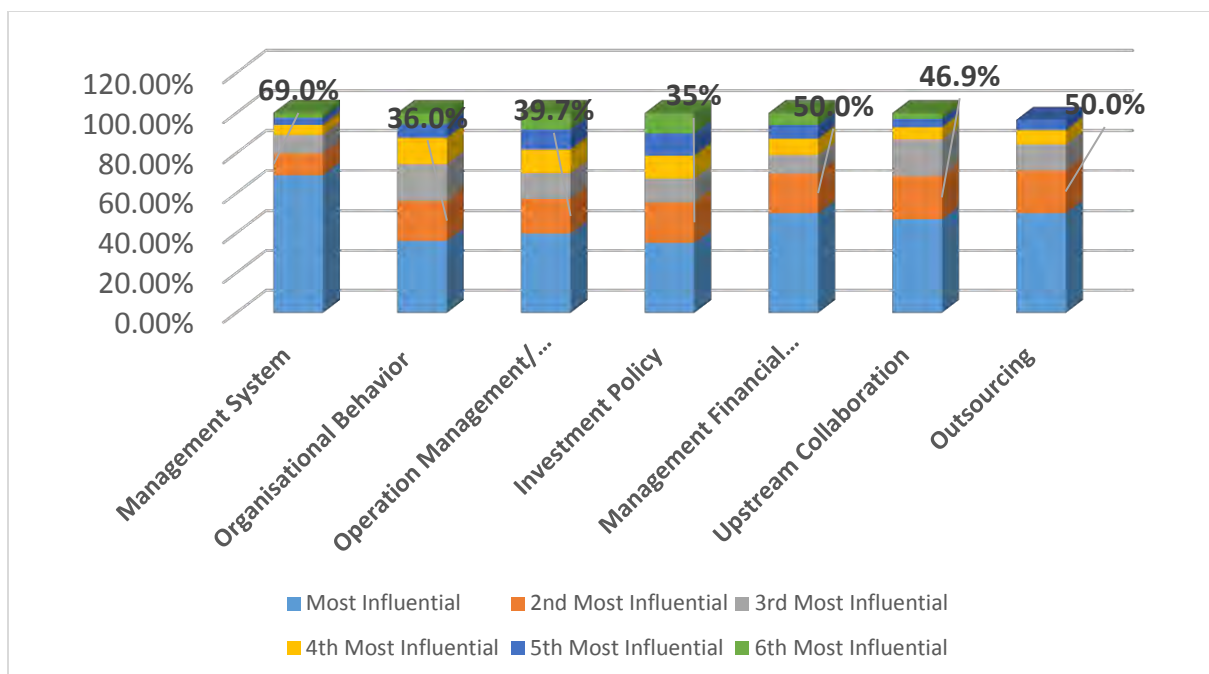


Figure 4. 18 : Choice of Working Capital Management- Internal Macro Factors
 Source: Field Study, April 2017

4.11.4: Choice of Working Capital Management-Internal Micro Factors

The important factors that the pharmacies consider when choosing working capital management practices were credit policy or collection management (held by 53.5% of the respondents) and inventory management (held by 34.6% of the respondents). The least of the factors that the respondents considered were employee financial capabilities (held by 60% of the respondents) and payable management (held by 89.9% of the respondents).

