The significance of working capital management in enhancing liquidity and profitability in the electricity distribution sector in Namibia: A Case of Study of Central Northern Electricity Distribution Company (CENORED) (Pty) Ltd.

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ABSTRACT

The study focused on the significance of working capital management in enhancing liquidity and profitability in the electricity distribution sector in Namibia because the electricity distribution sector has deteriorated sharply as the sector continues to be troubled by heavy gearing that has also been aggravated by mounting debts resulting in financial stress. In this study positivism philosophy was adopted as well as case study design. In addition, questionnaires were used to collect the data. Descriptive statistics analysis was done using the measures of central tendency and measures of variability namely such as arithmetic means, variances and standard deviations. The study establish that working capital management is significant to the electricity distribution sector as it is pivotal to the health, performance and value enhancement of all business enterprises. In addition, it highlighted that growth effect of working capital management is particularly important in the Namibian electricity distribution sector where demand is continually outstripping supply. Thus, the overall benefits of working capital management that are linked to improved liquidity, profitability and enhanced value creation and growth are indispensable to the electricity distribution sector in Namibia, as they enable the sector to make critical infrastructural and technological investments to contain the surging demand, and also to attract more investors in this highly capital intensive sector. In addition, it was established that profit maximisation through working capital management enables a company to realise its ultimate objective of maximizing shareholders wealth by so doing attracting more investors in order to make further capital investments that will enable the sector to contain the rising demand in electricity. This is also important because high percentages of profitability play a vital role in bringing external finance to the business because creditors, investors and suppliers do not hesitate to invest in such a sector, whilst the enhanced resource utilization that is upheld by working capital management also leads to value creation that is pursued by most investors. Furthermore, the profitability enhancement impact of working capital management enables the sector to plough back its own profits into the required capital investments, thus reducing dependence on expensive debt financing. Consequently, it can also be concluded that working capital management guarantees business survival and continuity and this is key for the alleviation of power shortages in the country, and the revival of the entire economy at large.

Key words: Working Capital Management, Liquidity, Profitability, Debt Financing, External Financing, Investors, Creditors, Electricity Distribution Sector,
1.0 INTRODUCTION

The question of state intervention through public enterprises has drawn incessant debates over the years in different socio-economic backgrounds (Basu, 2008). These debates have largely been enthused by mounting evidence revealing that most of these enterprises are failing to accomplish their key mandate of accelerating economic and social development (Rondinelli, 2008). Thus, as Van de Graaf and Colgan (2016), Bower (2017) and Burton (2010) allude, the electricity market in general has not been spared from these critical reviews as it recurrently drew international attention in recent years, forming a top agenda on the to-do menu of virtually all governments globally. In addition, the distribution of electricity in particular has also posed threats to national economic sustainability, development and growth (Department of Economic and Social Affairs, 2008, 2013), as increases in power supply are directly linked to job creation and national economic growth (Clarke, 2012). For example, the economic growth in middle eastern countries like the United Arab Emirates (UAE) and Qatar cannot be dissociated from their electric power consumption per capita growth, and this has been the situation over the years (Qader, 2009). Similarly, in the African context, Nigeria is facing extreme energy deficiencies despite being endowed with abundant gas, water and mineral resources (Tallapragada, 2009), which is blamed on the dearth of investment, nefarious policies, poor performance, deepening poverty, low human development indicators and lack of strategic planning in the sector. The World Bank (2011) and Elusakin (2013) further illuminate that this situation is typical of many developing countries that include Namibia. It is vital to note that electricity distribution in numerous countries that include Namibia is usually carried out by various electricity distribution companies like the Central Northern Electricity Distribution Company (CENORED) (Pty) Ltd, a system that Eskom (2015) beholds as key in ensuring the smooth supply and consumption of electricity. Thus, Abdelhay and Malik (2011) describes electricity distribution as an important part of the three stage delivery process of electric power, which also includes generation and transmission. With the world population steadily increasing from 6.8 billion people in 2011 to 7.4 billion in 2015, Ross (2015) recognises that the challenges faced by the electricity distribution industry are bound to multiply, given that the industry is plagued by poor infrastructure, wear and tear of distribution grids and climate change, which is further compounded by the rising demand for the commodity. Expounding, Bouttes et al (2011) and Munyoro et al (2016) underscore that these surges in power demand are attributed to rapid urbanization. Hence, this also implies that the problems faced by electricity distribution companies around the world, though common, occur at different intensities in different countries, and Namibia is no exception. For example, despite being a developed nation, the United Kingdom is equally distressed by electricity distribution, and they view this problem not only as a mechanical problem, but also as a managerial challenge as noted by Watson et al (2001).

In response to the above mentioned challenges, the government of India has recommended electricity distribution companies to be efficient, resilient, and financially robust to ensure growth and poverty reduction (Ministry of Power, 2005). However, almost all investment-climate surveys done so far in the sector point to poor availability and quality of electricity, which in turn pose critical constraints to commercial and manufacturing activities, as well as national
competitiveness. However, despite the considerable progress realized in implementing efficient electricity distribution policies in Namibia over the past decade, the distribution segment continues to post significant losses and liquidity challenges that deter it from meticulously accomplishing the electricity distribution sector goals (Sadelec, 2000; EMCON Consulting Group, 2002; Ljung, 2007; Kapika and Eberhard, 2013). This explains why electricity distribution in the country has deteriorated sharply, as the sector continues to be weighed down by heavy borrowing and other mounting debts (Alagh, 2013; Worldbank, 2011; Namnewsnetwork, 2015: africanenergyresources.com). Moreover, these persistent losses have subjected the electricity distribution sector to further challenges that include limited access to modern infrastructure, inadequate power generating capacity, inefficient usage capacity and ineffective regulation (Worldbank, 2011; www.indexmundi.com; africanenergyresources.com; tradingeconomics.com). Furthermore, the sector incurs high technical losses from vandalism, lacks insufficient transmission and distribution facilities, has poorly trained manpower at its disposal, faces problems of inefficient use of electricity by consumers, and also lacks capital for investment that is coupled by a precipitous decline in creditworthiness (World Bank Group Energy Sector Strategy, 2009). Consequently, the challenges associated with the highlighted electricity crisis, particularly the current subdued levels of electricity and energy consumption per capita that fall short of the recommended global development standards, and also the dismal state of socio-economic conditions in the Namibian economy, have led to high financial stress in the electricity distribution sector (Alagh, 2013; http://www.mme.gov.na). Accordingly, this study aims to ascertain the significance of working capital management in enhancing liquidity and profitability in the electricity distribution sector in Namibia, focusing on the Central Northern Electricity Distribution Company (CENORED) (Pty) Ltd. In addition, the study’s intention is to evaluate the impact of working capital management on the liquidity and profitability of electricity distribution sector in Namibia as well as providing recommendations to all stakeholders.

