

Working Capital and Profitability of Listed Hotel Companies in Nigeria

Ayoola O. Olagunju*

Department of Accounting, Babcock University, Ilishan Remo, Ogun State, Nigeria, E-mail, ayoola.olagunju@gmail.com

Appolos N. Nwaobia

Department of Accounting, Babcock University, Ilishan Remo, Ogun State, Nigeria, E-mail, nwaobiaa@babcock.edu.ng

Grace Oyeyemi Ogundajo

Department of Accounting, Babcock University, Ilishan Remo, Ogun State, Nigeria, E-mail, ogundajog@babcock.edu.ng

**Corresponding Author*

How to cite this article: Olagunju, A.O., Nwaobia, A.N. & Ogundajo, G. O. (2020). Working Capital and Profitability of Listed Hotel Companies in Nigeria. African Journal of Hospitality, Tourism and Leisure, 9(4):669-684. DOI: <https://doi.org/10.46222/ajhtl.19770720-44>

Abstract

This study examined the effect of working capital on the profitability of listed hotels companies in Nigeria. The design adopted was ex-post-facto. All the four (4) listed hotels firms on the NSE as at 31st December, 2018 were considered as population. An unbalanced panel data obtained from the companies' published financial statements for 19 years (2000 to 2018) were analyzed using descriptive and inferential statistics. It was discovered that working capital had a significant effect on return on asset of listed hotels companies in Nigeria. Inflation rate and exchange rate significantly controlled the relationship between working capital and return on assets of the companies. This study concluded that working capital affects profitability and that inflation and exchange rates control the effect of working capital on profitability. Managers should ensure bulk purchase of inventories that can be stored for long without being spoilt to hedge the effect of inflation and exchange rates fluctuations. Optimal credit policy should also be set to enhance effective liquid fund management which would contribute to boosting profitability.

Keywords: Profitability, inflation, exchange rate, working capital

Introduction

Business activities in firms are designed and carried out to meet the profit maximization objective (Azeez, Abubakar & Olamide, 2016). Chyntia, Indriani, and Saputra (2018) documented that one of the key performance measures of an entity is its profitability. It serves as a yardstick used by the investors, managers, creditors, as well as all other stakeholders in establishing the well-being of a company and its future potentials. Thus, ability to manage the operations of a business focusing on strategies of reducing expenses, effective and efficient management of available resources especially liquid fund greatly impact on the level of profit that accrues to an entity.

According to Kajola, Sanyaolu, Alao and Ojunrongbe (2019) earnings are the reflection of the effective and efficient management of entity's resources entrusted in the care of managers, engaged in its day to day activities. Profitability is a performance measure of organization's management competencies. Globally, several factors affect the attainment of profit maximization focus of entity which possibly may be beyond what the management could control; for example, macroeconomic factors like inflation and exchange rate affects working capital especially inventories of entities across sectors (Gharaibeh, 2015; Islam & Nishiyama,



2016). The implications of the unfavourable turnaround in these macroeconomic factors could have an adverse effect of earnings and inhibits entities from reaching its target profitability (Ilaboya & Ohiokha, 2016).

Kajola, Nwaobia and Adedeji (2014) asserted that finance managers of an entity, in performing his duties and ensuring optimal financial strategies usually encounter challenges in striking a balance between liquidity and profitability. Entity's inability to meet its financial obligations especially short-run is detrimental to its going concern. Inability to settle the suppliers on credit transactions made deter the goodwill and could result in long lead-time or disappointments in supplies. Also, entities tend to lose customers when unable to meet their demands on time. In situations of persistence increase in general price levels of goods in an economy, coupled with hike in the exchange rate, managers could be of the opinion of bulk purchase of inventories (non-perishable) to mitigate the effect on the cost of production but this would also lead to capital tied down, shortage of funds available to meet obligations (Takon & Atseye, 2015).

Firm's ability to increase its turnover through a high volume of transactions or market penetrations and effective cost management especially direct cost increases the net returns. The hotel industries have been facing fluctuating operations in recent times. This is because of instability in both the global and national tourism sector and invariably the hotel industry. The level of insecurity, poor infrastructural facilities, and unfriendly business environment are among several impediments in the nation which may inhibit the performance of this sector (Yusuf, 2016). The cost of the goods sold, and the cost of rendering services is germane in deriving the net earnings of an operation. Firm's ability to manage its operating costs affects its profitability effectively and efficiently. The major proportion of the cost of operating any business lies in the inventory value, especially amidst the hotel industries. As a service industry characterized by food services and room management, the firms in this industry are consistently in operation and require huge liquid capital for running cost. Likewise, the majority of food and drinks being served requires importation of cost inputs, thus influenced by the prevailing exchange rate. Most of their inventories are edible raw materials which are perishable in nature and cannot be stored in large quantities. Thus, persistent increase in the general price level of commodities usually impact on their purchases on a regular basis and thus resulting in huge operating cost, leading to dwindling net returns.

A major factor that is not usually focused on but has been a big influence on the hotel industry is the inflation rate in a country. The rate of inflation in Nigeria in recent times as reported by PwC, (2018) is alarming. The index increased from 9.0% in 2015 to 16.4% in 2017. Inflation, hike in the Dollar to Naira exchange rate and depreciating Naira would not only impact the hotel industry but the Nigerian economy as a whole. This will lead to a high running cost, more working capital requirement and then dwindling returns.

There are many studies on working capital and profitability across the globe, for example, Agwor and Akani (2017); Arif, Janmat and Anwar (2016); Bansal and Khosla (2015); Bhunia and Das (2015); Nteere (2014); Erin, Okoye, Modebe, Achugamonu and Ado (2016); Matoke and Muturi (2017); Muhammad and Imran (2015); Nailal and Rika (2016); Omari, Soda, Razzak and Al-Rawashdeh (2017) as well as Shalid and Amir (2017) but few considered hotel industries. There is limited literature on working capital and profitability of the hotel industry in Nigeria. This study is therefore considered timely in filling this gap in literature. The hotel sector is one of the key sectors of the Nigerian economy that is expected to drive the tourism sector and enhance the inflow of foreign exchange into Nigeria. Again, the decline in the value of Nigeria currency (Naira) has led to stringent rules relating foreign exchange by the Central Bank of Nigeria, and this has caused reductions in foreign travel in recent times, thereby creating an opportunity for increased demand for local hotel services



(PwC, 2018). This study identified working capital management strategies that could improve the profitability and sustainability of hotel companies in Nigeria and thus made its modest contribution in this area.