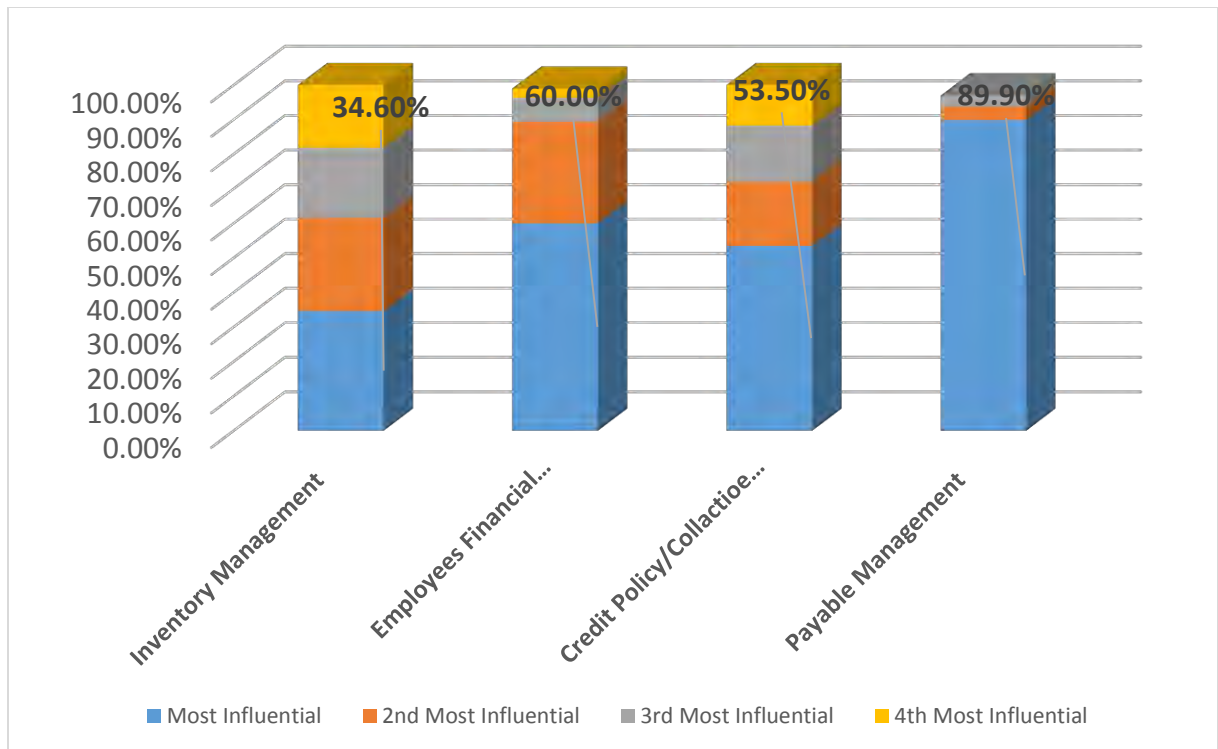


Figure 4. 19 : Choice of Working Capital Management-Internal Micro Factors
 Source: Field Study, April 2017

4.12. Application of Information Technology (I.T) As a Working Capital Management Practice

According to eighty-one (81%) of the respondents for the firms apply Information technology as a working capital management practice. However, 18% of the respondents answered in negative. Figure 4.24 below shows the picture described above.

