

An Empirical Study on the Impact of Systematic Bookkeeping Practices on Inventory Control Efficiency in Small Grocery Shops

Naitika Anand Band

Research Scholar, C.P. & Berar E. S. College, Tulsibag, Mahal Nagpur, Dist. Nagpur.

Dr. Medha Kanetkar

Principal, Shri Niketan Arts, Commerce College, Nagpur.

Abstract

Small grocery stores with limited capital and high variability of demands need effective inventory management to reduce their sustainability and profitability. The paper is an empirical survey comparing the effects that systematic bookkeeping had in relation to inventory control within the small grocery stores. The 120 respondents were chosen as shop owners and a structured questionnaire was used to gain primary data, and statistical software like a descriptive analysis, correlation, and regression were utilized to verify the correlation between bookkeeping practices and inventory performance measures, these measures included inventory turnover, the frequency of stock-out, and control of holding costs. The results show that there is a positive relationship between systematic record keeping and inventory efficiency which is significantly explained by the bookkeeping practices in relationship to variations in the inventory outcomes. The effectiveness of shops that used digital or hybrid bookkeeping systems was better than those that used manual records. The authors arrive at the conclusion that it is due to structured bookkeeping with the support of basic accounting skills and digital resources that optimization of stocks and efficiency of operations in small retail enterprises correspond to a vital role.

Keywords Systematic Bookkeeping, Inventory Control Efficiency, Small Grocery Shops, Inventory Turnover, Digital Accounting Systems, Working Capital Management, Stock-Out Reduction, Small Retail Enterprises

Introduction

Inventory control is an important business process in the small retail business, especially small groceries which are under tight working capital and operating under small gross profit margin. Poor inventory management usually results to stock-outs, overstocking, wastages of perishable items and liquidity strains. In this type of businesses, systematic bookkeeping practices, which could be described as the constant, precise and timely recording of financial and inventory transactions, are the cornerstone of making good inventory decisions based on the information. Grocery shop owners are on toes when it comes to memorizing transactions, sales, stock quantities and returns, which means they are prone to errors and open their finances to minuscule losses.

SMEs of other countries around the world provide evidence that formal accounting systems can greatly improve working efficiency and finances (Abdul-Rashid et al., 2017; Adela et al., 2024). Bookkeeping gives credible information in determination of inventory turnover ratios, reorder levels, safety stocks, grey margins, and working capital needs. Maseko and Manyani (2011) argue that better accounting records enable SMEs to track the stock movements, identify inconsistencies, and enhance the internal control process. They conclude that there are poor records that are related to bad inventory decisions and low-profitability.

Accounting systems and business performance have received a lot of research. McMahon (2001) developed the fact that SMEs are better sustained by adopting systematic financial reporting than those with informal rate. Equally, Ismail and King (2007) discovered that consistency between the accounting information systems (AIS) and managerial capacity enhances performance of firms. This coincidence is particularly pertinent to small grocery stores, when the owners play the role of purchasing managers, accountants, and inventory controllers themselves.

Literature Review

Empirical studies that have been conducted recently support this point. Adela et al. (2024) proved that accounting practices in a business have a substantial impact on SME performance, and their accounting capabilities have a mediating factor between the owners and accounting practices. Their results indicate that systematic record keeping enhances the

quality of decisions made but it is likely to be effective depending on how the owner of the business is able to interpret financial information. In small groceries, this is converted to the utilisation of stock registries, sales, and purchase invoices not only to meet compliance but also strategic inventory planning.

Literature on inventory management motivation also favors the ability of accurate information to enhance efficiency. Apparently, Deloof (2003) observed that effective working capital management, such as inventory control, has a positive impact on profitability. In grocery retailing, when inventory is a significant proportion of current assets, the accuracy of bookkeeping is a direct factor in the working cycles of the current assets. The reduction in time of holding inventory also led to increased profitability, which was reported by Lazaridis and Tryfonidis (2006), which showed that stock data could be relied upon in minimizing the excess holding costs.

The use of technology acts as a supplement to enhance the bookkeeping-inventory associations. Grande, Estebanez, and Colomina (2011) made a conclusion that SMEs that use accounting information systems experience better processes and financial control internally. Similarly, it was demonstrated by Lim, Rahmat, and Suban'Ani (2025) that small businesses having simplified digital inventory systems had a better data accuracy and fewer manual errors. The integration of bookkeeping with the point-of-sale (POS) systems would allow cash flow updates and inventory real-time, enhancing the stock visibility and accuracy in replenishment.

