



A COMPARATIVE ANALYSIS OF WORKING CAPITAL MANAGEMENT OF FIRMS IN GHANA: A CASE STUDY OF GHANA OIL AND TOTAL PETROLEUM

Edward Attah-Botchwey¹, Kofi Kodua Sarpong², Nana Yaw Agyeman owusu³, Adriana Rene Amuah⁴
Esther Takyiwa Annan⁵

¹University of Professional Studies Accra, Department of Banking and Finance, Accra, Ghana
edward.attah-botchwey@upsamail.edu.gh, ORCID: 0000-0003-1140-5786

²University of Professional Studies Accra, the Chancellor, Accra, Ghana
kksarpong@gmail.com, ORCID: 0000-0001-5532-2152

³University of Professional Studies Accra, Department of Accounting Accra, Ghana
anyowusu@st.edu.gh

⁴University of Professional Studies Accra, Department of Banking and Finance, Accra, Ghana
10282875@upsamail.edu.gh

⁵University of Professional Studies Accra, Department of Banking and Finance, Accra, Ghana
10282962@upsamail.edu.gh

EXECUTIVE SUMMARY

This study carried out a comparative analysis of working capital management between GOIL and TOTAL petroleum. Its aim was to compare their working capital management and measure their liquidity, profitability and financial efficiency. Secondary data from 2012 to 2021 from the annual reports of the selected oil marketing companies. However, ratio analysis was employed to compare their liquidity, profitability and financial efficiency. Results indicated that both companies had liquidity but TOTAL Ghana were more liquid amongst the two companies. It also indicated that TOTAL Ghana had a high profitability with high gross profit and net profit ratios. Conversely, the results show that GOIL were more financially efficient with high inventory turnover and accounts receivable turnover ratios. Finally, the study recommended that both companies' management employ policies to increase efficiency ratios to increase financial efficiency.

INTRODUCTION

1.1 Background of the Study

The main objective of most businesses all over the world is to maximize shareholders' wealth through continuous and improved performance (Adam & Caroline, 2018). Effective financial management, including working capital management, plays a critical role in this direction. Padachi & Howorth, (2014). Previous literature has emphasized the significance of long-term corporate financial decisions, but there is an increasing recognition of the importance of WCM for the long-term survival of organizations, particularly in the increasingly turbulent and complex business environment (Almeida & Eid Jr, 2014).

Mismanagement of cash and credit supply can threaten the growth and sustainability of businesses, leading to bankruptcy and operational challenges (Mohamad & Saad, 2010; Kieschnick et al., 2012). Therefore, it is essential for management to identify the business activities that have substantial implications for working capital management, which in turn affects profitability and liquidity indicators (Ali & Haseeb, 2019; Haseeb et al., 2018; Haseeb, 2019; Uryanto et al., 2018).

Decisions related to WCM plays a crucial function company's financial growth and market value, and mismanagement can lead to operational challenges (Christopher & Kamalavalli, 2009). Effective WCM and policies

can enhance financial growth of SMEs (Awopetu, 2012; Sonia, 2009). While managing the working capital of a firm, poor decisions will result to failure of firms, particularly SMEs (Banos et al., 2010). Various factors such as growth, profitability, availability of investment markets, fixed assets, income inconsistencies, firm longevity, cash flow management, information asymmetry, and the composition of the management gravely influences working capital (Shaista & Veeri, 2013).

While some studies indicate a positive effect of WCM on financial growth (Arshad & Gondal, 2013; Asaduzzaman & Chowdhury, 2014), others have found a negative relationship between WCM and financial growth (Javid & Zita, 2014; Teruel & Solano, 2007). WCM is crucial for a company's liquidity and financial growth, hence management must ensure the maintenance of satisfactory levels to avoid scarcity or abundance (Filbeck & Krueger, 2005).

1.2 Profile of the Organisations

1.2.1. About GOIL Company Limited

GOIL Company Limited (GOIL) succeeded the marketing outfit of AGIP PETROLI, a subsidiary of which was established in Ghana in 1960. In 1974, the Government of Ghana acquired 100 percent shares and changed the name to Ghana Oil Company Limited. In 2019, the Company changed its name to GOIL Company Limited, to reflect its growth and expanded activities/ventures in the petroleum sector and other industries.

By a shareholders resolution passed on 1st August, 2007 the Company adopted new regulations and was converted into a public company. Between the year 2010 and 2012 the Company underwent a transformation process aimed at changing its logo, station outlook, and most importantly the corporate culture which was dubbed "Good Energy comes with a Smile". The launching of the New GOIL took place on the 18th May 2012.

Though the Company's main business is marketing and distribution of petroleum products in Ghana, one of the tenets of the New GOIL is to move beyond the current frontiers to marketing and distribution of energy products in general. GOIL therefore, welcomes partners who are interested in helping us drive our business in this direction.

These offices also serve as distribution points for the Company's products. However, the main distribution points for fuels are Liaison Office, Central Depot, and the Accra Plains Depot, Takoradi Naval base and the Takoradi Depot.

GOIL has the largest retail network across the country. The company also has numerous consumer outlets throughout Ghana. The consumer outlets include companies, schools, hospitals, factories, hotels, banks and major parastatals.

In addition, there are a number of other retail outlets established to market premix fuel and kerosene to rural areas. LP Gas filling plants have also been installed at some of the filling and service stations and at other locations in the country. Currently, GOIL's technical partners are ENI SPA (AGIP) of Italy.

Mission

- To market quality petroleum and other energy products and services in all its branches in an ethical, healthy, safe, environmentally friendly and socially responsible manner. Produce and manufacture goods or provide services which enhance or support the marketing, distribution and sale of the company's products and services.

Vision

- Is to be a world-class provider of goods and services in the petroleum and other areas of the energy industry. (Source: <https://goil.com.gh/about-us/our-story/>)

1.2.2. About TotalEnergies Marketing Ghana PLC

TotalEnergies Marketing Ghana PLC is part of the global TotalEnergies Group, which is the fourth largest publicly-traded integrated international Oil and Gas Company in the world with presence in over 130 countries. TotalEnergies operations in Ghana started in 1951 under the name Total Oil Products Limited. Since then TotalEnergies has undergone various transformations, taking over from BP Ghana Limited, then Elf Oil to TotalfinaElf following a global merger between Total and Elf and finally resulting in the incorporation of Total Petroleum Ghana Limited (now known as TotalEnergies Marketing Ghana PLC) when Marketing Afrique

acquired Mobil in Ghana. This progression, coupled with great respect for quality, standards, achievements, and safety has propelled the Company to the forefront of the Industry.

TotalEnergies Marketing Ghana PLC trading under the brand name TotalEnergies has a strong brand image in the Ghanaian market. The Company is well represented in all 16 Regions of the country with strategic locations in major cities and towns.

Coverage

TotalEnergies Marketing Ghana PLC has large network coverage of 263 service stations in Ghana. Our range of services cuts across the Aviation, Bitumen, and Mining industries, besides the Manufacturing and Roads Sectors.

Innovation

TotalEnergies Marketing Ghana PLC has also remained at the forefront of several innovations, which have been largely driven by the dynamic trends of the consuming public. For over 12 years running and until recently, TotalEnergies Marketing Ghana PLC was the only Oil Marketing Company with an electronic card payment system in Ghana. The electronic card, TotalEnergies Card, continues to enjoy widespread demand from many major companies in Ghana for its security, flexibility and the convenience it affords the user.

Recognizing the growth in the fleet of high-performance vehicles in Ghana, TotalEnergies Marketing Ghana PLC introduced onto the market the high-performance fuels, Excellium Super, Excellium Super 95 and Excellium Diesel, guaranteed to ensure a smooth ride. The Quartz 4X4 and Total INEO lubricants were also launched in response to the high demand and technological trends.

Current Developments

We are the first Oil Marketing Company (OMC) to be ISO 9001:2015 certified in Ghana and have initiated a comprehensive investment program, which not only responds to customer needs but is also ECO-friendly and gives priority to customer comfort and safety.

We bring to our customers the latest world trends in service station design. This new international identity is hinged around a set of standards that harmonize the look of our service stations all over the world, yet adapting to needs that are specific to each site. Our latest design is a resolutely lighter and contemporary image with installations that are more energy-efficient and sales outlets that are more discreet, blending harmoniously into our environment.

Some of the renovated service stations have additional state-of-the-art lube bays and car wash centers. Food Corners have been introduced at some of the refurbished stations. For example, Chicken Inn, Vida é Café, Pharmacy, Vulco Tyre Service, and ATM at Pig farm station, and the new Sesna's eatery and Vegetable stall at the Liberation Road station. With these renovations, TotalEnergies service stations are multi-purpose destination points for individual customers and families.

Mission

The purpose of TotalEnergies Marketing Ghana PLC is to market quality petroleum products and serve its customers responsibly and profitably in an innovative way to ensure that the public continues to turn to the TotalEnergies brand.

Vision

- To be the number 1 with customer service
- To develop talent through diversity
- To have a sustainable shareholder value
- To be a good corporate citizen

Key Strengths

- A solid share price on the stock market
- Competent, skilled, professional, experienced & culturally diverse staff

- High performance and reliable lubricants backed by TotalEnergies' local technical expertise
- A large service station network coverage in Ghana with strategic locations in cities and towns
- “Simple, Smart and Secure” fuel card (TotalEnergies card) accepted in all TotalEnergies stations countrywide
- Capacity to install and maintain equipment at customer sites
- We provide a wide variety of knowledge-based solutions on road transport
- We have a state-of-the-art laboratory in Tarkwa, the third largest ANAC after Belgium and Singapore
- Recognition from institutions such as the Chartered institute of Marketing Ghana (CIMG), Ghana Club 100, and the prestigious Ashanti Business Excellence.

