

EFFECTIVENESS OF RAW MATERIAL INVENTORY ACCOUNTING SYSTEM IN SUPPORTING INTERNAL CONTROL: A STUDY AT ZOCCO GROUP

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ABSTRACT

Raw material inventory management is a crucial aspect in supporting the smooth operation of food and beverage companies. A properly implemented inventory accounting system can help companies control raw material availability, reduce the risk of recording errors, and generate information needed for decision-making. This study aims to evaluate the food and beverage raw material inventory accounting system at Zocco Group based on its compliance with the inventory accounting system theory according to Mulyadi (2016). The study used a qualitative approach with descriptive methods. Data were obtained through observation, interviews, and documentation of parties involved in inventory management, then analyzed using the Miles and Huberman model, which includes data reduction, data presentation, and conclusion drawing. The results of the study indicate that the inventory accounting system implemented by Zocco Group has basically been running well. This is evident from the division of functions, the use of accounting documents and records, the implementation of inventory procedures, and the implementation of internal controls that support the company's operational activities. However, there is still a dual role in the raw material receiving and storage functions, so that the separation of responsibilities is not fully in accordance with the internal control principles proposed by Mulyadi (2016). Therefore, it is necessary to separate the receiving function from the storage function so that internal control becomes more effective and the risk of errors or misuse of inventory can be minimized.

Keywords: inventory accounting system, raw material inventory, internal control, system evaluation, food and beverage.

1. INTRODUCTION

The food and beverage industry, often referred to as F&B, is a continuously growing sector and plays a vital role in the Indonesian economy. According to the Central Statistics Agency (BPS), the food and beverage supply sector experienced 10.17% growth compared to the previous year in 2024. This sector also contributed 2.64% to Gross Domestic Product. This growth has fueled increasingly fierce competition among businesses. Companies must maintain operational efficiency, maintain product quality, and ensure the sustainable availability of raw materials. In the food and beverage industry, raw materials are a critical asset that determines smooth production and customer service. According to Heizer, Render, and Munson (2020), inventory is an asset held for sale or use in the production process. PSAK No. 14 emphasizes that inventory includes assets held for sale or use in the production process or the provision of services. Therefore, effective inventory management is a crucial factor in supporting operational efficiency while minimizing the risk of overstocking, stockouts, damage, and raw material waste (Laoli et al., 2024).

Effective inventory management requires an adequate inventory accounting system. According to Mulyadi (2016), an accounting system is a network of procedures designed to generate information needed by management through the procurement, receipt, storage, and issuance of raw materials. This system functions as an internal control tool to minimize the risk of inventory loss, damage, and waste (Febriyani et al., 2021). Various previous studies have shown that the implementation of an accounting information system plays a crucial role in improving the effectiveness of internal inventory control (Sunia Apriyono, 2023; Nabilah et al., 2026; Zahrah et al., 2025; Khasanah & Fabian Susanto, 2025; Achman & Rizqullah, 2025). However, most research still focuses on manufacturing companies, warehouses, restaurants, or businesses with a single operational unit, resulting in limited evaluation of inventory accounting systems in F&B companies with multiple branches and more complex operational characteristics.

This situation indicates a research gap because inventory management in multi-branch businesses faces different challenges, such as coordination between branches, differences in raw material requirements, potential recording discrepancies, and an increased risk of inventory loss and waste (Nabilah et al., 2026). This phenomenon also occurs at the Zocco Group, which operates four branches in Malang City, requiring an inventory accounting system capable of ensuring uniform procedures for procurement, receipt, storage, expenditure, recording, and internal control at each branch. Evaluation of the implemented system is important to determine the effectiveness of the inventory accounting system implementation and to identify aspects that still need improvement to increase the company's operational efficiency.

Based on these conditions, this study aims to evaluate the food and beverage raw material inventory accounting system at four Zocco Group branches in Malang City based on the suitability of procurement, receipt, storage, expenditure, recording, and internal control procedures with the principles of the inventory accounting system. This research is expected to provide tangible contributions in the form of recommendations for management to improve the effectiveness of raw material inventory management. Furthermore, it is also expected to broaden theoretical knowledge by providing insights into how to implement inventory accounting systems in food and beverage companies, particularly those with multiple branches, which have not been widely studied before.

2. RESEARCH METHODS

This study used a descriptive qualitative approach, chosen because it allowed researchers

to obtain more in-depth information regarding the company's procedures, documents, related functions, accounting records, and internal controls. The evaluation was conducted by comparing the current system with inventory accounting system theory as a basis for assessing the system's effectiveness (Mulyadi, 2016).

