European Journal of Accounting, Auditing and Finance Research
Vol.6, No.3, pp.65-77, April 2018
Published by European Centre for Research Training and Development UK (www.eajournals.org)

AN ANALYSIS OF OPTIMAL INVENTORY ACCOUNTING MODELS - PROS AND CONS

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ABSTRACT: *In this paper titled "An Analysis of Optimal Inventory Accounting Models - Pros and Cons" researchers endeavor an attempt by doing ardent work that in any kind of organization, inventory accounting plays significant role in overall supply chain management as well maintaining profitable relationship amongst producers, sellers (organizations) and primarily customers. After thorough study, researchers have found that for the efficient, smooth and profitable functioning of organizations, inventory accounting system should be able to fulfill the requirements between supply and demand of products available in stock. In this research paper researchers investigate different inventory accounting methods and explore their popularity amongst different inventory models and also make emphasis of analysis of different available methods. Researchers also make an attempt to explore valid reasons in each described inventory accounting method as per different objectives of organizations in detail.*

KEYWORDS: Fifo, Lifo, Hifo, Fefo, *Nifo*

INTRODUCTION

Prologue:

Inventory is one of the most important components of Profit and Loss (trading) account as well as current asset of Balance Sheet. Handling inventory can define the success and failure of the enterprises. Inventory is two ways sword excess piled inventory block the financial blood of the organization and raise the carrying cost of the inventory whereas minimal stock may hamper the production process due to paucity of raw material and it may force to procure costly raw material in case of crisis. Therefore, it is very important to have effective inventory accounting system and optimum level of inventory.

Small business, it may be likely to compute inventory on finger on regular basis to keep control of it. In actual fact, if projects based on order supplies, there may be slight unceasingly in inventory.

But, for bigger business houses, it is essential to have more supplies and products in hand, and will have to put on different stratagem to grip this accountability. When enterprises grasp this extent, it is essential to ponder not only the physical procedure of determining stock, but also the inventory accounting practice for following these vital commercial assets.

To present true and fair financial statements, apposite accounting for inventory is vital since it is very important part of Profit and Loss (trading) account as well as current asset of Balance Sheet.

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

Any establishment has in hand for its own manufacturing or for trade to customers has inventory which includes the raw materials, work-in-process, and finished goods. Inventory is cogitated an asset, so the bookkeeper need steadily practice a effective technique for conveying costs to stock in order to record it as a current asset.

The assessment of stock is not a petty matter, since the accounting technique used to create an appraisal has a straight bearing on the total of cost indicted to the cost of goods sold in a financial year, and consequently on the quantity of revenue netted. The rudimentary method for calculating the cost of goods sold in a financial year is:

Cost of goods sold = Beginning inventory + Purchases - Ending inventory

Hence, the cost of goods sold is mainly grounded on the cost allocated to ending inventory, which carries us back to the accounting technique practiced to do so. There are numerous potential inventory accounting methods, which are:

1. Periodic Inventory System
2. Perpetual Inventory System
    a) Specific Identification Method
    b) Weighted Average Method
    c) **N**ext **I**n **F**irst **O**ut Method (NIFO)
    d) **Lo**west In **F**irst **O**ut (LOFO)
    e) **F**irst **I**n, **F**irst **O**ut Method (FIFO)
    f) **L**ast **I**n, **F**irst **O**ut Method (LIFO)
    g) **H**ighest **I**n, **F**irst **O**ut (HIFO)
    h) **F**irst **E**xpired **F**irst **O**ut (FEFO)

Note: - FIFO, LIFO, HIFO and FEFO are explained quantitatively in later part of the study.

