

IMPROVING INVENTORY ACCOUNTING IN ACCORDANCE WITH INTERNATIONAL STANDARDS

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Annotation. *This study explores the improvement of inventory accounting in accordance with international standards, particularly IAS 2 (Inventories). The research analyzes the current practices of inventory recognition, measurement, valuation, and disclosure within national accounting systems and compares them with the requirements of International Financial Reporting Standards (IFRS). Special attention is given to issues such as cost determination methods, net realizable value assessment, impairment recognition, and financial statement presentation. The paper identifies existing methodological gaps and practical challenges in aligning local accounting regulations with IAS 2. Based on the analysis, recommendations are proposed to enhance transparency, ensure consistency in inventory valuation, and improve the overall quality and reliability of financial reporting in line with international standards.*

Keywords: *Inventory accounting, IAS 2, international standards, IFRS, cost measurement, net realizable value, impairment, financial reporting, accounting reform, harmonization.*

Annotatsiya. *Mazkur tadqiqot xalqaro standartlar, xususan IAS 2 (Tovar-moddiy zahiralari) talablari asosida tovar-moddiy zahiralari hisobini takomillashtirish masalalarini o'rganishga bag'ishlangan. Tadqiqotda milliy buxgalteriya hisobi tizimida zahiralarni tan olish, baholash, qiymatini aniqlash va moliyaviy hisobotda ochib berish amaliyoti Xalqaro moliyaviy hisobot standartlari (IFRS) talablari bilan qiyosiy tahlil qilingan. Xususan, tannarxni aniqlash usullari, sof realizatsiya qiymatini baholash, qadrsizlanishni tan olish hamda moliyaviy hisobotda taqdim etish masalalariga alohida e'tibor qaratilgan. Tadqiqot natijasida milliy me'yoriy-huquqiy hujjatlarni IAS 2 talablari bilan uyg'unlashtirishdagi mavjud metodologik tafovutlar va amaliy muammolar aniqlangan. Tahlil asosida shaffoflikni oshirish, zahiralarni baholashda izchillikni ta'minlash va moliyaviy hisobot sifatini yaxshilash bo'yicha tavsiyalar ishlab chiqilgan.*

Kalit so'zlar: *Tovar-moddiy zahiralari hisobi, IAS 2, xalqaro standartlar, IFRS, tannarxni baholash, sof realizatsiya qiymati, qadrsizlanish, moliyaviy hisobot, buxgalteriya hisobi islohoti, uyg'unlashtirish.*

Аннотация. *Данное исследование посвящено вопросам совершенствования учета товарно-материальных запасов в соответствии с международными стандартами, в частности IAS 2 (Запасы). В работе проведен сравнительный анализ практики признания, оценки, определения стоимости и раскрытия информации о запасах в национальной системе бухгалтерского учета с требованиями Международных стандартов финансовой отчетности (IFRS). Особое внимание уделено методам определения себестоимости, оценке чистой стоимости реализации, признанию обесценения и представлению информации в финансовой отчетности. В ходе исследования*

выявлены существующие методологические различия и практические проблемы гармонизации национальных нормативных документов с требованиями IAS 2. По результатам анализа предложены рекомендации, направленные на повышение прозрачности, обеспечение последовательности в оценке запасов и улучшение качества финансовой отчетности в соответствии с международными стандартами.

Ключевые слова: Учет товарно-материальных запасов, IAS 2, международные стандарты, IFRS, оценка себестоимости, чистая стоимость реализации, обесценение, финансовая отчетность, реформа бухгалтерского учета, гармонизация.

Introduction. In the contemporary landscape of global business, adherence to international standards in inventory accounting has become increasingly imperative. Organizations are challenged to enhance accuracy, transparency, and compliance in their financial reporting processes to ensure competitiveness and reliability. This necessity is particularly evident as companies expand across borders, requiring a harmonization of accounting practices that align with the International Financial Reporting Standards (IFRS). Effective inventory accounting under these standards not only facilitates better decision-making within organizations but also fosters trust among investors and stakeholders. As diverse industries embrace transformative technologies, such as automated accounting solutions, it is crucial to address the ethical implications and operational shifts associated with these advancements. Knowledge gaps present opportunities for further research concerning the integration of artificial intelligence tools in inventory management systems, particularly in their potential to streamline processes while evaluating associated risks (Calvin K et al., 2023), (Yogesh K Dwivedi et al., 2023).

Overview of inventory accounting and its importance. Inventory accounting plays a crucial role in financial reporting and management, as it provides insight into a company's inventory levels and the associated cost implications. This practice is vital for both operational efficiency and strategic decision-making, as it directly influences cash flow, profitability, and compliance with international financial reporting standards. By accurately tracking and valuing inventory, businesses can better align production with market demand, thereby minimizing excess stock and reducing holding costs. Furthermore, an effective inventory accounting system serves as a foundational element for enhancing the overall financial health of an organization, ensuring that stakeholders have access to reliable information for informed decision-making. Consequently, the emphasis on aligning inventory accounting practices with international standards becomes paramount, as seen in various industries striving for operational excellence and financial transparency (Calvin K et al., 2023) (Reed T Sutton et al., 2020).

