



INVENTORY VALUATION TECHNIQUES AND THEIR IMPACT ON PROFITABILITY IN MANUFACTURING FIRMS

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Abstract

The inventory valuation is a major factor in the determination of the financial performance of manufacturing firms. Various valuation methods like First-In-First-Out (FIFO), Last-In-First-Out (LIFO) and Highest-In-First-Out (HIFO) affect goods sold cost, profit and tax due. This paper reviews the impact of inventory valuation techniques on the profitability of the manufacturing organizations especially the automobile spares industry. In which financial data over a number of years were examined in a bid to compare the different methods of calculating inventory values. The research

concludes that FIFO increases the profits and inventory value mostly whereas LIFO reduces profits and offers tax benefits. The study provides the significance of the choice of an appropriate inventory valuation method to report financial figures and make strategic decisions.

I. Introduction

One of the greatest current assets of manufacturing companies is inventory. This requires proper inventory management and valuation that is needed to ensure that the operations remain stable and efficient. The value of inventory is calculated and establishes the financial worth of the goods that have not been sold by the end of a given accounting period. Valuation of inventory is done using different accounting methods which include FIFO, LIFO and HIFO. The methods have implications on the cost of goods sold, gross profit, and net profit. Valuation technique has also an impact on financial ratios, tax liabilities and decision-making processes in organizations.



Inventory in terms of total assets is a major portion in industries like automobile spare parts production. Thus, it is most important to use the correct inventory valuation method when reporting a true financial position. The present study seeks to determine how various methods of valuation affect profitability using real financial information.

II. Review Of Literature

Singh (2021) also investigated the impact of inventory valuation procedures on financial ratios and profitability in manufacturing companies. In the study, it was discovered that variations in valuation methods have a great impact on financial statements.

Thomas (2022) examined the use of valuation policies in the making of financial decisions and came up with the conclusion that transparent valuation practices enhance managerial planning and budgeting.

In a research conducted by Sharma and Gupta (2020), the authors investigated the effects of FIFO and LIFO on profitability in the period of inflation.

Their results showed that FIFO has the tendency of inflating reported profits whereas LIFO gives tax advantages. Reddy (2019) also highlighted that inventory valuation methods have to be applied uniformly across all financial reporting in order to preserve comparability. Based on these studies, inventory valuation plays an important role in financial management and decision making.

III. Statement Of Problem

Manufacturing companies carry inventory that is bulk in nature and how inventory is valued greatly influences financial performances. Nevertheless, most organizations have problems in identifying the most appropriate method of valuation. Various valuation methods can result in varying profit amounts, tax, and financial ratios. Thus, when it comes to financial management, it is important to know the financial implications of these techniques.

In this paper, the researcher aims at examining the effect of FIFO, LIFO and HIFO methods of valuation on the



profitability of manufacturing companies.

IV. Objectives Of The Study

The primary goals of the research are:

To examine the various inventory valuation methods like FIFO, LIFO and HIFO.

To determine the effect of these methods on profitability.

To compare the financial results of the various inventory valuation approaches.

To determine the most appropriate valuation technique of manufacturing companies.

To offer recommendations to practice effective inventory valuation.

V. Scope Of The Study

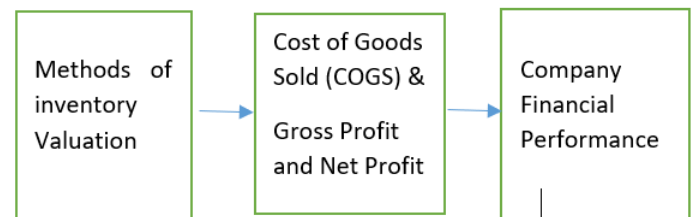
Inventory valuation techniques used in manufacturing firms where the automobile spare parts industry belongs are under the study.

The studies use Sarang Auto Parts Pvt. Ltd. financial reports of a several years to test the impacts of the various valuation methods.

The analysis primarily focuses on how FIFO, LIFO, and HIFO approaches

affect such financial measures as the cost of goods sold, gross profit, and the inventory value.

Vi. Framework



VII. Research Methodology

The research has adopted descriptive and analytical research design that will study the impact of inventory valuation methods on profitability.

The study utilized both primary and secondary sources of data. Primary data was gathered by talking to finance managers and accountants. Secondary data was gathered in the form of company financial statements, annual report, journals and research articles.

The analysis of financial information is conducted in a period of five years.



The financial results acquired by the application of FIFO, LIFO, and HIFO valuation methods were compared with the help of accounting tools and ratio analysis.

Viii. Practical Implications

This study has a number of practical implications to manufacturing companies.

Financial Decision Making: The selection of the right inventory valuation technique assists companies to show off the financial performance.

Tax Planning: Various valuation techniques have an impact on the tax liability, which means that firms can organize their tax planning.

Cost Control: The methods of inventory valuation assist the management analyse the cost of inventory and enhance the operational efficiency.

Strategic Planning: Valuation of inventory helps in budgeting, pricing and planning in the long run.

IX.Data Discussion And Analysis

The analysis was based on financial implications of FIFO, LIFO, and HIFO.