Periodic Inventory System

In this method, all procurements are documented in a purchase account. When the physical stock is completed, the rest of the purchases account is budged to the inventory account, which in order to adjust to match the cost of the ending inventory. Periodic inventory accounting permits a firm to recognize the beginning inventory and ending inventory within an financial year, but it does not follow inventory on a day to day basis. Inventory is track by a physical stock count. The computation of the cost of goods sold under the periodic inventory system is:

Cost of goods available for sale = Beginning inventory + Purchases

Cost of goods sold = Cost of goods available for sale – Ending inventory

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

The cost of ending inventory can be determined by using ABC Method of inventory accounting or the FIFO or LIFO inventory accounting methods, or any less ordinary technique. Beginning inventory for the financial year under study is ending inventory from the previous year. The firm requires closing down at least once a year to do a manual, periodic count. The scrutinized records should tell the firm's proprietor unerringly what stock should be in hand. The main advantage of undertaking a periodic stock count is to found how much stock has been pilfered, subject to decomposition, or missing.

Perpetual Inventory System

Perpetual inventory accounting system engages supplementary records than periodic inventory accounting systems. Every stock item is kept on a different account. These inventory accounts include details of cost of goods sold, purchases and stock in hand. Perpetual inventory accounting systems let very high degree of control of the firm's stock by management.

A perpetual inventory accounting system report stock balances of store after every transaction through point-of-sale inventory systems.

Perpetual inventory systems provide the company owner with a proof of what is sold, when it was sold, where it was sold from, and at what price it was sold. Therefore, it allows for companies to have centralized inventory accounting system.

Yet with a perpetual inventory accounting system, the firm requires to close down at least once a year to do a manual, periodic count. The scrutinized records should tell the firm's proprietor unerringly what stock should be in hand. The main advantage of undertaking a periodic stock count is to found how much stock has been pilfered, subject to decomposition, or missing.

Periodic v/s Perpetual Inventory Accounting

If firm is small and do not have spare fund to invest, periodic inventory accounting is a greater option because with just a cash book and a uncomplicated accounting method. If firm not sell products or sell services may not need an inventory accounting system unless owns hospitality business or a restaurant.

As firm grows, it may need to change over to a perpetual inventory accounting system as it permits to know the balance in the stock account at any point in time. Big company usually have perpetual inventory accounting system rather than periodic inventory systems.

Specific Identification Method: - independently follow the cost of each item in stock, and levy the definite cost of a piece to the cost of goods sold when sell the particular article to which that cost has been allocated. This process requirements an enormous quantity of data outlining, so this method is only useful for precisely high-cost and exceptional pieces, for example, vehicles, bus, car (automobile) or works of art. It is not a feasible technique in most other conditions.

Weighted Average Method: - Under the this method, inventory is by and large of one layer (but it can be employed in the inventory with multi layer then it need very high

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

level of tracking of individual items), since the cost of any new bought stock are mixed into the cost of any in hand stock to obtain a fresh weighted average cost, which in turn is accustomed yet again as more stock is procures. Inventory stuffs are so amalgamated and intermingled that it becomes impossible to allocate a particular cost to an individual item. Stock items are so commoditized (i.e., replica to each other) no way to allot a cost to an individual piece. For example bought 120 drums of oil at $1000, 120 drums at $1100, and 120 drums at $1200; your average cost is $1100. Under the weighted average method when vended a drum of oil it is presumed cost was $1100, despite of what actually paid for that specific drum.

Next In First Out Method (NIFO):-The technique try to charge supplies issues or cost of goods sold at a real cost which is as close as possible to the market price. The cost of goods sold is used at the next price, i.e., the price of materials for which ordered has been placed but not so far received. In other words, cost of goods sold for more processing or vending are at the most recent cost at which the firm has been devoted even though goods yet haven't been actually received. For example, 200 units of material X purchased @ $ 1 per unit are present in the store and a purchased order for another 200 units @ $ 2 has been placed. If an indent of 75 units from the production department is made, they will be issue the items to the production department at $ 2 per unit (i.e., the price at which the materials are yet to be received). This method can be used with multi layer inventory, the cash flow remains very high. The value of inventory on a particular date is ascertained by deducting the cost of materials issued or goods sold from the total value of materials or goods purchased. Calculations of issue prices are complicated in this method and therefore the method is not widely used.