(Source: <https://totalenergies.com.gh/about-us>)

1.3 Business Issue Statement

A company's investment in short-term assets and it manages its current assets as well as its current liabilities all fall under working capital management. (Radhika & Azhagaiah, 2012). WCM involves the management of current assets and liabilities, investments and financing all within a policy structure denoting net assets as a key factor Khan, et al. (2012). Working capital is derived from net assets, serves as a measure of a company's financial health. However, academic research has historically focused more on long-term capital and fixed assets, giving less attention to working capital management (Viskari et al., 2011; Komonen, 2010). Nevertheless, effectively managing operational working capital is crucial as it involves finding a balance between minimizing locked up capital and current assets for increased financial growth, while avoiding the negative consequences of insufficient operational working capital. Inadequate inventory levels can lead to many unfortunate situations resulting in extra costs. Reduced trade credits offered to customers can also lead to decreased sales and strained customer relationships (Molina and Preve, 2009; Wang, 2002). Notably, WCM significantly impacts the profitability of a company, with studies showing a negative correlation between operational working capital cycle times and return on investment (Marttonen, Monto, and Karri, 2013). The finance industry, characterized by tangible assets and good financial growth, places particular importance on working capital management. As a result, there is growing interest in efficient WCM practices, leading to increased academic research in this area. The determinants of WCM and its relationship with profitability have been explored extensively (Hill et al., 2010). Efficiency in managing WCM involves planning and managing short-term assets to meet current obligations while avoiding poor investment in assets (Sunday et al., 2012)

In Ghana, the oil sector plays a major role economic development and growth. For example, oil contributed GH¢21.56 million in 2016, GH¢814.23 million in 2017, GH¢1,948.87 million in 2018, GH¢2,177.37 million in 2019, and GH¢1,884.56 million in 2020 to revenue while GDP of enjoyed GH¢17,599.79 in 2016, GH¢27,426.88 in 2017, GH¢38,594.36 in 2018, GH¢44,252.98 in 2019 and GH¢36,784.65 in 2020 (*Ministry of Finance and Bank of Ghana, 2021*). Oil sector is one of the sectors that have attracted the attention of many academicians including researchers. The finance sector's importance on economic development and the impact of WCM, it is equally essential to carry out depth analysis of how these oil firms WCM and how it affects their financial growth.

Previous literature conducted about this topic, for example Gill et al(2010); Raheman et al.(2010); Gul et al. (2011); Maradi et al (2012); Nyabwanga et al (2012); Khan et al. (2013); Oladipupo and Okafor (2013); Almazari, (2013); Akoto et al. (2013); and focused on the connection between WCM and financial growth. Dorkpah et al. (2016) focused on how WCM practices impacts on a company's growth; the effect of WCM of Ghana Banks on financial growth (Yeboah & Yeboah, 2014); working Capital Management and Cash Holdings of Banks in Ghana (Yeboah & Agyei 2012). All these studies focused on different firms and variables and none of them is conducted on the oil sector, hence this study sought to compare the WCM of firms in Ghana: a comparative analysis of Ghana oil and total petroleum in Ghana.

1.4 Objective of the Study

In general, the study seeks to analyse the working capital management of Ghana oil and total petroleum in Ghana.

1. To compare liquidity of Ghana oil and total petroleum in Ghana.
2. To examine profitability of Ghana oil and total petroleum in Ghana.
3. To assess the financial efficiency Ghana oil and total petroleum in Ghana

1.5 Research questions

Research questions the study sought to answer.

1. Who is more liquid between Ghana oil and total petroleum in Ghana?
2. Who is more profitable between Ghana oil and total petroleum in Ghana?
3. Who is more efficient between Ghana oil and total petroleum in Ghana?

1.6 Significance of the Study

Many academic scholars and researchers have explored into the subject working capital management due the role it plays in every organisation. However, few studies have been carried out in Ghana and none of these studies focused on the oil sector of Ghana. It is believed that the outcome of this study would serve as a guide to policy makers and managers of the oil firms' finances in the policy formulation. The findings of the study would assist stakeholders in similar business as well as other businesses to effectively manage their working capital efficiently. It is expected that the result of this study would contribute to the current existing knowledge on the subject matter and serve as reference point for future research.

1.7 Scope of the Study

In context, the study sought to compare WCM of both firms. Geographically, the study concentrated only Ghana oil and total petroleum in Ghana. Data for the study was collected purposively from audited financial statements of the aforementioned oil companies in Ghana.

1.8 Organisation of the Study

The study is categorised into chapters. Chapter one provides the introduction of study. This comprises of the background, statement of the problem, objectives of the study, research questions, and significance of the study, scope and the organisation of the study. Chapter two deals with related literature review. It covers concept of working capital management, theoretical framework, empirical literature and conceptual model of the study. Chapter three presents the methodology the study employed to accomplish its objectives. Specific areas this chapter covered include research design, population of the study, sampling technique and sample size, source of data, instrument for data collection, validity and reliability of the data and data analysis. Chapter four takes into account the study findings and discussions. Chapter five gives attention to the summary of findings, conclusions and recommendations based on the findings of the study.

LITERATURE REVIEW

2.1 Introduction

This chapter elaborates on the theoretical and empirical review of related literature. The theoretical literature presents and tries to explain theories pertaining to the area of study. The empirical literature describes what has been practically observed and confirmed objectively and relates to the subject matter.

2.2 Concepts

The study considered four key concepts and these inventory management concept, cash management concept, account receivable concept and financial performance concept.

2.2.1 Concept of Accounts Receivable Management

According to Yator (2018), accounts receivable refers to the outstanding amount of money owed to a company by its stakeholders for goods and services that have been fully paid for. Managing accounts receivable involves overseeing the operations related to this account, and it is listed as a current asset on an organization's balance sheet. Current assets are short-term resources that are expected to be converted to cash within a year (Raza et al., 2015).

In the context of this study, accounts receivable management was measured using the accounts receivable turnover, which is calculated by dividing net credit sales by the average accounts receivable (Pakdel & Ashrafi, 2019). A study conducted in Kenya examined the impact of accounts receivable management on the financial performance of chartered public universities. Accounts receivable in public universities encompass various sources such as HELB loans, student fees, and additional fees like conference facility hiring charges (Otieno, 2018). The efficiency of fund

collection from these accounts significantly affects the financial performance of public universities, enabling them to meet their obligations and generate surpluses.

The objective of this study is to assess the influence of the average collection period, a key indicator of accounts receivable management, on the financial performance of chartered public universities in Kenya. Effective accounts receivable management is crucial for financial analysis in both profit-driven and non-profit organizations, as highlighted by Qazi et al. (2011). Managing accounts receivable, as a current asset, measures an organization's ability to meet short-term obligations while maintaining a healthy cash flow.

2.2.2 Concept of Financial Performance

Financial performance serves as a quantifiable measure of an organization's ability to sustain its operations and overall health, expressed in monetary terms (Gartenberg et al., 2019). It is evaluated by analyzing the financial reports and records of an organization for a specific period. Effective financial management is essential for achieving organizational goals. Previous literature has predominantly focused on traditional indicators of financial performance, which encompass various financial metrics and indicators Bulle, (2017). However, a noteworthy observation made by Bulle (2017) is that achieving optimal financial management often involves a trade-off between profitability, liquidity, and solvency. In this study, the financial performance of chartered public universities in Kenya was assessed by examining the accumulated surpluses and deficit balances presented in their financial statements. The aim was to determine the adequacy or inadequacy of their financial performance. According to Trincu-Drăgușin et al. (2016), a surplus indicates positive financial health and improvement, while a deficit signifies negative financial sustainability. The financial strength of Kenyan chartered public universities has been undermined by yearly budget cuts and reductions in government funding, including a significant 26% reduction in higher education funding in response to the COVID-19 pandemic in the 2021/2022 financial year (Munene, 2019; Africa Edition, 2021). These factors contribute to the exacerbation of the financial crisis faced by Kenyan chartered public universities.

2.3 Theoretical Framework

2.3.1 Cash flow theory

According to Huseyin (2011), managers tend to hoard cash to increase the amount of assets under their control and to gain discretionary power over the firm investment decision, (Jensen, 1986). Available cash for investment, allow the manager the leisure of not raising external funds and for capital markets detailed information about the firm's investment projects (Huseyin, 2011). Hence, managers could invest in markets that have zero impact shareholders wealth. The lack of investment opportunities afford managers the luxury of holding cash to ensure the availability of funds to invest in growth projects, even if the NPV of these projects is negative (Huseyin, 2011). This would greatly affects shareholder value and, even if the firm has a large investment programme and a low market-to-book ratio. Hence, employing the market-to-book ratio as a proxy, creates a negative relationship between investment opportunity set and cash holding. It is vital to ensure that in managing liquidity, the firm should create between meeting the current obligation to mitigate liquidity short fall and investing in the interest of shareholders wealth maximization (Huseyin, 2011).

2.3.2 Agency Theory

The concept of agency theory, initially proposed by Berle and Means (2006), also plays a role in the decision-making process of managing accounts receivables. According to this theory, conflicts can arise between different stakeholders of a firm due to their potentially divergent interests. The primary responsibility of managers is to effectively run the company in a manner that generates returns for the shareholders, thereby increasing profit margins and cash flow. However, due to the possibility of non-rational and opportunistic behavior by managers (Jensen, 2004), their interests and policies may sometimes deviate from those of the shareholders, resulting in agency costs or problems.