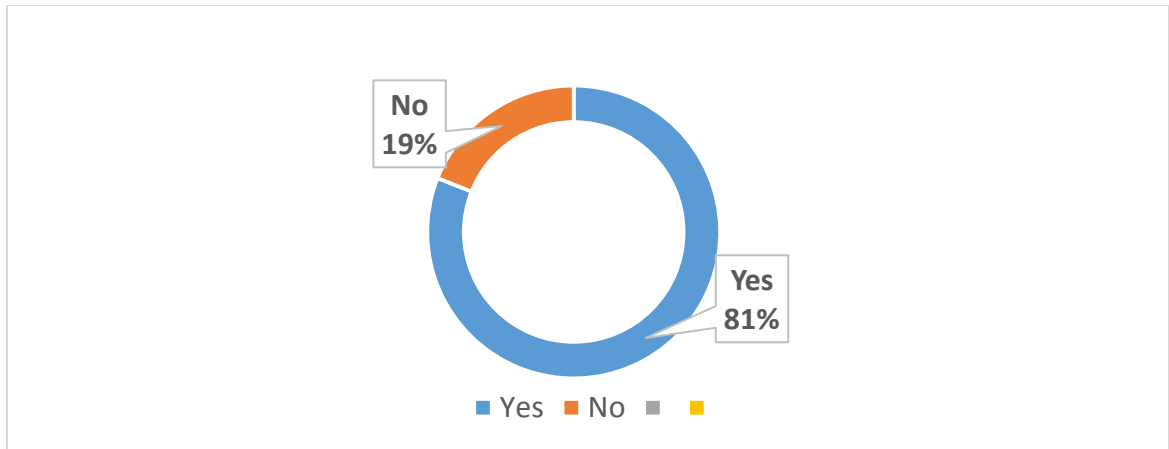


Figure 4. 20: Application of I.T in Working Capital Management Practices
Source: Field Study, April 2017

4.13 Usefulness of I.T. in Working Capital Management

According to 92% of the respondents, the application of information technology was very essential for efficient working capital management practices. Hence, the pharmacies consider information technology as extremely useful in cash management, inventory management, account receivable management and account payable management.

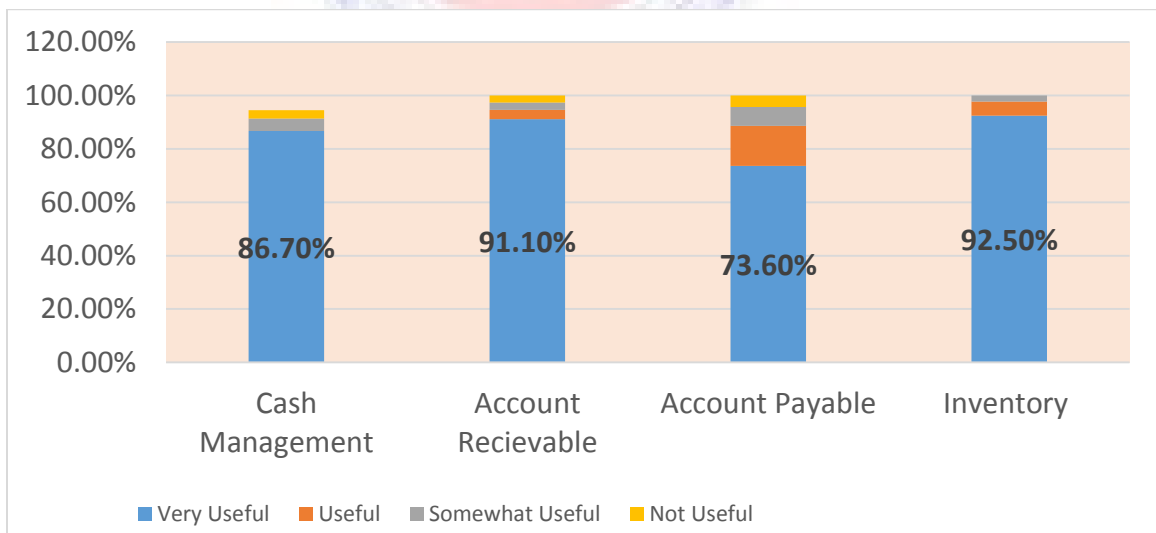


Figure 4. 21 : Usefulness of I.T in Working Capital Management
Source: Field Study, April 2017

4.14. Outcome of the Working Capital Management Practices Employed by the Pharmaceutical Company

4.14.1. Challenges faced by Pharmaceutical firms in their working capital management practices

From the analysis below, the respondents agreed that the major challenges that the pharmacies face in their working capital management practices were Pressure on margins (held by 55 % of the respondents); Weak competitive position (held by 71.90% of the respondents); Poor cash flow (held by 55.30% of the respondents); Low profitability (held by 60.00% of the respondents) ; and Shortage of capital to finance growth (held by 57.7% of the respondents). Figure 4.2 below shows challenges faced by Pharmaceutical firms in their working capital management practices

