VENDOR MANAGED INVENTORY ON FINANCIAL PERFORMANCE OF FLOUR PROCESSING SMEs IN NAIROBI CITY COUNTY, KENYA

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ABSTRACT

Small and Medium Sized manufacturing firms involved in processing flour play a key role in mitigating food insecurity issues in most of the economies. Be it developed or emerging ones. However, the Nairobi City County based flour processing Small Medium Enterprises (SME) has not been exempted from declining financial performance in addition to other small firms over the years. Therefore, this inquiry aimed at determining the influence of vendor managed inventory on financial performance of flour processing SMEs in Nairobi County, Kenya; To underpin this investigation, the researcher considered twofold theoretical viewpoints, namely; lean inventory theory and economic order quantity theory. This inquiry incorporated descriptive survey research design to develop the research problem. The 18-Nairobi City County based flour processing Small Medium Enterprises (SME) is the size of the populace selected for the purposes of achieving the study's main objective with the corresponding 18 top officials of the aforementioned SMEs being used as the unit of observation. Further, it should be noted that since the populace was dismal, the researcher planned to rely on survey methodology for data collect purposes. The whole process of collection of the data aforementioned was based on a drop and pick approach whereby structured

questionnaires were used as the tool for that purpose. The research findings portrayed that vendor managed inventory had statistically significant influence on the financial performance of flour processing SMEs in Nairobi City County, Kenya. Majority of the respondents were of the opinion that firms should direct their efforts toward adopting advanced forecasting tools and data analytics, leveraging these technologies to gain better insights into customer demand patterns, ultimately reducing the risks associated with shortages excessive inventory. The study or follows; recommendations were as inventory management comprehensive studies that explore the combined impact of various strategies, including JIT, EOQ, and lean inventory, on financial performance should be conducted. The studies would provide insights into the synergies and trade-offs between these practices. Comparative studies would assess the effectiveness different of inventory management strategies, taking into account their combined application. These studies can help businesses identify the most effective combinations of strategies for their specific contexts.

Keywords: Vendor Managed Inventory; Financial Performance

INTRODUCTION

SMEs are generally small sized firms whose investment and turnover levels fall below certain limits. Despite the relatively smaller revenue margins associated with these businesses, they represent a critical backbone for many global economies. As Gherghina et al. (2020) assert, these enterprises play a substantial part in generating employment besides alleviating poverty. In the developed world, SMEs are acknowledged for their high contribution towards economic growth by promoting new discoveries and generating job opportunities. They contribute substantially to the competitiveness and dynamism of developed countries by introducing new technologies and ideas. On the regional front, SMEs shape the African continent's economic landscape by reducing poverty and helping generate livelihoods for many people (Gherghina et al., 2020). Locally in the Kenyan context, these institutions have been crucial in creating employment opportunities both in the rural and urban areas, translating to increased productivity.

Notwithstanding their significance, especially for developing countries like Kenya, SMEs face multiple challenges. Apart from operational constraints, these institutions tend to have limited access to finance and often grapple with intense competition in the market (Kiiru et al., 2023). These unique challenges highlight the need for a broader comprehension of the failures of these important institutions and the background underlying their financial performance. SMEs in Nairobi County, particularly those involved in flour manufacturing and processing sector face unique issues related to the agricultural and food processing. The financial challenges experiences by SMEs in the flour processing industry required extensive assessment to identify vital improvement areas as suggested by Kiiru et al. (2023). As such, examining the background of financial performance is essential for developing strategies and policies to improve the sustainability and resilience of flour processing SMEs in Nairobi County.

In developing countries like Kenya, SMEs shape the economic landscape by supporting the various aspects of development. As Surya et al. (2021) point out, SMEs drive economic growth by contributing to the gross domestic product (GDP). These enterprises achieve this through their cumulative economic activities. Besides contributing to a substantial percentage of the national income, these activities foster stability and economic growth by creating employment opportunities. In Kenya, SMEs contribute approximately 40% to the GDP since they make up for around 98% of all the businesses in the country (Omondi et al., 2022). These institutions are widely recognized for being highly adaptable and resilient, factors that support the diversification of industries and the creation of more dynamic and robust economic environments.