Lowest In First Out (LOFO):- Under this method, LOFO is the acronym of Lowest In First Out, the first two alphabets of the Lowest is used to differentiate with LIFO, LOFO and LIFO is altogether different methods of inventory accounting, first the things with least purchase cost are utilized in the production, this method is generally used with multi layer inventory. Hence, at the end of the year stock in hand remains with height procure price, the cash flow is low due to the highest value of stock remains in inventory. LOFO method is one of the least used methods in the inventory accounting. LOFO method is taken into explanation in contradistinction to the LIFO method for the purchase prices. This method of inventory accounting is not in style in the business world because it assumes that the costs of the raw materials are likely to be raise.

LITERATURE REVIEW

Sunder (1976) presented a deterministic model to estimate the difference between the net present value of tax payments and cash flows associated with FIFO and LIFO. Based on these differences, the author claimed that companies may choose the best alternative to value their inventories. Morse and Richardson (1983) mainly ask for that organizations of same magnitude and in the identical business incline to pick the similar inventory accounting method. Further researches like Dopuch and Pincus (1988), who matched FIFO and LIFO methods grounded on their properties in the financial statements, established that the selection of LIFO method was more of tax benefits related. Hughes and Schwartz (1988) also established a projecting model to emphasis on an administrator's choice of inventory accounting methods in a world of information and

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

establish tax savings as a solid basis behind the selection. In an alike view, the model established by Cushing and LeClere (1992) measured added issues like organization size, inventory unevenness, etc to forecast the selection of inventory accounting method. The authors determined that both tax and non-tax thoughts prejudiced the selection and that a projecting model for inventory accounting method was quiet mysterious. One more such deterministic structure was offered by Bar-Yosef and Sen (1992), in which, enticement properties and tax savings were considered. Writers acknowledged "an optimal inventory accounting policy that calls for a mixed strategy" (Bar-Yosef and Sen, 1992, p.335) - that is, partially FIFO and somewhat LIFO - and appealed the weighted average method to be the best option. Contrariwise, some distinguished researches studied the rationales behind the selection of inventory accounting methods and the special effects growing from these varied performs. Several researchers (Morse and Richardson, 1983; Hunt III, 1985; Lee and Hsieh, 1985; Dopuch and Pincus, 1988; Kuo, 1993) resolved from their pragmatic investigation that tax benefits, firm size and extraordinary liability levels are the strong logics to determine the inventory accounting method.

This research, though, does not wish to change any prognostic model or discourse the causes after the selection of inventory accounting methods and their effects on the financial statements. Moderately, the aim is to recognize the inventory accounting method usually applied by organization in Bangladesh and to define whether the particular method is steadily useful inside the boundaries of accounting standards. Representative researches, in route with the aim of this paper, include Herrmann and Thomas (1995) - where authors claimed FIFO to be more in practice across UK, Denmark, Netherlands and Ireland whereas Average-Cost method was bring into being prevalent in Portugal and France. A chief use of the LIFO method was too noted by this research in Germany, regardless of there being difficulties about LIFO in the accounting standards. Another research by Chung and Narasimhan (2003) indicated an overall use of the LIFO method by MNCs in United States. A research which mainly shares to this study have been described by Ali et al. (2006), where a constant practice of the Average-Cost method was establish in Pakistan and Bangladesh and FIFO method in India. A matching research was steered by Jaafar and McLeay (2007) which established the presence of LIFO in Germany. Writers also discovered the practice of Average-Cost method across Spain and France and FIFO method in UK, Italy and Sweden. Previous researches correlated to inventory accounting methods have been led in two directions. First, there is an inspiring form of sign detailing explanations as to which inventory accounting method can be the best choice. Maximum of these researches dedicated to organizations which accepted the inventory accounting methods of FIFO and LIFO across Europe and United States (Ibarra, 2008).