This paper is structured as follows; next to the introduction is section 2, in which the review of extant literature and the underpinning theory for the study are presented. The methodology adopted for the study including measurement of variables is presented in section 3. Section 4 highlights the empirical analyses, results and discussions while the study concludes in section 5.

Review of literature

Conceptual review

Jakpar, Tinggi, Siang, Johari, Myint and Sadique (2017) defined working capital as the period it takes an entity to transform its expenditure on the purchase of raw material to cash collectable from the sales of its finished goods. Furthermore, with an efficient short-term capital mix, the liquidity of a firm is improved, and firm value is maximized, given that having an optimal level would meet working capital demands. As Autukaite and Molay (2011) submitted, there are four drivers of working capital which need to be carefully managed for the attainment of optimality. These are cash, account receivable, inventory and account payable. The Cash conversion cycle is a key consideration in working capital management and its effect on firm performance. The cash conversion cycle is the time period between a firm's cash outlay in input materials, overheads and labour and receipt of cash from customers for products and/or services sold to them. It is the average length of time money is tied up in current assets. It is calculated as the average collection period plus inventory turnover days minus average payment period (Brigham & Houston, 2003).

The credit policy of the firm determines the quantum of accounts receivable which affects the working capital of the firm. Where the policy is overly liberal, large funds are tied down in receivables that may exhibit a high degree of toxicity and resultant increased bad debts. The business firm should strive towards formulating a credit policy that will enhance its cash flow. Cash flow can be significantly enhanced if the amounts owing to a business are collected faster. Slow payments cripple businesses especially small businesses with lean resources to accommodate late collections (Block & Hirt, 2009). Longer credit terms, in the long run, may increase a firm's turnover but may reduce the quality of its assets due to increased risk of bad debts. Considering the fact that Accounts receivable is a major component in business finance, an optimal trade receivables policy, will require the setting up of an enhanced credit analysis system, a credit control system and a trade receivables collection system that would balance the peculiar nature and needs of customers and the entity's liquidity and profitability considerations. Such policy can help ease financial frictions of customers (Akindele & Odusina, 2015).

The effective management of creditors enhances the cash position of organisations. Every purchasing activity undertaken initiates cash outflow and thus an unplanned and ambitious purchasing function does create liquidity difficulties in organisations. Trade credits from suppliers help entities to reduce some investment in working capital and save some resources (Egbide, 2009). Maximizing the accounts payable and stretching the payment terms could be a competitive advantage for firms. However, undue delay in payment of accounts can be expensive if a firm is offered a discount for early payment (Block & Hirt, 2009) as well as lead to loss of goodwill. Here again, striking a balance is important when formulating accounts payable policy.

Inventories include supplies, raw materials, work in process, and finished goods, and are an essential part of virtually all business operations. Optimal inventory levels depend on



demand for the products; so sales must be forecasted before target inventories can be established (Brigham & Houston, 2007). Overstocking can place a heavy burden on the cash resources of a business, while insufficient inventory can result in lost sales and delays for customers. Optimal inventory levels reduce the risk of stock out (Pandey, 2010). Maintaining large size of inventories results in commitment of a considerable amount of funds. It is, therefore, imperative to manage inventories efficiently and effectively by adopting an appropriate working capital policy in order to avoid unnecessary investments in stock. An undertaking neglecting appropriate working capital policy in the area of inventory management would be jeopardizing its long-run profitability and the firm may fail ultimately.

Muhammad and Imran (2012) emphasized that the motive of establishing a company, especially privately owned entities is was to maximize profit; and as such, the management would ensure that all strategies are put in place to attain these goals. It is essential to measure the efficiency of business management as a yardstick for determining their performance and profitability serves as one of the core measures of the performance of a firm. It is an essential aspect of its financial reporting. It reveals the firm's ability and capacity to generate earnings at a rate of sales, level of assets and stock of capital in a specific period (Margaretha & Supartika, 2016). Chepkoech, Chenuos and Kosgei (2015) view performance as a state of fulfilment on an assigned task. It is a reflection of the success status of entities.

Several studies (Agwor & Akani, 2017; Nteere, 2014; Erin et al., 2016; Matoke & Muturi, 2017; Shalid & Amir, 2017) have used different measures to assess the financial status, position and performance of business but for the purpose of this study, return on assets is used as a proxy for profitability as found in the study of Ongore and Kusa (2013). Profitability is crucial in the determination of a company's going concern status, revenue recognition, overall health and its economic value. In the determination of whether to invest in a company or not, potential investors evaluate the company's profitability to establish resource utilization and management of its investment portfolio (Johnson, Scholes & Whittington, 2006).

Underpinning theory

Resource-based theory served as the bedrock of this paper. The resource-based view can be originally traced to Edith Penrose but popularized by Wernerfelt (1984). Penrose suggested that the resources possessed, deployed, and used by the organisation are more important than industry structure (Penrose, 1959). The resource-based theory is based on how companies can explore its resources in gaining sustainable and competitive advantage over other competing firms in the industry. The resource-based view of the firm (RBV) draws focus to the internal environment of the firm as an enabler for competitive advantage and highlights the resources that firms have established to compete in the business environment (Onijingin, 2017).

The resource-based theory propositions rested on how companies gain competitive advantage through the number of resources they have. A company that has good working capital would gain a competitive advantage over the company struggling with working capital. In the hotel industry, the service rendered by each hotel is the main differentiation between the hotels. The service depends on the value, reliability, effectiveness, efficiency of the resources employed to achieve a goal congruence of both the guests and the hotel. According to Barney (2001), resources are the tangible and intangible assets firms use to conceive of and implement their strategies. Every entity has peculiar characteristics which could be managed to enhance its competitive advantage if efficiently managed by the management. The uniqueness of the entity's customers and suppliers could fetch such an edge above its competitors and ability the maintain optimal working capital in terms assessment of new markets, effective management of resources, payable management and timely recovering of receivables while the ultimate end result would be increased profitability (Aminu & Zainudin, 2015). Therefore, working capital



and profitability components are inputs and outputs for the business and can be better explained and employed using the RBV theory.