As a key driver of the Kenyan economy, SMEs generate employment opportunities due to their strong presence in various industries. Besides manufacturing, these institutions are well-established in the services and agricultural industries. This presence makes them a key aspect of employment creation in both rural and urban areas. According to Omondi et al. (2022), SMEs annual job creation rate stands at 30% for all new jobs in Kenya. Likewise, Endris and Kassegn (2022) assert in their study of SMEs roles ensuring economic growth and development

and sustainability in the Sub-Saharan African region, these enterprises absorb a substantial ratio of the labor force, supporting poverty alleviation efforts and socio-economic development.

It is well evident that the SMEs sub-sector have positively contributed to Nairobi County local economy which is well-demonstrated by the presence of diverse economic activities. Kenyan SMEs foster the development of a vibrant ecosystem due to their critical role as growth engines (Omondi et al., 2022). Moreover, they nurture emerging entrepreneurs and foster a culture that supports innovation. In the flour processing sector, these enterprises not only fuel local economic activities but also have helped position Kenya as a competitive player in the international stage.

Effective inventory management is crucial in a company's financial performance. A comprehensive review of the aspects of Vendor Managed Inventory (VMI), Just-in-Time (JIT), and Inventory Forecasting which fall under the inventory management practices domain at both global, regional, and local viewpoint shows that it affects the overall financial performance of firms. By extension, the matter of Just-in-Time (JIT) inventory management is a strategy adopted with one aim of enhancing account levels by harmonizing manufacture and supply with client request. To reduce inventory holding costs, this approach aforementioned is the most appropriate one. It further reduces the lead times, with improvement of operational efficiency. Extensive research conducted by Chen, Ma, and Rong (2019) in China provides substantial evidence supporting the favorable impact of JIT on financial performance. Companies can effectively foster better coordination among suppliers, manufacturers, and customers by embracing JIT principles, thereby resulting in enhanced financial outcomes.

VMI aims to optimize the supply chain, enhance inventory control, and elevate customer satisfaction. According to Ahmadi et al (2018) effective implementation of VMI is associated with notable outcomes leading to improved customer satisfaction, and heightened profitability. The establishment of collaborative partnerships between suppliers and customers assumes a critical role in facilitating successful VMI initiatives, thereby enabling the achievement of optimized inventory levels and favorable financial results.

Precise inventory forecasting ensures effective inventory management and optimizing financial performance. Liu and Gong (2019) underscore the significance of employing advanced techniques. They argued that harnessing the power of data analytics and demand forecasting models yields substantial improvements in inventory management decision-making and financial outcomes. The ability to accurately forecast demand empowers companies to align their inventory levels with anticipated customer requirements, leading to reduced holding costs and increased profitability. Implementing sophisticated inventory forecasting methods, such as employing statistical models and machine learning algorithms, organizations can gain a competitive edge in efficiently managing their inventory and enhancing their financial performance.

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Kontus (2019) established a negative correlation between inventory conversion time and return on assets, market value added as well as cash flow from operations. This reduction in inventory conversion time holds the potential to yield several benefits, including decreased holding costs, reduced risk of stock obsolescence, and improved cash flow. Nevertheless, it is worth noting that the connection that exists amid inventory turnover and profitable performance was deemed insignificant within the context of Sri Lankan manufacturing companies. Hence, additional investigation is imperative to examine the connected influences that may exert any impact on this relationship.

Financial performance of any organization is varied significantly by the aspects of Just-in-Time (JIT), Inventory forecasting and Vendor Managed Inventory (VMI). Hence pegged on this argument, as indicated in the relevant literature. Financial indicators which include return on assets, market value added and cash flow from operations just to mention but a few has been empirically proven to have experienced a direct impacting by JIT principles, integration of VMI practices, and utilization of advanced techniques. Managers are advised to duly acknowledge the pivotal role of efficient stock control in augmenting business performance and consider the implementation of suitable strategies and practices to attain favorable results.

