

CASH EQUIVALENTS AND CASH HOLDINGS OF FOOD AND BEVERAGE FIRMS IN NIGERIA

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Abstract

This study examined influence of cash equivalents on cash holdings of food and beverage sector of Nigeria's manufacturing industry. The study specifically examined the effect of current assets and liquid assets on cash holdings. *Ex-post facto* research design was utilized. Judgmental sampling technique was used to select four firms from a population of twelve listed food and beverage firms in Nigeria. Data for a ten-year period (2008-2017) were used for analysis. The study employed regression model to evaluate the effect of current assets and liquid assets on cash holdings. Findings revealed a positive but non-significant impact of current assets and liquid assets on cash holdings, suggesting the complex nature of cash management decisions within the food and beverage firms. The implication of this finding is that cash equivalents of firms must be given adequate attention during financial planning. The study concluded that cash equivalents exert positive effects on cash holdings. It was recommended that adequate management of cash equivalents should be embarked upon by corporate firms to enhance their profit making potentials.

Introduction

In the dynamic landscape of business operations, effective cash management remains a cornerstone of financial decision-making, particularly for firms operating in the food and beverages sector in Nigeria. Cash, as a vital current asset, serves as the lifeblood of businesses, facilitating day-to-day operations, investment opportunities, and strategic decision-making (Pandey, 2010). In this context, the management of current assets and liquid assets assumes paramount importance, as they directly influence the liquidity position and financial health of firms.

Current assets represent the resources that can be readily converted into cash within a short time frame, including cash equivalents, accounts receivable, and inventory (Orji, 2009). Liquid assets, on the other hand,

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encompass those assets that can be quickly converted into cash without significant loss of value, such as marketable securities and short-term investments. Understanding the relationship between current assets, liquid assets, and cash holdings is crucial for optimizing cash management practices and ensuring the financial stability of food and beverages firms in Nigeria.

Given the dynamic nature of the Nigerian business environment, characterized by fluctuating market conditions, regulatory changes, and economic uncertainties, effective cash management becomes even more challenging for firms operating in the food and beverages sector. These firms often face unique operational challenges related to production cycles, distribution networks, and market competition, which necessitate prudent management of current and liquid assets to maintain adequate liquidity levels and support sustainable growth (Louge, 2009).

In Nigeria, the food and beverages industry plays a significant role in the country's economy, contributing to employment generation, GDP growth, and foreign exchange earnings. With a diverse range of products catering to domestic and international markets, firms operating in this sector face various challenges related to production, distribution, and market competition. Effective cash management is vital for navigating these challenges and capitalizing on emerging opportunities.

However, despite the critical importance of current assets and liquid assets in shaping cash holdings and overall financial performance, there is a notable gap in empirical research focusing on the specific dynamics within the Nigerian food and beverages industry. Limited studies have explored the nuanced relationship between current assets, liquid assets, and cash holdings, particularly within the context of the unique challenges and opportunities faced by food and beverages firms in Nigeria.

Statement of the Problem

Without a clear understanding of how variations in current assets and liquid assets impact cash holdings, firms may struggle to effectively allocate resources, leading to suboptimal financial performance and increased vulnerability to market risks (Udu & Agu, 1993).

Furthermore, the lack of empirical research on this topic limits the ability of food and beverages firms in Nigeria to benchmark their cash management practices against industry best practices and identify areas for improvement. By examining the effect of current assets and liquid assets on cash holdings, this study aims to fill this gap in the literature and provide actionable insights that can inform strategic decision-making, enhance financial sustainability, and promote long-term growth and competitiveness within the Nigerian food and beverage industry.

Objectives of the Study

The general objective of the study is to examine the effects of cash equivalents on cash holdings of food and beverage firms in Nigeria. However, the specific objectives are:

- To analyze the effect of current assets on cash holdings of food and beverages firms in Nigeria.
- To examine the impact of liquid assets on cash holdings of food and beverages firms in Nigeria.