Empirical review

Matoke and Muturi (2017) opined that working capital management plays a significant role in better performance of business entities as a report on their study on the effect of working capital management on the financial performance of hospitality industry in Kisii town, Kenya. Their results revealed that the working capital management components of accounts payable period, average collection period and inventory turnover period were positively related to financial performance. On the contrary, the study conducted by Nyamweno and Olweny (2014) in the same economy using linear dynamic panel data estimation analysis showed that account receivables and cash conversion cycle have an indirect effect on performance measured by gross operating profit while days of account payables and days in inventory have a significant direct effect on performance. Similarly, Omari et al. (2017) examined the relationship between profitability ratio and gross working capital of Jordanian industrial sector and discovered that gross working capital had significant impact on gross profit margin, operating profit margin and net profit margin.

Odero (2014) conducted a study on the effect of working capital management on financial performance of five-star hotels in Nairobi County where the study sought to answer the research question of whether there exists an effect of working capital on company's financial performance of five-star hotels in Nairobi. It was established that hotels have longer accounts payable period to maintain a high current ratio and avoid operating in the red, thus avoiding insolvency. The study finally documented that businesses in the hospitality sector should monitor their inventory conversion period to ensure that it is as short as possible to enhance liquidity.

Mansoori and Muhammad (2012) did a study to investigate the relationship between working capital management on the firm's profitability among firms listed on the Singapore stock market exchange for the period 2004-2011. The finding from a sample of 92 firms indicated a negative association between cash conversion cycle and Return on Assets (ROA). The results demonstrate that firm's profitability is increased by decreasing receivable conversion period and inventory conversion period. Agha (2014) in his study, sought to ascertain if there is any relationship between profitability (ROA) and Debt Turnover Ratio (DTO), Creditors Turnover Ratio (CTO), Inventory Turnover Ratio (ITO) and Current Ratio (CR). Data were collected from Glaxo Smith Kline Pharmaceutical Company registered in Karachi Stock Exchange for the period of 1996 to 2011. Multiple regression was used for analysis. The study showed that CTO, DTO and ITO have a positive relationship with ROA, while there is no significant relationship between CR and ROA.

According to Eya (2016) in his study on the relationship between working capital management and return on asset of food beverage industries in Nigeria, it was obtained that a significant positive relationship exists between current ratio, quick ratio and return on asset. Similarly, Erin et al. (2016) examined the influence of working capital management on the performance of consumer and industrial goods sectors in Nigeria, and reported that firm performance is significantly and positively impacted by average payment period and inventory conversion period, while cash conversion cycle impacted on the performance negatively but insignificant, while concluding that working capital management significantly impacted on the performance of listed consumer and industrial goods producing firms in Nigeria. They were of the opinion that industry managers should devise efficient means of managing working capital in order to attain a profit maximization goal. Likewise, Agwor and Akani (2017) investigated the working capital management and performance of hospitality industries in the Eastern part



of Nigeria (Rivers state); it was revealed that there is a positive and significant relationship between financing policy and effective performance and there is a positive significant relationship between investing policy and effective performance. This was shown that hospitality firms in Port Harcourt had liquidity challenges and were unable to pay their short-term financial obligation as at when due. They recommended that the hospitality firms should engage adequate working capital management to enhance effective performance and financing policies and investing should be effectively implemented so as to promote effective performance of hospitality firms in Nigeria.

The study of Onyango and Ngahu (2018) on Nairobi hospitality industry revealed that cash conversion cycle, inventory level, accounts receivables and current liabilities were insignificant to financial distress management in the hospitality industry. In Sri Lanka, Athambawa (2015) found a significant negative relationship between profitability and number of day's accounts receivables which implies that managers can increase profitability by reducing the number of day's receivable; profitable companies wait a longer time to pay their bills. Managers were advised to ensure that day's accounts receivable is reduced to create more value and maintain reasonable inventory level. Similarly, Muhammad and Imran (2015) investigated the effect of selected financial ratios on profitability using an empirical analysis on listed cement firms in Saudi Arabia and reported a significant effect of leverage, total asset turnover ratio, inventory turnover ratio, creditors' velocity, and debtors' turnover ratio on net profit margin of cement companies in Saudi Arabia. Nailal and Rika (2016) opined that one factor that influences the net profit margin is current ratio which refers to the liquidity condition of a company that they can pay their debt as it matures. Working capital management and corporate performance using Indian firms was a study carried out by Agarwal and Varma (2013) and discovered that a significant relationship between working capital management and firm profitability.

Nteere (2014) discovered that there exists a highly significant negative relationship between the time it takes for the hotel industry in Kenya to collect its cash from their customers or day sales outstanding and profitability and a strong positive relationship between days payables outstanding and profitability. The study opined that having short receivables collection period but longer payables payment period enables the entity to take advantage of the cash available for their working capital needs and enhances their profit. Bansal and Khosla (2015) discovered that there are a lot of potentials for growth of the hospitality and tourism industry both in India due to the worldwide industrial development, increased earnings of individuals, economic growth of tourists producing nations, improved transport and communication means. Although, their findings revealed that some selected hotels are facing the problem of liquidity and unnecessarily keeping a high level of current and liquid assets continuously.

Deloof (2003) investigated the relationship between working capital management and profitability by sampling 1009 most important Belgium firms spread from 1992-1996, by means of a regression analysis, proved that enterprises with a long cash conversion cycles and long inventory, accounts receivables, and current liabilities cycles obtained lower rates of return measured through the operational profit in respect of enterprises with shorter cycles. Similar findings were observed by Lazaridis and Tryfonidis, (2006) the study investigated the relationship between working capital management and firms' profitability for 131 listed companies in the Athens Stock Exchange for the period 2001-2004, they suggested that managers can create profits for their companies by handling correctly the cash conversion cycle and keeping each different component (accounts receivables, accounts payables, inventory) to an optimum level.



Olaniyi, Muhammad and Fagbemi (2016) examined the impact of Cash Conversion Cycle and inventory days have on profitability using Nigerian conglomerates and discovered that there is a relationship between average collection period and return on equity is negative and significant while return on equity is positive and significant with average payment period. Kajola et al. (2014) investigated the effect of working capital management the financial performance and revealed a negative relationship between working capital management (cash conversion cycle) and firm's financial performance (ROA). Similar findings were obtained by Salman, Folajin and Oriowo (2014) in their study on the relationship between working capital policies and financial performance of listed manufacturing companies in Nigeria, using a return on assets and return on equity as measures of financial performance. In like manner, Uremadu, Egbide, Enyi (2012) in their study on working capital management, liquidity and corporate profitability among quoted firms in Nigeria, discovered that cash conversion period (CCP) with a wrong sign is the most significant precision variable in influencing profits and leads corporate profitability in Nigeria. It is closely followed by the inventory conversion period (ICP) and then the creditors' payment period (CPP) is third in importance in affecting profitability and liquidity in Nigeria.