2.0 Background of the Study

The issue of electricity distribution has generally been a very delicate issue that has habitually attracted international attention in recent years, justifying why it formed a top agenda on the to-do menu of virtually all governments globally (Burton, 2010; Van de Graaf and Colgan, 2016; Bower, 2017). Consequently, concerned policy makers in various governments are having sleepless nights (Department of Economic and Social Affairs, 2008) because this issue of electricity distribution is directly linked to economic sustainability and development (Department of Economic and Social Affairs, 2013). This is supported by Clarke (2012), who suggests that the increase in power supply is perceived as a strategic way of creating jobs and improving national economic growth. However, African countries like Cameroon and Nigeria have been facing huge energy deficiencies, yet they are endowed with substantial energy resources in the form of gas, water and minerals (Tallapragada, 2009). These serious shortages of electricity in developing countries that also include Namibia (World Bank, 2011) have generally been blamed on various factors that include the lack of investment, nefarious policies, poor performance, deepening poverty, low human development indicators and lack of strategic planning in the electricity distribution sector. It is key in this study to note that electricity distribution in various countries is usually carried out by different electricity distribution companies. For example, in Namibia, the Central Northern
Electricity Distribution Company (CENORED) (Pty) Ltd is one of the companies that distribute the electricity commodity in the country. Although the role that these companies play is crucial in balancing the supply and consumption of electricity (Eskom, 2015), they are mostly besieged by underfunding problems that make it difficult for them to meet their operation costs as well as demand. This is further aggravated by the fact that electricity distribution companies’ costs tend to surpass their revenues, a situation that is ascribed to the fact that electricity tends to be subsidized in most countries. Notwithstanding the highlighted challenges faced by the electricity distribution sector, Abdelhay and Malik (2011) endorse the electricity distribution function as an important stage in the three stage delivery of electric power, which also includes generation and transmission.

Thus, in the face of the increasing world population, Ross (2015) stresses that the challenges being faced by the electricity distribution industry are bound to multiply, as the sector continues to be hounded by poor infrastructure, the wear out of distribution grids and climate change, which is also compounded by the increase in the demand for electricity. Moreover, as noted by Bouttes et al. (2011), the increase in power demand is also attributed to rapid urbanization that is being caused by the movement of people from rural areas to urban areas (Munyoro et al, 2016). Hence, this infers that the problems being faced by the electricity distribution sector around the world, even though common, occur at different intensities in different countries, and Namibia is no exception. For example, the United Kingdom is equally facing these electricity distribution challenges, and its policy makers perceive the problem not only as a mechanical problem, but also as a managerial challenge as highlighted by Watson et al (2001). In response to the above mentioned challenges, the government of India has highlighted on the need for the electricity distribution sector to be efficient, resilient, and financially robust in order to ensure sustainability that is essential for economic growth and poverty reduction (Ministry of Power, 2005). This is not surprising given that almost all investment-climate surveys done so far point to poor availability and quality of electricity as the critical constraints to commercial and manufacturing activity, as well as national competitiveness. Thus, despite all the considerable progress registered in implementing efficient electricity distribution policies in Namibia over the past decade, the electricity distribution sector in the country continues to be inundated by significant losses and utility finance challenges that inhibit it from realizing the electricity distribution sector goals. According to Alagh (2013), these challenges have led to the massive deterioration of electricity distribution, which is worsened by the fact that the sector continues to rely on heavy borrowing.

Consequently, the electricity distribution sector has been subjected to additional challenges that include limited access to infrastructure, inadequate power generating capacity, inefficient capacity utilisation, ineffective regulation, high technical losses and vandalism. Moreover, the sector encounters problems of insufficient transmission and distribution facilities, poorly trained manpower, inappropriate industries and market structure, inefficient use of electricity by consumers, lack of capital for investment and a precipitous decline in creditworthiness (www.worldbank.org). Thus, as Alagh (2013) alludes, these challenges that have led to an acute electricity crisis in Namibia, have also resulted in a severe financial strain in the sector at large. Hence the need to ascertain the significance of working capital management in enhancing the liquidity and profitability of the electricity distribution sector in Namibia. Working capital management is an activity that is espoused as an indispensable element in the analysis of a firm’s
performance while conducting day to day operations. The study will specifically focus on the Central Northern Electricity Distribution Company (CENORED) (Pty) Ltd.

2.1 The Electricity Market Function.
Alagh (2013) suggests that an electricity market is an arrangement to transfer electric energy from producers to consumers. According to Watson et al (2001), this transmission of electric energy requires special infrastructure that is commonly known as a power system. Elusakin (2013) further confers that this electricity market consists of a few producers, who are the owners and operators of the power plants, and also possess the liberty to sell electricity to local consumers, power pools or anyone. In this same market, there are also retailers and traders whose role is to buy and sell electricity from producers or other retailers to consumers or other retailers. According to Abdelhay and Malik (2011), these retailers can provide a price insurance to the consumers and simultaneously increase competition in the electricity market, although they are exposed to large economic risks (Elusakin, 2013). At the bottom of the electricity market hierarchy, there are consumers who are the end users of electricity, and also have the liberty to buy from local power companies or power pools since they vary in size. The electricity market is summarized in Figure 2.1 below, which illustrates the relationships between various players in the market.

Figure 2.1: The Electricity Market

Source: Authors and ceremics.enpc.fr

2.2 The Electricity Distribution Concept
The evolution of electrical transmission and distribution systems in recent years has evolved into something smarter, and has been conceptualized as the smart grid (Elusakin 2013). According to
Watson et al (2001), this smart grid can be seen as a programme for making the grid more economical, efficient, resilient and sustainable in the long term under dynamic scenarios. Moreover, of importance to note is the fact that electricity cannot be stored, hence the need to come up with a framework that caters for generation and distribution needs of the electricity. As suggested by Abdelhay and Malik (2011), in order to assess the potential of smart grid innovations, models of varying complexities and scale need to be designed and tested under multiple scenarios. Some of the cross-domain processes and mechanisms that could be modelled include the dynamic response of demand to price signals, transmission pricing and congestion management, technology adoption under subsidized regimes, active network management under high penetration of distributed generation, market reforms and new trading strategies (Watson et al 2001). However, traditional equation-based and statistical modelling methods present limitations when it comes to representing the complex real world with interactions that are typically dynamic, non-linear, history dependent, multi-scale and multidimensional in nature, as entities involved do not only interact amongst themselves, but also with their environment (Elusakin 2013). In addition, these entities may be heterogeneous and evolving with time to make their own intelligent decisions to maximize payoffs.