Rajeev (2010) underlined the retail setting by noting that the systematic control of the inventory minimizes waste and enhances customer satisfaction and satisfaction by having better availability of the products. The small groceries usually have seasonality and local consumption levels that make the demand very varied. Forecasting is conjectural without adequate sales and stock reports. Nyamao et al. (2012) established that the accounting practices play a key role to affect financial performance of the small enterprises, mainly in enhancing cost control and operation monitoring. The assumption in this regard is that structured bookkeeping can improve the inventory turnover as well as minimize stocks discrepancies.

Moreover, there are hints of small retailers in developing economies that poor record keeping is one of the main problems of this group of businesses. According to Onalapo and Adegbite (2014), bad accounting information systems are the cause of ineffective stock management and poor financial control amongst small business entities. Lack of systematic book keeping will result in shrinkage of Inventory, pilferage as well as misallocation of working capital. On the other hand, a company with the right records is in a position to detect the sluggish stock and revise order quantities, as well as the procurement cycles.

Despite the fact that previous studies demonstrate the high relevance of accounting systems and business performance any empirical research of the direct interaction between systematic bookkeeping methods and inventory management effectiveness in small grocery stores is limited. A major gap in the literature is that most researches are broadly on SMEs or manufacturing facilities, and micro retail setting, which is characterized by informal practices, has no literature. Grocery stores have special issues that include; perishability, repetitive replenishment periods, sale with credit and fluctuating supplier prices. All these reasons make it necessary to maintain records in real-time in order to control stocks.

The research makes its contribution to the current literature by presenting an empirical research on whether systematic bookkeeping practices have any significant effect in enhancing inventory control efficiency in small grocery stores. Efficiency of inventory control, in this case, incorporates the following indicators; inventory turnover ratio, stock out frequency, holding costs reduction, shrinkage control and precision of stock reconciliation. The study will reconcile the information systems about the accounting and literature on inventory management so that it yields recommendations that can be used in advancing the efficiency of the operations in the small retail grocery businesses.

Objective:

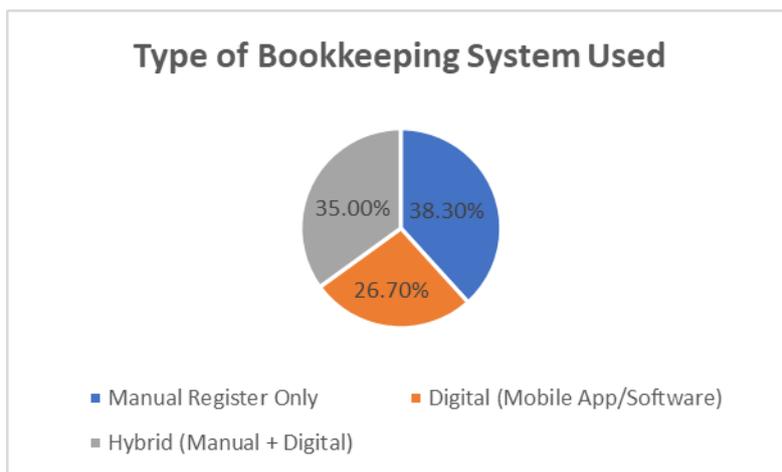
The main task of the study is to find empirically the role of systematic bookkeeping on the effectiveness of inventory control in small grocery stores and investigate how correct recording maintenance, accountancy competency, and the digital tools application can have an effect on inventory turnover, stock management, cost control, and the overall performance of operations.

Methodology:

The research design selected by this study is quantitative, descriptive research design in order to investigate the effects of systematic book keeping practices on the efficiency of inventory control in small grocery shops. Primary data shall be gathered using a structured survey questionnaire to be given to the sampled shop owners in a convenience or stratified sampling process. Digital tools use, inventory turnover, stock-out frequency, holding cost control, bookkeeping frequency, Likert scale measures were used to measure the variables. The theoretical framework will be supported with the aid of secondary information gathered through journals and reports.

Results and Discussion

The current part presents the results of the study on 120 owners of small groceries who were sampled to determine the effectiveness of systematic bookkeeping skills in inventory control.



There are 38.3 percent grocery stores that only use manual bookkeeping and 61.7 percent use digital or hybrid bookkeeping. This refers to a slow uptake of structured and technology based record-keeping practices.

Table 1 Descriptive Statistics

Variable	Mean	Std. Deviation
Regular Recording of Sales & Purchases	4.12	0.78
Accuracy of Inventory Records	3.95	0.84
Use of Bookkeeping for Reordering Decisions	3.88	0.91
Reduction in Stock-Out Frequency	3.76	0.86
Improvement in Inventory Turnover	3.82	0.88
Reduction in Holding Cost	3.69	0.93

The average score of systematic recording (4.12) implies that the majority of the shop owners keep systematic records. The comparatively large means (more than 3.5) of the inventory turnover improvement and stock-out reduction indicate the existence of the positive perception about the efficacy of bookkeeping practices in making inventory more efficient.