The relationship between profitability and working capital of Pakistan pharmaceutical sector was examined by Ahmed, Ahmed and Kanwal (2018) and reported that current ratio, cash conversion cycle and ratio of current assets to total assets insignificantly impacted on corporate profitability. Banos, Garcia and Martinez (2014) evaluated the nature of the relationship between working capital management and corporate performance of non-financial UK companies and reported a non-linear linkage between working capital investment and performance. They found that non-financial firms in UK optimized the level of investment in their working capital and thus maximizes their value and that the optimality tends to decline when the firm faces financial constraints. ALShubiri (2011) looked at the impact of working capital practices of banks and industrial firms on risk management using 14 banks and 59 firms listed on the Amman stock exchange from 2004 to 2008 and reported that there is a negative relationship between the degree of aggressiveness of working capital policy and accounting measures of return.

In the light of the inconclusive debate and mixed results from these studies and arising from the evidence that many of these studies have been carried out on manufacturing firms and other sectors of the economy, with limited studies on hotels companies in Nigeria, this study examined the effect of working capital on profitability of hotels in Nigeria and hypothesized that:

H₀1: Working capital has no significant effect on profitability of listed hotels companies in Nigeria.

H₀2: Inflation and exchange rate do not significantly control the effect of working capital on profitability of listed hotels companies in Nigeria.

Methodology

This study adopted the *ex-post facto* research design because the study examined the causal-effect relationship between working capital and profitability. The source of data was the audited financial statements of the four (4) Hotels companies quoted on the Nigerian Stock Exchange as at 31st December 2018 (Capital Hotels Plc, Ikeja Hotels Plc, Tourist Company of Nigeria Plc and Transcorp Hotels Plc), between the year 2000 and 2018. Both descriptive and inferential analyses were conducted. Descriptive statistics, correlation analysis and variance inflation factor analysis were carried out to evaluate the characteristics and the appropriateness of the series in the distribution. Multiple regression analysis was used to test the hypotheses



while appropriate and relevant diagnostic tests were carried out to ensure appropriateness of estimation methods and to avoid biased results.

Description and measurement of variables

The dependent variable in this paper is ‘profitability’ using ‘return on assets’ as a proxy while the independent variable ‘working capital’ is measured as account receivable period, account payable period, and inventory turnover period. The paper adopted the studies of Kajola, Nwaobia and Adedeji (2014), Jakpar, Tinggi, Siang, Johari, Myint and Sadique (2017) in measuring the variables. The control variables, Inflation and exchange rate were derived from CBN Statistical Bulletin. Return on assets: This is measured as the proportion of Profit before interest and tax (PBIT) to total assets. It is computed as: $ROA = PBIT/Total\ assets$. Average collection period: This is computed as the number of days it takes the firm to recoup its receivables emanating from credit sales. This is usually based on the credit policy of the firm. It is calculated as: $ACP = (Average\ trade\ receivables/Net\ sales)*365days$. Average payment period: This is the number of days it takes the firm to settle its suppliers on the account of credit purchases. This is usually influenced by the terms and conditions of credit policy of the suppliers. It is measured as: $APP = (Average\ trade\ payables/Net\ purchases)*365days$.

Inventory turnover period: This is the number of days it takes the firm to transform its inventories into sales, and computed as: $ITP = (Average\ inventory/Cost\ of\ sales)*365days$.

Inflation (INFL): This is the percentage of changes in the purchasing power of a nation's currency. Exchange Rate (EXCR): This is the naira value exchange of one United States Dollar (US\$)

Model specification

This paper established the following model to evaluate the influence of working capital of profitability of listed hotels industry in Nigeria, and to determine the control effect of inflation and exchange rate on the relationship between working capital and profitability of listed hotels industry in Nigeria:

$$ROA_{it} = \alpha_0 + \alpha_1 ACP_{it} + \alpha_2 APP_{it} + \alpha_3 ITP_{it} + \varepsilon_{it} \dots \dots \dots \text{Model 1}$$

$$ROA_{it} = \alpha_0 + \alpha_1 ACP_{it} + \alpha_2 APP_{it} + \alpha_3 ITP_{it} + \alpha_4 INFL_{it} + \alpha_5 EXCR_{it} + \varepsilon_{it} \dots \dots \dots \text{Model 2}$$

Where: α_0 = constant; ε = error term; i = Entity; t = Time; ROA = Return on Asset; ACP = Average Collection Period; INFL = Inflation; APP = Average Payment Period; EXCR = Exchange Rate; and ITP = Inventory Turnover Period.

A priori expectation

This paper expected that working capital management would have positive effect on profitability; likewise, the control variables (inflation and exchange rate), that is, $\alpha_4 - \alpha_5 > 0$.

Results

Descriptive statistics

The statistical properties of the variables are highlighted in Table 1 and the emphasis here is on the mean, minimum, maximum and measures of dispersion of the variables involved in this study. The characteristics of return on assets (ROA) showed that the earnings of the companies are highly volatile with a standard deviation of 10.97. Also, the minimum values of -53.41 indicated that there are periods within the time frame when the companies reported huge losses as evidenced in the negative sign of these ratios. The maximum figure of 21.12 implies that the maximum return of 21.12% on total assets was generated by the companies within the time frame of this study.



Table 1: Characteristics of the Variables

Variable	ROA	ACP	APP	ITP	INFL	EXCR
Mean	1.93	45.84	52.98	38.92	125.71	205.99
Std. Dev	10.97	34.86	84.16	22.04	64.76	104.86
Min	-53.41	5.79	4.02	4.32	32.24	121
Max	21.12	215.45	416.28	105.74	261.58	490

The minimum and maximum values of Account Collection Period (ACP) indicated that the credit policy given to customers allowed them to pay within a minimum of 6 days. The worst-case scenario took a maximum of 216 days. This maximum repayment period is too long and could be disastrous to the performance of the companies as capital would be tied down in the hand of customers as a result of long outstanding receivables. The lengthy days of receivable collection period of 216 days seemed abnormal and could be related to several factors, for example, delinquency, which needs to be addressed. Firstly, the credit terms of the companies need to be reviewed and clearly communicated to customers to avoid delay in payment. Also, the companies should ensure that goods on sale or return are not being treated as sales. In addition, the firms may need the service of factoring agents in the recovery process of long outstanding debts before it automatically turns irrecoverable. The implication of Account Payable Period (APP) with a minimum of 5 days and a maximum of 417 days is mixed. It may be favourable for the companies to have a long period to settle the suppliers but at the same time delay in payment for over a year could lead to loss of goodwill and reluctance of suppliers to engage in active business with the companies. However, the minimum range of 5 days is too short, for healthy working capital; the receivables collection period is expected to be shorter than the payables payment period.