FIFO Method:

The technique presupposes that the first stock bought is sold. It tends to create a decrease in cost of goods sold and increase in profits at times when prices are on the rise.

LIFO Method:

In this approach, the latest inventory that is acquired is issued. This increases the cost of goods sold and decreases the reported profits, but it has the potential to decrease tax liabilities.

HIFO Method:

In this approach the most heavily priced inventory is issued. It leads to the maximum cost of goods sold and the least liberal amount of profit estimation.

The discussion indicates that all the valuation techniques yield variable financial results and have to be chosen according to the business goals.



X. Limitations Of The Study

This research paper deals with one firm that is involved in the automobile spare parts market.

The analysis is portrayed based on few years of limited financial data.

These findings might not be consistent in other industries and economic settings.

The accounting standards can be altered, and this can influence the relevance of some methods.

XI. Conclusion

The value of inventory is important in establishing financial performance of manufacturing enterprises. The valuation method greatly impacts on cost of goods sold, profitability and tax liability.

The investigation concludes that FIFO tends to yield more profits at times of inflation whereas LIFO yield lesser profits but is beneficial in terms of tax.

HIFO is a more conservative basis of

estimating profit because the inventory that is charged is the most expensive.

The process of inventory valuation is the one that should be thought through by organizations depending on the financial objectives, taxation policy, and the organization needs. An effective inventory valuation will lead to the accurate financial reporting and enhanced managerial decisions.

XII. Reference

- 1) Singh, R. (2021). Inventory Valuation, Financial Performance. *Journal of Accounting Studies*.
- 2) Thomas, J. (2022). Financial Decision Making Policies of Valuation. *Financial Management Review*.
- 3) Sharma, P., & Gupta, N. (2020). Effects of Inventory techniques on Profitability. *International Journal of Finance*.
- 4) Reddy, K. (2019). Financial Reporting and Accounting Methods. *Business Accounting Journal*.
- 5) Swadhi, R., Gayathri, K., Suresh, N. V., Catherine, S., & Velmurugan, P. R. (2025).



- Leveraging Machine Learning for Enhanced Patient Engagement and Outcomes: Revolutionizing Healthcare Marketing. In *Impact of Digital Transformation on Business Growth and Performance* (pp. 313-340). IGI Global.
- 6) Swadhi, R., Velmurugan, P. R., Gayathri, K., & Catherine, S. (2026). Evolving critical themes in advanced human resource management: Navigating change in the modern workplace. In *Critical aspects in advanced human resource management* (pp. 75-102). IGI Global.
- 7) Tartari, E., Weterings, V., Gastmeier, P. J. R. B., Rodríguez Baño, J., Widmer, A., Kluytmans, J., & Voss, A. (2017). Patient engagement with surgical site infection prevention: an expert panel perspective. *Antimicrobial Resistance & Infection Control*, 6(1), 45.
- 8) Venice, A., Swadhi, R., Gayathri, K., Chandra, P., & Sajana, K. P. (2026). Rehabilitation Robotics and Adaptive Motion Planning for Patient-Centric Care. In *Intelligent Motion Control for Human-Centered Systems* (pp. 51-76). IGI Global.
- 9) Vettriselvan, R. (2025). Harnessing innovation and digital marketing in the era of industry 5.0: resilient healthcare SMEs. In *The Future of Small Business in Industry 5.0* (pp. 163-186). IGI Global.
- 10) Vettriselvan, R., & Anto, M. R. (2018). Pathetic health status and working condition of Zambian women. *Indian Journal of Public Health Research & Development*, 9(9), 259-264.
- 11) Vettriselvan, R., & Rajan FSA, A. J. (2019). Occupational Health Issues Faced by Women in Spinners. *Indian Journal of Public Health Research & Development*, 10(1).
- 12) Vettriselvan, R., Deepan, A., Jaiswani, G., Balakrishnan, A., & Sakthivel, R. (2025). Health Consequences of Early Marriage: Examining Morbidity and Long-Term Wellbeing. In *Social, Political, and Health Implications of Early Marriage* (pp. 189-212). IGI Global.
- 13) Vettriselvan, R., Ramya, R., Selvalakshmi, V., Jyothi, P., & Velmurugan, P. R. (2026). Empowering Patients through Knowledge: Educational Strategies in Rehabilitation. In *Holistic Approaches to Health Recovery* (pp. 263-290). IGI Global.
- 14) Vettriselvan, R., Velmurugan, P. R., Varshney, K. R., EP, J., & Deepika, R. (2025). Health Impacts of Smartphone and Internet Addictions Across Age Groups: Physical and Mental Health Across Generations. In *Impacts of Digital*