Review Of related literature

This consists of cash items that will normally be converted into cash within one year and items that items that will be used within one year (Hraee, Charles & Bille, 1986). It will be important to remark that sometimes inventories as one of the items of currents assets will change values in quantity or value but may not be sold within a financial year but spills over to the following year i.e. could be converted into liquid within days and months. It is important to firms' survival because the funds need to pay bills and meet expenses. In these study current assets comprises of all other current assets items including inventories.

Liquid Assets

Liquid assets can also be interchangeably called quick assets. This includes all items in the financial current assets viz; cash, marketable commodities, accounts receivable etc. excluding inventories. In accounting format for determining the ratio at which that a firm can settle its immediate financial responsibilities with the ratio of;

$$\frac{\text{Total current assets} - \text{inventories}}{\text{Total current liability}} \\ = \text{Quick ratio.}$$

It is the least liquid of firm's current assets (Orji, 2009).

Cash Holding

In the context of food and beverages firms in Nigeria, the examination of cash holding assumes significance given its implications for financial management and operational resilience. While theoretical perspectives such as Modigliani and Miller's (1958) proposition of cash irrelevance in perfect capital markets provide a foundational framework, the practical realities of Nigeria's financial landscape introduce complexities that warrant closer scrutiny. Market frictions including transaction costs, information asymmetry, and agency costs (Jensen & Meckling, 1976) necessitate a nuanced understanding of cash holding dynamics within the Nigerian context. Empirical studies suggest that cash holding serves as a strategic tool for firms in Nigeria, offering flexibility to exploit profitable investment opportunities while mitigating the high costs associated with external financing (Opler et al., 1999). However, caution must be exercised to prevent excessive cash holdings, which may lead to suboptimal resource allocation and diminished shareholder value in the presence of agency conflicts (Jensen, 1986).

For food and beverages firms operating in Nigeria, cash represents a critical asset facilitating liquidity management and operational agility. As monetary items immediately available for business purposes, cash embodies financial responsiveness and solvency, playing a pivotal role in facilitating transactions and meeting financial obligations. Within the Nigerian business landscape, efficient cash management strategies are essential for optimizing liquidity, navigating market uncertainties, and supporting strategic initiatives. Moreover, the availability and effective utilization of cash resources reflect managerial acumen in deploying financial assets to enhance shareholder value and sustain organizational competitiveness within the unique socio-economic context of Nigeria.

Profitability

In food and beverages firms in Nigeria, profitability stands as a key determinant of economic viability and organizational success. Defined as the ability to generate revenue surpassing costs relative to the capital base, profitability holds strategic importance for firms seeking sustainable growth and competitive advantage. Within the Nigerian context, profitability metrics such as return on assets, return on equity, and return on capital employed serve as critical indicators of financial performance, reflecting the efficiency of resource utilization and value creation. The pursuit of profitability aligns with strategic imperatives aimed at maximizing shareholder wealth, ensuring business sustainability, and contributing to the economic development of Nigeria's food and beverages industry. Through profitability analysis, stakeholders gain valuable insights into a firm's financial health, management effectiveness, and growth prospects, informing decision-making processes and strategic initiatives in Nigeria's dynamic business environment.

Theoretical Review

Pecking order theory

Extending pecking order theory (Myers & Majluf, 1984) to the explanation of the determinants of cash leads to the conclusion that there is no optimal cash level. It is used as a buffer between retained earnings and investment needs. Under this theory, the cash level would just be the result of the financing and investment

decisions. According to this theory, issuing new equities is very costly for firms because of information asymmetries.

Thus, firms finance their investments primarily with internal funds, then with debt (International Journal of Accounting & Business Finance 02 Issue 1 – 2017) and finally with equities. When operational cash flow are high, firms use them to finance new profitable projects, to repay debts, to pay dividends and finally to accumulate cash. When retained earnings are insufficient to finance new investments, firms use their cash holdings, and then issue new debt.

Empirical Review

Farman and Nawaz (2016) studied the determinants of corporate cash holdings among non-financial firms listed on the Nairobi Securities Exchange. They found that profitability, growth opportunities, liquidity, and audit type significantly influenced dividend payout decisions of pharmaceutical companies, while variables like taxation, risk, firm size, and leverage had insignificant effects. Rashid (2012) examined the impact of cash holdings and ownership concentration on firm valuation in Australia. His study revealed a positive relationship between cash holdings and q-ratios, moderated by ownership structure. However, an increase in cash holdings negatively affected firms' market valuation over time. Sorin (2015) investigated cash holdings and firm value among Romanian listed firms, finding that high cash levels could deter investors as they signal a lack of investment opportunities, thus decreasing firm value.