2.3 The History of Electricity Distribution In Namibia
Namibia was under the German rule before attaining independence in 1990 (www. Nytimes.com; www.bbc.com; www.sahistory.org.za; www.britannica.com). It was during this colonial era that the country suffered racial ills such as energy imbalances that denied over 80% of the population from accessing electricity (helda.helsinki.fi; www.kas.de; www.theguardian.com). With such a setup, there was a better match for electricity supply and demand. As years progressed, the government of Namibia then came up with an assortment of policies that were earmarked for improving the electricity situation in the country (www.the-eis.com; www.mme.gov.na). These policies are noted in Table 2.1.

Table 2.1: Namibian Policies for Improving the Electricity Situation

<table>
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<th>Policy</th>
<th>Major action areas</th>
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<td><strong>Vision 2030 (2004)</strong></td>
<td>Namibia’s Vision 2030 envisages the transformation of Namibia into an industrialised nation with a viable natural resources-based export sector, and increased size of skills-based industrial and service sectors, and market oriented production [Vision 2030, 2004]. Rapid industrialisation will place significant pressure on the Namibian electricity supply industry, and challenges its growth and ability to deliver electrical energy on demand. The opportunity to strategically incorporate the development of the nation’s energy sector in general, and its electricity sector in particular – as key economic drivers of cross-sectoral significance and importance – was missed in the preparation of Vision 2030. Yet, adequately powering the nation comes with many challenges,</td>
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economic trade-offs and long-term commitments, all of which need to be taken into account if the Vision is to have a realistic chance of being accomplished.


Namibia’s White Paper on Energy Policy of 1998 states the following broad energy policy goals: effective governance, security of supply, social upliftment, investment and growth, economic competitiveness and efficiency, and sustainability. The Policy also recognises the importance of renewable energies, and their potential role in realising the country’s energy-related goals and aspirations. The White Paper identifies the sector’s challenges – which remain as relevant today as they were more than 10 years ago – namely: high dependence on imports, a large number of supply authorities with widely differing competence and practices, a host of technical, financial and institutional problems relating to rural electricity supply, electricity prices that in many instances are not cost-reflective, and unclear institutional structures and arrangements.

Electricity Act (2007)

In September 2007, the Namibian President signed the Electricity Act, 2007 [Electricity, 2007]. The Act establishes the Electricity Control Board (ECB) as the country’s electricity sector regulator, and formulates guidelines for electricity sector governance [ECB, 2009]. The ECB is responsible to control and regulate the provision, use and consumption of electricity in Namibia, to oversee the efficient functioning and development of the industry, and security of electricity provision, to ensure that a competitive environment in the electricity industry is maintained, and to promote private sector investment in the electricity industry. The Act describes the requirements, conditions and obligations for obtaining licences to generate, trade in, transmit, distribute, import and export electricity. Amongst others, the ECB has developed guidelines to set cost-reflective tariffs, and implement an Independent Power Producer regime in Namibia.


A Cabinet directive in June 2007 approved the implementation of the Off-grid Energisation Master Plan, and also directed that the hot water supply to all Government and parastatal buildings is to be met by solar water heaters only [MME, 2008]. As a demand side management measure, and potential stimulant of the solar water manufacturing industry in the country, the latter directive is significant.

National Development

The National Development Plan 3 – NDP III of 2008 – recognises that the energy sub-sector plays a pivotal role in the country’s economy and national
Plan III (2008) development” [NDP III, 2008]. It states that although electricity supply has improved since 2001, the vast majority of Namibian households still have no access to electricity, particularly in the Northern Regions. Fuel wood is still dominant as an energy source putting severe pressure on the natural environment. This situation requires enormous efforts to realise Vision 2030. NDP III further states that the sub-sectors’ goal is adequate, secure and efficient supply of energy that is environment friendly and leads to a reduction in the country’s reliance on energy imports.

Source: Authors and www.mme.gov.na

However, by the year 2008, the maximum demand of electricity in Namibia was 533 MW, which is substantially more than the maximum internal electricity generation capacity of 393MW that Namibia has at its disposal. This electricity was being generated from 3 major power stations namely Ruacana, Van Eck and Paratus power stations. The Van Eck power station was commissioned in 1972, and today it is expensive to operate. Thus, to cover this shortage, Namibia imports electrical energy that is generated mainly in South Africa and Zimbabwe, using NamPower’s extensive transmission networks.

2.4 The Meaning of Working Capital

The Annual Survey of Industries (1961) highlights that working capital signifies the circulating capital that is required to meet the day-to-day operations of any business firm. In approval, Kennedy and McMullen (1968) also equally contend that working capital is the circulating capital involving those assets that are easily converted with relative speed from one form to another. Expanding on this, Weston & Brigham (1994) allege that the working capital process mainly encompasses a firm’s investment activities and decisions in short term assets such as cash, receivables and inventories. Mead et al (2002) on the other hand simply defines working capital as a firm’s current assets. However, the accounting terminology recognises working capital as the difference between the inflow and outflow of funds. Thus, in recognition of this accounting terminology, Tagduan & Nicolaescu (2011) define working capital as the percentage of permanent capital used to finance company’s current assets. Similarly, Aravindam & Ramanathan (2013) also define working capital as the cash invested in company’s daily operations. Consequently, Guthman (1953) upholds working capital as the lifeblood of any business as it constitutes cyclically flowing streams of funds through the business. In agreement, Too et al (2016) further explain that working capital is commonly used for the capital required for day-to-day working in a business concern, such as for purchasing raw materials, for meeting day-to-day expenditure on salaries, wages, rents rates and advertising among others.

Basically, there are two concepts of working capital which are quantitative and qualitative, with some people defining the two concepts as gross and net concepts (Guthman 1953). Smith (1937) termed the quantitative concept as circulating capital, which perceives working capital as the total
of current assets that are also regarded as gross working capital. On the other hand, the qualitative concept gives an idea regarding source of financing capital, and views working capital as the excess of current assets over current liabilities. Guthmann (1953) agrees with the qualitative concept as he perceives working capital as the excess of current assets over current liabilities, although he specifically refers to it as net working capital. Thus, in the qualitative concept, net working capital represents the amount of current assets that would remain if all the current liabilities are paid. In addition, Weston and Bringham (1994) confer that these concepts of working capital have their unique points of importance. Hence, they argue that if the objective is to measure the size and extent to which current assets are being used, the gross concept is useful, whilst the net concept is pertinent and preferable when evaluating the liquidity position of an undertaking.

Aravindan & Ramanathan (2013) confer that by calculating working capital through establishing the difference between current assets and current liabilities, a firm is granted the possibility to acknowledge the amount of capital which is allocated to operating needs. Moreover, obtaining working capital through the difference between permanent capitals (equity and non-current liabilities) and non-current assets enables a firm to ascertain if it uses the excess of permanent capitals to finance its current assets. Thus, if the difference is negative, it signifies that a percentage of the non-current assets is being financed by the short period financing, which consequently enhances the company’s bankruptcy risk (Mota, 2013). Hence, Martins et al (2009) recommend companies to have the same maturity for capitals used to finance assets and for the assets themselves, as the transformation of the assets into cash takes more time than is previously forecasted, which obliges the company to need a positive working capital at all times.

