

LIQUIDITY FUNDAMENTALS AND STRATEGIC PROSPECTS OF LIQUID INVENTORY BUSINESS: EVIDENCE FROM LENCON COMPANY IN WUKARI

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Abstract

Over the years, not much endeavour empirically projects the dynamics and strategic prospects of industries in Nigeria's Emerging Business Communities (EBC). Relatively, Wukari features as EBC in Taraba State of Nigeria, hosting three universities in addition to agribusinesses, banks, and other strategic organizations. Lencon Table Water Company (herein identified as Lencon Company) is an enterprise which uniquely deals on table water (designated as liquid inventory in context). This study examines how liquidity fundamentals correlate with strategic prospects of Lencon Company. Specifically, the study determines how raw material, work-in-process, and finished goods fundamentals (respectively) correlate with turnover prospects. Theoretical foundations anchor on the contributions of Fubara and Agundu (2005), Agundu, Ottih and Reuben (2005), Leach and Melicher (2006), Kazmi (2008), Miller (2010), Agundu (2011), Anichebe and Agu (2013), Agundu and Akpa (2016), Ekanem and Agundu (2017), and Agundu (2019). The target population is 58 respondents, of which 50 are sampled based on Taro Yamane technique; with 48 effectively responding. Descriptive and inferential analyses, aided by Statistical Package for Social Sciences (SPSS) 23, generated results revealing positive and significant correlation between raw materials ($p\text{-value}=0.00 < 0.05$); work-in-process ($p\text{-value} = 0.00 < 0.05$); and finished goods fundamentals ($p\text{-value} = 0.03 < 0.05$) respectively, and turnover prospects. The study, concluding that liquidity fundamentals significantly correlate with strategic prospects ($r=0.75$), recommends that government and stakeholders should optimize economic diversification tendencies by fixing overlapping regulations and frail infrastructure in the economy. Industry managers should harness standard control models, in sync with sustainable management and administration of finance, budgeting, costing and risk management systems, going forward.

Keywords: Inventory, Liquidity fundamentals, Strategic finance, Turnover prospects.

Introduction

As an economy opens up more windows for industry, industrialists are poised to improve on the management of inventory. Poor control leads to loss of customers and loss of turnover, after funds have been invested in liquid effects. With professionalism, the right level is

maintained to check the greys of depreciation, pilferage and wastage.

Anichebe and Agu (2013) assert that inventory elicits decisions bordering on product innovation, distribution, and turnover. Inventory-associated problems are further compounded by technological

progress and exponential boost of industrial capacity to turn in products in greater quantities, with faster and finer multiple designs. The challenge facing many industrialists has to do with contextualizing inventory management to sustain optimum liquidity and profitability. This ensures free flow of materials and timely show of products. Control critically involves procurement, utilization, controlling and coordination of operating assets which find expression in raw material, work-in-process, and finished goods. It justifies the mandate of availing the right operating assets in the right quality and quantity, in the right place at the right time, in furtherance of the production function (Pandey, 2000; Ogbadu, 2009; Temeng, Eshun & Essey, 2010).

Efficacious inventory flow under efficient and effective supply chain management is a strategic success factor in defining turnover prospects of the industries. This entails balancing supply with demand, with industrialists' desire to have adequate levels to satisfy the demand, on the one hand, and they not wanting to carry too much operating assets, on the other hand, because of holding cost (Coyle, Bardi & Langley, 2003). This strategically underscores proactivity in maintaining levels that accommodate unexpected fluctuations, which is crucial for turnover prospects not to be jeopardized.

In this study, turnover prospect is proxy for strategic prospects as it provides sound basis for reinventing the performance of industries; hence it examines how liquidity fundamentals correlate with strategic prospects, focusing on Lencon Table Water Company (herein identified as Lencon Company) in Wukari in Taraba State of Nigeria. Wukari is an

Emerging Business Communities (EBC) hosting three universities, many agribusinesses, banks, and other strategic (commercial/industrial) organizations. Lencon Company visibly deals on table water (contextualized herein as liquid inventory). The specific research objectives are to:

1. Ascertain the correlation of raw material liquidity fundamental and turnover prospects,
2. Analyse the correlation of work-in-process liquidity fundamental and turnover prospects,
3. And determine the correlation of finished goods liquidity fundamental and turnover prospects.