Efficient management of working capital is essential for the profitability and long-term sustainability of businesses, regardless of their size or industry. It ensures the availability of sufficient funds to meet both short-term financial needs and ensure continuous business operations in the long run. Effective working capital management is closely tied to the goal of maximizing shareholder wealth and is considered a crucial aspect of managing short-term assets and investment strategies (Akbar et al., 2021). The relationship between working capital and firm performance has

been studied in various contexts, with measures of profitability serving as indicators of a company's success. Profitability, which refers to the ability to generate income from available resources, including efficient working capital management, plays a vital role in achieving positive returns (Morara and Sibindi, 2021; Al-Abass, 2018). By implementing efficient strategies for managing working capital, managers can effectively utilize internal reserves and pursue profitable investment opportunities, avoiding costly and high-risk securities (Kwenda and Matanda, 2015). Proper working capital management allows for the internal generation of funds at a lower cost compared to relying on external financing, making it a preferred approach. The objective of working capital management is to ensure the prompt payment of operating expenses and short-term debts while simultaneously maximizing profitability and maintaining adequate levels of liquidity (Ukaegbu, 2014). This involves managing both current assets and current liabilities to strike a balance between profitability and risk, ultimately contributing to the overall value of the firm (Aravind, 2016). Insufficient working capital poses risks to solvency, while excessive working capital diminishes profitability.

INVENTORY CONTROL

Inventory control involves overseeing and managing stock levels, with the primary objective of maintaining control over inventory and providing accurate information about it. It also entails monitoring the materials used in production and ensuring their timely availability according to planned schedules, aiming to ensure smooth operations, utilize capabilities, reduce costs, and ensure a consistent flow of finished products to customers as per specified dates (Marand et al., 2019). The importance of inventory control lies in determining the economic quantity of demand and reordering to minimize inventory to the lowest feasible level. Its purpose is to accurately quantify the stock under static conditions characterized by stability and certainty. However, current and future conditions often involve dynamic and unpredictable factors that impact the quality of raw materials, semi-finished goods, or finished products, as well as usage rates, supply dates, or durations (Rajeswari, 2019).

Inventory plays a crucial role in economic, industrial, and commercial units, serving as an essential component regardless of the circumstances. It is vital for units to store materials in alignment with consumer demands, ensuring timely and uninterrupted production. Inventory acts as a vital link that connects various activities within an economic unit, starting from the procurement of goods or raw materials, through the production and storage cycles, incurring associated costs, and culminating in formulation and sales in response to customer requests.

The value of inventory, particularly for industrial units, is of great significance, and any inaccuracies in its valuation can result in errors when determining total current assets and equity. Such errors can cascade to the income statement, affecting total and net profit. Furthermore, inaccuracies in inventory valuation during a specific period can have repercussions on subsequent periods, as the ending inventory of one period becomes the beginning inventory of the next. Thus, the accuracy of inventory valuation in previous periods directly influences subsequent periods (Herath and Lu, 2018).

2.4 Empirical Review

This section focuses on the review of related literatures of previous studies. It mainly concentrated on effect of inventory on financial performance, effect of cash management on financial performance, effect of account receivable management on financial performance and relationship between working capital management and financial performance.

2.4.1 Effect of inventory on financial performance

The finance literature extensively investigates the relationship between inventory control and financial performance. Ionescu et al. (2018) conducted a study in Romania to assess the impact of stock valuation methods on the financial situation and performance of companies. The research aimed to analyze how different stock valuation options affect the financial position and performance of economic units. The study confirmed that various stock valuation methods have different impacts on the financial position and performance of companies, based on theoretical analysis and applied research.

Alrjoub and Ahmad (2017) conducted a research study to examine the effect of different types of inventory (raw material stock, in-progress inventory, finished stock, total stock) on company performance. The study also explored the influence of additional factors, such as the cost of capital, which had not been previously explored. The findings

indicated that inventory management, considering different types of inventory, has a long-term impact on company performance. The relationship between inventory management and company performance is influenced by the cost of capital. The study recommended that companies consider the cost of capital when making inventory-related decisions and adapt inventory control strategies to align with changes in the business environment.

Another study by Jonek-Kowalska (2014) focused on examining the financial aspects of changes in the level of finished stock in a mining establishment. The research investigated the increase in the level of finished stock, often resulting from the absence of permanent cost advantages in recruiting companies. The study also explored the correlation between changes in the level of finished stock and economic fluctuations in global energy resource markets. The findings revealed that the mining establishment experienced periods of surplus levels of finished stock, indicating sales issues in certain years. However, the level of stock consistently increased over the examined period, with relatively uniform finished goods and stable quality standards. The study showed that the value of the stock remained stable, with the manufactured product reaching its highest value during periods of low prices for hard coal in the European market. The increase in inventory levels led to a longer trading cycle, reduced liquidity, and decreased operational cash flow. The study emphasized the need to adjust indirect costs associated with inventory and address the loss of alternative uses for stagnant resources in the stock. The average cost of financing the stock ranged from \$2.5 million to \$5.6 million during periods of average stock levels and increased to \$6.2 billion during strong periods.

2.4.2 Effect of account receivables management on financial performance

Adam and Caroline (2018) conducted a study in Mogadishu, Somalia, to examine the correlation between accounts receivable management and the financial performance of Small Medium Enterprises (SMEs). The study utilized a survey research method to collect quantitative data from a sample of 81 SMEs out of a target population of 102. Inferential and descriptive statistics, including correlation coefficient and Pearson correlation, were employed to analyze the data. The study found a positive impact of accounts receivable on the financial performance of SMEs in Mogadishu. However, the specific measurements used to assess accounts receivable were not specified. In contrast, the present study addresses this gap by measuring accounts receivable through the average collection period.

Tibbs and Munene (2018) conducted research on Embu Water and Sanitation Ltd. to investigate the influence of accounts receivable on financial performance. The study utilized operational motive, cash conversion cycle, and transaction costs theories to explain the relevance of the variables. Secondary data from the company's financial reports were analyzed using inferential and descriptive statistics. The study found a significant positive effect of the average collection period and current ratio on equities, indicating that an increase in the debtor's payment period led to improved financial performance for the company. However, this study focused on a single public entity, limiting the generalizability of the finding. Njeru et al.(2016) conducted research on the impact of accounts receivable management on the financial performance of government venture capital organizations in Kenya. The study included all 24 venture-capitalist firms funded by the national government and utilized a census survey method. Primary data on the independent variables were collected through a questionnaire, while secondary data on the dependent variable were obtained through record investigation. Inferential and descriptive statistics, such as regression, ANOVA, and correlation coefficient, were analyzed using SPSS software. The study revealed a significant direct correlation between accounts receivable and the financial performance of Kenyan venture-capitalist enterprises. However, the measurement of accounts receivable in this research did not consider the impact of bad debts, which can significantly affect the financial position of institutions, particularly public organizations.

2.4.3 Effect of cash management on financial performance

Soet et al. (2018) investigated the impact of managing operating cash flow on the financial performance of mutual funds in Kenya. The study utilized causal research and analyzed secondary panel data from the audited financial statements of 22 mutual funds during the period of 2011-2016. The researchers employed the p-value at a 5% confidence level from t-tests to determine whether to accept or reject the null hypotheses. The findings indicated that effective management of operating cash flow had a significant and positive influence on return on assets, while its impact on return on equity was insignificant yet positive.

Kinyanjui, Kiragu, and Kamau (2017) explored the effects of cash management practices, including cash holding practices, use of technology, and cash pooling practices, on the financial performance of small and medium-sized

enterprises (SMEs) in Nyeri town, Kenya. Their study employed a descriptive research design, focusing on registered SMEs in Nyeri town as the target population. Data was collected through a self-administered semi-structured questionnaire from a sample of 62 SMEs registered with the business registrar's office in Nyeri County. Statistical Package for Social Sciences (SPSS) was utilized for data analysis, generating both descriptive and inferential statistics. The results revealed that cash holding practices and the use of technology in cash management significantly influenced the financial performance of SMEs in Nyeri.

Afrifa and Tingbani (2017) conducted a study on the relationship between working capital management (WCM) and the performance of small and medium-sized enterprises (SMEs), taking into account the potential impact of cash flow. The research utilized panel data regression analysis on a sample of 802 British quoted SMEs listed on the alternative investment Market from 2004 to 2013. The study findings demonstrated the significance of cash flow in the WCM and performance of SMEs. The results indicated that WCM had a significant negative effect on SME performance. Additionally, the evidence suggested that cash flow-constrained (non-constrained) SMEs improved their performance by reducing (increasing) their investment in working capital. Ogbonnaya et al (2016) examined the correlation between cash flow and performance in the Nigerian banking sector. The study involved a survey of four banks listed on the Nigeria Stock Exchange. Data were collected from the annual reports and accounts of the selected banks, and statistical analysis was performed using correlation techniques. The results revealed a significant and strong positive relationship between operating cash flow and performance in the Nigerian banking sector. Furthermore, it was found that investing cash flow and financing cash flow had a weak and negative relationship. The study recommended that regulatory authorities such as CBN, SEC, CAC, and NDIC should scrutinize their financial statements, and external auditors of quoted banks in the banking sector should utilize cash flow ratios to evaluate performance, enabling investors to make informed decisions.