Averagely, it takes 39 days to turn inventory into finished goods by the companies in the lodging industries with minimum days of 5 and a maximum of 106 days. The characteristics of the inventory turnover period (ITP) are relatively good for the companies as these days are the shortest within the working capital cycle. This implies that the companies possibly experience cases of neither overtrading nor overcapitalization. It is also an indication that finished goods are readily available before the demand by the customers and that inventories (raw materials) are made available by suppliers before production, thus no cases of stock out. The standard deviation of the inflation of 64.76 evidenced that the level of a general increase in the price level of goods in Nigeria has been highly volatile over the years of this study. Also, the descriptive analysis showed that the exchange rate has been at its least of N104 to \$1 and at its peak at N490 to \$1 within the period covered in this study.

Inferential analyses

The paper made use of both correlation and regression analyses. The correlation analysis using both correlation matrix test and Variance Inflation Factor test were carried out to determine whether the series in the distribution are correlated, while the regression analysis was conducted for the test of the hypotheses.

Table 2: Correlation analysis

Variable	ACP	APP	ITP	INFL	EXCR	VIF	1/VIF
ACP	1.00					1.39	0.72
APP	0.49	1.00				1.46	0.68
ITP	0.03	0.24	1.00			1.10	0.91
INFL	-0.23	-0.10	0.14	1.00		3.40	0.29
EXCR	-0.22	-0.18	0.12	0.83	1.00	3.42	0.29
						Mean = 2.16	



Table 2 showed the minimum and maximum correlation coefficients of 0.03 and 0.49 (except for the correlation coefficient between inflation and exchange rate of 0.83) which are less than the benchmark of 0.75 implied that there is no evidence of multicollinearity problem among the variables. In Table 2, inflation and exchange rate are negatively correlated with Account Collection period and Account payable period but positively correlated with inventory turnover period. Inflation and exchange rate are positively correlated likewise; Account Collection Period, Account Payable Period and Inventory Turnover Period are positively correlated. The result of the correlation matrix was corroborated by the result of the variance inflation factor to explain the nature of associations among the variables. The result of the variance inflation factor is as presented together with the multicollinearity test results in Table 2. In Baltagi (2011), the benchmark for Mean of the Variance Inflation Factor is 5.0 while for the individual reverse factor is 1. The reverse variance inflation factors of each of the variables are all below the threshold of “1” while the average of the aggregate for all the periods is less than the benchmark of 5.0. This confirmed the report of the correlation matrix which indicated that multicollinearity problem does not exist among the variables.

Table 3: Results of the multiple regression analysis

Variable	MODEL ONE (H ₀ 1)				MODEL TWO (H ₀ 2)			
	(Baseline)				(Baseline with Control Variables)			
	β	Std.Err	T-stat	ρ	β	Std.Err	T-stat	ρ
Constant	-2.149	2.978	-0.72	0.473	2.545	3.859	0.66	0.51
ACP	0.157	0.040	3.89	0.000	0.150	0.040	3.74	0.00
APP	-0.004	0.017	-0.24	0.814	-0.011	0.017	-0.63	0.52
ITP	-0.075	0.057	-1.31	0.196	-0.058	0.056	-1.02	0.31
INFL	-	-	-	-	0.031	0.034	0.90	0.36
EXCR	-	-	-	-	-0.041	0.021	-1.98	0.05
Adj. R ² , F-Stat (Prob)	0.22, F _(3, 60) = 6.89 (0.00)				0.26, F _(5, 58) = 5.50 (0.00)			
Hausman Test	chi ² ₍₃₎ = 22.4 (0.00)				chi ² ₍₃₎ = 25.14 (0.00)			
Testparm Test	F _(18, 39) = 0.70 (0.79)				F _(16, 39) = 0.22 (0.999)			
Heteroskedasticity Test	chi ² ₍₁₎ = 30.10 (0.00)				chi ² ₍₁₎ = 64.54 (0.00)			
Serial Auto-Correlation Test	F _(1, 3) = 34.53 (0.01)				F _(1, 3) = 13.22 (0.04)			

Source: Author’s Work (2020)

$$ROA_{it} = -2.149 + 0.157ACP_{it} - 0.004APP_{it} - 0.075ITP_{it} + \varepsilon_{it} \dots \dots \dots \text{Model 1}$$

$$ROA_{it} = 2.545 + 0.150ACP_{it} - 0.011APP_{it} - 0.058ITP_{it} + 0.031INFL_{it} - 0.041EXCR_{it} + \varepsilon_{it} \dots \text{Model 2}$$

Diagnostic tests

Hausman tests for both models determining the most appropriate estimating technique between Fixed Effect and Random Effect were conducted at a significance level of 5 per cent. The results of the tests with p-values of 0.00, and 0.00 being lower than the chosen significant level of 5% supported the appropriateness of the Fixed Effect according to its null hypothesis which states that there is the presence of unsystematic difference in the model coefficients. Thus, the study does reject the null hypothesis. The confirmatory tests on the results of Hausman tests were conducted using Testparm Test. This was done to determine the most appropriate estimating technique between the Fixed Effects and Pooled OLS, with null form of “no panel effect” that is “no significant difference across units”. The results with p-values of 0.79, and 0.999 negate the results of the Hausman test, thus confirmed the inappropriateness of the Fixed Effect that there is no panel effect for both Models. Therefore, Pooled OLS was adjudged the most appropriate technique and was used for the analyses of both model one and model two.



Breusch-Pagan/Cook-Weisberg Test with ρ -values of 0.00 and 0.00 indicated that both models are not homoscedastic in nature, which implies that the changes in the residuals of the model over the period “t” in both models are not constant. The existence of associations among the coefficients of the model and its residuals were tested using Wooldridge test for serial autocorrelation as an unhealthy association result to the error terms being smaller than expected and the co-efficient of determination being higher than normal. The statistics derived with ρ -values of 0.01 and 0.04 negate the null hypothesis which states that there is no first order autocorrelation. This implies that there is autocorrelation problem among the series in both models. Based on the results of the diagnostic tests carried out, both Model One and Model Two were estimated using Pooled Ordinary Least Square with Cluster Standard Errors.