In another study Woon-Oh Jung-2010 a formalized game - theoretic method in which inventory accounting selection of the organization expresses exclusive facts to their challengers, and hereafter those selection are purposefully prepared. The model provides a justification for the practice of FIFO by some firms, prior noteworthy sums of tax benefits which could be taken by the use of LIFO. An elucidation is also set for adverse market responses to LIFO implementations accepted by most of the empirical researches of LIFO/FIFO choices. An extra outcome attained is that, given a certain situation, the practice of FIFO (thus foregoing the LIFO tax saving) would be extra often practiced in industries with extraordinary barricades to entry. Some lean-tos and restrictions of the model are also debated. In recent reserch (Iryna Anatoliyivna Karabaza, Lyudmyla

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

Ihorivna Lezhnenko- 2015) offers an appraisal of foreign and domestic experience in inventory accounting. Benefits and drawbacks of perpetual and periodic inventory systems were well-defined. The feasibility of periodic inventory system use was examined in the perspective of Ukrainian accounting system. The style for inventory accounting process in agreement of periodic inventory system was proposed for domestic accounts. The research (Ivan Diaz-Rainey, Helen Roberts, David H. Lont - 2017) uses store data from financial accounts to reconnoiter whether organizations included in the physical oil market were venturing in the run-up to 2008. Using quarterly store data over the period 1990Q4 to 2012Q1 and a sample of 15 of the leading listed oil companies in the world, they derive an Index of Scaled Physical Inventories (ISPI). They find deteriorating ISPI up to the initial 2000s is steady with organizations reducing store for competence sake; then ISPI starts to increase, suggesting physical stores could have added to the run-up in oil prices between 2003 and 2008.

Research Gap

There are several methods of inventory valuation and accounting methods, which yields a unlike result on profits when costs are in a run-through of upsurge or diminution. Since rate rises have been more common phenomenon, the acceptance of one system or moving from one process to another needs vigilant study. We investigate the diverse inventory accounting methods used in industry, the choice recognized to define the method used to assess stocks, in our study titled "**An Analysis of Optimal Inventory Accounting Models - Pros and Cons**". Literature review is evident that no research has been done on aforementioned area and there is research gap, therefore, investigators did courage to undertake this topic for investigation, so, we identified inventory accounting methods which are very popular and used in various sectors.

Objectives

This research pursues to attain the following objectives:

1. To check which method of inventory accounting is most popular.
2. To discover which method of inventory accounting is most beneficial for the organization
3. To delineate the conditions under which particular method should be used.
4. To analyze the most commonly used methods applied for pricing inventories.
5. To find out the assumption behind the popular methods like "FIFO" and "LIFO".
6. To detect any alternative method is available for the popular inventory accounting methods like "FIFO" and "LIFO".
7. To also study (if alternative methods available) if any then what are the assumptions.

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

RESEARCH METHODOLOGY

Present research is virtuously the theoretical and model based study, firstly, acquired the essential material on the topic under study i.e. of Inventory valuation and accounting methods through books, journals references. Secondly, a model illustration has been taken and all the methods under study have been applied to check the outcome. Thirdly, compare the methods under study to check that if any other method available as an alternative to other.

Limitation

Specific Identification Method, Lowest in First out (LOFO), Weighted Average Method, and Next in First out (NIFO) has not been considered for discussion since Specific Identification Method and Lowest in First out (LOFO) are not in frequent use whereas Weighted Average Method has no alternative, it is ultimate method in its own genre in accounting of stock and can fit in any organization and so far as NIFO is concerned it is to certain extent unethical, it take the cost of future or speculate, therefore, researchers have not considered these four methods to study.

How to Decide Which Method to be used for Inventory Accounting?