Adhering to international accounting standards is pivotal for organizations striving to enhance their inventory accounting practices. By aligning with these standards, companies can ensure consistency and comparability in financial reporting, which is essential for fostering investor trust and facilitating cross-border transactions. Additionally, this alignment mitigates the risk of errors and misstatements in financial statements, which can

arise from divergent national standards. The importance of rigorous measurement and reporting practices, particularly in context to inventory valuation, cannot be understated; inadequate approaches may lead to misleading financial health assessments. Furthermore, organizations adopting international standards can better navigate regulatory landscapes and enhance their operational efficiency. As outlined in (Yogesh K Dwivedi et al., 2023) and (Gordon W Cheung et al., 2023), adopting best practices in financial reporting not only bolsters stakeholder confidence but also supports long-term strategic goals, making alignment with international standards a fundamental initiative in improving inventory accounting.

Understanding International Inventory Accounting Standards. The evolution of International Inventory Accounting Standards reflects a dynamic shift towards harmonization and transparency in financial reporting. This shift has become increasingly important as businesses operate in a globalized economy, necessitating compliance with standards that can be uniformly applied across various jurisdictions. The principles set forth by these standards aim to improve the reliability of inventory valuations and ensure that they accurately reflect the economic realities of enterprises. For instance, the guidelines stipulate methodologies such as FIFO (First-In, First-Out) and weighted average cost for inventory accounting, which are essential for mitigating inconsistencies in reported earnings. Furthermore, adhering to these international standards enhances comparability for investors and stakeholders, thereby fostering informed decision-making. This backdrop is critical as firms work towards integrating advanced accounting practices (Lennart T Bach et al., 2023) and prioritizing adherence to evolving reporting protocols (Matthew J Page et al., 2021), ultimately leading to improved organizational performance in inventory management.

The principles governing inventory accounting under International Financial Reporting Standards (IFRS) and U.S. Generally Accepted Accounting Principles (GAAP) present both similarities and notable divergences that impact financial reporting. Both frameworks mandate the accurate valuation of inventory, yet they differ in the acceptable methods for determining cost flow assumptions. Under IFRS, the use of the FIFO (First-In, First-Out) method is commonly adopted, as it provides an advantageous reflection of inventory value during inflationary periods, thereby enhancing net profit and overall financial health of the firm. Conversely, GAAP permits a wider array of methods, including LIFO (Last-In, First-Out), which can result in lower taxable income but may obscure the true financial status of a business. Thus, adherence to these accounting standards is crucial, as it shapes not only the efficiency of inventory management but also the reliability of financial statements (Mayarani S et al., 2025) (Wang R, 2023).

In examining the differences and similarities between major international accounting standards, particularly the U.S. Generally Accepted Accounting Principles (GAAP) and the International Financial Reporting Standards (IFRS), several key aspects emerge that

impact inventory accounting. While both systems aim to standardize financial reporting and ensure transparency, significant variances exist in the treatment of inventory costs. For instance, GAAP permits the Last In First Out (LIFO) method, which is favored by some U.S. companies for tax advantages, while IFRS prohibits it, mandating entities to use either First In First Out (FIFO) or weighted average cost methods. Despite these differences, both frameworks converge in their objective to provide reliable financial information that can facilitate investment decisions and enhance comparability across borders (Hussein A, 2024) (Wang R, 2023). This alignment underscores the necessity of converging inventory accounting practices to improve accuracy and consistency in global markets.

Challenges in Implementing International Inventory Standards. The implementation of international inventory standards presents multifaceted challenges that organizations must navigate to enhance their financial reporting. Key obstacles include the divergence of existing national accounting practices from international guidelines, which complicates the transition process. Such discrepancies can generate inconsistencies in the valuation and reporting of inventory, ultimately affecting financial transparency. Furthermore, as organizations strive to comply with these standards, they may encounter a lack of trained personnel adept in international accounting principles, which disrupts operational efficiency. An example of this complexity is seen in Egypt's efforts to converge its national standards with international norms, as companies must adapt to new methodologies and cultural considerations while ensuring compliance with legal frameworks (Hussein A, 2024). As discussed in (N Imamova, 2025), aligning these frameworks not only facilitates comparability and transparency but is also imperative for enhancing overall competitiveness in a rapidly globalizing market.

In the context of improving inventory accounting standards, multinational companies frequently encounter challenges that stem from discrepancies in accounting regulations and practices across different jurisdictions. These discrepancies can complicate the harmonization of financial reporting, particularly as firms navigate the transition to International Financial Reporting Standards (IFRS). Critics often highlight that the costs associated with these transitions can outweigh the potential benefits, fostering resistance within companies reluctant to relinquish local accounting practices (Trimble M et al., 2024). Furthermore, various cultural, economic, and legal factors contribute to the complexity of accounting across borders, impacting not only compliance but also strategic decision-making (Clare et al., 2021). As a result, multinational enterprises must invest significant resources in training, technology, and process re-evaluation to align their inventory accounting practices with international standards while mitigating the risks associated with non-compliance.