Ogundipe, Ogundipe, and Ajao (2013) explored cash holdings and firm characteristics in the Nigerian market, highlighting significant effects of cash flow, networking capital, leverage, profitability, and investment capital expenditure. Robert (2015) focused on Swedish corporations and the impact of the 2008 financial crisis on corporate cash policies. His study revealed that factors influencing cash holding levels aligned with theories such as the Pecking Order Hypothesis and Trade-Off Model, with limited influence from the financial crisis. Efstathios (2015) examined cash holdings and firm characteristics in the UK market from 1980 to 2012. The study found positive relationships between cash holdings and investment opportunity, while cash flow, net working capital, leverage, and firm size negatively affected cash ratios.

Augusto (2014) explored corporate cash holdings in Portuguese companies, finding support for the trade-off theory in explaining the evolution of liquidity levels. Governance characteristics and the impact of the 2008 financial crisis were also examined. Nenu and Vintilă (2014) analyzed cash holdings among firms listed on the Bucharest Stock Exchange, noting a positive correlation with previous cash levels and a negative relationship with leverage and tangible assets. Felix (2016) conducted a meta-regression analysis to investigate differences in the influence of firm characteristics on cash levels across geographic regions. The study found regional variations, with factors such as growth opportunities and governance quality influencing cash reserves differently.

Cuong (2019) investigated the optimal cash holding ratio for non-financial firms listed on the Vietnam stock exchange, finding a nonlinear relationship between cash holdings and firm performance. A proportion of cash holdings within a threshold contributed to improved efficiency, beyond which further increases diminished performance. Ogundipe, Salawu, and Ogundipe (2012) examined cash holding determinants among Nigerian quoted firms, highlighting significant relationships with firm size, net working capital, return on assets, and growth opportunities. Chadwick and Saif (2015) analyzed the macroeconomic determinants of cash holdings in US firms from 1960 to 2007, noting the influence of inflation and documenting a cash level target at the firm level.

Ratnam and Nagejeyakunaran (2017) investigated the relationship between cash holdings and corporate performance in Sri Lanka, finding a positive correlation between cash holding and firm performance. Venkat, Tony, and Xin (2014) explored how the organizational structure of firms affects cash holdings, with diversified

firms found to hold significantly less cash than focused counterparts due to complementary growth opportunities and active internal capital markets. Akinyomi and Olagunju (2013) examined the effect of firm size on the profitability of Nigerian manufacturing firms, finding a positive relationship between firm size and profitability. Sulaman et al. (2014) investigated the determinants of cash holdings among Pakistani firms, revealing significant effects of firm size, board size, net working capital, and investment on corporate cash levels.

Materials and Methods

The study adopted *ex-post facto* research design in examining the effects of cash equivalents on cash holdings of foods and beverage sector in Nigeria. Secondary data from published annual financial statements of the selected firms for the period 2008-2017 were utilized. From a population of twelve listed food and beverage firms in Nigeria, four firms are selected using convenient sampling technique based on the availability and consistency of their annual financial reports. The selected firms are Dangote Flour Mill Plc, Nascon, Guinness Nigeria Plc, and Nigeria Breweries Plc. Regression model was employed using Arellano and Bond (AB, 1991) generalized method-of-moments (GMM) estimator for the analysis after some diagnostic tests.

RESULTS

Hypothesis 1: Current assets have no effect on the cash holdings of the food and beverage firms.

Table 1: Effect of Current Assets on the Cash Holding of Food and Beverage Firms in Nigeria.

Variable	Coefficient	z-stat.	Probability
Incash_hold(-1)	-0.8117506	-11.87	0.000
Incurr_ass	3.047808	21.08	0.000
Cons	-24.18403	-17.3	0.000

Source: Authors' computation, 2024 using Stata 14.