The research was conducted at Zocco Group, a food and beverage company. The research location was chosen because the company's raw material inventory management plays a crucial role in supporting smooth operations, necessitating an evaluation of its inventory accounting system.

The research subjects were selected using purposive sampling, which involves selecting informants based on their understanding of and direct involvement in raw material inventory management. The data used consisted of qualitative data sourced from primary data through observation and interviews, as well as secondary data obtained from company documents, books, literature, and scientific journals.

The research instruments consisted of observation guidelines, interview guidelines, and documentation sheets focused on evaluating related functions, documents, accounting records, inventory accounting system procedures, and internal control of raw material inventory. Data collection was conducted through observation of inventory management activities, interviews with authorized informants, and documentation of organizational structures, formulas, stock cards, inventory reports, and other supporting documents. Data analysis refers to the Miles and Huberman model, which includes data reduction, data presentation, and drawing and verifying conclusions. Data validity was tested using source triangulation and technical triangulation to increase the credibility of the research results.

3. RESULTS AND DISCUSSION

The results of the study based on observations, interviews, and documentation indicate that the food and beverage raw material inventory accounting system at Zocco Group has been implemented through a series of interrelated functions, documents, accounting records, inventory procedures, and internal control mechanisms. The system involves six interrelated internal controls. The system involves six main functions, namely Admin Purchasing, Receiving, Store Keeper, Accounting, Cost Control, and General Manager. Each function carries out responsibilities ranging from planning and procurement of raw materials, receiving and storage, recording transactions, monitoring management use.

Table 1. Summary of Zocco Group's Raw Material Inventory Accounting System Evaluation Results

Evaluation Aspects	Research result	Conformity to Theory
Related functions	There are six main functions: Purchasing Admin, Receiving, Store Keeper, Accounting, Cost Control, and General Manager. However, the receiving function is still handled by the Store Keeper.	Mostly appropriate
Document	Using PO, purchase invoice, delivery note, Goods Request Form, Goods Receipt Form, daily stock report, expenditure report, stock opname report, purchase return, as well as raw material purchase and usage report.	In accordance

Accounting records	Using daily stock reports, stock take recaps, raw material purchase and usage reports, variable cost reports, fixed costs, COGS, and financial reports.	Mostly appropriate
Inventory procedures	Includes purchasing, receiving, storing, issuing, stock taking, and purchasing returns in a systematic and recommended manner.	In accordance
Internal control	Implemented through the division of transaction authorization tasks, stock taking, supervision of Cost Control and General Manager, as well as the implementation of SOPs.	Mostly appropriate

Evaluation of Related Functions in Inventory Accounting System

The results of the study indicate that the division of functions in the Zocco Group inventory accounting system has been carried out based on the duties and responsibilities of each department. The Purchasing Admin is responsible for planning needs and procuring raw materials, while the Store Keeper handles storage, expenditure, recording incoming and outgoing goods, and stock monitoring. Accounting is responsible for recording transactions and preparing financial reports, while Cost Control supervises the use of raw materials, calculates COGS, and evaluates costs. The General Manager then plays a role in coordinating operational activities and evaluating reports from each department as a basis for decision making.

Compared to Mulyadi (2016), this division of functions is essentially in accordance with accounting system principles that emphasize the separation of functional responsibilities to create internal control mechanisms. However, the study found that the goods receiving function is still carried out by the Store Keeper, who is also responsible for inventory storage. This condition indicates that the separation of functions has not been optimally implemented. This finding aligns with Apriyono and Hwihanus (2023), who stated that the separation of tasks in the inventory accounting system plays a role in improving the effectiveness of internal control and the accuracy of inventory information. Purba et al. (2021) also showed that a clear division of functions can reduce the risk of recording errors and misuse of company assets. Therefore, the separation of receiving and storage functions is still necessary to improve the effectiveness of Zocco Group's internal control.

Evaluation of Accounting Documents and Records

The documents used by Zocco Group in inventory management include Purchase Orders (POs), purchase invoices, delivery notes, Store Request forms, goods receipt forms, daily stock reports, raw material expenditure reports, stocktaking reports, purchase return documents, and raw material purchase and usage reports. The use of these documents allows for traceable administrative evidence for purchasing, receiving, storing, issuing, and inventory control activities. In addition, the company uses raw material usage reports, variable cost reports, fixed cost reports, and Cost of Goods Sold (COGS) reports as additional documents to support cost control and evaluate operational efficiency.

The use of these documents is fundamentally consistent with Mulyadi (2016), who explains that documents serve as proof of transactions and the basis for accounting records, enabling each transaction to be authorized and accounted for. This finding supports Apriyono and Hwihanus (2023), who stated that complete transaction documents can improve the reliability of inventory accounting information systems. These results are also consistent with Purba et al. (2021), who explain that complete documentation supports the effectiveness of internal controls and

facilitates the company's evaluation process.