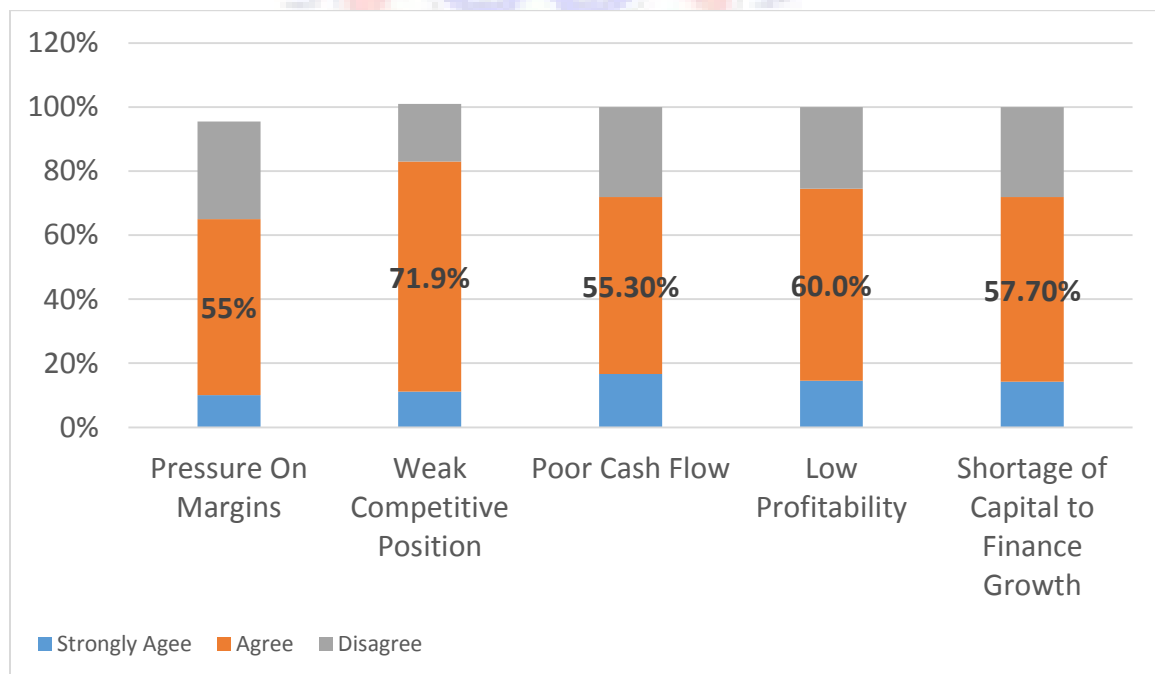


Figure 4. 22 : Challenges faced by Pharmaceutical Firms in their Working Capital Management Practices

Source: Field Study, April 2017

4.14.2. Benefits of Working Capital Management Practices to the Pharmaceutical Firms.

The benefits of working capital management practices to pharmaceutical firms can be summarised and ranked consecutively as improved profitability, improved shareholder's value, improved liquidity, unlocking of capital to finance growth, reduction in funds tied up in working capital and improved competitive position.