From table 1 above, the probability value for the coefficient of current assets as shown is less than 0.05(0.000<0.05). Since the p-value is less than 0.05, we reject H_0 and conclude that current assets have significant effect on cash holdings of the food and beverage firms.

Hypothesis 2: Liquid assets have no effect on the cash holdings of the food and beverage firms.

Table 2: Effect of Liquid Assets on the Cash Holding of Food and Beverage Firms in Nigeria.

Variable	Coefficient	z-stat.	Probability
Incash_hold(-1)	-0.9264085	-3.57	0.000
Intotal_ass	2.748396	5.1	0.000
Cons	-19.36703	-2.46	0.845

Source: Authors' computation, 2024 using Stata 14.

From table 2 above, the probability value for the coefficient of liquid assets as shown is greater than 0.05(0.845<0.05). Since the p-value is greater than 0.05, we accept H_0 and conclude that liquid assets have no significant effect on cash holdings of the food and beverage firms.

Discussions of Findings

The result reveals that current assets have a positive effect on cash holding within the food and beverage sector. This finding aligns with the result of previous research by Ghada (2016), Borric and Ahba (2015), and Osundina (2014), indicating consensus among scholars regarding the relationship between firm size indicators and cash holdings. Descriptive statistics further illustrate the variability of these variables, with current assets demonstrating the most clustered distribution, suggesting a more consistent impact on cash holding compared to other factors like liquid assets. However, the Jarque-Bera test results indicate that only total assets and net profit

before tax exhibit normal distribution, implying potential deviations in the distribution patterns of current assets and liquid assets.

Moreover, the discussion highlights conflicting findings regarding the impact of firm size on cash holding. While some studies, such as Ogundipa, Salowu, and Ogundipa (2012), support a negative relationship between firm size and cash holding, others, including Gill and Shaha (2012) and Enyew (2016), suggest a positive association. Additionally, Rizwan Ahmad Qu Ullah and Kumani's research underscores the nuanced nature of this relationship, noting a significantly negative correlation with non-cash liquidity assets but a significantly positive relationship with cash holdings. These divergent findings underscore the complexity of factors influencing cash management decisions within the food and beverage industry, warranting further exploration and analysis to elucidate the underlying mechanisms.

Current assets are shown to be positively related with cash holding. Therefore, it is expected that a firm with larger current assets should have larger cash holding. For one percent rise in the current asset of a firm, the results show that the cash holding of firm will go up by about 3.05 percent. This is supported by Gill and Islam (2012), Ogundipa, Salwu and Ogundipa (2012) and Aiyegbusi and Akinlo (2016), while Rizwan, Ahmadu, Qi, Ullah and Kimani (2017) disagreed with result but held that current assets have negative impact on cash holding. In another study by Ahmed Qi, Ullah and Kimani (2016) concluded that the result to be obtained is subject to efficient liquidity management.

The results also show that liquid assets are positively related with the cash holding. As shown, the coefficient of liquid asset is statistically significant because the probability value for the Z-statistics is much smaller than the one percent level of significance ($0.0001 < 0.01\%$). The coefficient of liquid asset shows that as liquid asset rises, firm holds more cash. This is in consonance with the findings of Daharri (2010). Whereas Ghadi (2016) and Hussain, Gumila and Idris (2016) that strong positive relationship exists between liquid assets and corporate cash holdings.

Conclusion

The variability observed in the distribution of these variables underscores the nuanced nature of their impact on cash holding. While current assets exhibit a more clustered distribution, suggesting a more consistent influence, the distribution of liquid assets appears to be less uniform, indicating potential fluctuations in their effect on cash holdings over time.

Despite the consensus on the positive relationship between current assets, liquid assets, and cash holdings, the discussion also highlights conflicting findings regarding the broader impact of firm size on cash management practices.

Recommendations:

- ❖ **Optimization of cash equivalents:** Firms in the food and beverage sector should prioritize the effective management of their cash equivalents to be able to attend to short term obligations as they fall due.
- ❖ **There should be a good balance among the components of cash equivalents:** Every food and beverage firms in Nigeria should maintain a good balance among the various components of cash equivalents. This gives the required financial stability to the firms to be able to withstand vulnerabilities prevalent in the sector.

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