Effective stock control is critical to the victory of businesses in Nigeria. The JIT inventory management method is popular because it reduces waste and boosts productivity. Implementing JIT in Nigerian enterprises reduces inventory holding costs, improves stock in trade, and increases gainfulness, based on research by Abotsi et al. (2023). JIT aids businesses in keeping their stock at just-in-time levels, which reduces the likelihood of stockouts and boosts customer satisfaction. Like in the United States, vendor-managed inventory (VMI) in Nigeria has become increasingly popular. The supplier and the customer can save money on storage fees by using VMI to keep track of stock and reorder items as needed. According to research by Panigrahi et al. (2023), businesses in Nigeria benefit from VMI implementation in terms of their bottom lines. Financial performance can also be improved by using inventory forecasting methods like demand forecasting and sales forecasting, which help businesses make informed inventory selections and keep stock levels reasonable. Improved financial results are possible for Nigerian firms because of JIT, VMI, and inventory forecasting.

Inventory management techniques profoundly affect companies' financial performance in South Africa. The JIT method has become well-liked because of its capacity to lessen the burden of holding stock and boost productivity. According to Madzivhandila (2022), businesses in South Africa that adopt JIT see a diminution in inventory costs, an upsurge in cash flow, and a rise in profits. VMI's widespread use has also been spotted in South Africa, facilitating enhanced communication and cooperation between retailers and wholesalers. Businesses using VMI can better prevent stockouts, allocate resources efficiently, and increase profits (Kwateng et al., 2022). Accurate inventory planning and avoiding surplus stock are two additional ways inventory forecasting approaches like demand forecasting aid financial performance. Financial results for businesses in South Africa can be enhanced by applying JIT, VMI, and inventory forecasting.

In Egypt, JIT has gained popularity as a method to reduce stockpile expenses and boost productivity. According to Abobakr et al. (2022), businesses in Egypt benefit from JIT implementation in the form of lower inventory holding costs, improved cash flow, and higher profits. Egypt is another country that has embraced VMI to help suppliers keep track of stock and reorder when necessary. Increased supply chain coordination, fewer stockouts, and better financial results are all outcomes of using VMI (Bvuchete et al., 2021). Inventory forecasting methods, like demand forecasting, are also instrumental in maximizing stock turnover and minimizing surplus. Financial results for Egyptian businesses improve with JIT, VMI, and inventory forecasting implemented well.

Key financial metrics like profitability, liquidity, and return on investment were analyzed by Belcaid et al. (2023). Positive outcome has been noted on financial performance as a result of lowering holding costs and limiting stockouts, effective stock management due to introduction of economic order quantity (EOQ) as well as just-in-time (JIT) concept in the production processes. In addition, Boisjoly et al. (2020) identified the inventory turnover ratio as an indicator of efficient stock management. Better inventory management is associated with increased profits, as measured by a higher inventory turnover ratio. While studying the connection between stock in trade and commercial performance is useful, Orobia et al. (2020) noted that it is also vital to account for the specific setting of African enterprises. Supply chain issues, limited infrastructure, and political instability can impact inventory management procedures, adversely affecting financial performance.

Statement of the Problem

Generally, SMEs are beneficial to the economy as they create employment, eradicate poverty, and generate foreign exchange (Kiringa and Ndolo, 2023). More specifically, flour processing medium sized firms add value on goods in the supply chain and boost economic growth (Charles and Ochieng, 2023). Although these firm have paramount contribution to the social-economic arena, they face financial performance challenges. The flour processing segment of the manufacturing industry also grew in 2022 but at a slower pace than in 2021. The sector's growth dropped to 2.7 percent in 2022 from 7.3 percent in 2021, with many millers reporting poor financial performance. This slowdown was in part attributed to a decrease in agricultural output, especially of food crops that are important inputs in agro-processing (Economic Survey Report, 2023). For instance, Unga Ltd's brand of maize recorded 2% loss in profitability in 2021, compared to 4. 1% in 2020 (Unga Limited Annual Report, 2022). The year 2019 saw the closure of several companies in the flour manufacturing industry (Kalu & Njoku, 2022). The industry's main challenge is the low profit margin due to high costs (Mutua & Kirui, 2020).