The accounting records implemented include daily stock reports, stock take recaps, raw material purchase reports, raw material usage reports, variable cost reports, fixed cost reports, COGS reports, and the company's financial statements. These records are used to monitor inventory conditions, raw material usage, and operational costs. Compared to Mulyadi (2016), Zocco Group has not yet used inventory cards and warehouse cards as described in theory. However, the implemented recording system has been able to meet the company's operational information needs. These findings align with Apriyono and Hwihanus (2023) who found that consistent inventory recording can improve the quality of accounting information, and Purba et al. (2021) who emphasized that a good recording system can produce accurate information as a basis for management decision-making.

Evaluation of Inventory Accounting System Procedures

The research results show that Zocco Group's inventory management procedures include six main stages: raw material purchasing, goods receipt, raw material storage, raw material disbursement, stocktaking, and purchase returns. Each stage is carried out sequentially, involving departments with their respective responsibilities. For example, in the disbursement of raw materials, the operational department submits a request via the Goods Request Form, then the Store Keeper prepares the materials according to the request and records them in the expenditure report to update inventory data. Meanwhile, stocktaking is carried out periodically by comparing the physical amount of inventory with recorded data. If there is a difference, Cost Control and the Store Keeper conduct an investigation to determine the cause and determine corrective actions.

This procedure aligns with Mulyadi's (2016) concept, which states that an inventory accounting system must be implemented through a series of systematic activities, using valid documents, obtaining authorization, and producing records that reflect actual conditions. These results also support research by Apriyono and Hwihanus (2023) that systematically implemented inventory procedures can improve inventory management effectiveness and support smooth operations. Similarly, Purba et al. (2021) stated that clear and documented procedures can facilitate supervision and reduce the potential for errors in inventory management. Thus, Zocco Group's inventory procedures are generally in accordance with theory, although the separation of receiving and storage functions still needs improvement.

Internal Control Evaluation

Internal control over raw material inventory has been implemented through the division of tasks and responsibilities, transaction authorization, periodic stocktaking, supervision by Cost Control and the General Manager, and the implementation of Standard Operating Procedures (SOPs). These controls are intended to maintain asset security, ensure the accuracy of inventory information, and reduce the risk of loss, damage, or misuse of raw materials. An authorization system is also implemented in raw material purchasing and dispensing activities so that transactions are carried out with the approval of authorized parties.

Compared to Mulyadi's (2016) theory, the implementation of internal control largely complies with the principles of division of responsibilities, authorization systems, recording procedures, and supervisory practices. This finding aligns with Apriyono and Hwihanus (2023), who demonstrated that the effectiveness of internal control is influenced by clear division of tasks, complete documentation, and regular monitoring. The research findings also support Purba et al.'s (2021) findings, which state that adequate implementation of internal control elements can

maintain asset security and produce reliable accounting information. However, the persistence of gaps between the receiving and storage functions is a weakness that needs to be addressed as it can increase the risk of errors or inventory deviations. Therefore, Zocco Group's internal control can be considered to be functioning well and largely in accordance with Mulyadi (2016), but still requires improvement in the aspect of separation of functional responsibilities.

Overall, the research results indicate that the Zocco Group's food and beverage inventory accounting system has been able to support operational activities through the implementation of structured functions, documents, accounting records, procedures, and internal controls. Consistency with Mulyadi's (2016) theory is particularly evident in the division of tasks, transaction documentation, systematic inventory procedures, authorization, and stocktaking. However, the implemented system is not entirely ideal due to the overlapping functions of receiving and storing, as well as differences in the form of inventory records compared to those proposed in theory. These findings reinforce the research of Apriyono and Hwihanus (2023) and Purba et al. (2021) regarding the importance of separation of functions, complete documentation, consistent recording, and supervision as key components in creating an effective inventory accounting system.

CONCLUSION

Based on the research results, it can be concluded that the raw material inventory accounting system implemented at Zocco Group has basically been running well and is able to support the company's internal control through the division of functions, the use of accounting documents and records, the implementation of inventory procedures, and the implementation of supervision in accordance with operational needs. When compared to Mulyadi's theory (2016), most of the system elements have been implemented well, although there is still a duplication of duties in the raw material receiving and storage functions. This condition indicates that the separation of functional responsibilities is not fully optimal so that it still has the potential to cause recording errors and misuse of inventory. Therefore, the separation of these two functions is necessary to improve the effectiveness of the inventory accounting system and internal control at Zocco Group.

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