2.4.4 Relationship between working capital management and financial performance

Sathyamoorthi et al. (2018) conducted a study to examine the impact of working capital on the profitability of retail stores listed on the Botswana Stock Exchange from 2012 to 2016. They found a non-linear relationship between working capital and firm profitability, using return on assets (ROA) as the dependent variable and components of the cash conversion cycle (CCC) as independent variables.

Mukaddam and Sibindi (2020) investigated the relationship between financial performance and corporate governance practices in South African retail firms. Their study revealed a negative association between board size and financial performance. Additionally, they found that board independence and firm size had a positive impact on financial performance. The authors concluded that the relationship between corporate governance and financial performance among retail firms in South Africa was not very strong.

Akbar et al. (2021) explored the influence of working capital management on the operating and market risk returns of firms from 12 different industrial segments in Pakistan. Their findings indicated that higher levels of working capital were associated with lower stock price volatility. Mabandla (2018) conducted a study on the relationship between working capital management and the financial performance of food and beverage firms listed on the JSE in South Africa from 2007 to 2016. The study revealed a positive association between an aggressive working capital management policy and financial performance. Furthermore, it found that the cash conversion cycle (CCC) and profitability moved in opposite directions.

Yahaya and Adamu (2016) examined the effects of working capital management on the financial performance of pharmaceutical firms in Nigeria. Zimon and Grzegorz (2020) focused on management strategies of working capital in Polish service-providing companies. Zimon and Tarighi (2021) studied the effects of the COVID-19 global crisis on working capital management policy. Nastiti et al. (2019) analyzed the impact of working capital management on firm profitability and its indirect effect on sustainable growth in a sample of 136 manufacturing firms listed on the Indonesian Stock Exchange. The study revealed that working capital was a significant determinant of profitability and had an indirect effect on sustainable growth through firm profitability.

Kaushik and Chauhan (2019) investigated the relationship between working capital management and firm performance using data from 211 Indian listed firms from 2008 to 2016. They found that net trade cycle, accounts receivable days, and inventory days negatively affected financial performance, while accounts payable days had a

positive effect. Roni et al. (2018) examined the relationship between working capital management and the profitability of Indonesian state-owned enterprises in the processing industry. They identified variables such as asset structure, liquidity, cash turnover, profitability, receivable turnover, and inventory turnover. The study revealed that inventory turnover and asset structure positively influenced firm profitability, while liquidity, cash turnover, and receivable turnover did not have a significant impact.

Sharif and Islam (2018) assessed the effect of working capital on the profitability of Bangladeshi pharmaceutical firms using time series data from listed firms at the Dhaka Stock Exchange and Chittagong Stock Exchange. They found a significant relationship between working capital and firm profitability, suggesting that firms should reconsider their working capital management practices to remain competitive. Jana (2018) examined the effects and efficiency of working capital management strategies in Indian fast-moving consumer goods (FMCG) firms using data from 15 listed FMCG firms. The study found both positive and negative relationships between profitability and working capital management, highlighting the significance of efficient working capital management for FMCG companies.

Aregbeyen (2013) investigated the relationship between working capital management and profitability based on data from 48 manufacturing firms listed on the Nigerian Stock Exchange from 1993 to 2005. The study revealed that inefficient working capital management significantly reduced profitability. Raheman et al. (2010) analyzed the relationship between working capital management and the performance of Pakistani firms using data from 204 manufacturing firms listed on the Karachi Stock Exchange from 1998 to 2007. The study found that the net trade cycle, cash conversion cycle, and inventory turnover in days had a significant impact on performance. The authors suggested the need for improved collection and payment policies to enhance working capital management and firm profitability.

The present study aims to address the lack of empirical evidence on the impact of working capital management efficiency on the financial performance of manufacturing firms listed on the GSE. The study will analyze the effect of working capital management on financial performance, identify the key determinants of working capital management efficiency, and assess the moderating effect of working capital investment and financing policy on the relationship between working capital management efficiency and financial performance. The study will utilize data from 2012 to 2021 and focus on manufacturing firms listed on the GSE.

2.5 Cash management

Cash management is one of the most crucial aspects of financial management for any business organization. Effective cash management practices can significantly impact an organization's financial performance. According to Hassan et al (Zain & Rashid, 2018), adherence to best practices in business is essential for success and good financial management is a critical aspect of achieving this. Financial management, as defined by Titman et al (Mirza et al., 2017), is a strategy aimed at enhancing economic value, while Azhar et al add that it involves financial planning and control, financial accounting, financial analysis, management of investments, insurance, retirement and estate planning. Draughn, LeBoeuf, Wozniak, Lawrence and Welch emphasize that financial satisfaction is comprised of financial adequacy, perceived economic well-being, and satisfaction with the level of living (Woodyard & Robb, 2016). Furthermore, financial management skills are essential in measuring financial literacy. Financially healthy organizations often have efficient cash management practices in place, which helps them maintain liquidity and avoid unnecessary borrowing costs. Effective cash management practices enable companies to improve their financial performance by reducing the risk of insolvency, improving profitability, and increasing market share (Salehi, 2012). In addition, understanding financial management is imperative for entrepreneurs as it ensures effective decision-making and efficient use of resources. Moreover, financial literacy is critical in managing personal finances and aids individuals to make informed decisions regarding investments, savings, preparing budgets, managing debts, and developing financial plans (Yuniarta et al., 2021).

2.5.2 Cash and Cash Equivalents

Cash equivalents are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes. For an investment to qualify as a cash equivalent, it must be readily convertible to a known amount of cash and be subject to an insignificant risk of changes in value. Therefore, an investment normally qualifies as a cash equivalent only when it has a short maturity of, say, three months or less from the date of acquisition.

Investments in shares are excluded from cash equivalents unless they are, in substance, cash equivalents; for example, preference shares of a company acquired shortly before their specified redemption date (provided there is only an insignificant risk of failure of the company to repay the amount at maturity). Cash flows exclude movements between items that constitute cash or cash equivalents because these components are part of the cash management of an enterprise rather than part of its operating, investing and financing activities. Cash management includes the investment of excess cash in cash equivalents.

2.5.3 Financial Performance

Financial performance, which is often synonymous with profitability, refers to a business's ability to generate a profit from its activities. It reflects the effectiveness of management in utilizing organizational resources to create value for the business (Nishanthini & Nimalathasan, 2013). Profitability is influenced by a combination of internal and external factors. Internal determinants are specific to the firm, while external factors are related to the industry. Internal factors such as size, liquidity, leverage, and financial assets have been identified as significant drivers of profitability (Nishanthini & Nimalathasan, 2013).

PROJECT IMPLEMENTATION

3.1 Introduction

The section describes the methods that the study will adopt to attain the objectives of the study. The research design, target population, sampling methodologies and sample size, research instruments, research instrument reliability and validity, data collection procedures, and data analysis are the various methods highlighted.

3.2 Research Design

The framework that guides data collection and analysis; the structure that guides the execution of the data collection and analysis method, which provides the link between empirical data and its inferences in a logical sequence to the study's initial research question (Bryman, 2005; Yin 2014) cited by Baiden (2006). Baiden cites Blismas (2001) as an example of experimental, survey, action research, and case study (2006). Cooper and Schindler (2010) define research design as a plan that specifies how the research will be carried out in order to achieve its goal.

Kumar (2005), on the other hand, defines research design as a strategy that practically represents the strategies that researchers employ to get responses to their research questions. According to scholars, there are various different sorts of research designs that researchers utilise in their research studies. There are three types of research designs and these are descriptive, exploratory, and explanatory (Saunders, Lewis & Thornhill, 2007). Exploratory research studies are useful for learning "what is going on in a particular or region; searching for new understandings; responding to demands for information, and evaluating phenomena in a new light" (Robson, 2002, p. 59).

This is appropriate in cases where the researcher want to gain a thorough grasp of the phenomenon. According to Hair, Babin, Money, and Samuel (2003); Sanders et al. (2009), exploratory research can be done through focus groups, literature searches, and professional interviews. Some scenarios are described in descriptive research. The major goal of this research is to present a detailed profile of a group of people, events, and situations (Robson, 2002, p. 59). It is important for the researcher to have prior understanding of the phenomena for which data were collected (Saunders, Lewis & Thornhill, 2003). The study employed a descriptive research design. This method will be used because; it is deemed as an appropriate way of evaluating the subject to be investigated. Because the study was done in a context that required direct responses from the respondents while exploring existing phenomena without modifying the variables, this approach was perfect for this study.

3.3 Population of the Study

The target population is defined by Nachmias and Nachmias (2009) as the complete set of relevant units of analysis or data. The research population, according to Mugenda and Mugenda (2008), is the precise group of people inside a specified location or institution, as well as the events and components that are to be investigated. The population of the study consists of ten years audited financial statements for period from 2012 – 2021. The study was limited to oil companies' selected using purposive sampling technique; the decision was premised on the classification of the firms as manufacturing (based on the nature and description of their business).

3.4 Source of Data

The study used secondary data. The study will employ the use of panel data. The study extracted the information from its proposed firms (TOTAL and GOIL). For the purposes of this study, a quantitative approach for data collection was adopted. The financial statements of the institutions used for the research, specifically data total assets, total liabilities, inventory, working capital, profits, etc. would be collected from each bank's financial statements to compare working capital management.

3.5 Validity and Reliability of Data

According to Mugenda & Mugenda (2003), validity refers to how precisely the data acquired in the study represents the study's variables. Construct validity refers to the degree to which a test measures what it promises to measure, i.e., providing a legitimate operationalization of theoretical constructs in a study. It seeks to establish validity of the responses that was extracted from the published financial statements of companies.