The hypotheses elicited are:

H₀₁: Raw material liquidity fundamental is not significantly correlated with turnover prospects,

H₀₂: Work-in-process liquidity fundamental is not significantly correlated with turnover prospects, and

H₀₃: Finished goods liquidity fundamental is not significantly correlated with turnover prospects.

Literature Review

Inventory denotes the value of raw materials, work-in-process, and finished goods carried in the course of commercial/industrial operations. Raw materials go into the production process and eventually become transformed into final products; work-in-process are partly processed items on the production line; while finished goods are completely produced assets ready for distribution. Inventory management is concerned with maintaining these assets in order to incur the least cost (Kwadwo, 2015).

It encompasses various activities envisioned to ensure that customers have

the needed products. By this, industrialists coordinate purchasing, manufacturing and distribution functions with a view to meeting operational needs and availing desired products to customers (Miller, 2010). The scope of inventory management caters for requirements relating to reorder quantity, replenishment lead time, returnable/defective goods, demand forecasting, carrying cost outlay, asset management, physical inventory, available space, inventory valuation, future inventory pricing, and quality management analyses.

Having a level of inventory in store is expensive, because of costs associated with tied-up capital, warehousing, protection, deterioration, loss, insurance, packaging, administration, and associated tendencies. Advocates of Just-in-Time principle (JIT), thus, expect operating assets to arrive *just in time*, such that, effectively, no inventory is needed, and there is no cause to face the challenge of temporary storage of inventory (Coyle, Bardey & Langley, 2003; Ashonjo, 2021). However, industrialists still have to grapple with issues bordering on diversity of products in terms of colour/design, package type, size, etc. Where accurate demand forecast is afforded, aggregate demand has to be broken down into sub-total demand forecasts to fulfil final customer's order; avoiding the twin lapses (extremes) of stock-out and/or overstock. To boost profitability, therefore, industrialists seek to prevent wastage of time and raw materials; ensuring that industrial capacity is not idle or unnecessarily underutilized (Agundu, 2011; Agundu, 2019). Excess or inadequacy of inventory affects:

1. Productive activity,
2. Turnover capacity, and
3. Overall corporate profitability.

To ensure optimality, *ordering costs* and *holding costs* are to be balanced, leveraging the functionality of *Economic Order Quantity (EOQ)*. Holding costs, are particularly numerous, including but not limited to interest on capital invested in inventories, insurance cost, obsolescence, wastage resulting from storing inventories, and costs attributed to re-ordering, lost sales, lost production, orders not executed, customers' dissatisfaction and threat of market share loss, fixed outlay burden, idle workforce wages, and underutilized machine capacity. These incidentally reduce profit and profitability if treated with levity. On a brighter note, when inventory management is well implemented, inventory costs are drastically minimized, culminating in maximized turnover. This is further sustained by accentuating production and distribution performance standards. The EOQ fosters the process of minimizing the costs associated with acquiring and carrying operating assets, but the industry manager must ensure the desired level of inventory (Arnold, 2000; Agha, 2010; Egberi & Egberi, 2011).

Empirical studies credited to scholars in this subject-area have more insights for professionals to savour. Ogbo, Onekanma and Wilfred (2014) examined the effect of inventory management on organizational performance of 7-Up Bottling Company, Enugu; underscoring the significance of efficient inventory control system to organizational performance. The results affirmed the merit of flexibility in inventory control, as compliant organizations stand to gain easy storage and retrieval of material, improved turnover, and reduced operating cost.