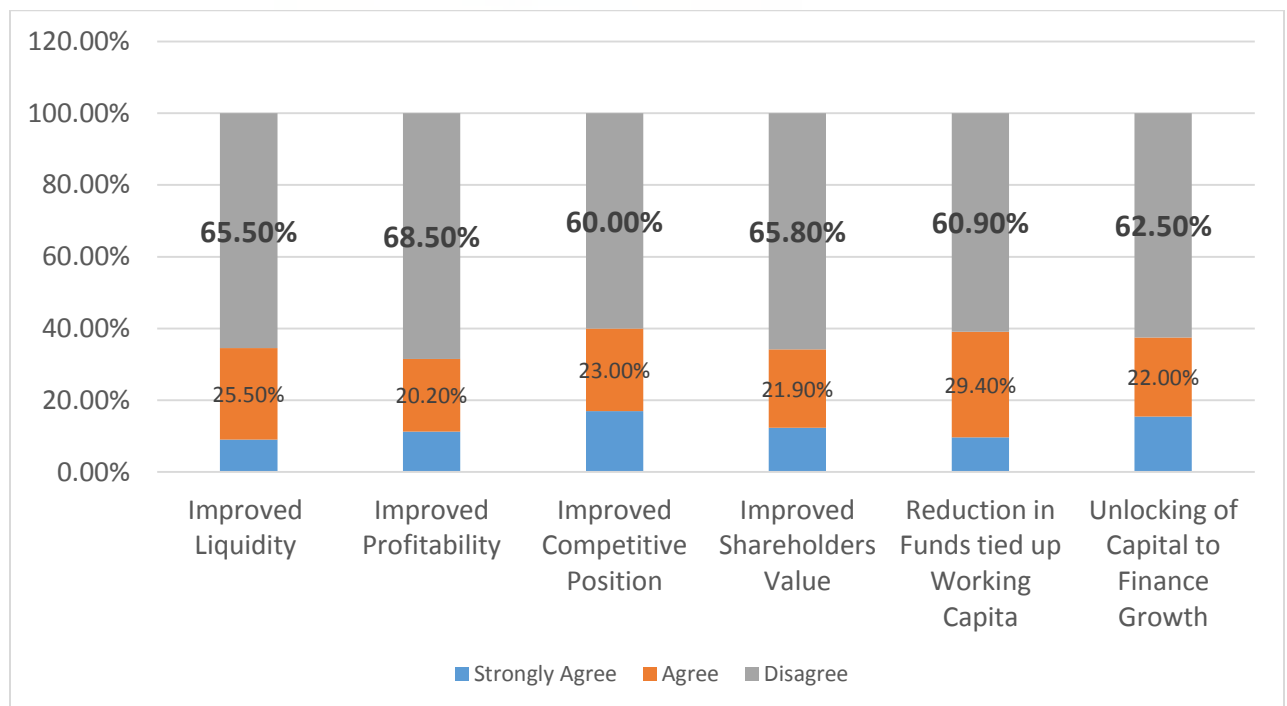


Figure 4. 23 : Benefits of Working Capital Management Practices to Pharmaceutical Firms
Source: Field Study, April 2017

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

The foregoing chapter have dealt in detail with financial management practices of pharmaceutical companies in Kumasi. This chapter summarizes the key findings, provides conclusion and recommendations that can be drawn from the study.

5.1 Summary of Key Findings

Working Capital Policy largely rest with the managing directors of the respective pharmaceutical firms whilst the firms employ risk avoiding policy in their Working Capital Management. The working capital policy of the firms was being reviewed annually and the practices adopted by the firms in respect of working capital management in the past were poor as compared with their current Working Capital Management practices. The following are the other key findings of the study.

First, on cash and cash equivalent management practices, the pharmacies resort to subjective judgement when they have surplus cash and want to invest this cash in short term instruments. The firms also settle on ad hoc decisions as the overall strategy for managing their portfolio of short term investments. The shortest possible time for which the firms employ cash budgeting is on monthly basis and when the firms realize surplus cash, 62% of the respondents claim that they plough it back into the business. The factors that the pharmacies consider when choosing investment methods for cash surpluses are “the risk and yield of the investment” and “when the investment is expected to mature”.

Second, on account receivable management practices, the five C's of credit was the principal technique used by the pharmaceutical companies when granting credit and they use the aging schedule to monitor the payment behaviour of their credit customers' changes in credit terms is done based on the effect that the credit has on the level of accounts receivable.

Third, in inventory management practices, the appropriate amount to replenish warehouses and other inventory storage points is based on ad hoc decisions whereas the shortage costs is the deciding factor for replenishing quantities of inventory purchased by the pharmacies. Meanwhile, information technology was noted to be very useful in the management of all the components of working capital, thus computerized inventory control system was not so much upheld by the pharmacies.