This is the degree to which a process produces consistent outcomes across a number of trials (Orodho, 2009). According to Zkmund (1997) reliability refers to the level to which measures are free from random error and therefore yield dependable outcomes. According to Sekaran (2003) reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the goodness of the measure. Thus the extent to which any measurement procedure produces consistent results over time and an accurate representation of the total population under study is referred to as reliability. The research used Cronbach's Alpha as a measure of internal consistency. Cronbach's Alpha is a reliability coefficient that indicates how well items in a set are positively correlated to one another (Sekaran, 2003). Reliability of the questionnaire was evaluated through Cronbach's Alpha which measures the internal consistency. Cronbach's alpha was calculated by application of SPSS version 21 for reliability analysis of various objectives. According to Mugenda and Mugenda (2008) the accepted threshold of reliability is 0.7. To obtain the reliability of data, SPSS used to calculate Cronbach Alpha of the responses.

3.6 Sampling Procedure and Sample Size

This proposed study employed purposive sampling technique to select the companies. This is because the objective of the study sought to examine the effect of working capital management on financial performance of oil companies. The sample of this study comprises of two listed oil firm on Ghana Stock Exchange from 2012 – 2021. These firms belong to oil sector.

3.7 Data Analysis Procedure

The study's conclusions will be established using both descriptive and inferential statistics. In addition, the mean and standard deviation will be utilized to describe the variables under consideration. However, inferential statistics such as the ratio analysis will be used to compare the working capital management of both companies.

- Current Ratio= Current assets/Current liabilities
- Quick ratio= Current assets-Inventory/Current liabilities-
- Gross profit ratio= Gross profit/Net sales
- Net profit Ratio= Net profit/Revenue
- Inventory turnover ratio= Cost of goods sold/ Average inventory
- Accounts receivable ratio= Net credit sales/ Average accounts receivable

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the analysis and discussion of data extracted from the published financial statements of Ghana Oil and Total Petroleum. The statements covered the period between 2012 and 2021. The study evaluated liquidity and profitability of the companies by assessing financial indicators such as current assets, current liabilities, inventory, gross profit, net profit, and revenues were obtained directly from the financial statements. These analysed using panel data.

4.2 Descriptive statistics

Descriptive statistics presents information about the nature of the data. It reveals a clear variation between the two oil firms' variables within the study as exemplified by the mean, standard error, standard deviation, confidence level

as well as interval. These values demonstrate the obvious diversity between the two oil firms in Ghana during the study period considered. It was further revealed that various working capital management strategies were used by the companies to achieve firm financial performance. The firms according to their working capital management values obtained for instance maintained close figure with mean values of 0.8041658 and 0.8842243 respectively for GOIL and TOTAL, which basically above the 0.5 benchmark and therefore indicate how aggressive or conservative the strategy for managing working capital by these firms is. This further infers that both GOIL and TOTAL oil firms often used aggressive working capital management. As depicted in table 4.1, the working capital ratio of Ghana Oil revealed corresponding standard deviation of 0.1488113 while that of TOTAL Ghana revealed standard deviation of 0.107407 indicate that TOTAL Ghana performs better than GOIL. This outcome is portrayed in table in table.

In addition, inventory turnover of GOIL revealed a mea score of 60.73929 while TOTAL revealed a mean score of 22.40044 with their respective standard deviations of 10.2765 and 5.150469. These outcomes show that on average GOIL scored better than TOTAL. Similarly, the accounts receivable of GOIL scored a mean of 9.220492 while TOTAL scored a mean of 10.5351 with their corresponding standard deviation of 2.171358 and 1.252005 respectively. This infers that TOTAL scored better on average as compared with GOIL.

As illustrated in both table 4.1 and 4.2 the descriptive statistics of financial performance in term of return on equity showed that, the minimum value of return on equity for the GOIL is 0.2038158 which is less than minimum value of return on equity for the TOTAL which was 0.2834579. With regards to the maximum value of return on equity for GOIL is 0.384772 which is less than the maximum value of return of equity for TOTAL which was 0.3457905 for the same period of time. The study further revealed that the standard deviation of return on equity for GOIL is 0.04796856 while the standard deviation of return on equity for TOTAL 0.0454022 as exhibited in tables 4.1 and 4.2 in that order. From the results, it implies averagely return on equity for TOTAL better than that of GOIL. .

Likewise, as represented in both table 4.1 and 4.2 the descriptive statistics of financial performance in term of net profit margin showed that, the minimum value of net profit margin for the GOIL is 0.9722484 which is less than minimum value of net profit margin for the TOTAL which was 0.9357442. On the other hand, the maximum value of net profit margin for GOIL is 1.019947 which is higher than the maximum value of net profit margin for TOTAL which was 0.9747859 for the same period of time. The outcome of the study revealed that the mean score of the net profit margin for GOIL was 0.9839435 with its corresponding standard deviation of 0.13284 while mean score of the net profit margin for TOTAL was 0.9639416 with its corresponding standard deviation of 0.116799 in that order. It could be inferred that averagely GOIL performs better than TOTAL.

Table 4.1: Descriptive Statistics for GOIL

Variable	Obs	Mean	Std. Dev.	Min	Max
WORKING CAPITAL	10	0.8041	0.1488	0.5836	1.074
INVENTORY	10	60.0654	10.2765	44.32	74.99
ACCOUNTS RECEIVABLE	10	9.6555	2.1713	6.70	12.56
CASH MANAGEMENT	10	0.044	0.0308	0.015	0.1071
NET PROFIT	10	0.983	0.0132	0.9722	1.0199

Source: Field Data, 2023

Table 4.2: Descriptive Statistics for TOTAL

Variable	Obs	Mean	Std. Dev.	Min	Max
WORKING CAPITAL	10	0.8842	0.1074	0.7713	1.0842
INVENTORY	10	23.0654	5.6248	12.7539	30.7871
ACCOUNTS RECEIVABLE	10	10.6595	1.1358	9.0321	12.2547
CASH MANAGEMENT	10	0.5446	0.0183	0.0234	0.0891
NET PROFIT	10	0.9388	0.0113	0.9371	0.9754

Source: Field Data, 2023

4.3 Test of Liquidity

From Table 3 below shows the liquidity ratios of TOTAL and GOIL. The liquidity ratio explains of the liquidity position of a firm. This consist of the current and the quick ratios from 2012-2021. TOTAL recorded the highest current ratio of 1.08 in 2021 as compared to GOIL's 1.07 in 2012. For quick ratio, TOTAL record their highest ratio in 2021 as well with a value of 0.78 and the highest quick ratio for GOIL came in 2012 with a value of 0.96. Therefore in comparison of liquidity, TOTAL had more liquidity to GOIL even though both companies maintain high liquidity.

Table 3: Current Ratio and Quick Ratio

Year	LIQUIDITY RATIO			
	TOTAL Current Ratio	Quick Ratio	GOIL Current Ratio	Quick Ratio
2012	0.93	0.35	1.07	0.96
2013	0.94	0.58	0.91	0.82
2014	0.92	0.66	0.74	0.64
2015	0.87	0.57	0.78	0.72
2016	0.77	0.56	0.94	0.86
2017	0.73	0.56	0.81	0.74
2018	0.80	0.66	0.80	0.75
2019	0.81	0.68	0.81	0.70
2020	0.98	0.75	0.58	0.53
2021	1.08	0.78	1.06	0.89

For Figure 1 and 2 below represents a line chart of the current and quick ratios of TOTAL and GOIL. The horizontal axis denotes the years while the vertical axis denotes the current and quick ratios. As per the legend in the chart, TOTAL is represent with the blue line while GOIL is represented with the orange line. By examining the lines and the connecting the data, we notice a different patterns and trends within both companies as the both have peaks and slopes occurring at separate periods. In the current ratio chart, TOTAL peaked in 2021 but slumped in 2017 while GOIL peaked in 2012 and slumped 2020. The charts simply displays an overview of their performance trend. Figure 2 also display a trend of quick ratio performance.