Furthermore, Kennedy and McMullen (1968) postulate that current assets have a short life span, implying that they can easily be converted into cash within a twelve month financial period. On the other hand, current liabilities are short-term obligations that are also payable within an accounting cycle such as accounts opened with suppliers of raw materials. According to Caballero et al (2010), it is also important to highlight that in order to find the “perfect” level of working capital for a determined company, several factors have to be taken into account, which include the type of business, the company’s dimension, the suppliers relation, the market where the company acts, the growth opportunities that the company could have and the operations’ seasonality. Having said that, it is also essential to highlight a business’ working capital tends to vary as time progresses due to external factors such as demand and economic changes.

As depicted in Figure 2.2, businesses tend to have fixed working capital and fluctuating working capital. Fluctuating working capital is usually short term in nature, for example a short-term bank loan (Kennedy and McMullen, 1968), whilst fixed working capital is long term. Likewise, such fluctuations exist in the electricity industry and hence, the levels of working capital required in the business vary all the time. Of great importance to also note is the availability and delivery of this working capital to a business in need, because failure to adhere to these variables may negatively affect the business. Subsequently, Kavitha (2007) states that the cheapest and best sources of cash exist as working capital right within a business, and also emphasizes that the good management of working capital will generate cash, which will help to improve the business and reduce risks. Thus
as Bei & Wijewardana (2012) and Gill & Biger (2013) propound, both inadequate and excess working capital affect firm profitability, and thus effective working capital management (WCM) and working capital policy (WCP) are critical to business success. Hence the need for working capital management that is focused on henceforth.

**Figure 2.2 Business Working Capital Classification**

![Business Working Capital Classification](image)

**Source: Authors**

### 2.5 The Working Capital Management Concept

Too et al (2016) highlight that working capital management is primarily concerned with the management of current assets, and by extension, the current liabilities of a business. Moreover, they indicate that it also concerns the business’ decision on the amount and composition of current assets and the financing of these assets, and the planning and control of the current assets and current liabilities in a manner that strikes a balance between liquidity and profitability. Similarly, Harris (2005) illuminates that working capital management is a simple and straightforward concept of ensuring the ability of the firm to fund the difference between the short-term assets and short-term liabilities. Expounding further, Afza and Nasir (2007) contend that current assets and liabilities are important components of total assets, hence the need to be carefully analyzed through working capital management.

Moreover, Smith (1980) equally argues that because of their importance, a careful and systematic investigation of these assets is necessary as they play a vital role in the profitability of firms, its risk and value. Thus, Too et al (2016) accentuate that the goal of the working capital management process is to ensure that a firm is able to continue its operations with sufficient cash flow to satisfy both maturing and short-term debts, and also upcoming operational expenses. Its decisions are purportedly based on cash flows and profitability. Lamberson (1995) also equally propagates that working capital management involves the planning and controlling of current assets and liabilities.
in a manner that eliminates the risk of inability to meet short-term obligations and avoid excessive investments in assets.

Ching et al (2011) exhibit the importance of working capital management by declaring that when implemented efficiently and effectively, it can create a business’ true competitive advantage. Arguing likewise, Joshi (1994) proclaims that working capital management is a sensitive area in the field of financial management, as in line with Horne and Wachowicz (2000)’s opinions, if it is not enough, shortages and problems in the day-to-day operations may arise. Furthermore, Too et al (2016) correspondingly contend that working capital management is a very important component of corporate finance because it directly affects the liquidity, profitability and growth of a business. Moreover, Atrill (2006) stresses that working capital management is also important to the financial health of businesses of all sizes, as the amounts invested in working capital are often high in proportion to the total assets employed.

This management of short-term assets is regarded as important as the management of long-term financial assets, since it directly contributes to the maximization of a business profitability, liquidity and total performance. Moreover, several researchers like Padachi (2006) and Kotut (2003) established that the efficient management of working capital is pivotal to the health and performance of all business enterprises, hence, they recommend firms to employ the use of efficient working capital management practices as a strategy of improving their value. According to Too et al (2016), the investigation on the working capital management practice is focused on four paradigms that include cash management practices, receivables management practices, inventory management practices and the management of current liabilities. Hence, Duah (2015) alludes that the key to understanding a company’s working capital cycle is to know where payments are collected and made, and to identify areas where the cycle is stretched and can potentially be reduced. Since most studies have generally dwelt on the importance of working capital management in enhancing company profitability and liquidity, these concepts are elaborated on further.

2.7 The Liquidity Concept

Liquidity can be understood in terms of cashflows as opposed to stocks, and thus, it refers to the unhindered cashflows among the agents of the financial system, with a particular focus on cashflows among the central bank, commercial banks and markets. However, Williamson (2008) views liquidity as the ability to realize these cashflows. Also, the Farlex Financial Dictionary (2012) defines liquidity as a large position in cash or in assets that are easily convertible to cash. Priya and Nimalathasan (2014) perceive liquidity from a purely accounting perspective, and state that it means how quickly an asset can be transformed into cash. When referring to company liquidity, it signifies its ability to meet its current liabilities, and is usually measured by different financial ratios (www.investorwords.com). Bhunia (2010) consequently highlights that the study of liquidity is of major importance to both the internal and the external analysts because of its close relationship with day-to-day operations of a business.
Ware (2015) equally contends that liquidity is a necessity for the survival of the firm, further underscoring that in the contentious comparison of liquidity with profitability, liquidity gets higher priority because no firm will continue to exist if it has no liquidity. Thus, as Agarwal and Mishra (2007) allude, firms which do not make profit may be treated as under par but not having liquidity may cease to operate over a period. According to Panigrahi (2013), when there is a poor management of working capital, funds may be unnecessarily tied up in idle assets, consequently reducing the liquidity of the company and the inability to invest in productive assets like plant and machinery. Thus, the existence of an adequate liquidity and its careful management can make substantial difference between the success and failure of an enterprise. Bhunia (2010) similarly stresses that liquidity plays a significant role in the successful functioning of a business firm, which should thus ensure that it does not suffer from lack-of or excess liquidity to meet its short-term compulsions.

According to Brealey (2012), liquidity can be expressed in terms of liquidity ratios namely current ratio, quick (acid test) ratio and cash ratio. Current ratio is the ratio of the current assets to the current liabilities, which measures the margin of liquidity. The rapid decreases in the current ratio sometimes signify trouble, but can also be misleading. Ngwili (2013) and Brealey (2012) also identify another liquidity ratio, the quick (acid test) ratio, which is an indicator of a company’s short term liquidity and is calculated as current assets net of inventories divided by current liabilities. Thus, it measures a company’s ability to meet its short-term obligations with its most liquid assets that exclude inventories. Ngwili (2013) further highlights that the higher the quick ratio, the better the company's liquidity position and vice versa.