Edwin and Memba (2015) analysed the relationship between inventory management and profitability of cement

manufacturing firms in Kenya, using cross-sectional data for the period, 1999-2014, as contained in the annual reports of those listed on the Nairobi Securities Exchange. Ordinary Least Squares (OLS) multiple regression model was adopted in data analysis; contextualizing with variables such as inventory turnover, inventory conversion period, Inventory levels, storage cost, size of firm, gross profit margin, return on assets, and firm's growth. The results indicated direct relationship between firm's size and storage cost, underscoring the need for managers to ensure that the right quantity and quality of inventory is kept in warehouses to hedge against excessive holding cost and stock-out.

Furthermore, other analyses focused on how inventory management affects organizational performance of some firms in Nigeria, operationalizing with frameworks that project the extent to which inventory control affects productivity; demand management is related to customer satisfaction; and JIT mode impacts firm's growth. The outcomes were equally strongly affirmative. For those testing their hypotheses with Pearson Product Moment Correlation technique, the illumination affirmed high connection between the analytical variables, to the effect that inventory management is imperative in commercial/industrial operations. Still, some others who examined the impact of inventory control on organizational performance, in view of concerns on inefficient and uncharted inconsistency in addressing the challenges associated with inventory control, elicited maintenance of optimum levels which is of essence to production continuity, fuller utilization of men and machines, and

capacity to promptly meet customer-specifics.

The results involving t-test further affirmed that inventory control has significant positive impact on the performance parameters, thus contributing meaningfully to economic production quantity and quality, especially, in relation to fundamentals such as budgetary costs, scheduled time to customers, and corporate profitability (Agu & Anichebe, 2003; Godana & Ngugi, 2014).

Methodology

Inventory is a vital component of operating (liquid) assets on the statement of financial position (balance sheet) of organizations. It is more value relevant where managers continuously seek better ways of optimizing investment in assets. Organizations, indeed, are unrelenting in training and retraining personnel in the area of inventory control and strategic financial management with a view to capacitating them for best performance under a functionally efficient inventory management system. Efficient inventory management creates huge turnover which redefine the performance of firms in terms of liquidity and profitability optimization (Syed, Mohamad, Rahman & Suhaimi, 2016).

This is a correlational study, designed to spotlight how liquidity fundamentals correlates with strategic prospects of Lencon Company. Justifications for this framework derive from submissions of social and management science contemporaries, with data collection instrument (questionnaire) that is validity and reliability compliant (Burns & Groove, 2003; Osuala, 2005; Ezeja, 2007). The instrument was administered on 50 out of 58 target respondents (i.e. 18 staff and 40

	Min. Stat.	Range Stat.	Min. Stat.	Max. Stat.	Mean Stat.	Std. E.	S.D. Stat.	Var. Stat.	Stat.	Min. Stat.	Range Stat.	Min. Stat.
FG & firm's growth	47	3	1	4	1.32	.092	.629	.396	2.373	.347	6.614	.681
FG & firm's sustenance.	47	4	1	5	1.85	.139	.955	.912	1.405	.347	2.079	.681
FG & goals accomplishment	47	4	1	5	1.96	.166	1.141	1.302	1.003	.347	.276	.681
Valid N (listwise)	47											

Source: SPSS 23 Computations from Questionnaire

Table 4: Inferential Coefficients for RM

Perspective	Un-std. Coef.		Std. Coef	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.165	.554		2.101	.001
RM liquidity fundamental	2.312	.275	.167	1.132	.002

Source: SPSS 23 Computations

Table 5: Inferential Coefficients for WIP

Perspective	Un-std. Coef.		Std. Coef	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.184	.507		2.336	.004
WIP liquidity fundamental	1.177	.127	.231	1.394	.000

Source: SPSS 23 Computations

Table 6: Inferential Coefficients for FG

Perspective	Un-std. Coef.		Std. Coef	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.509	.524		2.880	.006
FG liquidity fundamental	1.066	.289	.039	.229	.001
R				0.75	