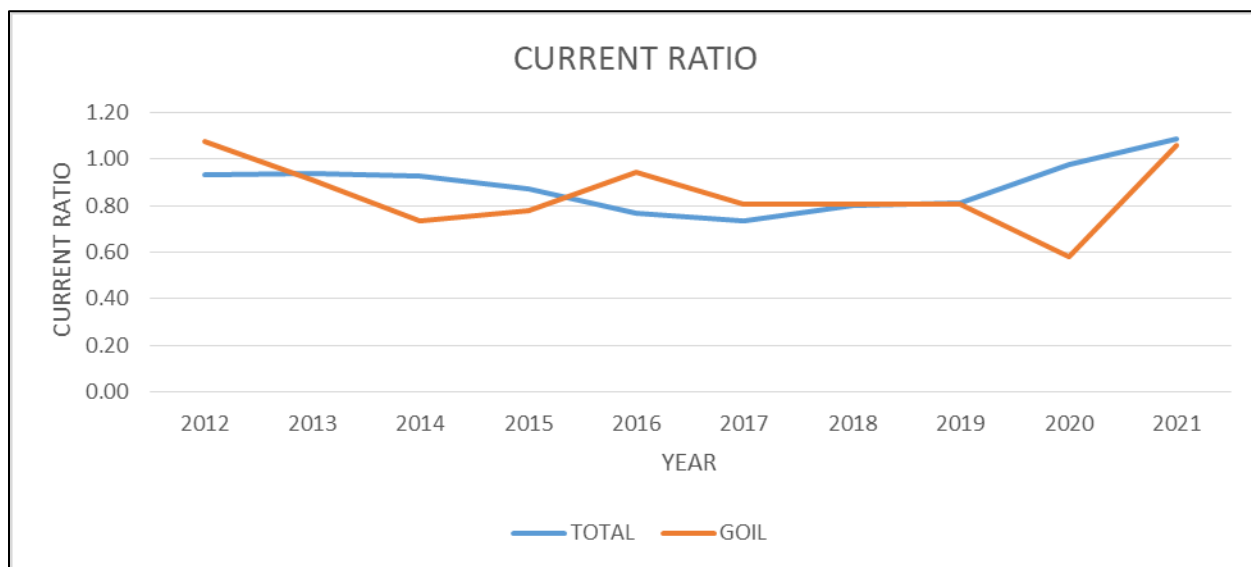


Figure 1: TOTAL and GOIL Current Ratio

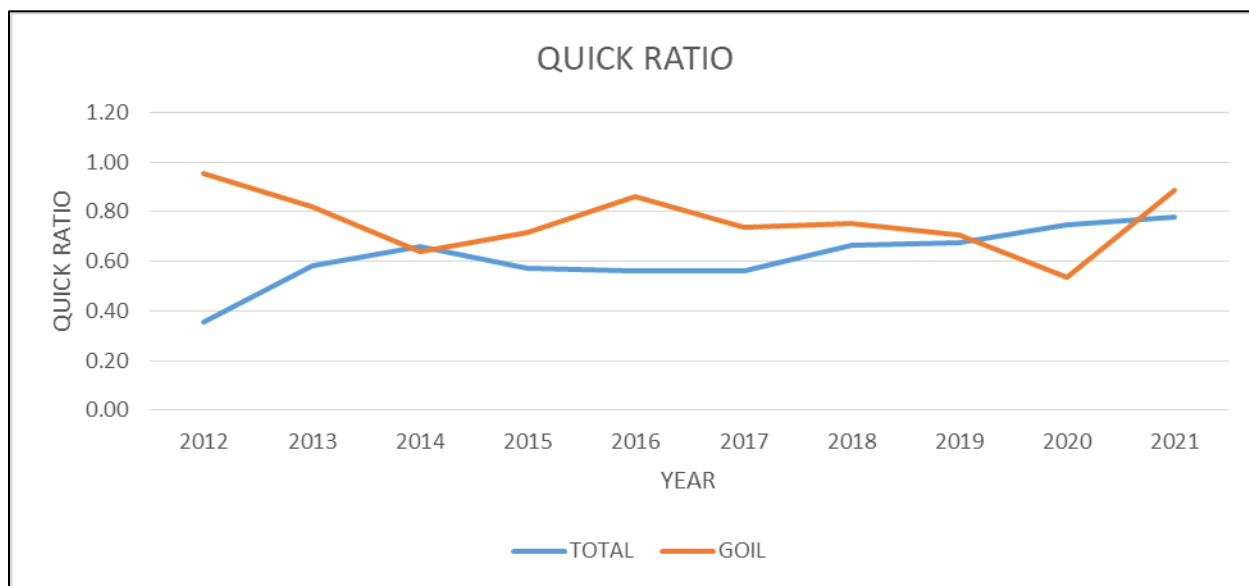


Figure 2: TOTAL and GOIL Quick Ratio

4.4 Test of Financial Profitability

For Table 4 below, shows the profitability ratio for TOTAL and GOIL. It shows the gross profit and net profit ratios of both companies from 2012 to 2021. This indicates the companies' profitability margin for the stated period. TOTAL had their highest gross profit ratio in 2019 with a value of 0.11 and their highest net profit ratio with a value of 0.10 in that same year. However, GOIL had their highest gross profit ratio with a value of 0.09 in 2020 and their highest net profit ratio with a value of 0.08 that same year too. In terms of comparison between both companies, TOTAL clearly appears to be more liquid in terms of profitability.

Table 4: Profitability Ratio Table

Year	PROFITABILITY RATIO			
	TOTAL		GOIL	
	Gross Profit Ratio	Net Profit Ratio	Gross Profit Ratio	Net Profit Ratio
2012	0.06	0.05	0.06	0.04
2013	0.08	0.06	0.06	0.05
2014	0.07	0.05	0.05	0.03
2015	0.09	0.06	0.06	0.05
2016	0.10	0.07	0.08	0.07
2017	0.10	0.08	0.06	0.04
2018	0.09	0.08	0.08	0.05
2019	0.11	0.10	0.08	0.07
2020	0.09	0.06	0.09	0.08
2021	0.10	0.09	0.08	0.07

For Figure 3 and 4 below, denotes a line chart of the gross profit and net profit ratios of TOTAL and GOIL. The horizontal axis denotes the years while the vertical axis denotes the gross profit and net profit ratios. As per the legend in the chart, TOTAL is represent with the blue line while GOIL is represented with the orange line. By examining the lines and the connecting the data, we notice a different patterns and trends within both companies as the both have peaks and slopes occurring at separate periods. In the current ratio chart, TOTAL peaked in 2019 but slumped in 2020 while GOIL peaked in 2020 and slumped 2014. The charts simply displays an overview of their performance trend. Figure 2 also display a trend of quick ratio performance.

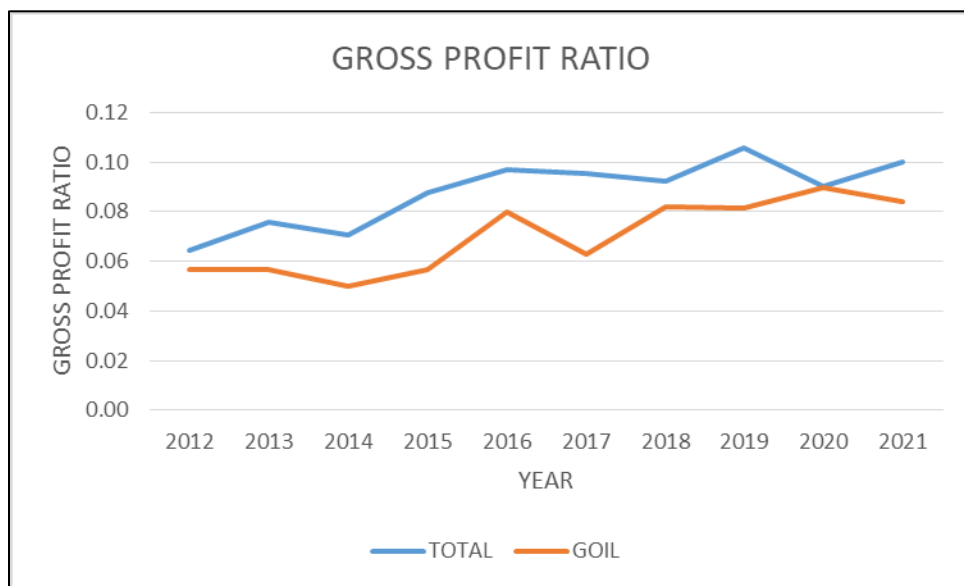


Figure 3: Gross Profit Ratio

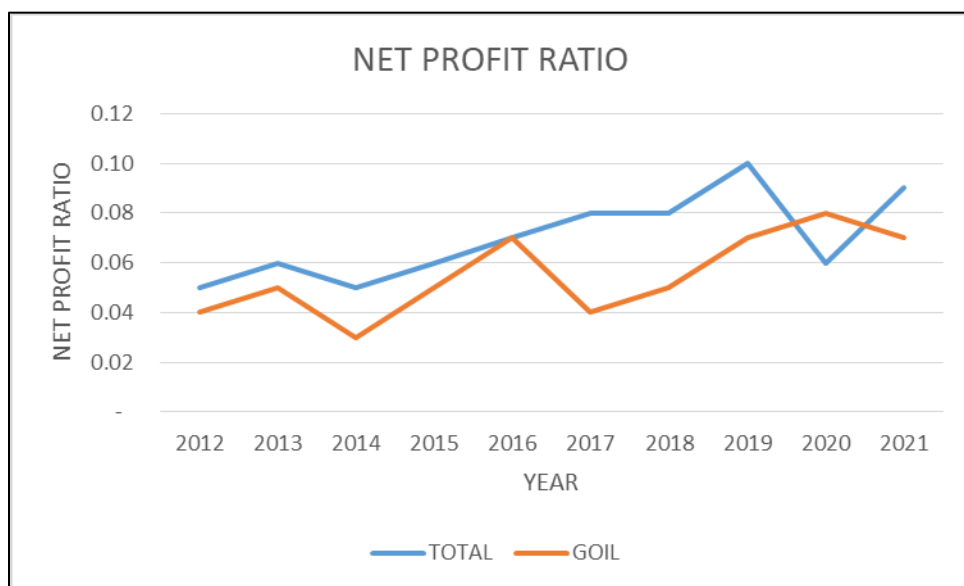


Figure 4: Net Profit Ratio

4.5 Test of Financial Efficiency

From Table 5 below shows the efficiency ratios of TOTAL and GOIL. The efficiency ratio measures how a company can turn products into profit. This consist of the inventory turnover ratio and the accounts receivable turnover ratio from 2012-2021. TOTAL recorded the highest inventory turnover ratio of 5 in 2015 as compared to GOIL's 5 in 2016. For accounts receivable turnover ratio, TOTAL recorded their highest ratio in 2015 as well with a value of 4 and the highest accounts receivable turnover ratio for GOIL came in 2018 with a value of 4. Therefore in comparison of efficiency, GOIL had more efficient as compared to TOTAL. A high inventory turnover ratio measure the number of times a company within a year can sell and replace its stock.