Issues related to varying local regulations and compliance. In the realm of inventory accounting, businesses often face significant challenges arising from varying

local regulations and compliance requirements. These discrepancies can lead to inefficiencies and inconsistencies in financial reporting, ultimately hindering the efforts to align practices with international standards. The integration of specific local laws into global operations necessitates a nuanced understanding of the regulatory landscape, which can differ dramatically between jurisdictions. Such complexities may impact inventory valuation, reporting timelines, and overall financial disclosure requirements. Moreover, adherence to local regulations often entails the allocation of additional resources for compliance management and risk assessment, affecting operational efficiency. To effectively navigate these challenges, organizations must adopt robust accounting frameworks that not only comply with local mandates but also align with global standards, ultimately ensuring transparency and reliability in financial reporting (Oriekhoe OI et al., 2024) (Alice C Hughes et al., 2023).

In pursuing improvements in inventory accounting practices, organizations must adopt a multifaceted approach that aligns with international standards. First, implementing advanced inventory management systems can enhance accuracy and reduce human error, thereby streamlining the tracking of stock levels and valuations. Additionally, regular training programs for accounting personnel can cultivate a deep understanding of inventory methods like FIFO (first-in, first-out) and LIFO (last-in, first-out), ensuring adherence to compliance requirements. Furthermore, the integration of robust reporting frameworks, as emphasized in (Matthew J Page et al., 2021), can provide insights into inventory performance, enabling more informed decision-making. Lastly, embracing technology such as blockchain for traceability can further enhance transparency and accountability. In this way, companies can significantly improve their inventory accounting practices, ensuring that they not only meet local compliance standards but also align with international accounting principles, ultimately leading to optimal operational efficiency as indicated by (Friedlingstein P et al., 2020).

The adoption of advanced inventory management technologies plays a crucial role in enhancing inventory accounting practices within the framework of international standards. As organizations increasingly turn to sophisticated tools and systems, such as real-time tracking and automation, they benefit from improved accuracy and efficiency in their inventory processes. These technologies not only streamline operations but also facilitate compliance with international accounting standards by ensuring transparency and traceability in inventory records. Notably, the integration of artificial intelligence and advanced analytics can significantly transform inventory management, driving more informed decision-making and optimizing supply chain performance (Yogesh K Dwivedi et al., 2023). However, businesses must also recognize the potential challenges and risks associated with these technologies, including data privacy and ethical considerations that warrant careful attention (Reed T Sutton et al., 2020). Ultimately, balancing innovation with responsible implementation is essential for successful adoption.

In the realm of inventory accounting, the significance of staff training and continuous professional development (CPD) cannot be overstated. As organizations strive to align their practices with international standards, such as the International Financial Reporting Standards (IFRS), the need for well-trained personnel becomes paramount. Effective CPD programs equip staff with essential skills that respond to the evolving demands of the industry, ensuring compliance with regulatory frameworks (Song F, 2024). The ability to adapt quickly to new accounting practices and technologies is further enhanced through targeted training initiatives, which also foster a culture of lifelong learning within organizations. Moreover, research indicates a gap in competencies regarding emerging skills necessary for the knowledge economy, underscoring the importance of tailored CPD offerings that address these deficiencies (K Sanoran et al., 2024). Consequently, enhanced training initiatives lead to improved inventory accounting outcomes, benefitting both organizations and their stakeholders.

Conclusion. In conclusion, the pursuit of improved inventory accounting practices that align with international standards is crucial for organizations seeking to enhance financial accuracy and operational efficiency. As illustrated throughout this essay, the complexities inherent in inventory management necessitate a strategic approach that not only adheres to established guidelines but also embraces technological advancements. Implementing robust accounting systems can facilitate transparency and accuracy, significantly reducing discrepancies in reported figures. Additionally, organizations can leverage tools drawing on artificial intelligence to automate inventory processes, thereby decreasing human error and increasing operational productivity. Nonetheless, it is essential to approach the integration of these technologies thoughtfully, addressing challenges related to data quality and ethical considerations surrounding their deployment. The insights provided here lay a foundation for further research into optimizing inventory methods in alignment with evolving international standards (Benjamin D Douglas et al., 2023) (Yogesh K Dwivedi et al., 2023).

Effective inventory accounting is integral to maintaining accurate financial reporting and operational efficiency, particularly in compliance with international standards. Best practices begin with the implementation of robust inventory management software, which facilitates real-time tracking and reporting. Regular inventory audits are essential, helping to reconcile physical counts with accounting records and identify discrepancies early. Additionally, adopting a systematic approach to categorizing inventory—such as employing the ABC method—enables businesses to prioritize resources on high-value items while optimizing stock levels for others. Training personnel on best practices and using technology to reduce human error further enhances accuracy in reporting. As organizations navigate these improvements, they must also consider the ethical implications of technological advancements, as highlighted in recent studies that explore the balance between efficiency gains and potential misuse (Benjamin D Douglas et al.,

2023) (Yogesh K Dwivedi et al., 2023). By aligning operational practices with these principles, companies can achieve greater compliance and transparency in their inventory accounting.

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