Fourth, the pharmacies always take discount from their suppliers and pay on the discount date. Again, it was found that the loans secured by the firms always required collateral.

Fifth, legislation is the major external macro factor that the firms consider when choosing working capital management practices. The customers' needs/requirements are the significant external micro factor that the firms consider when choosing working capital management practices. A management method is the central internal macro factor that the firms consider when choosing working capital management practices. Credit policy or collection management is the main internal micro factor that the supermarkets consider when choosing working capital management practices.

Finally, pressure on margins is the major challenge that the pharmacies face in their working capital management practices. The pharmacies face liquidity challenges, low profitability, worse competitive position, increased funds tied up in working capital and finally lack of ability to unlock capital to finance growth.

5.2 Conclusion

The study was inspired by the desire to assess the working capital management practices of selected pharmaceutical companies in Ghana. To achieve this, survey instrument was administered on 25 senior employees of pharmaceutical firms in Kumasi with a response rate of 84%. The data collected was processed by the capability of survey Monkey and Microsoft excel. The results showed that the pharmacies face liquidity challenges, low profitability, worse competitive position, increased funds tied up in working capital and finally lack of ability to unlock capital to finance growth. It is therefore recommended that the pharmacies reconsider the factors that determine their working capital so that they come up with best practices of working capital that can mitigate against the challenges.

5.3 Recommendations

The following recommendations are put forward:

- A. The working capital management policy need to be changed from informal to formal to enhance the chances of the supermarkets to be successful in their Working Capital Management. Further, the policies of working capital must be

reviewed more than once a year depending upon the pharmacy so that weaknesses can be identified early for redial action to be taken on time.

- B. The choice of Working Capital Management practices of the pharmaceutical firms depended on legislation, customer needs, management method, and Credit policy and yet failed to reap the benefits of efficient Working Capital Management. It is therefore recommended that the pharmacies reconsider the factors that determine their working capital so that they come up with best practices of working capital that can mitigate against the liquidity challenges, low profitability, worse competitive position, increased funds tied up in working capital and finally lack of ability on the part of the pharmacies to unlock capital to finance growth.
- C. Computerized control system must be used to manage inventory instead of the use of the ad hoc system. Pharmaceutical firms must therefore deploy I.T in their operations to inject efficiency in their Working Capital Management.

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APPENDIX

QUESTIONNAIRE

WORKING CAPITAL MANAGEMENT PRACTICES OF PHARMACEUTICAL COMPANIES IN KUMASI METROPOLIS

DIRECTIONS: For certain questions, you are asked to choose one answer among the alternatives. In some cases, your opinions is requested by asking you to select from a list of choices that range from one extreme to another. For other questions, you are asked to rank the alternatives in terms of their relative importance to your company. Use “1” to refer to the most important, “2” for the second most important, and so forth. Please do not assign ranks to alternatives that do not apply to your company, just leave the spaces blank. For some questions, you are encouraged to specify other alternatives in the space provided.

SESSION A: PROFILE OF FIRM

1. What is the range of your company's annual sales for the past three years?

- (a) GH¢0.5million - GH¢ 2million
- (b)GH¢2.1million - GH¢4million
- (c) GH¢4.1million - GH¢6million
- (d) GH¢6.1million and above