Source: SPSS 23 Computations

For RM liquidity fundamental, the descriptive statistics in Table 1 indicate mean values of 1.36, 2.98 and 1.91; as well as standard deviation values of 0.568, 1.294 and 1.060; among others. For WIP liquidity fundamental, the descriptive statistics in Table 2 indicate mean values of 2.09, 3.32 and 3.04; as well as standard deviation values of 1.316, 1.400 and 1.601; among others. For FG liquidity fundamental, the descriptive statistics in Table 3 indicate mean values of 1.32, 1.85 and 1.96; as well as standard deviation values of 0.629, 0.955 and 1.141; among others. Regarding the test of hypotheses, the results for H_{01} , in Table 4, indicate a significant coefficient of RM liquidity fundamental ($p=0.002<0.05$). The null hypothesis is rejected, in affirmation of the alternate hypothesis which states that RM liquidity fundamental is significantly correlated with turnover prospects.

The results for H_{02} , in Table 5, indicate significant coefficient of WIP liquidity fundamental ($p=0.000<0.05$). The null hypothesis is rejected, in affirmation of the alternate hypothesis which states that WIP liquidity fundamental is significantly correlated with turnover prospects. The results for H_{03} , in Table 6, indicate

significant coefficient of FG liquidity fundamental ($p=0.001<0.05$). The null hypothesis is rejected, in affirmation of the alternate hypothesis which states that FG liquidity fundamental is significantly correlated with turnover prospects. The overarching correlation coefficient of 0.75 is highly positive and significant in statistical analytical terms.

Discussion of Findings

Industrialists engage in economic production which involves transforming raw materials and work-in-process into finished goods to meet human/industrial requirements (Amogu, 2005; Agundu & Akpa, 2016). When raw materials are not available, production is disrupted. The disruption hinders not only production but turnover level, which determines profit and profitability. Also, when production suffers, customers are lost to competitors. However, when excessive inventories are stocked, capital is unduly tied to the organization. Through the process of inventory management, industry managers determine the EOQ (right lot size) for efficient production, distribution and sustainable profitability.

Ama (2001) posits that with proper inventory management, hitch-free

production is afforded in manufacturing concerns, operationally fostering uninterrupted supply chain, hedging buffer provision, and smooth production flow. Furthermore, in this regard, the firm records meaningful boost in:

1. Customer goodwill preservation,
2. Future sales promotion, and
3. Human resource over-stoppage prevention.

Industry managers are also to operate and manage liquidity dynamics using the EOQ, the inventory level, thereby ideally minimizing total inventory ordering costs and holding costs. By this, they equally determine optimal units of an inventory item to order to minimize the total cost associated with its purchase, delivery and storage. The analytical parameters of the EOQ function include total demand for the year, purchase cost of the item, fixed cost per order, and storage cost of the item per year. Nonetheless, workability is guaranteed analytically, provided ordering cost is constant, rate of demand is constant, lead time is fixed, purchase price of the item is constant (i.e. no discount is granted), and replenishment is instantaneous (i.e. the batch is wholly dispatched at once).

The focus of this study is on how liquidity fundamentals correlate with strategic prospects. In the manifest outcomes, raw material liquidity fundamental is significantly correlated with turnover prospects. Thus, unavailability of raw materials disrupts production and consequently truncates output and turnover which fundamentally determine profitability. This stance is supported by the finding of Nweze (2000) that inventory (RM) is significantly linked with organizational prospects, especially profit maximization. Work-in-process liquidity fundamental is also significantly correlated with turnover

prospects. This revelation is in line with the finding of Godana and Ngugi (2014) that having inventory (WIP) in furtherance of the production of goods in the right quality and quantity is of essence to organizational performance. Finished goods liquidity fundamental is significantly correlated with turnover prospects. This outcome is corroborated by the submission of Miller (2010) that inventory (FG) management assures customers of needed items under an efficient supply chain management system. It accentuates effective coordination of purchasing, manufacturing and distribution functions, with strategic emphasis on identifying and specifying the right size, investment and placement of stocked operating assets. Industry managers, in so doing, ensure pragmatic navigation of their enterprise initiatives by being innovative and competitive in the ever-changing and challenging world of business (Agundu, Ottih & Reuben, 2005; Ekanem & Agundu, 2017).