Another liquidity ratio identified by Brealey (2012) is the cash ratio, which is the ratio of a company's total cash and cash equivalents to its current liabilities. The cash ratio is most commonly used as a measure of company liquidity. Ngwili (2013) alleges that a company’s most liquid assets are its holdings of cash and marketable securities, and that is why analysts also look at the cash ratio to determine how quickly it can repay its short-term debt. Thus, a strong cash ratio is useful to creditors when deciding how much debt, if any, they would be willing to extend to the asking party.

2.8 Central bank liquidity
Central bank liquidity is the ability of the central bank to supply the liquidity needed to the financial system. Bindseil (2005) underscores that it is usually measured as the liquidity supplied to the economy by the central bank, specifically the cash flows of monetary base from the central bank to the financial system. It relates to the central bank’s operations liquidity, which refers to the amount of liquidity provided through central bank auctions to the money market according to the monetary policy stance. Therefore, the central bank provides liquidity equal to the sum of the autonomous factors plus the reserves. Also, the central bank manages its market operations so that the inter-bank short-term lending rates remain closely aligned to the target policy rate.

2.9 The Profitability Concept
According to Nimalathasan (2009), profit is the primary objective of a business, which is an absolute measure of earning capacity. Profit is defined as the excess of return over outlay (Iyer, 1995). In point of view of the heavy investment which is obligatory for the success of most enterprises, profit in the accounting sense tends to become a long term objective which measures not only the success of the product, but also of the development of the market for it (Nishanthini and Nimalathasan, 2013). Profit is determined by matching revenue against cost associated with it, and only those costs are placed against revenue. Nimalathasan (2009) also promulgates that additional profit is the report card of the past, and the inventive gold star for the future.

Profitability is also regarded as the ability of a given investment to earn a return from its use, and is the relative measure of earning capacity (Nishanthini and Nimalathasan, 2013; Nimalathasan, 2009). It thus provides evidence concerning the earnings potential of a company and how effectively a firm is being managed. If the firm fails to make profit, the capital invested is eroded, and if this situation is prolonged the enterprise ultimately ceases to exist. Consequently, Bindseil (2005) suggests that profitability shows how efficiently management can make profits by using resources availed to them in the market. Moreover, Harward & Upton (2001) highlight that profitability is the ability of a given investment to earn a return from its use. However, Smith (1953) is of the view that profitability is not synonymous with efficiency, but rather an index of efficiency, which is thus regarded as a measure of efficiency and management’s guide to greater efficiency. Profitability measures profit generated from the business and is measured in percentage terms, for example as a percentage of investments, sales, or assets. According to Gitman (2002), high percentages of profitability play a vital role in bringing external finance to the business because creditors, investors and suppliers do not hesitate to invest in such a company. Also, enhanced resources utilization leads to value creation, which is pursued by most investors.

Profitability is measured through profitability ratios, and according to Brealey (2012), they include the Net profit margin, Return on assets (ROA), Return on equity (ROE) and payout ratio. The net profit margin calculated as net income divided by revenues, or net profits divided by sales measures the proportion of sales that finds its way into profits. Ngwili (2013) highlights that profit margin is very useful when comparing companies in similar industries, as a higher profit margin indicates a more profitable company that has better control over its costs compared to its competitors. Furthermore, the return on assets ratio is calculated by dividing a company's annual earnings by its total assets, which measures the performance of the firm and also an indicator of how profitable a company is relative to its total assets (Brealey, 2012). According to Ngwili (2013), ROA gives an idea as to how efficient management is at using its assets to generate earnings. Thus, the higher the ROA number, the better, because the company is earning more money on less investment.

According to Brealey (2012), the Return on equity ratio is calculated as net income divided by shareholders equity, measuring a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. Ngwili (2013) further underscores that ROE is useful for comparing the profitability of a company to that of other firms in the same industry. The other important profitability ratio is the Payout ratio, which is calculated as dividends
divided by earnings, measuring the proportion of earnings that are paid out as dividends. Ngwili (2013) further notes that the payout ratio is a key financial metric used to determine the sustainability of a company’s dividend payments, as a lower payout ratio is generally preferable to a higher payout ratio. Managers don’t like to cut dividends if there is a shortfall in earnings.

2.10 Working Capital Management Models
There are several working capital management theories that form part of available literature, and these are discussed in detail below.

- **The Trade-Off Model**
Too et al (2016) assert that the Trade-off model demonstrates that firms decide their optimal level of cash holding by comparing the marginal cost and benefits of holding cash. Thus, any change in working capital management in a business will influence either liquidity or profitability. This is observed by Harward & Upton (2001), who contend that working capital management is a razor edge exercise for financial managers of an enterprise, as they have to take decisions carefully to ensure that the firm’s twin objectives of profitability and solvency are not affected. In addition, Bindseil (2005) notes that if a firm maintains a huge amount of current assets, its profitability will be affected although it protects its liquidity, which is also the case if a firm maintains low current assets that weaken liquidity whilst enhancing profitability. Echoing, Van Horne and Wachowicz (2000) emphasize that excessive levels of current assets can easily result in a firm realizing a substandard return on investment, whilst firms with too few current assets may incur shortages and difficulties in maintaining smooth operations. Also reinforcing these arguments, Too et al (2016) promulgate that preserving liquidity and profitability of the firm is an important objective, as increasing profit at the expense of liquidity can bring serious problems to the firm and vice-versa.

Consequently, Too et al (2016) further recommend firms to diligently invest in working capital management as it directly affects the liquidity and profitability of a firm. Moreover, since the ultimate objective of any firm is to maximize shareholders wealth, which can be achieved through profit maximization, a firm that wishes to accomplish this goal must strike a balance between current assets and current liabilities, thus keeping abreast of the liquidity and profitability trade-off (Too et al, 2016). This trade-off between liquidity and profitability is shown in Figure 2.3. In short, if a company does not care about profit, it cannot survive for a longer period, whilst if it does not care about liquidity, it may face the problem of insolvency or bankruptcy. However for some scholars, liquidity plays a more important role because a company with low liquidity purportedly has a better capacity to serve the economy than a company without liquidity (Chatterjee, 2012).

**Figure 2.3: The Liquidity-Profitability Trade-Off**
Another theory that supports the study of working capital management is the Keynesian liquidity preference theory that was coined by John Keynes in 1936. It argues that when all other things are kept constant, investors prefer liquid investments to illiquid ones, and will always demand a premium for investments that have longer maturity periods. Thus, according to this theory, people hold cash or inventory for transaction, speculative, precaution, and compensation motives (Too et al, 2016). This therefore justifies the need for working capital to run the day-to-day business activities, and can therefore not be ignored. Pandey (2010) thus compels entities to invest enough of their available funds in current assets to ensure the success of its operations.