2. How old is your firm?

- (a)1 – 10
- (b) 11 – 50
- (c)51 and Above

SESSION B: WORKING CAPITAL POLICY

3. What overall policy does the firm has for the management of its working capital?

- (a) Formal policy
- (b) Informal policy
- (c) No policy

4. Who sets the management policy for working capital (if there is one) for your supermarket?

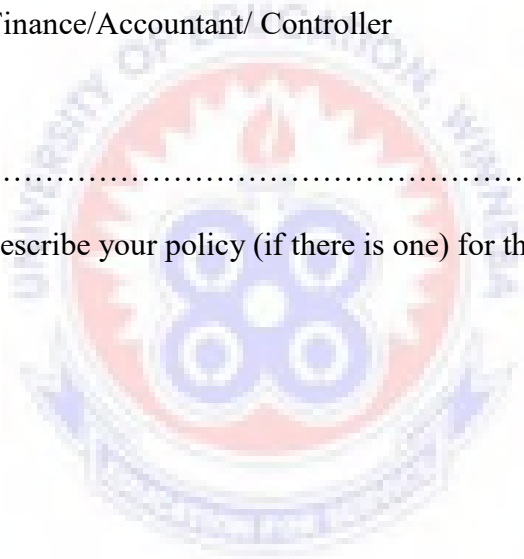
- (a) Board of Directors
- (b) President (CEO /M.D)
- (c) Vice President/ Finance/Accountant/ Controller
- (d) Treasurer
- (f) Other specify

5. How would you describe your policy (if there is one) for the management of working capital?

- (a) Risk- avoiding
- (b) Risk-accepting
- (c) Situational
- (d) Changes over time

6. How often is the management policy for working capital (if there is one) reviewed?

- (a) Monthly
- (b) Quarterly
- (c) Bi-annually
- (d) Annually
- (e) Other, specify.....



SESSION C: CASH AND CASH EQUIVALENT MANAGEMENT PRACTICES

7. In transferring funds between the marketable securities portfolio and your company's cash account, how do you decide on the appropriate amounts? Choose One

- (a) Subjective judgments
- (b) Established guidelines
- (c) Cost balancing models
- (d) Other, specify.....

8. What overall strategy does your firm employ with respect to managing your firm's portfolio of marketable securities? * Please Rank in order of their importance to you.

Number the most important 1, the next 2, the next 3, and the least 4. If any of the options has no importance at all to you, please leave blank.

- 1. Buy and hold to maturity
- 2. Ad hoc decisions
- 3. Play the yield curve
- 4. Portfolio perspective

9. What is the shortest period for which your firm uses cash budgeting?

- (a) Daily
- (b) Weekly
- (c) Monthly
- (d) Quarterly
- Other specify.....

10. How do you manage your surplus cash? (*You may choose more than One*)

- (a) Invest in short term marketable securities
- (b) Diversification
- (c) Plough back into the business
- (d) Acquire capital assets

11. What factors do you consider when choosing an appropriate investment method for short-term cash surpluses? Please Rank in order of their importance to you. Number the most important =1, the next =2, the next =3, and the least=5. If any of the options has no importance at all to you, please leave blank. - - 1 2 3 4 5

	1	2	3	4	5
The risk and yield of the investment					
The size of the surplus					
When the investment is expected to mature					
Any penalties which may be incurred for early liquidation					
The ease with which an investment can be realised					

SESSION D: RECEIVABLE MANAGEMENT

12. Which of the following techniques do you use to decide on granting credit? * Please Rank in order of their importance to you. Number the most important 1, the next 2, the next 3, and the least 4. If any of the options has no importance at all to you, please leave blank.

(a) The “five C“s” of credit

(b) Sequential credit analysis

(c) Credit scoring

(d) Other (please specify).....

13. In monitoring the payment behavior of your credit customers, which of the following measures do you find most useful? * Please Rank in order of their importance to you. Number the most important 1, the next 2, the next 3, and the least 4. If any of the options has no importance at all to you, leave blank.

(a) Account receivable

(b) Turnover Collection period

(c) Aging schedule

(d) Other (please specify).....

14. What criteria do you adopt in evaluating proposed changes in the credit terms of your firm? *Rank in order of their importance to you. Number the most important 1, the next

2, the next 3, and the least 4. If any of the options has no importance at all to you, leave blank.