Previous studies have revealed different conceptual, contextual, and methodological outcomes concerning the conceptual connection between inventory accomplishment practices and the commercial performance of organizations. Achuora, Arasa, and Mworia (2020) proved that VMI had a powerful and positive influence on profitability in industrial companies. Kwateng, Fokuoh, and Tetteh (2022) investigated on the effect of VMI on operational performance in the mining sector and Mwangi and Kitheka (2018) on the other hand found a direct link between VMI dimensions and the organizational productivity of supermarkets in terms of

financial performance. Zhao et al. (2019) evaluated the performance of a VMI system in a managed supply chain. Also, Lara, Menegon, Sehnem, and Kuzma (2022) carried out a metaanalysis that pointed out JIT industrial as the main factor that improves financial performance. The study by Bashar and Hasin (2021) was on the effect of JIT manufacture on management quality in the apparel industry, while Lu, Zhu, and Wu (2022) performed a meta-analysis on lean practices and productivity in terms of financial performance. In this context, the present research sought to determine the influence of vendor managed inventory on financial performance of flour processing SMEs in Nairobi City County, Kenya

Research Hypothesis

There is no significant influence of Vendor managed inventory on financial performance of flour processing SMEs in Nairobi City County, Kenya.

Theoretical Review

This is part of literature review and it is the section which portrays the various theories which underpin the current investigation. For that matter, two of them have been chosen which are more appropriate as compared to others. These are, lean inventory theory, and Economic Order Quantity (EOQ)

Lean Inventory Theory

The above-mentioned philosophy was advanced by Henry Ford in the 1450s as a part of his concept of an integrated manufacturing system. Just-in-Time (JIT) further develops into Lean Inventory Theory and promotes keeping low inventory levels that correspond to production needs. Womack in 1990 initiated this supposition referred to as lean inventory theory and it is based on keeping low inventories which will result in profitability through reduction in carrying costs. It is cost-based decision-making within the organizational processes, such as production, warehousing, and the entire supply chain.

Njeru (2019) further states that the lean inventory theory is an extension of the Economic Order Quantity (EOQ) concept, aimed at optimizing catalogue quantities by pointing out the right amount to purchase at any point. The theory emphasizes the need to be flexible in managing inventory levels and to treat different inventory items differently. In a competitive environment, lean inventory practices allow firms to be competitive, grow their market share and improve profitability by avoiding the negative cash flow impacts of excess inventory.

This study employs the lean inventory hypothesis to give a conceptual basis for investigating the consequence of account rheostat on organizational productivity. The decision is made in order to comprehend controversial inventory control methods that allow firms to achieve higher return on investment through minimal inventory levels and carrying costs.

Economic Order Quantity (EOQ)Theory

This aforementioned supposition is used to determine the quantity to be purchased in order to lower the total cost, comprising both holding costs and reorder costs. The EOQ model relies on several key assumptions: Costs such as ordering costs, stock holding costs, price per unit, demand levels as well as lead times are all known and constant. On the other hand, replenishments are instantaneous whereby, the entire batch is delivered at once, and inventory shortage is not allowed. But the main disadvantage of the aforementioned empirical methodology is failure to incorporate the aspect of safety stocks that are required to endure fluctuations in lead time and demand, which is a practical problem.

Each inventory item in the EOQ model has to be associated with an ordering point that represents the optimal order quantity. This model assumes that all variables are constant, ignoring the frequent and common uncertainties that firms encounter. Such uncertainties can be seen in demand variations, item spoilage in transit, and deliveries postponement. The uncertainties require modifications to the EOQ to cater for unforeseen business situations.

RESEARCH METHODOLOGY

Target Population and Sampling

The firms to be targeted are those that have been in operation for over five years in Nairobi County and all are in tier 2 category (Mugenda and Mugenda, 2003). The study incorporated a population of 18 such firms as indicated in Table 1 below

Category-names of the firms	Population
Nguvu Milling LTD	1
Phimar Maize Millers LTD	1
Sweetmeal Commodities	1
Cateress Milling Company	1
Luma Stores & Suppliers ENT LTD	1
World Peak International LTD	1
Dandora Millers LTD	1
Bewa Packers LTD	1
Faulu Flour Millers	1
Kanini Merchants	1
Nelcon Millers	1
Paff Enterprises	1
Range Processor LTD	1
Vikat Millers	1

Winnies Pure Health Product	1
Witman Enterprises LTD	1
Pendo Flour Mill	1
Sopa Supplies	1
Total	18

Source; United Grain Millers Association (2023).