Table 5: Efficiency Ratio

Year	EFFICIENCY RATIO			
	TOTAL	GOIL		Accounts Receivables
	Inventory Turnover Ratio	Accounts Receivables Turnover Ratio	Inventory Turnover Ratio	Turnover Ratio
2012	3	2	3	3
2013	3	3	5	2
2014	3	3	4	3
2015	5	4	4	2
2016	3	2	5	2
2017	4	2	3	2
2018	3	3	4	4
2019	2	5	5	3
2020	3	2	3	2
2021	3	3	5	3

For Figure 5 and 6 below, represents a line chart of the inventory turnover and accounts receivable ratios of TOTAL and GOIL. The horizontal axis denotes the years while the vertical axis denotes the inventory turnover and accounts receivable ratios. As per the legend in the chart, TOTAL is represent with the blue line while GOIL is represented with the orange line. By examining the lines and the connecting the data, we notice a different patterns and trends within both companies as the both have peaks and slopes occurring at separate periods. In the inventory turnover chart, TOTAL peaked in 2015 while GOIL peaked in 2019. The charts simply displays an overview of their efficiency pattern. Figure 6 also display a trend of accounts efficiency.

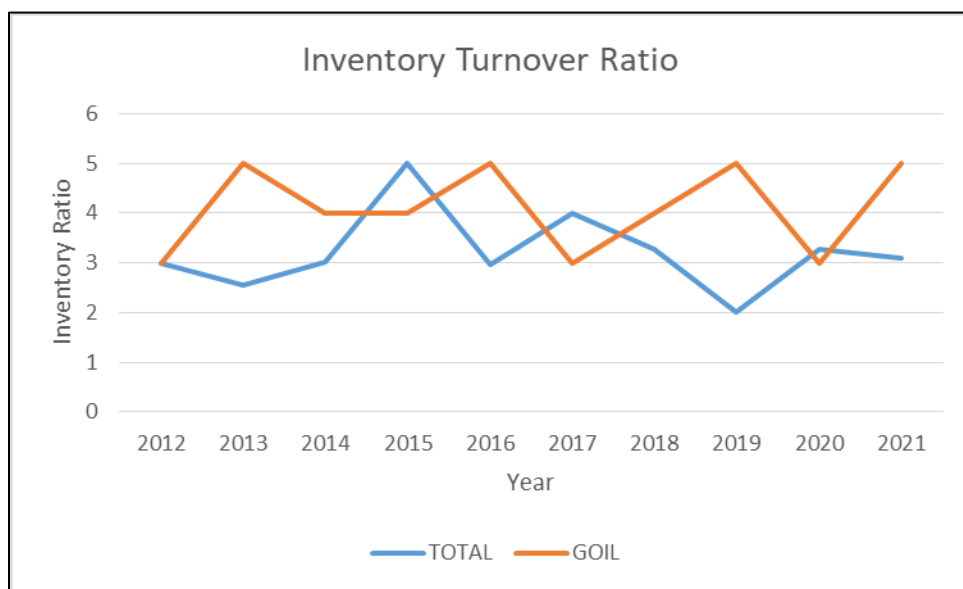


Figure 5: Inventory Turnover Ratio

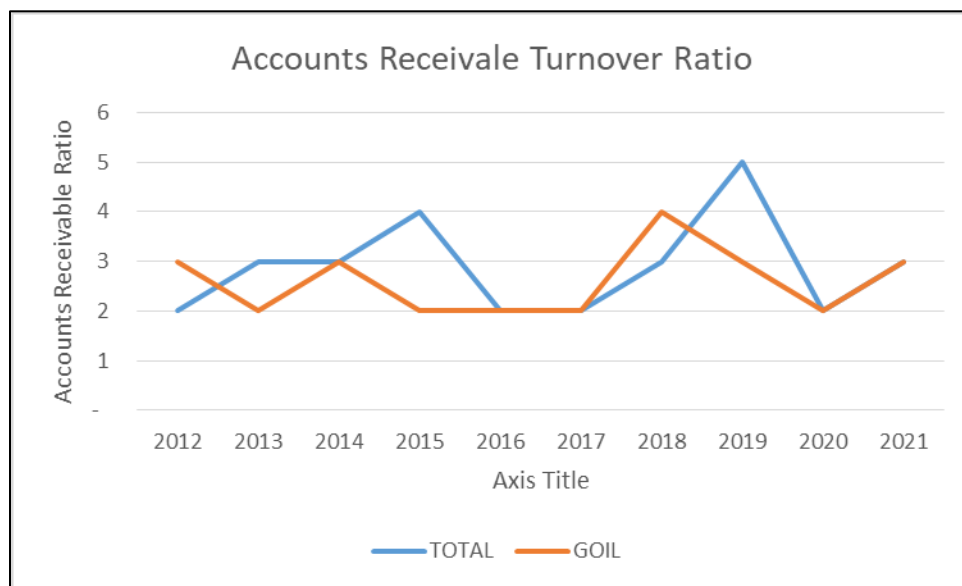


Figure 6: Accounts Receivable Turnover Ratio

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of key findings, general conclusions as well as recommendations. It discusses the outcomes based on the specific objectives, draws conclusions and makes recommendations for continuous improvement in working capital management Ghana Oil and Total Petroleum. It also highlighted the possible research areas for further research.

5.2 Summary of Findings

The oil industry is a major contributor to the growth of the economy. This has resulted in various investment and policy recommendation to the industry. The recent hike in prices of petroleum products around the world has called for stronger management policies to avoid a hit on the industry. As such, the study sort to analyse the working capital management of oil marketing companies in Ghana from 2012 to 2021. Using Ratio analysis, the study compared profitability, liquidity and efficiency of both companies to measure their financial strengths.

Using the liquidity ratio, the study compared the current and quick ratios of TOTAL and GOIL in Ghana. TOTAL recorded the highest current ratio of 1.08 in 2021 as compared to GOIL's 1.07 in 2012. For quick ratio, TOTAL record their highest ratio in 2021 as well with a value of 0.78 and the highest quick ratio for GOIL came in 2012 with a value of 0.96. Therefore in comparison of liquidity, TOTAL had more liquidity to GOIL even though both companies maintain high liquidity. This findings is similar to Soyema & Olawale (2014) who also found high liquidity values in the comparison of brewery companies in Nigeria.

Using the profitability ratio, the study compared the gross profit and net profit ratios of TOTAL and GOIL in Ghana. The study found the companies' profitability ratio for the stated period. TOTAL had their highest gross profit ratio in 2019 with a value of 0.11 and their highest net profit ratio with a value of 0.10 in that same year. However, GOIL had their highest gross profit ratio with a value of 0.09 in 2020 and their highest net profit ratio with a value of 0.08 that same year too. In terms of comparison between both companies, TOTAL clearly appears to be more liquid in terms of profitability. The findings appear lower as compared to a study by Makar (2017) on the banking industry in Nepal.

The financial efficiency ratio compared the inventory turnover ratio and the accounts receivable turnover ratio from 2012-2021. TOTAL recorded the highest inventory turnover ratio of 5 in 2015 as compared to GOIL's 5 in 2016. For accounts receivable turnover ratio, TOTAL recorded their highest ratio in 2015 as well with a value of 4 and the highest accounts receivable turnover ratio for GOIL came in 2018 with a value of 4. Therefore in comparison of

efficiency, GOIL had more efficiency as compared to TOTAL. A high inventory turnover ratio measure the number of times a company within a year can sell and replace its stock.

5.3 CONCLUSIONS

This research work attempted to compare working capital management of TOTAL and GOIL oil marketing companies in Ghana. The analysis was based on the data from the financial annual reports of the various companies considered for this study. As intended the study compared various financial metric under working capital management. The findings established using liquidity ratio that TOTAL was more liquid as it showed high current and quick ratio values. The high current and quick ratio values indicates the companies' ability to pay off its current liabilities.

The findings also indicated that TOTAL had a higher gross and net profit ratio as compared to GOIL. Gross profit ratio indicates the portion of profit generated by net sales. It measures the cost-effective manner a business creates sellable products. The net profit ratio of TOTAL was also higher as compared to GOIL. This ratio explains the portion of a company's profits in relation to its revenue. The study finally compared the financial efficiency of both companies. This is metric measures the company's ability to uses resources well. The inventory turnover ratio measures the number of times a company's inventory is sold or replaced within a year. On the other hand, accounts receivable measures the effectiveness of a company in collecting debt or extending credit. The results indicated that GOIL were more financially efficient.

5.4. Policy Implications and Recommendations

The study recommended that management of both GOIL and TOTAL companies in Ghana should ensure to immerse improvement by making sure their inventory turnover management is effective so as to improve financial efficiency. As such, management should high specialized persons in finance to manage books to improve inventory turnover. It is further recommended that management of these firms should ensure that the management inventory turnover contributes to return on equity. It suggested that management of GOIL and TOTAL should make sure that they contribute meaningfully to their net profit margin and earnings per share in order to create value for their shareholder and as well generate dividend for them.

According to the results of the research, working capital management has a favorable impact on an organization's expansion and profitability. Unfortunately, since they lack understanding, business owners frequently struggle to recognise the significance of working capital management. Although its administration could appear expensive in the short term, it has significant financial advantages over time. The oil companies should give attention to their account receivable and provide their credit departments more freedom to identify efficient working capital management strategies. Also, the ideal method to maximise the profit rate may be to implement quality management systems for the accounts receivables.