- (a) Effect on firm sales
- (b) Effect on level of accounts receivable
- (c) Effect on level of firm profits
- (d) Effect on return on investment

SESSION E: INVENTORY MANAGEMENT PRACTICES

15. With respect to managing INVENTORY, how do you decide on the appropriate amounts to replenish your warehouses or other inventory storage points?

- (a) Ad hoc decisions
- (b) Industry guidelines
- (c) Cost balancing models
- (d) Computerized inventory control systems
- (e) Other (please specify)

16. In deciding on replenishment quantities for inventory **purchased** by your company, which of the following parameters are considered? * Rank in order of their importance to you. Number the most important 1, the next 2, the next 3, the next 4, the next 5 and the least important 6. If any of the options has no importance at all to you, please leave blank.

- (a) Availability of parts and materials
- (b) Credit terms offered by your suppliers
- (c) Credit terms offered by your suppliers
- (d) Shortage costs

(e) Inflationary effects

6. Other

SESSION F: ACCOUNT AND NOTE PAYABLE MANAGEMENT PRACTICES

17. What is your policy/practice with respect to cash discounts offered by your supplier?

- (a) Always take the discount by paying on the discount date
- (b) Sometimes take the discount by paying on the discount date
- (c) Pay later than the discount date, but still takes the discount
- (d) Never takes the discount

18. To what extent is collateral a part of your short term loans?

- (a) Loans never require collateral
- (b) Loans occasionally require collateral
- (c) Loans always require a collateral

SESSION G: FACTORS THAT DETERMINE THE CHOICE OF WCM PRACTICES

From question 20 to 23, select the factor(s) that influence your company’s choice of working capital management practices.

19. External MACRO factors. Choose the alternative(s) that influence your choice of WCM practice 1=Most influential, 4=Least influential - - - 1 2 3 4

	1	2	3	4
Business and economic environment (knowledge				
Industries effect management				
Politics				

Legislation				
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20. External MICRO factors Choose the alternative(s) that influence your choice of

WCM practice 1=Most influential, 6=Least influential - - 1 2 3 4 5 6

	1	2	3	4	5	6
Customer needs/requirements						
Financing requirements/methods						
Technology						
Supplier influence/collaboration						
Competitors' effect						
Shareholders wealth maximisation						

21. Internal MACRO factors Choose the alternative(s) that influence your choice of WCM practice 1=Most influential, 6=Least influential - - - 1 2 3 4 5 6

	1	2	3	4	5	6
Management System						
Organizational behavior						
Operation management /Supply Chain management						
Investment policy						
Management financial capability (knowledge)						
Upstream collaboration						
Outsourcing						

22. Internal MICRO factors. Choose the alternative(s) that influence your choice of WCM practice in order of their importance to you. 1=Most influential, 4=Least influential

	1	2	3	4
Inventory management				
Employees' financial capability (knowledge)				
Credit policy/Collection management				
Payable Management				

**SESSION H: APPLICATION OF INFORMATION TECHNOLOGY AS A
WORKING CAPITAL MANAGEMENT PRACTICE**

23. Do you apply information technology (I.T) in your working capital management practices?

(a) Yes

(b) No

24. Do you consider Information Technology (I.T) useful in your working capital management practices?

	Very Useful	Useful	Somewhat Useful	Not Useful
Cash management				
Account receivable				
Account payable				
Inventory management				

SESSION I: OUTCOME OF THE WORKING CAPITAL MANAGEMENT PRACTICES EMPLOYED BY THE PHARMACEUTICAL COMPANY

25. Do you face any of the following problems in your firm?

	Strongly Agree	Agree	Disagree
Pressure on margins			
Weak competitive position			
Poor cash flow			
Low profitability			
Shortage of capital to finance growth			

26. Does your company experience any of the following effects?

	Strongly Agree	Agree	Disagree
Improved Liquidity			
Improved Profitability			
Improved competitive position			
Improved shareholders value			
Reduction in funds tied up in working capital			
Unlocking of capital to finance growth			