Regression results and discussions

The result of the regression model presented in Table 3 (Model One) evidenced that Account Collection Period (ACP) has significant positive effect on Return on Asset (ROA) ($\alpha = 0.157$, $\rho=0.00$). A unit increase in ACP would result in a 15.7% increase in ROA while Account Payable Period (APP) and Inventory Turnover Period (ITP) negatively but insignificantly influence ROA. The explanatory powers of the independent variables reflect that the combined changes in the independent variables yield 22% variation in the ROA, while the remaining 78% changes in ROA is caused by other factors not captured in this model. The probability of the F-test (ρ -values of 0.00) showed that working capital measured as Account Collection Period (ACP), Account Payable Period (APP) and Inventory Turnover Period (ITP) significantly affects the profitability of the listed hotel companies in Nigeria.

When the control variables (Inflation (INFL) and Exchange Rate (EXCR) were introduced, the result of the regression as shown in Table 3 (Model Two) indicated that Account Collection Period (ACP) has significant positive effect on Return on Asset (ROA) ($\alpha = 0.150$, $\rho=0.00$); a unit increase in ACP would result to 15% increase in ROA; Inflation also has positive but insignificant effect; while Account Payable Period (APP), Inventory Turnover Period (ITP) and Exchange Rate (EXCR) exert negative but insignificant influence on ROA. The explanatory powers of the independent and control variables reflect that the combined changes in the independent and control variables yield 26% variation in the ROA, while the remaining 74% changes in ROA is caused by other factors not captured in this model. The probability of the F-test (ρ -values of 0.00) showed that working capital with the controlling effect of Inflation (INFL) and Exchange Rate (EXCR), significantly affects the profitability of listed hotel companies in Nigeria.

The comparative analysis of the two models (with and without control variables) with multiple coefficients of determination of 22% and 26% signified the controlling effect of INFL and EXCR in the model; which implies that 4% additional variation in ROA is an indication of the inclusion of INFL and EXCR as control variables. The 4% increment in the coefficient of determination prior and after the inclusion of inflation and exchange rate as control variables evidenced that INFL and EXCR controlled the relationship between working capital and profitability of listed hotel companies in Nigeria.

Discussions

The findings of this study revealed that working capital significantly affects return on assets; this is consistent with the reports of Matoke and Muturi (2017) which opined that working capital management plays a significant role in better performance of business entities; likewise, Shalid and Amir (2017) opined that working capital is a necessary tool for either a financial or non-financial organization to make decisions. Similarly, Nyamweno and Olweny (2014) and Omari et al. (2017) concluded that working capital drives the earnings of a firm. It was also



shown that a significant positive relationship exists between Account Collection Period (ACP) and return on assets (ROA). This supported the report of the study of Agha (2014) conducted in Pakistan but while this study found a significant effect, Agha reported an insignificant positive effect of ACP on ROA. On the contrary, the findings negate the report of Mansoori and Muhammad (2012) conducted in Singapore which reported a negative impact of ACP on Return on Assets. An insignificant negative relationship was obtained between Account Payable Period, Inventory turnover period and return on assets of listed hotel companies in Nigeria. The findings negate the assertion of Agha (2014) which declared insignificant positive effect of APP and ITP on ROA. The significant combined effect of working capital measured as Account Collection Period (ACP), Account Payable Period (APP) and Inventory Turnover Period (ITP) on ROA of listed hotel companies in Nigeria as obtained in this study corroborates the reports of Eya (2016) and Salman et al. (2014) conducted in Nigeria which also reported that working capital has a significant effect on ROA. The findings of this study contradict the reports of Mansoori and Muhammad (2012) conducted in Singapore and Agha (2014) carried out in Pakistan; while this study found a significant effect, Mansoori and Muhammad (2012) and Agha (2014) reported an insignificant relationship between working capital and ROA.

The findings of this study revealed that inflation has an insignificant positive effect on Return on Assets of listed hotel companies in Nigeria while exchange rate exerted a significant negative effect. This can be deduced from the fact that the majority of recipes for dessert dishes are imported inventories thus would have been affected by the hike in the exchange rate in recent times and fluctuations over time. The controlling effect of Inflation (INFL) and Exchange Rate (EXCR) tested in Model Two depicted a negative impact of exchange rate on ROA. The persistence rise in the exchange rate of a United States Dollar to Naira over the years resulted in high operating cost, thus negatively affected the ROA of listed hotel companies in Nigeria.

To the management of the sampled firms and other companies in related businesses, this study reiterates and underscores the fact, that exchange rate negatively affects the returns generated and reported by the firm. The management should consider the use of substitutes for their goods (inventory) which are produced within Nigeria to nullify the negative effect of the exchange rate, reduce operational cost, and yield improvements in the profitability. The study exposes the threat that inflation and exchange rate pose on the economy of the nation. The persistent increase in general price levels of goods as well as a high exchange rate is a challenge to the growth of indigenous companies because it leads to high operational costs. The government should find means of regulating the monetary policies in favour of the establishment, growth, and survival of indigenous companies especially hotel companies. Also, the performance of this sector of the economy can be improved if government boosts the tourism sector through improvement in infrastructure, provision of enabling business environment, as well as provision of secured society for foreigners to operate safely. The negative though the insignificant impact of account payable period is an indication of the effect of the credit policy of suppliers of these companies on the performance of their businesses. The suppliers of the hotel companies should relax their credit policy to be at equilibrium of favouring both the companies and the suppliers' entity.

Conclusion and recommendations

The study examined the nature and degree of impact of working capital on the profitability of listed hotels\lodging companies in Nigeria. It also investigated the controlling impact of inflation and exchange rate in the relationship between working capital and profitability of the four (4) listed hotel. companies in Nigeria within the periods of nineteen years (2000-2018). The result of all the analyses carried out revealed that working capital significantly affected the



profitability of hotels companies listed on the Nigerian Stock Exchange. It is evidenced that inflation and exchange rate impacted on the relationship between working capital and profitability of listed hotel companies in Nigeria. This study justified the application of resource-based view theory in establishing the relationship between working capital and profitability; thus, contributed to wide acceptability and application of the theory in studies on financial management. It was evidenced that effective utilization of resources made available to the managers, especially fund would lead to improved profitability.