Recommendations are given that the GOIL and TOTAL can quicken the rate of credit and debt collection and debt repayment policy in order ensure accounts receivables are effective and efficient managed. In order to improve their business outcomes and raise their profit rate, GOIL and TOTAL should implement this technique.

5.5 Limitation of the study

A study as this would be prudent to cover most essential sectors in Ghana and all oil firms in Ghana, but restricted to Ghana oil and Total Petroleum as a result of various constraints. The study was limited to comparing working capital management (WCM) of Ghana oil and Total Petroleum in Ghana. It also examines liquidity, profitability and financial efficiency of Ghana oil and total petroleum in Ghana.

Another limitation was time constraint as the study was conducted within a specific time frame, and the data collection and analysis were limited to this period. Factors such as changes in technology, regulations, or market dynamics that occurred after the study may not be fully reflected in the findings. Future research could consider longitudinal studies to capture changes and developments over time.

Despite these limitations, this study provides valuable insights into the working capital management best practices. It serves as a foundation for further research in this area, encouraging a broader examination of management best

practices and liquidity strategies in different contexts and across various industries. Future studies can address these limitations and build upon the findings to enhance our understanding of the broader working capital management practices and its implications on the sustainability of local businesses.

REFERENCES

1. Abor, J. & Quartey P. (2010). Issues in SME Development in Ghana and South Africa. *International Research Journal of Finance and Economics*. Vol. 39:219-228.
2. Afza, T. & Nazir, M. S. (2009) Impact of Aggressive Working capital management Policy on Firm's Profitability. *The IUP J. Appl. Finance*. 2009, 19-30.
3. Ahmet, G. S, Emin, H. C & Gamez, V. (2012). Effects of Working Capital Management on firm's performance. *International Journal of Economics and financial Issues*. 2(4):488-495.
4. Akinwande, G. S. (2009). Working Capital Management in Telecommunication Sector, a Case Study of VGC Telecoms. School of Management, Blekinge Institute of Technology.
5. Allan, P. (2001). *Accounting and Finance: A firm foundation*. Mishawaka: USA.
6. Al-Mwalla, M. (2012). The impact of working capital policies on Firm's profitability and value: the case of Jordan. *International research journal of finance and economics*. Vol.2(1):66-76
7. Archeier, H. K. & Seibel, H.D. (1987). *Small Scale Industries and Economic Development in Ghana*. Business Behaviour and Strategies in Informal Sector Economics. Verlag Breitenbech, Saarbruck: Germany.
8. Atrill, P. (2006). *Financial Management for Decision Makers*. London: Pearson Education Ltd. 2006.
9. Bandara RMS, Weerakoon-Banda YK. Impact of working capital management practices on firm value. 2011. Retrieved May 15, 2017 from <http://www.kln.ac.lk/uokr/ICBI2011/A&F%20140.pdf>
10. Banjerjee B. (2005). *Financial policy and management accounting*. Prentice-Hall of India private Limited; India.
11. Ben-Horim, M. & Levy, H. (1983). Management of Accounts Receivable under Inflation. *Financial Management*;12(1):42-48.
12. Bensoussan, A. Chutani, A. & Sethi, S. (2009). Optimal cash management under uncertainty. *Operations Research Letters*; 37:425-429.
13. Bickman, L. and Rog, D. (2009). *The handbook of applied social research methods*. Los Angeles, CA: Sage Publications inc.
14. Block, S.B, Hirk, G. A, Short, J.D. (2000). *Fundamentals of financial management*. Dow Jones and Company Chicopee: New Delhi.
15. Creswell, J. W. (2002). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Approaches to Research*. Upper Saddle River, NJ: Merrill
16. Creswell, J. W. and Clark, V. L. P. (2007). *Designing and Conducting Mixed Methods Research* Ed. Calif., University of Nebraska-Lincoln: Sage Publications, Inc.
17. Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? *Journal of Business Finance and Accounting*; 30(3/4):573-588.
18. Denzin, N. K. and Lincoln Y. S.(2003). *Strategies of Qualitative Inquiry*. Thousand Oaks, California, Sage.
19. Denzin, N. K. and Lincoln Y. S. (2000). *Handbook of Qualitative Research* 2nd Ed Thousand Oaks, California. Sage Publications
20. Dittmar, A. & Marth-Smith, J. (2007). Corporate governance and the value of cash holdings. *Journal of Financial Economics*; 83(3):599-634.
21. Dong, H. P. (2010). The Relationship between Working Capital Management and Profitability. *International Research Journal of Finance and Economic*; 01(49):1450-2887.
22. Eljelly, A. (2004). Liquidity-Profitability trade off: An empirical investigation in an emerging market. *International Journal of Commerce and Management*. 2004; 14(2):46-48.
23. Filbeck, G., Thomas, M. K. (2005). An Analysis of Working Capital Management Results Across Industries. *Mid-American Journal of Business*. 2005; 20(2):11-18.
24. Fletcher, D., & Scott, M. (2010). Psychological stress in sport coaching: A review of concept, research and practice. *Journal of Sport Sciences*. Vol. 28(2). p. 127-137. Available from: <http://dx.doi.org/10.1136/bjism.2002.004390>. Accessed on May 10, 2017.
25. Ganesan, R. (2007). An Analysis of Working Capital Management Efficiency in telecommunication Equipment Industry. *Rivier Academic Journal*. 2007; 3(2):1-10.

26. Garcia-Teruel, Martinez-Solano. Effect of working capital management on SME profitability. *International Journal of Managerial Finance*; 3(2):164-177.
27. Gill, A. & Shah, C. (2012). Determinants of Corporate Cash Holdings: Evidence from Canada. *International Journal of Economics and Finance*; 4(1):70-79.
28. Hall, C. (2002). Total Working Capital Management. *AFP Exchange*, 2002; 22(6):26-32.
29. Harris, A. (2005). Working Capital Management: Difficult, but Rewarding. *Financial Executive*. 2005; 21(4):52-53.
30. Hill, M. D, Kelly, G. W., & Lockhart, G. B. (2012). Shareholder Returns from Supplying Trade Credit. *Financial Management*; 41(1):255-280.
31. Hochstein, A. A (2001). Keynesian View of the Fisher Separation Theorem, *Atlantic Economic Journal*.
32. Horngren, C. T, Datar, S. M. & Foster, G. (2003). Cost accounting 11th ed. India: Dorling Kindersley Private Ltd. *Journal of Business Finance & Accounting*. 2003; 30(3&4):573-587.
33. Institute of Chartered Accountants (2010). Ghana ICAG Study Text: Corporate Strategy and Governance. Ghana: Black Mask Publishing Limited. 2010.
34. Kaur, J. (2010). Working Capital Management in Indian Tyre Industry. *Int Res J Finance Econ*. 46:7-15.
35. Kulkarni A. Working Capital Policies. 2011. Retrieved May 8, 2017 from, <http://www.buzzle.com/articles/working-capitalpolicy.html>
36. Kumar, V. (2010). Debtor management. Accounting Education. Retrieved June 5, 2014 from, <http://www.svtuition.org/2010/03/debtor-managementfinance.html>
37. Lazaridis, J. & Tryfonidis, D. (2006). Relationship between working capital management and profitability of listed companies in the Athens Stock Exchange. *Journal of Finance Management Analysis*. 2006; 1(19):26-35.
38. Mathuva, D. M. (2009). The Influence of Working Capital Management Components on Corporate Profitability: A Survey on Kenyan Listed Firms. *Research Journal of Business Management*. 2009; 3:481-492.
39. Mohamad, N. E. A. B. & Saad, N. B. M (2010). Working Capital Management: The Effect of Market Valuation and Profitability in Malaysia. *International Journal of Business and Management*; 5(1):140-147.
40. Padachi, K. (2006). Trends in Working Capital Management and its impact on Firms' Performance: An analysis of Mauritian Small Manufacturing Firms. *Int. Rev. Bus. Res.*
41. Panwala, W. (2009). Dimensions of Liquidity Management: Case Study of the Surat Textile Traders Co-operative Bank Limited. *National Journal of System and Information Technology*. 2009; 2(1):117- 126.
42. Peel, M. L. & Wilson, N. (1996). Working Capital and financial management Practices in small firm sector. *International Small and business journal*.
43. Rafuse, M. E. (1996). WCM: An urgent need to refocus, *journal of management decision*. 1996.
44. Raheman, A., Nasr, M. (2007). Working Capital Management and Profitability: Case of Pakistani Firms.
45. Preve, L. & Sarria-Allende, V. (2010). Working Capital Management: Oxford University Press.
46. Şamiloğlu, F. & Demirgünes, K. (2008). The Effect of Working Capital Management on Firm.
47. Sanger, J. (2011). *Essential of Working Capital Management*. New Jersey: John Wiley & Sons. 1st edition.
48. Shin, H. H. & Soenen, L. (1998). Efficiency of working capital management and company and profitability. *Financial practice and education*. 1998.
49. Turner, H. (2009). Debtor Management for Small to Medium Sized Business. *Business and Commercial Law*.
50. Uyar A. (2009). The relationship of cash conversion cycle with firm size and profitability: an Empirical Investigation in Turkey. *International Research Journal of Finance and Economics*; 24:14-23.
51. Yin, R. K. (1994). Discovering the Future of the Case Study Method in Evaluation Research. *Evaluation Practice*, Vol. 15, pp. 283-290.

APPENDICES

<https://totalenergies.com.gh>

<https://goil.com.gh>