Conclusion and Recommendations

Inventory is a vital part of operating (current) assets critically domiciled in manufacturing industries. Huge funds are invested in them to ensure smooth flow of production and distribution. However, maintaining inventory come with holding (carrying) costs as well as opportunity cost. Efficient inventory control helps in balancing the *pros* and *cons* associated with the decision line. Industry managers who fail to manage inventory efficiently are vulnerable to incidental stock-out, productivity drop, turnover slide, and customer hurt. Managerial inefficiency in handling production circulating assets results in higher inventory costs, longer inventory conversion period, and reduced recycling of funds (liquidity), which cumulatively culminate in stifling of turnover prospects. The essence of

inventory optimization is to have the right goods quality and quantity at the right place and time. Investments in inventory anchor economic activities geared towards enhancing product quality; at times, procured to maintain production, prevent stock-outs and fulfil customer expectations; but where the process is inefficient, portends unnecessary holding cost, such that liquidity (indicative of ability to meet payment demands as they fall due) is severely undermined. In an operating order, underscored by Miller (2010), the profile is as follows:

1. First and most liquid asset is cash, flanked by short-term investments;
2. Second is trade debtors, which is fairly liquid and can be recouped in near future; and
3. Third is inventorying (the least in the current asset log, as they have to be sold, at times on credit and the customers given stipulated credit tenor cash to be realized.

Over all, efficient inventory management, anchoring on the EOQ, enables industry managers to order the right level (quantum) and maintain it all the time; not holding too much, thereby reducing the capital tied down in them. As much as industry managers cannot do without investing in inventory, it is imperative for them to efficiently manage the profile of stockpile in order to:

- Avoid disrupted production,
- Minimize costs,
- Increase customers' satisfaction, and
- Balance liquidity with profitability fundamentals for sustainability.

This has a lot to do with mainstreaming corporate integrity in the creditors and other critical stakeholders' space. This study analysed how liquidity fundamentals

correlate with strategic prospects of Lencon Company, a liquid inventory business in Wukari. The operationalized independent variables are RM, WIP, and FG liquidity fundamentals, while proxy of the dependent variable is turnover prospect. The ensuing revelations affirm a significant correlation between the analytical variables. The study concludes that liquidity fundamentals significantly correlate with strategic prospects of the firm. It recognizes that manufacturers carry inventory for a variety of reasons in performance of functions in the total production system; realizing that it is physically and economically impracticable for industrial items to arrive exactly where and when they are needed. The need to keep some inventory at any point in time, thus, cannot be overemphasized. It compels pragmatic inventory patrol and control under an efficient strategic liquidity management framework (Agundu, 2011). Based on the analytical outcomes, it is vitally expedient for:

- Entrepreneurs should optimize the ideals of inventory management, with strategic systems of finance, budgeting, costing and risk management; and
- Government alongside other macroeconomic stakeholders should make economic diversification work by fixing critical concerns, including overlapping regulation and frail infrastructure in the economy.

Furthermore, for industry managers to afford an enabling environment to survive and thrive, there should be conscientious:

- Stabilization of fiscal and monetary dynamics,
- Minimization of cost of doing business,
- Standardization of infrastructure and industrial security, as well as

- Optimization of operative incentive management dynamics.

Priority should be given to harnessing human, real and financial capital from enterprise owners/industry promoters under a highly auspicious (sustainably catalytic) system of accounting, budgeting, and cost control (Agundu & Akpa, 2016). From industry/entrepreneurial finance perspective, the principles put forward by Leach and Melicher (2006), which make for strategic enterprise stability, sue for greater creativity and frugality, as well as synchronizing investment risk and return in the holistic management of the dynamics of industry liquidity.

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