The Aggressive Theory
According to Too et al (2016), the aggressive theory is applied where the firm plans to assume high risk, and also where short term funds are used to a very high degree to finance current and fixed assets. This approach is purportedly characterized by low interest rates. However, Too et al (2016) further proclaims that it is important to note that that the risk associated with short term debt is higher than long term debt, which applies mostly to companies/ firms operating in a stable economy and is quite certain about future cash flows. Thus, a company with an aggressive working capital policy offers short credit periods to customers, holds minimal inventory and has a small amount of cash in hand. This policy in the end increases the risk of defaulting due to the fact that a company might face lack of resources to meet its short term liabilities, but however gives a high return as it is associated with high risk. Robles (2016) also highlights that in the aggressive working capital policy, the working capital management policy assumes more risk, implying a lower investment in working capital accounts which also means lower levels of inventories, the shortening of trade credit to customers and also the postpone payment to suppliers. This policy thus means greater profitability and also a greater risk for companies. This inverse relationship between working capital management and profitability is proved through the studies of Hager (1976), where the researcher postulates that firms holding lower levels of working capital accounts tend to reduce the cost of holding unproductive assets, such as marketable securities. In a contrary direction, these firms allegedly tend to increase their payables, thus reducing the company’s financing needs.
The Agency Cost of Free Cash Flow Theory

The agency cost of free cash flow theory was put forth by Michael Jensen in 1986, and brings out the fact that organizations suffer agency costs as a result of free cash flow as managers are always tempted to pile up cash under their control and make investment decisions which might not be in the best interest of shareholders (Too et al, 2016). These corporate managers are regarded as the agents of shareholders, a relationship that is often weighed down by conflicting interests. Jensen (1986) thus highlights that free cashflow is cash in excess of that required to fund all projects that have positive net present values when discounted at relevant cost of capital. Thus, efficient working capital management is essential in order to avoid situations whereby managers mismanage the resources of the organization for their own interests (Too et al (2016).

3.0 RESEARCH METHODOLOGY

The research philosophy used in this study was the positivism philosophy (Zikmund et al, 2013; Munyoro and Nhevere, 2018; Bryman & Bell, 2015). Likewise, the study used positivism philosophy because there was need for was seeking facts (positivism) from the target respondents on the significance of working capital management with the study focusing on Central Northern Electricity Distribution Company (CENORED) (Pty) Ltd of Namibia (Saunders et al, 2009). For that reason, the researcher developed a hypothesis which was tested using factual collected data from the officials of Central Northern Electricity Distribution Company (CENORED) (Pty) Ltd (Churchill, 1996; Carson et al, 2001; Kaboub, 2008). A case study research design was used in conducting this study (Bryman & Bell, 2015; Burns and Grove, 2003). In addition, the research design was used because it is an operation or plan that stipulates the kind of information that is to be collected, from what source, using what kind of procedure and also how it will be analysed (Parahoo, 1997; Sharjahan, 2005; Saunders et al, 2007) and is simply recognized as a strategy of inquiry (Denzin and Lincoln, 2011; Polit et al, 2001; George and Bennet, 2005; Yin, 2009; Rose et al, 2015). In this study, the population was made up of 170 officials. This was made up of: Technical and Engineering (132), Corporate Services (15), Finance (20) and Office of the Chief Executive Office (3). Thus, the sample was made up of up of 50 officials and in the following manner: Technical and Engineering (20), Corporate Services (10), Finance (18) and Office of the Chief Executive Office (2). This study adopted the convenience sampling method, a non-probability sampling technique that is used on the basis of convenience, those willing to participate and are easily accessible as argued by Dornyei (2007) and Teddlie and Yu (2009). Furthermore, this study made use of questionnaires in collecting data from the officials of the Central Northern Electricity Distribution Company (CENORED) (Pty) Ltd of Namibia (Sekaran and Bougie, 2012; Abawi, 2013). For the purpose of effectiveness, semi-structured questionnaires that included both closed and open ended questions were used in this study (Saunders et al, 2009; Cresswell, 2014). Furthermore, questionnaires were used because they handle the issue of anonymity well, thus allowing respondents to give unbiased answers without fear of victimization (Cresswell and Clark, 2011; Mathers et al, 2009; Sekaran and Bougie, 2012). Descriptive statistics analysis was done using the measures of central tendency and measures of variability namely such as arithmetic means, variances and standard deviations (Saunders et al, 2009). Correlation analysis and regression analysis were also used to examine the significance of working capital management in
the Central Northern Electricity Distribution Company (CENORED) pvt ltd of Namibia (Wuensch, 2016). Statistical Package for the Social Sciences (SPSS) was used to analyse quantitative data (Crammer, 2012). Qualitative data was categorized according to a qualitative questions in the questionnaire and involved an iterative process in order to emerge with themes (Seidel, 1998; Munyoro, 2014). The responses were coded in terms of certain subjects and themes (Seidel, 1998; Gibbs, 2002; Munyoro, 2014). The research analysised the meaning of the responses that were given in open ended questions and linked to the research objectives and literature (Seidel, 1998; Gibbs, 2002; Munyoro, 2014).

4.0 DATA ANALYSIS AND PRESENTATION

The response rate in this study was at 90% which according to Saunders (2009) is a good response rate for any stud

Education
In terms of education the majority of the respondents (50%) attained a degree with diploma and PhD candidates accounting for 20% each as shown below.

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>secondary</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>diploma</td>
<td>20.0</td>
<td>20.0</td>
<td>30.0</td>
</tr>
<tr>
<td>degree</td>
<td>50.0</td>
<td>50.0</td>
<td>80.0</td>
</tr>
<tr>
<td>Masters/PhD</td>
<td>20.0</td>
<td>20.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Experience at CENORED PVT LTD
This study also revealed that the majority of the respondents had spent between 5 to 10 years in the organisation as they accounted for 60% of the total respondents while those in the age groups 11-15 years and less than 5 years accounted for 30% and 10% respectively.

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;5years</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>5-10years</td>
<td>60.0</td>
<td>60.0</td>
<td>70.0</td>
</tr>
<tr>
<td>11-15years</td>
<td>30.0</td>
<td>30.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Factor Analysis
In this study the research sought to understand the major determinant to how respondents answered questionnaires and to this regard a Kaiser’s stopping method was used. This tool considers factors with an Eigen value above one and in this study the results from this method are shown in the table below:

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigen values</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>1.253</td>
<td>12.534</td>
</tr>
<tr>
<td>2</td>
<td>1.600</td>
<td>16.005</td>
</tr>
<tr>
<td>4</td>
<td>1.933</td>
<td>19.335</td>
</tr>
<tr>
<td>5</td>
<td>1.020</td>
<td>10.197</td>
</tr>
<tr>
<td>6</td>
<td>.870</td>
<td>8.695</td>
</tr>
<tr>
<td>7</td>
<td>.309</td>
<td>3.090</td>
</tr>
</tbody>
</table>

After carrying out the factor analysis it is clear that number of years in department was the major deterrent factor to the way farmers responded to the questionnaires as it had the highest Eigen value of 1.933 as compared to age, education and years in the organisation which had Eigen scores of 1.25, 1.6 and 1.3 respectively. After being figured to be the main determinant in this study years in department was then used to carry out the analysis of variance (ANOVA) test and the table below shows the ANOVA test values.