Based on the findings of this study, it is recommended that managers should ensure that inventories that can be stored for long without being spoilt should be purchased in bulk to enjoy quantity discount and avoid buying expensively due to inflation and exchange rate fluctuations. Also, the credit policy of these firms should be set in such a way to have effective liquid fund management. Suppliers should be persuaded to relax the policy on settlements of payables by extending the payment periods as evidence that it negatively affects the profitability of the listed hotel. companies. It was observed that there were periods of the long repayment period of payables, the management needs to strike a balance on this to avoid loss of trust in the firms by the suppliers, as this would lead to their capital being tied down. Management should consider substitutes for their inventory and consumables which are locally produced to avert the negative impact of the high exchange rate.

References

- Agarwal, P. K. & Varma, S. K. (2013). Working capital management and corporate performance: Evidence from a study of Indian firms. *International Journal of Indian, Culture and Business Management*, 7(4), 552-570.
- Agha, H. (2014). Impact of working capital management on profitability. *European Scientific Journal*, 10(1), 374-381.
- Agwor, T. C. & Akani, F. F. (2017). Working capital management and effective performance of hospitality firms in Rivers State, Nigeria. *International Journal of Economics, Commerce and Management*, 5(12), 450-459.
- Ahmed, S., Ahmed, F. & Kanwal, S. (2018). Corporate profitability-working capital management tie: empirical evidence from pharmaceutical sector of Pakistan. *Asian Journal of Empirical Research*, 8(7), 259-270.
- Akindele, J. A. & Odusina, A. O. (2015). Working capital management and firm profitability: Evidence from Nigerian quoted companies. *Research Journal of Finance and Accounting*, 6(7), 148-153
- ALShubiri, F. N. (2011). Analysis the relationship between working capital policy and operating risk: An empirical study on Jordanian industrial companies. *Hebron University Research Journal*, 6(1), 287-306.
- ALShubiri, F. N. (2011). The effect of working capital practices on risk management: Evidence from Jordan. *Global Journal of Business Research*, 5(1), 39-54.
- Aminu, Y. & Zainudin, N. (2015). A review of anatomy of working capital management theories and the relevant linkages to working capital components: a theoretical building approach. *European Journal of Business and Management*, 7(2), 10-19.
- Arif, T. M., Jannat, K. N. & Anwar, S. M. (2016). Financial statement and competitive analysis: A study on tourism and hospitality industry in Bangladesh. *International Journal of Financial Research*, 7(4), 180-189.
- Athambawa, J. (2015). Effects of working capital management on firm profitability: Empirical evidence from Sri Lanka. *International Journal of Managerial and Financial Accounting*, 7(1), 26-37.



- Autukaite R. & Molay E. (2011), Cash holding, working capital and firm value: Evidence from France. *International Conference of the French Finance Association*, 5(1), 11-13.
- Azeez, O., Abubakar, M. & Olamide, F. (2016). Analysis of the effect of working capital management on profitability of listed Nigerian conglomerate companies. *FWU Journal of Social Sciences*, 10(1), 10-20.
- Baltagi, B. H. (2011). *Econometrics*, (5th Ed.). Berlin, Heidelberg: Springer-Verlag.
- Banos, C. S., Garcia, T. P. J. & Martinez, S. P. (2014). Working capital management, corporate performance, and financial constraints. *Journal of Business Research*, 67(3), 332-338.
- Bansal, S. & Khosla, D. (2015). Working capital management of hotel industry in India: An analysis. *International Journal of Research*, 2(2), 442-453.
- Barney, J. B. (2001). Is the resource- based ‘view’ a useful perspective for strategic management research? Yes. *Academy of Management Review*, 26(1), 41–56.
- Bhunia, A. & Das, A (2015). Underlying relationship between working capital management and profitability of pharmaceutical companies in India. *American Journal of Theoretical and Applied Business*, 1(1), 27-36.
- Block, B. S. & Hirt, G. A. (2009). *Foundation of Financial Management* (9th Ed.). New York, NY: McGraw-Hill
- Brigham, F. & Houston, F. (2003). *Fundamentals of Financial Management* (10th Ed.). New York, NY: McGraw-Hill Inc.
- Chepkoech, Z. M., Chenuos, N. K. & Kosgei, D. K. (2015) Green procurement strategies as determinants of financial performance: Evidence from small and medium enterprises in Uasin-gishu County, Kenya. *International Journal of Small Business and Entrepreneurship Research*, 3(2) 1-15
- Chyntia, E., Indriani, M. & Saputra, M. (2018). Effect of intellectual capital to financial performance and market value company listed in Indonesia stock exchange (Idx) year 2010-2015. *Account and Financial Management Journal*, 3(2), 1323-1330
- Deloof, M. (2003). Does working capital management affect profitability of Belgian Firms? *Journal of Business Finance and Accounting*, 30(3&4), 573-588.
- Egbide, B. (2009). Working capital management and profitability of listed companies in Nigeria. *Nigeria Research Journal of Accountancy*, 1(1), 44-53.
- Erin, O., Okoye, L., Modebe, N., Achugamonu, U. & Ado, A. (2016). Working capital management and the performance of consumer and industrial goods sectors in Nigeria. *Journal of Contemporary Accounting and Security Studies*, 1(1), 179-192.
- Eya, C. I. (2016). Effect of working capital management on the performance of food and beverage industries in Nigeria. *Arabian Journal of Business and Management Review*, 6(5), 1-7.
- Gharaibeh, A. M. O. (2015). Empirical evidence of the determinants of commercial banks’ profitability in Bahrain. *Journal of Emerging Trends in Economics and Management Sciences*, 6(5), 299-314.
- Gill, A., Biger, N. & Mathur, N. (2010). The relationship between working capital management and profitability: Evidence from the United States. *Business and Economics Journal*, 10(1), 1-9.
- Ilaboya, O. J. & Ohiokha I. F. (2016). Firm age, size and profitability dynamics: A test of learning by doing and structural inertia hypotheses, *Business and Management Research*, 5(1), 29-39