Data Analysis

This inquiry considered inferential statistics. In this case, one, correlational analysis and two regression analysis were performed.

RESEARCH FINDINGS

Pearson's Product Moment Correlation

The outcomes of association analysis were applied to assess the connection between the variables working in the study. the results are as indicated in Table 2

Table 2: Correlation Matrix for Vendor Managed Inventory and Financial Performance						
		Financial Performance				
Vendor	Pearson Correlation	.830**				
Managed	Sig. (2-tailed)	.000				
Inventory						
**. Correlation is significant at the 0.01 level (2-tailed).						
	(202.1)					

Source: Researcher (2024)

From the findings on Table 2, there was a robust direct connection between Vendor Managed Inventory and financial performance of flour processing SMEs in Nairobi County, Kenya. The correlation coefficient was .830 which was strong and direct in nature.

Simple Regression

The researcher carried out simple regression analysis to determine the extent to which Vendor Managed Inventory influenced financial performance of flour processing SMEs in Nairobi City County. The consequences are shown in Table 3

Model Summary								
Model	R	R Square	Adjusted Square		RStd. Error of the Estimate			
1	.959 ^a	.920	.920		.40677			
a. Predictors: (Constant), Vendor Managed Inventory ANOVA ^a								
Model		Sum of	Squares	5 Df	Mean Square			Sig.
	Regressior	n 568.061		3	189.35 4	1144.400		.000 ^b
1	Residual	49.142		297	.165			
	Total	617.203		300				
a. Dependent Variable: Financial Performance								
b. Predictors: (Constant), Vendor Managed Inventory Coefficients ^a								
Model	Model Unstandardized Coefficients				StandardizedT Coefficients		Sig.	
		В		Std. 1	Error	Beta		
	(Constant)			0.065	5		6.35	.000
	Vendor M Inventory	Managed 0.7	71	0.049)	0.712	15.73	.000
a. Depe	a. Dependent Variable: Financial performance							

 Table 4: Results of Regression Analysis for Vendor Managed Inventory and Financial performance of flour processing

 SMEs in Nairobi City County.

Table 4 showed the relationship between dependent and independent variables. From the analysis a strong coefficient of determination between Vendor Managed Inventory and financial performance exists (R=0.959). The coefficient of determination was strong and significant (R Square= 0.959, p<0.05). This indicated that 95.9 percent of variation in finance is as a result of Vendor Managed Inventory

Analysis of Variance (ANOVA) was conducted to test the significance of the regression, F=1144.400 and p=0.000. From the analysis the significance value is 0.000 which is less than the p value of 0.05 indicating the model is statistically significance in foreseeing how Vendor Managed Inventory influence financial performance of flour processing SMEs in Nairobi County, Kenya.

The unstandardized coefficients indicate the corresponding change in the dependent variable when a change of one unit is affected by independent variable. One unit increase in inventory managed inventory would result to 0.771 percent increase in financial performance.

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The regression equation is shown below;

Y = 0.413 + 0.771 X_1

Where;

Y = Financial Performance

X1 = Vendor Managed Inventory
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X3= Inventory Forecasting

Similar studies were undertaken by various researchers in the past which portrayed results in tandem with the current study findings. For instance, an investigation was undertaken by Achuora, Arasa, and Mworia (2020) concerning industrial businesses in existence in Nairobi County, Kenya. results show that vendor managed inventory dimensions have a substantial and positive influence on the productivity of the organizations. Equally, in Ghana, Kwateng et al. (2022) sought to found the extent to which the following predictor variable, namely; Vendor Managed Inventory (VMI) impacted on the dependent factor (ie operational performance). Outcome of the study portrayed that VMI has a substantial impact on operational accomplishment. Nonetheless, digitization and leadership did not interact to moderate the affiliation between VMI and operational productivity.