**Analysis of variance**

In this study the researcher sought to establish the perceptions of respondents on various issues which could not be answered by a simple yes or no hence resorted to using a likert scale. The likert scales used was as follows: 1=strongly agree, 2=agree, 3=neutral, 4=disagree and 5= strongly disagree. Therefore any mean below 3 indicated agreement while a mean above 3 meant disagreement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. dev</th>
<th>Anova p.Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working capital management enhances liquidity and profitability</td>
<td>1.3</td>
<td>0.94</td>
<td>0.23</td>
</tr>
<tr>
<td>There is better access to markets when you enhance liquidity in the organisation</td>
<td>1.9</td>
<td>0.88</td>
<td>0.08</td>
</tr>
<tr>
<td>Working capital management enhances production.</td>
<td>1.6</td>
<td>1.01</td>
<td>0.31</td>
</tr>
<tr>
<td>Working capital management improves profits.</td>
<td>2.1</td>
<td>0.93</td>
<td>0.06</td>
</tr>
<tr>
<td>Working capital management enables savings and investments.</td>
<td>2.3</td>
<td>0.84</td>
<td>0.13</td>
</tr>
</tbody>
</table>
### 5.0 FINDINGS

Having carried out a thorough assessment of the data gathered, the research established major findings that are discussed henceforth.

- **Working capital management is significant to the electricity distribution sector**

  The research concluded that working capital management is significant to the electricity distribution sector as indicated by a mean score of 1.4 and a standard deviation of 0.92. These scores enforce that the established result was not a mere coincidence, but rather a true reflection of the opinions of the respondents. In addition, an Anova p. Value of 0.53 proved that this notion was important to the study at hand. Supporting these findings, Ching et al (2011) state that working capital can create a business’ competitive advantage, whilst Too et al (2016) congruently contend that it directly affects the liquidity, profitability and growth of a business. Likewise, Kotut (2003), Atrill (2006) and Padachi (2006) suggest that working capital management is pivotal to the health, performance and value enhancement of all business enterprises. Thus, the highlighted growth effect of working capital management is particularly important in the Namibian electricity distribution sector where demand is continually outstripping supply as noted by NamPower (2012), which reveals that the units of electrical energy sold in Namibia between 1990 and 2010 grew by an average of 3.0% per year, whilst the system maximum demand (excluding the Skorpion Mine) grew by an average of 4.1% per year between 1999 and 2012. This current power challenge is also stressed by the NamPower managing director Paulinus Shilamba (2014), who stated that Namibia will continue to face power supply deficits until the year 2018 when new projects, particularly the Kudu will be commissioned. Moreover, the need for company driven initiatives to grow through internal strategies like working capital management are also prompted by the fact that Namibia continues to depend on imports from countries like Zimbabwe and South Africa, that are also grappling with their own electricity power supply challenges, implying that depending on them is not sustainable in the long run (Oertzen, 2012). Thus, the overall benefits of working capital management that are linked to improved liquidity, profitability and enhanced value creation and growth are indispensable to CENORED (Pvt) Ltd and the electricity distribution sector at large in Namibia, as they enable these companies to make critical infrastructural and technological investments to contain the surging demand, and also to attract more investors in this highly capital intensive sector. In this respect, the Namibian Electricity Control Board (2005) underscores that

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working capital management guarantees business survival and continuity.</td>
<td>1.4</td>
<td>0.97</td>
<td>0.34</td>
</tr>
<tr>
<td>Working capital management ensures better performance of the organization.</td>
<td>2.9</td>
<td>1.1</td>
<td>0.42</td>
</tr>
<tr>
<td>Working capital management creates more business and employment opportunities.</td>
<td>3.0</td>
<td>1.0</td>
<td>0.04</td>
</tr>
<tr>
<td>Working capital management enhances training and efficiency</td>
<td>2.6</td>
<td>0.79</td>
<td>0.22</td>
</tr>
<tr>
<td>Working capital management creates infrastructure</td>
<td>2.3</td>
<td>0.95</td>
<td>0.41</td>
</tr>
<tr>
<td>Working capital management is significant to electricity distribution sector</td>
<td>1.4</td>
<td>0.92</td>
<td>0.53</td>
</tr>
</tbody>
</table>
almost all of the nation’s distributors are financially incapable of making these necessary large investment requirements in the short to medium term as most of the distribution infrastructure that was developed in the 1960’s and 1970’s has a lifetime of about 30 years. Hence, the need to replace these assets at a very high cost and in time, to ensure that the quality of supply does not continue to deteriorate.

- **Working capital management enhances liquidity and profitability**

In this study it was revealed that working capital management enhances liquidity and profitability and this positive effect of working capital management on company profitability is confirmed by several researchers (for example Gentry et al., 1990; Jose et al., 1996; Shin and Soenen, 1998; and Farris and Hutchison, 2003), who provided evidence of a significant relationship between working capital management and profitability in public listed companies in the United States of America. Thapa (2013)’s study of food and beverages industries in the USA and Canada also similarly revealed that working capital management was positively related to profitability and cash flow (liquidity). Also reinforcing these findings, Ngendakumana et al (2015)’s Zimbabwean study established that as a company’s working capital management efficiency improved its profitability and that is why Too et al (2015) states that profit maximisation through working capital management enables a company to realise its ultimate objective of maximizing shareholder’s wealth. This is very important in Namibian electricity distribution companies like CENORED (Pvt) Ltd, which as highlighted earlier on needs to attract more investors in order to make further capital investments to be able to contain the rising demand in electricity. This need is illuminated by the Namibian Electricity Control Board (2005), which noted that significant capitalization funds are required to ensure that electricity distribution companies like CENORED (Pvt) Ltd will be able to conduct its operations effectively. In this respect, Gitman (2002) also underscores that high percentages of profitability play a vital role in bringing external finance to the business because creditors, investors and suppliers do not hesitate to invest in such a company, whilst the enhanced resource utilization that is upheld by working capital management also leads to value creation that is pursued by most investors. Furthermore, the profitability enhancement impact of working capital management enables CENORED (Pvt) Ltd to plough back its own profits into the required capital investments, thus reducing dependence on expensive debt financing. The management of CENORED (Pvt) Ltd’s liquidity through working capital management is also critical for attracting the indispensable financial investment. As Bhunia (2010) consistently highlights, the examination of liquidity is of major importance to both the internal and the external analysts because of its close relationship with day-to-day operations of a business. Banks, for example critically analyse business cash flows to ascertain the potential borrower’s capability to repay advanced loans adequately and promptly as per agreed terms. Moreover, this enhancement of liquidity through working capital management in a company like CENORED (Pvt) Ltd is stamped by Ware (2015) as a necessity for survival, whilst Panigrahi (2013) equally promulgates that it ensures that funds are not unnecessarily tied up in idle assets, thus enabling it to invest in productive assets like plant and machinery. The investment in productive assets by CENORED (Pvt) Ltd will be indispensable in its quest for further growth as it will be able to serve a wider customer base in light of the ever-increasing demand for electricity in the Namibian economy.