Table 2 Average Inventory Turnover Ratio by Bookkeeping Type

Bookkeeping System	Average Inventory Turnover Ratio
Manual	6.2 times/year
Hybrid	7.8 times/year
Digital	8.5 times/year

Digital bookkeeping stores have the best ratio of turnover (8.5 times per year) and suggest a more effective stream of inventory. Lower turnover (6.2) is also a sign of manual systems, indicating that the stock moves rather slowly and there is a risk of its overstocking.

To test the relationship between bookkeeping practices and inventory control efficiency, Pearson’s correlation was applied.

Table 3 Correlation

Variables	Bookkeeping Score	Inventory Efficiency Score
Bookkeeping Practices	1	0.648**
Inventory Efficiency	0.648**	1

The correlation coefficient ($r = 0.648$) shows that the organizational bookkeeping practices and efficiency in inventory control have a strong positive correlation. The H_0 is rejected because the relationship is found significant at the 1 percent level ($p < 0.01$).

A basic linear regression analysis was performed to test how bookkeeping practices determine efficiency of inventory controls.

Table 4 Model Summary

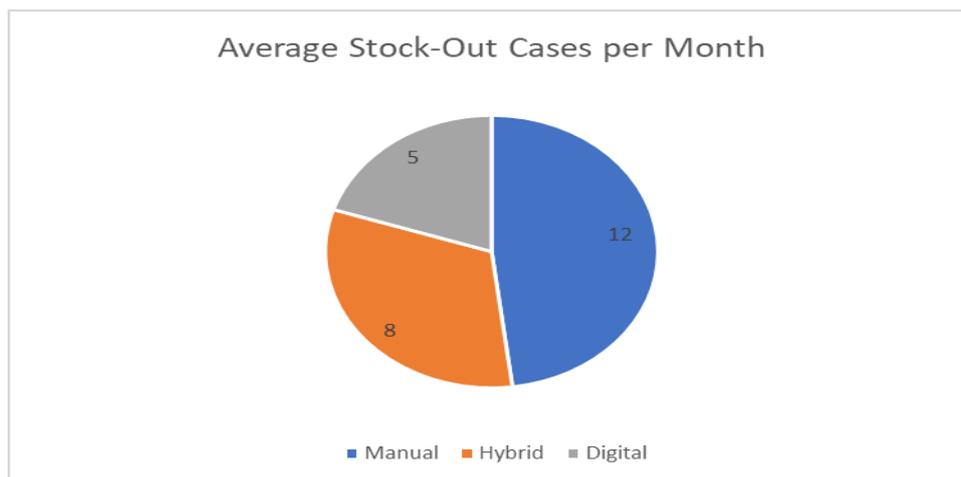
R	R ²	Adjusted R ²	Std. Error
0.648	0.420	0.415	0.52

The R^2 of 0.420 means that 42 percent of the change in efficiency of the inventory control can be explained by systematic bookkeeping practices, or in other words there exists significant explanatory power.

Table 5 Regression Co-efficient

Variable	Beta	t-value	Sig.
Constant	1.245	4.32	0.000
Bookkeeping Practices	0.673	9.84	0.000

The coefficient of beta (0.673) has a positive value, and is statistically significant (p less than 0.001), which means that there is a significant rise in efficiency of inventory control associated with the improvement of bookkeeping practices. The t-value (9.84) indicates the presence of high predictive strength.



There are less stock-out cases in digitally controlled stores than in the manual one. It shows that real-time record maintenance enhances planning of replenishment.

The study indicates clearly that the systematic bookkeeping practices have a significant growth in inventory control within small grocery stores. Stores that use digital or hybrid systems have greater inventory turnover ratios and lower frequency rates than stock-out in manual systems. The positive correlation ($R = 0.648$) and significant regression coefficients prove that the contribution of structured bookkeeping to the improvement of inventory performance is significant (42%). This means that the empirical evidence confirms the hypothesis that good bookkeeping systems are positively related to the efficiency of inventory management.

Discussion

Generally, the study results clearly demonstrate that systematic bookkeeping practices are an important determinant in the control of inventories in small groceries. The descriptive data indicated that the mean scores on frequent transaction records and the frequency of using records in reordering decisions are high, which indicates that a structured bookkeeping may have a positive impact on monitoring stocks and planning their replenishment. There was a higher inventory turnover ratio and reduced incidences of stock-out in shops with digital or hybrid bookkeeping systems as opposed to using purely the manual registers. This proves that proper financial records and including those in time to make it effective allows estimating the demand, decrease excess inventory, and enhance the usage of working capital.