- Imhanzenobe, J. O. (2020). Managers' financial practices and financial sustainability of Nigerian manufacturing companies: Which ratios matter most?, *Cogent Economics & Finance*, 8(1), 1724241.
- Islam, M. & Nisshiyama, S. (2016). The determinants of bank profitability: Dynamic panel evidence from South Asian countries. *Journal of Applied Finance and Banking*, 6(1), 77-97.
- Jakpar S., Tinggi M., Siang, K., Johari A., Myint, T. & Sadique, M. (2017). Working capital management and profitability: evidence from manufacturing sector in Malaysia. *Journal of Business and Financial Affairs*, 6(2), 1-9.
- Johnson, G., Scholes, K. & Whittington, R. (2006). *Exploring Corporate Strategies*. (Seventh edition), Harlow, England: Pearson Education Limited.
- Kajola, S. O., Nwaobia, A. & Adedeji, S. B. (2014). Working capital management and firm performance: Evidence from Nigerian listed firms. *The International Journal of Humanities & Social Studies*, 2(4), 121-129.
- Kajola, S. O., Sanyaolu, W. A., Alao, A. & Ojunrongbe, O. J. (2019). Liquidity and profitability: Evidence from the Nigerian Banking Sector. *Accounting and Taxation Review*, 3(2), 1-12
- Kasozi, J. (2017). The effect of working capital management on profitability: A case of listed manufacturing firms in South Africa. *Investment Management and Financial Innovations*, 14(2-2), 336-346.
- Lazaridis, I. & Tryfonidis, D. (2006). Relationship between working capital management and profitability of listed companies in the Athens stock exchange. *Journal of Financial Management and Analysis*, 19(1), 26-35.
- Makori, D. & Jagongo, A. (2013). Working capital management and firm profitability: Empirical evidence from manufacturing and construction firms listed on Nairobi securities exchange, Kenya. *International Journal of Accounting and Taxation*, 1(1), 1-14.
- Mansoori, E. & Muhammad, D. J. (2012). The effect of working capital management on firm's profitability: Evidence from Singapore. *Interdisciplinary Journal of Contemporary Research in Business*, 4(5), 23-45.
- Margaretha, F. & Supartika, N., (2016). Factors affecting profitability of small-medium enterprises (SMEs) firms listed in Indonesia stock exchange. *Journal of Economics, Business and Management*, 4(2), 132-137.
- Matoke, E. & Muturi, W. (2017). Effects of working capital management on financial performance: A case study of hospitality industry in Kisii town, Kenya. *International Journal of Social and Information Technology*, 3(2), 1752-1769.
- Muhammad, N. & Imran, K. (2015). The effect of selected financial ratios on profitability: An empirical analysis of listed firms of cement sector in Saudi Arabia. *Quarterly Journal of Economics Research*, 1(1), 1-12.
- Nailal, H. & Rika, D. (2016). The analysis of financial performance on net profit margin at the coal company. *International Journal of Management and Applied Science*, 2(4), 105-108.
- Nikolaos, G., Vassilis, A. & Georgios, N. (2009). A theoretical framework contrasting the resource-based perspective and the knowledge-based view. *European Research Studies*, 12(3), 177-190.
- Nteere, E. N. (2014). The effect of working capital management on the profitability of the hotel industry in Kenya: A study of five-star hotels in Nairobi. An unpublished MSc Dissertation in Business Administration, University of Nairobi.



- Nyamweno, C. N. & Olweny, T. (2014). Effect of working capital management of firms listed at the Nairobi securities exchange. *Economics and Finance Review*, 3(11), 1-14.
- Odero, B. O. (2014). Effect of working capital management on financial performance of five-star hotels in Nairobi County. An unpublished thesis for the award of master of business administration from the school of business, University of Nairobi, Kenya.
- Olaniyi, T. A., Muhammad, A. A. & Fagbemi, T. O. (2016). Analysis of the effect of working capital management on profitability of listed Nigerian conglomerate companies. *FWU Journal of Social Sciences*, 10(1), 10-20.
- Omari, R. A., Soda, M. Z., Razzak, A. & Al-Rawashdeh, F. (2017). The impact of profitability ratio on gross working capital of Jordanian industrial sector. *International Journal of Applied Business and Economic Research*, 15(26), 421-428.
- Ongore, V. O. & Kusa, G. B. (2013). Determinants of financial performance of commercial banks in Kenya. *International Journal of Economics and Financial Issues*, 3(1), 237-252.
- Onijingin, K. (2017). Competitive dynamics and corporate performance of selected flour milling companies in Nigeria. An unpublished PhD thesis in Business Administration, Babcock University Ilisan-Remo, Ogun State, Nigeria.
- Onyango, F. & Ngahu, S. (2018). Influence of working capital management on financial distress in hospitality industry (A study of four and five-star hotels in Nairobi County). *Journal of Economics and Finance*, 9(3), 52-59.
- Pandey, I. M. (2010). *Financial Management*, (5th Ed.). New Delhi India: Vikas Publishing House PVT Ltd
- Pattitoni, P., Petracci, B. & Spisni, M. (2014). Determinants of profitability in the EU-15 area. *Applied Financial Economics*, 24(11), 763-775.
- Penrose, E. T. (1959). *The Theory of Growth of the Firm*. (Second Ed.), Blackwell: Oxford.
- Ponsian, N., Chrispina, K., Tago, G. & Mkiibi, H. (2014). The effects of working capital management on profitability. *International Journal of Economics, Finance and Management Sciences*, 2(6), 347-355.
- PwC (2018). Hotels outlook: 2018-2022: South Africa – Nigeria – Mauritius – Kenya – Tanzania. Available at www.pwc.co.za/outlook [Retrieved 28 February 2019].
- Salauddin, D. A. (2001). Profitability of pharmaceutical companies of Bangladesh, *The Chittagong University Journal of Commerce*, 16(1), 54-67.
- Salman, A., Folajin, O. & Oriowo, A. (2014). Working capital management and profitability: A study of selected listed manufacturing companies in Nigerian stock exchange. *International Journal of Academic Research in Business and Social Sciences*, 4(8), 287-295.
- Spanos, E. & Lioukas, S. (2001). An examination into the causal logic of rent generation: contrasting Porter's competitive strategy framework and the resource-based perspective. *Strategic Management Journal*, 22(10), 907-934.
- Takon, S. M. & Atseye, F. A. (2015). Effects of working capital management on firm profitability in selected Nigerian quoted companies. *International Journal of Economics, Commerce and Management*, 3(10), 414-438.
- Uremadu, S. O., Egbide, B. & Enyi, P. E. (2012). Working capital management, liquidity and corporate profitability among quoted firms in Nigeria Evidence from the productive sector. *International Journal of Academic Research in Accounting, Finance and Management Science*, 2(1), 80-97.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.