- **Working capital management guarantees business survival and continuity.**
From the data gathered in this study, it can also be concluded that working capital management guarantees business survival and continuity. As seen in the analysis of variance, a mean score of 1.4 and a standard deviation of 0.97 were recorded. Furthermore, an Anova p value of 0.34 indicated the significance of this notion to the study at hand. These findings coincide with Bhunia (2010)’s argument that the positive impact of working capital management on liquidity empowers companies to avoid insolvency or bankruptcy, which normally leads to the premature closure of companies. Chatterjee (2012) also equally contends that this also affords a business an enhanced capacity to serve the economy. The enhanced survival prospects of companies in the Namibian electricity distribution sector through working capital management are key for the alleviation of the previously highlighted power shortages in the country, and the revival of the entire economy at large.

5.3 Recommendations
The following recommendations are prescribed to various concerned stakeholders in the Namibian electricity distribution sector.

- **Electricity distribution companies**
  There is need for electricity distribution companies to come up with smart grid networks in their distribution of electricity so that there is simultaneous production and consumption of the product. This is because electricity cannot be stored, and hence, all generated electricity should have ready consumers in order to avoid load losses. Moreover, there is need for the companies to effectively manage their receivables and payables in a manner that is recommended by the working capital management practice that is to shorten collection periods and delay payments as much as possible. This was proven to be effective by Deloof (2003)’s study in Belgium, where the empirical results concluded that profitability can increase by reducing the length of the accounts receivable period, whilst waiting longer to honour payables.

- **Government**
  The government should revise the regulation policy on electricity distribution and transmission to also accommodate the producers of electricity. This is mainly because electricity has been heavily subsidised at the expense of generation and distribution companies who in time are finding it difficult to meet the financial demands of the sector. Thus, there is need for government intervention to cushion on financing the sector.

- **Researchers**
  To future researchers, there is need to also look into other variables affecting the electricity distribution sector such as government policies, industrial growth and consumption of various sources of energy, such that a comparison can be made in the future to see which factor most affects or is significant to the electricity distribution sector.

5.4 Conclusion
This chapter provided a narrative of the findings of the whole study coming up with the conclusion that working capital management is significant in enhancing liquidity and profitability in the
electricity distribution sector. This chapter further provided recommendations to key stakeholders who are relevant to the topic under study.

6.0 REFERENCES

Abawi K. (2013); data collection instruments (questionnaire and interview Geneva); Geneva foundation for medica E-UMY repository

Abdelhay and Malik (2011); Electric distribution concept; Wiley press

Abowitz and Toole, (2010); Research methods fundamental issues of Design, validity and reliability in construction research; Journal of construction engineering and management.


Alagh, (2013); The future of Indian Agriculture; Popular social science

Annual Survey of Industries (1961) ministry of statistics and programme implementation; Government of India


Bindseil, (2005); Monetary policy implementation; Theory, past and present; Amazon

Bouttes (2011); Last glacial maximum CO₂, S13C successfully reconcilled

Bryman A. & Bell E. (2015); Business research methods and investigative approach In: Introduction to quantitative research methods; London SAGE

Burns N. and Grove S. (2003); Understanding Nursing research; Saunders

Burton, (2010); Saturn’s internasl planetary magnetic field; John Moore University; UK

Carson (2001); Qualitative Marketing Research

Choga and Njaya (2011); The contribution of microfinance to the development of rural farming in Zimbabwe


Clarke, (2012); Teaching thermstic analysis: overcoming challenges and developing

Cooper, (2006); Impact of Climate Change on Response Providers and Socially Vulnerable Communities in the US
Cresswell (2014); Research design: Qualitative, Quantitative and mixed methods approaches 4th edition; Lincoln SAGE

Davidson and Mwakasonda (2003); Southern Africa sub-regional study: South Africa and Zimbabwe Electricity access sub-theme ENERGY & DEVELOPMENT RESEARCH CENTRE University of Cape Town

Denzin N. and Lincoln Y. (2011); Handbook of critical and indigenous methodologies.

Department of Economic and Social Affairs, (2008); Government of NAmbia

Dornyei Z. (2007); Research Methods in Applied linguistics; Oxford university; new York


Fridah M. (2002); Government delivery system; Effectiveness of local Authorities in rural Malaysia

George A. and Bennet A. (2005); Process tracing in case study research: Stanford University

Gibbs G. (2002); Quantitative data analysis: explorations with NVIVO

Golofshani N. (2003); Understanding reliability and validity in qualitative research.


Ihuah and Eaton, (2013); The pragmatic research approach; a framework for sustainable management of public housing estates in Nigeria.

Kaboub F. (2008); Positiv paradigm; Thousand Oaks; SAGE


Kennedy R.D. and McMullen (1968); Financial Statements – Form Analysis and Interpretations

Kimberlin C. and Winterstein G. (2008); Validity and reliability of measurement instruments used in research; Hepworth

Mathers N. (2009); Surveys and questionnaires
Ministry of Power, (2005); Government of Namibia

Munyoro (2016); The motives of Zimbabwean Entrepreneurs

Namnews network, (2015); africanenergyresources.com

Oertzen (2009); Namibia’s energy future

Parahoo K. (1997); Nursing research: Principles, Processes and issues; Macmillan

Qader M. (2009); Electricity consumption and GHG emission in GCC countries; University of Bahrain

Sadelec, (2000); NEPAD vision and the INGA hydroelectric scheme; energy research centre


Tallapragada, (2009); The energy challenge in Sub-Saharan Africa: a guide for advocates and policy makers; Oxfarm

Teddlie C. and Yu, (2009); Mixed methods research on learning

Van de Graaf and Colgan, (2016); Global energy governance: a review and research agenda; Palgrave communications


Williamson (2008); Outsourcing: Transaction cost economics and supply chain management; Wiley


www.indexmundi.com;

Yin R. (2009); Case study research: Design and methods 4th edition; Thousand Oaks CA; SAGE

Zikmund W., Babin B., Carr J. And Griffin M. (2013); Business research methods; South Western Mason