Zhao et al. (2019) carried out research to assess behaviors and performance improvements in a Vendor Managed Inventory (VMI) program. The investigation was designed to evaluate the effectiveness of a VMI program in a controlled supply chain, which was supplier managed. The findings indicated that the supply chain performs better under VMI as opposed to a revenue-sharing contract. The cost of production is borne by the supplier, as well as the risk of inventory leftovers, but with the VMI approach, the supplier can replenish higher stock quantity, resulting in higher profits for both the supplier and the retailer.

Conclusions

Firms should direct their efforts toward adopting advanced forecasting tools and data analytics, leveraging these technologies to gain better insights into customer demand patterns, ultimately reducing the risks associated with shortages or excessive inventory. Comprehensive inventory management studies that explore the combined impact of various strategies, including JIT, EOQ, and lean inventory, on financial performance should be conducted. The studies would provide insights into the synergies and trade-offs between these practices. Comparative studies would assess the effectiveness of different inventory management strategies, taking into account their combined application. collaboration with suppliers is another key strategy highlighted in this section, echoing the literature's recognition of the importance of supply chain integration. Collaborative relationships with suppliers are crucial for maintaining the efficiency of Lean Inventory Systems. This collaboration involves sharing information, aligning production schedules, and establishing joint inventory management practices.

The literature acknowledges that successful supply chain integration can lead to reduced lead times, lower carrying costs, and improved overall financial performance. Similarly, the findings emphasize that flour processing companies should work closely with their suppliers to create a seamless and efficient supply chain. By doing so, they can respond more effectively to changes in customer demand, minimize disruptions, and ensure that the right amount of inventory is available when needed.

Recommendations and Further Studies

Future research endeavors should adopt a comprehensive approach, considering all variables and aspects relevant to inventory management and financial performance. Research should delve into comprehensive inventory management studies that explore the combined impact of various strategies, including EOQ, and lean inventory, on financial performance. Such studies can provide insights into the synergies and trade-offs between these practices. Comparative studies should assess the effectiveness of different inventory management strategies, taking into account their combined application. These studies can help businesses identify the most effective combinations of strategies for their specific contexts.

REFERENCES

- Abobakr, M. A., Abdel-Kader, M. G., & Elbayoumi, A. F. (2022). The Impact of Lean Manufacturing Practices on Sustainability Performance: A Natural Resource-Based View. Journal of Modern Accounting and Auditing, 18(3), 115-130.
- Abotsi, L. A., Umagu, U. B., Ayanbeshishie, S. A., & Effiong, S. A. (2023). Inventory Management and Financial Performance: Efficiency Level Investigation of Listed Food & Beverage Manufacturing Companies. *resmilitaris*, 13(2), 4853-4863.
- Achuora, J., Arasa R., Mworia, E. (2020). Vendor Managed Inventory and Firm Profitability: A Survey of Industrial Firms in Nairobi County, Kenya. *International Journal of Innovative Finance and Economics Research* 8(3):53-64.
- Ahmadi, R., Abbasi, B., & Rahimi, M. (2018). The impact of vendor managed inventory on financial performance. International Journal of Industrial Engineering & Production Research, 29(4), 567-574.
- Bashar, A., Hasin, A. A., & Adnan, Z. H. (2021). Impact of lean manufacturing: evidence from apparel industry in Bangladesh. *International Journal of Lean Six Sigma*, 12(5), 923-943.
- Belcaid, K., & Al-Faryan, M. A. S. (2023). Determinants of Bank Profitability in the Context of Financial Liberalization: Evidence from Morocco. *Business Perspectives and Research*, 22785337221148872.
- Boisjoly, R. P., Conine Jr, T. E., & McDonald IV, M. B. (2020). Working capital management: Financial and valuation impacts. *Journal of Business Research*, *108*, 1-8.
- Bvuchete, M., Grobbelaar, S. S., & Van Eeden, J. (2021). A network maturity mapping tool for demand-driven supply chain management: A case for the public healthcare sector. *Sustainability*, *13*(21), 11988.
- Charles, M., & Ochieng, S. B. (2023). Strategic Outsourcing and Firm Performance: A Review of Literature. *International Journal of Social Science and Humanities Research 1*(1), 20-29.
- Chen, L., Ma, H., & Rong, K. (2019). The impact of just-in-time on inventory performance: An empirical investigation. International Journal of Production Economics, 239, 108146.