- Technologies Across Generations (pp. 187-210). IGI Global.
- 15) Vijayalakshmi, M., Subramani, A. K., Vettriselvan, R., Catherin, T. C., & Deepika, R. (2025). Sustainability and Responsibility in the Digital Era: Leveraging Green Marketing in Healthcare. In *Digital Citizenship and Building a Responsible Online Presence* (pp. 285-306). IGI Global.
- 16) Vijayalakshmi, M., Subramani, A. K., Vettriselvan, R., Velmurugan, P. R., & Hasine, J. (2025). Strategic Collaborations in Medical Innovation and AI-Driven Globalization: Advancing Healthcare Startups. In *Navigating Strategic Partnerships for Sustainable Startup Growth* (pp. 85-110). IGI Global.
- 17) Williams, M. (2008). Infection control and prevention in perioperative practice. *Journal of perioperative practice*, 18(7), 274-277.
- 18) Zahoor, H., Mustafa, N., Ashifa, K. M., Safaei, M., & El Gamil, R. (2025). Unlocking resilience: Emotional intelligence and self-leadership shape stress perception among health students. *International Journal of Innovation and Learning*, 38(4), 395-419.
- 19) Catherine, S., Suresh, N. V., Mangaiyarkarasi, T., & Jenefa, L. (2025). Unveiling the enigma of shadow: Ethical difficulties in the field of AI.
- 20) Suresh, N. V., Selvakumar, A., Sridhar, G., & Jain, V. (2025). Dynamic Pricing Strategies Implementing Machine Learning Algorithms in E-Commerce. In *Building Business Models with Machine Learning* (pp. 129-136). IGI Global Scientific Publishing.
- 21) Catherine, S., Ramasundaram, G., Nimmagadda, M. R., & Suresh, N. V. (2025). Roots, routes, and identity: how culture shapes heritage travel. In *Multiple-Criteria Decision-Making (MCDM) Techniques and Statistics in Marketing* (pp. 343-352). IGI Global Scientific Publishing.
- 22) Kalaivani, M., Suresh, N. V., & Catherine, S. (2025). The Next Wave in Marketing: Data Science in the Age of Generative AI.
- 23) Vettriselvan, R., Deepan, A., Garg, P. K., Suresh, N. V., & Velmurugan, P. R. (2025). Advanced Text Analysis, Simplification, Classification, and Synthesis Techniques: Leveraging AI for Enhanced Medical Education. In *Using AI Tools in Text Analysis, Simplification, Classification, and Synthesis* (pp. 37-66). IGI Global Scientific Publishing.



- 24) Vettriselvan, R., Deepa, R., Gautam, R., Suresh, N. V., & Cathrine, S. (2025). Bridging Academia and Industry Through Technology and Entrepreneurial Innovation: Enhancing Supply Chain Efficiency. In *Bridging Academia and Industry Through Cloud Integration in Education* (pp. 145-174). IGI Global Scientific Publishing.
- 25) Venice, J. A., Vettriselvan, R., Rajesh, D., Suresh, N. V., & Abirami, P. (2025). Enabling personalized learning and adaptive systems through strategic management: cloud integration in education. In *Bridging Academia and Industry Through Cloud Integration in Education* (pp. 49-72). IGI Global Scientific Publishing.
- 26) Swadhi, R., Gayathri, K., Suresh, N. V., Catherine, S., & Velmurugan, P. R. (2025). Leveraging Machine Learning for Enhanced Patient Engagement and Outcomes: Revolutionizing Healthcare Marketing. In *Impact of Digital Transformation on Business Growth and Performance* (pp. 313-340). IGI Global Scientific Publishing.
- 27) Aravind, D., Kurnaz, S., Suresh, N. V., Reddy, E. E., Reddy, P. J. L., & Jayalakshmi, S. (2026). Hybrid Renewable Energy Systems and Effective Resource Utilization for Sustainable Aviation. In *Green Approaches and Environmental Stewardship for Aviation Management* (pp. 1-30). IGI Global Scientific Publishing.
- 28) Patil, S. H., Shanmugam, R., Gadhave, S. H., & Suresh, N. V. (2026). Workplace culture and employee perceptions in Xiaomi corporation. In *Empowering Inclusive Innovation* (pp. 701-708). Routledge.
- 29) Shanmugam, R., Pradeepa, S. V., Singh, P., & Suresh, N. V. (2026). Brand personality and its important role in purchase decisions. In *Empowering Inclusive Innovation* (pp. 769-776). Routledge.
- 30) De Chlarence, J. M., Sarkar, B., Gawande, N., & Suresh, N. V. (2026). Impact of multi-sensory marketing on consumer purchase decisions and loyalty in restaurants. In *Empowering Inclusive Innovation* (pp. 739-749). Routledge.
- 31) Singh, P., Shanmugam, R., Pradeepa, S. V., & Suresh, N. V. (2026). Performance evaluation of large cap mutual fund schemes in India: An empirical study using risk-return measures. In *Empowering Inclusive Innovation* (pp. 750-755). Routledge.
- 32) Gadhave, S. H., Shanmugam, R., Patil, S. H., & Suresh, N. V. (2026). Work-Life Balance as an HR initiative: An empirical study on employee



perceptions in the Indian IT sector.

In *Empowering Inclusive Innovation* (pp. 717-724). Routledge.

- 33) Gadhave, S. H., Shanmugam, R., Patil, S. H., & Suresh, N. V. (2026). Work–Life Balance as an HR initiative: An empirical study on employee perceptions in the Indian IT sector. In *Empowering Inclusive Innovation* (pp. 717-724). Routledge.