The correlation analysis depicted a strong positive correlation between bookkeeping practices and inventory efficiency ($r = 0.648$) whereas the regression outcomes showed that 42% of the changes in inventory performance can be explained by bookkeeping practices in this case. The relation of such explanatory power justifies the argument that record maintenance is not an administrative role at all, but a strategic operational instrument. The positive and significant beta coefficient also serves as a confirmation that the increases in the bookkeeping practices result in statistically significant changes in the inventory control outcomes.

The results of increased turnover ratios of the digitally managed shops are consistent with the findings of Lim et al. (2025) that discovered that digital inventory systems are more accurate and less prone to human error. Lower rate of stock-out as witnessed among the digital users in this study also supports this argument; real-time data recording will increase replenishment accuracy and customer satisfaction.

These results also however state that the effectiveness of bookkeeping is related to the capability of the owner to interpret financial data. Most of the shops keep records but not all of them make good use of their records in making analytical decisions. It implies that the benefits of systematic bookkeeping practices may be increased with the help of training and financial literacy programs.

Altogether, it can be concluded in this discussion that organized bookkeeping, particularly with the help of digital technologies, is a key engine of inventory effectiveness in small shopping grocery stores. The empirical data confirms the

null hypothesis rejection and prove that systematic record maintenance is the significant contributor to the operational performance improvement of micro retail enterprises.

Conclusion

The paper finds that systematic bookkeeping is very important and relevant to inventory control effectiveness in small grocery stores. The empirical results prove that proper and frequent maintenance of records can upgrade the inventory turnover, frequency of stock-out, holding costs and overall functioning of the operations. The statistical investigation proves that the nature of the relationship between bookkeeping practices and inventory efficiency is positive and strong with the bookkeeping practices accounting a significant percentage of the difference in inventory performance. Stores with digital or hybrid book keeping practices have the best inventory performance than companies that use manual practices only. Hence systematic bookkeeping is an extrinsic complaint duty rather than a strategic management method that refutes inventory planning as well as working capital management among small retail businesses.

Recommendations

According to the findings, it is advisable that the owners of small grocery shops should use organized and preferably electronic bookkeeping systems to increase the accuracy of inventory and the effectiveness of decision-making. The training courses in the field of simple accounting and inventory analysis must be arranged so that the owners were able to understand financial documents in an efficient way. Mobile phone based accounting applications specific to small retailers can be encouraged by the government, local trade bodies and financial institutions. Moreover, bookkeeping systems should be integrated with the basic point-of-sale (POS) systems to have real-time inventory. Enhanced financial literacy and adoption of technology will go a long way in optimizing on inventory, potential costs, and sustainability of small groceries in the long-term.

References

1. Abdul-Rashid, S. H., Sakundarini, N., Raja Ghazilla, R. A., & Thurasamy, R. (2017). The impact of sustainable manufacturing practices on sustainability performance. *International Journal of Operations & Production Management*, 37(2), 182–204.
2. Adela, V., Agyei, S. K., Frimpong, S., Damankah, B. A., Bossman, A., Abosompim, R. O., Benchie, J. K. O., & Ahmed, A. M. A. (2024). Bookkeeping practices and SME performance: The intervening role of owners' accounting skills. *Heliyon*, 10, e23911.
3. Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? *Journal of Business Finance & Accounting*, 30(3–4), 573–587.
4. Grande, E. U., Estébanez, R. P., & Colomina, C. M. (2011). The impact of accounting information systems on performance measures. *International Journal of Digital Accounting Research*, 11, 25–43.
5. Ismail, N. A., & King, M. (2007). Factors influencing the alignment of accounting information systems in SMEs. *Journal of Information Systems and Small Business*, 1(1–2), 1–20.
6. Lazaridis, I., & Tryfonidis, D. (2006). Relationship between working capital management and profitability. *Journal of Financial Management and Analysis*, 19(1), 26–35.
7. Lim, H. Q., Rahmat, A. R., & Suban'Ani, S. (2025). An inventory management system for small businesses. *Journal of Digital System Development*, 3(1), 29–44.
8. Maseko, N., & Manyani, O. (2011). Accounting practices of SMEs in Zimbabwe. *Journal of Accounting and Taxation*, 3(8), 171–181.
9. McMahon, R. G. P. (2001). Business growth and performance and the financial reporting practices of Australian manufacturing SMEs. *Journal of Small Business Management*, 39(2), 152–164.
10. Nyamao, N. R., Patrick, O., Martin, O., & Odondo, A. J. (2012). Effect of accounting practices on financial performance of SMEs. *International Journal of Business and Management Tomorrow*, 2(3), 1–10.
11. Onaolapo, A. A., & Adegbite, T. A. (2014). The analysis of the impact of accounting records keeping on performance of small scale enterprises. *International Journal of Academic Research in Business and Social Sciences*, 4(1), 1–17.
12. Rajeev, N. (2010). Inventory management in small and medium enterprises: A study. *International Journal of Business and Management*, 5(9), 123–130.*