Economic Survey Report, (2023).

- Endris, E., & Kassegn, A. (2022). The role of micro, small and medium enterprises (MSMEs) to the sustainable development of sub-Saharan Africa and its challenges: a systematic review of evidence from Ethiopia. *Journal of Innovation and Entrepreneurship*, 11(1), 20.
- Gherghina, Ş. C., Botezatu, M. A., Hosszu, A., & Simionescu, L. N. (2020). Small and medium-sized enterprises (SMEs): The engine of economic growth through investments and innovation. *Sustainability*, *12*(1), 347.
- Kalu, A. O, U & Njoku, M. E (2022). The Effect of Strategic Supply Chain Management on the Profitability of Flour Mills in the Sub-Saharan Africa (2005 - 2013). *Journal of Economics and Finance* 6(2), 42-55.
- Kiiru, D. K., Mukulu, E., & Ngatia, P. (2023). Innovativeness and Performance: Evidence from Kenyan SMEs. European Journal of Business and Management Research, 8(2), 113-119.
- Kiringa, L. K., & Ndolo, J. (2023). Supply Chain Management Practices, Information Advancement and Organizational Performance of Large Flour Milling Companies in
- Nairobi City County. Kenya. International Journal of Social Science and Humanities Research (IJSSHR) ISSN 2959-7056 (o); 2959-7048 (p), 1(1), 423-443.
- Kontus, P. (2019). Effect of inventory management on financial performance: Evidence from Sri Lankan manufacturing companies. International Journal of Engineering and Advanced Technology, 9(1), 6468-6474.
- Kwateng, K. O., Fokuoh, B., & Tetteh, F. K. (2022). The relationship between vendor-managed inventory and operational performance. *Modern Supply Chain Research and Applications* (ahead-of-print).
- Lara, A. C., Menegon, E. M. P., Sehnem, S., & Kuzma, E. (2022). Relationship between just in time, lean manufacturing, and performance practices: a meta-analysis. *Gestão & Produção*, 29, e9021.
- Liu, Y., & Gong, Y. (2019). A review of inventory management: From theory to practice. International Journal of Production Research, 57(4), 1053-1074.
- Madzivhandila, N. L. (2022). An Investigation of Factors Affecting Plasterboard Warehouse Inventory Management: The Case of a South African Company. University of Johannesburg (South Africa).
- Mugenda, O. M. & Mugenda, A. G. (2009). Research methods: Quantitative and Qualitative approaches. Nairobi: ACTS.
- Mutua, K., & Kirui, C. (2020). Supply Chain Management Practices and Performance of Flour Milling Companies in Nairobi County, Kenya.

- Mwangi, P. W., & Kitheka S. S. (2018). Effect of vendor managed inventory on organizational performance of supermarkets in Mombasa county
- Omondi, Cynthia, Francis Njoka, and Fenwicks Musonye. "An economy-wide rebound effect analysis of Kenya's energy efficiency initiatives." *Journal of Cleaner Production* 385 (2023): 135730.
- Panigrahi, R. R., Jena, D., Sahoo, A., & Nayak, M. R. (2023). Inventory Management Practice and Performances of Manufacturing Firms: An Empirical Study of RFID and VMI. In *Emerging Trends in Decision Sciences and Business Operations* (pp. 46-68). Routledge India.
- Surya, B., Menne, F., Sabhan, H., Suriani, S., Abubakar, H., & Idris, M. (2021). Economic growth, increasing productivity of SMEs, and open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 20.

Unga limited Annual Report, (2022).

Zhao, H., Xu, L., & Siemsen, E. (2021). Inventory sharing and demand-side underweighting. *Manufacturing & Service Operations Management*, 23(5), 1217-1236.