S. No.	Inventory Accounting Method	Reasons
1	Specific Identification Method	This is only useful for precisely high-cost and exceptional pieces.
2	Weighted Average Method	This method primarily used for Single layer inventory but accountant also uses this method in multi-layer of inventory due to convenience in calculation
3	Next In First Out Method (NIFO)	To keep inventory value low, cash flow high and to reduce the tax burden
4	Lowest In First Out (LOFO)	To keep the inventory value high so that loan can be raised.
5	First In, First Out Method (FIFO)	To keep the inventory fresh or dealing with the stock which has limited shelf life.
6	First Expired First Out (FEFO)	To keep the inventory fresh or dealing with the stock which has limited shelf life.
7	Last In, First Out Method (LIFO)	To keep inventory value low, cash flow high and reduces the tax burden
8	Highest In, First Out Method (HIFO)	To keep inventory value low, cash flow high and reduces the tax burden

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

Model Illustration: - Following is the detail of model illustration of an inventory, which we apply in all the methods under study:-

Dated	Particulars	Quantity (Units)	Units Cost ($)	Date of Manufacturing	Date of Expiry
1st January 2018	Balance b/d	500	12.00	22th December 2017	21st January 2018
4th January 2018	Requisition Slip No.	200			
5th January 2018	Goods Received Note No.	200	12.50	27th December 2017	28th January 2018
10th January 2018	Requisition Slip No.	400			
12th January 2018	Goods Received Note No.	150	12.75	29th December 2017	30st January 2018
15th January 2018	Requisition Slip No.	100			
19th January 2018	Requisition Slip No.	100			
20th January 2018	Goods Received Note No.	300	12.10	4th January 2018	3rd February2018
25thJanuary 2018	Goods Received Note No.	400	11.75	5th January 2018	4rd February2018
26th January 2018	Requisition Slip No.	200			
30th January 2018	Requisition Slip No.	250			

First in, first out method (FIFO):- Under the FIFO method, it is presume that items procure first are must sold or consumed for production first, which means that the items in hand are the most recent ones. This strategy strongly goes with the actual progress of stock in most firms, and so is desirable basically from a theoretical point of view. In phase of increasing cost (which is most of the time prevalent in most of the economies), presuming that the most primitive units procured are the first ones utilized means that the smallest amount are charged to the cost of goods sold first. Cost of goods sold tends to be lower means operating revenue leads to a higher amount therefore more burden of income taxes. The advantage of with this method is the oldest stocks are flushed out and inventory remain in hand is always the most fresh one.

Solution with Method – 1

Dated	Particulars	Receipts			Issued			Balance		
		Quantity (Units)	Units Cost ($)	Total Cost ($)	Quantity (Units)	Units Cost ($)	Total Cost ($)	Quantity (Units)	Units Cost ($)	Amounts ($)
1st January	Balance b/d							500	12.00	6,000.00
4th January	Requisition Slip No.				200	12.00	2,400.00	300	12.00	3,600.00
								300	12.00	3,600.00
5th January	Goods Received Note No.	200	12.50	2,500.00				200	12.50	2,500.00
10th January	Requisition Slip No.				200	12.00	2,400.00			
					200	12.50	2,500.00	100	12.50	1,250.00
12th January	Goods Received Note No.	150	12.75	1,912.50				100	12.50	1,250.00
								150	12.75	1,912.50
15th January	Requisition Slip No.				100	12.50	1,250.00	150	12.75	1,912.50
19th January	Requisition Slip No.				100	12.75	1,275.00	50	12.75	637.50
								50	12.75	637.50
20th January	Goods Received Note No.	300	12.10	3,630.00				300	12.10	3,630.00
25thJanuary	Goods Received Note No.	400	11.75	4,700.00				400	11.75	4,700.00
26th January	Requisition Slip No.				50	12.75	637.50			
					150	11.75	1,762.50	150	12.10	1,815.00
								400	11.75	4,700.00
30th January	Requisition Slip No.				150	12.10	1,815.00			
					100	11.75	1,175.00	**300**	**11.75**	**3,525.00**
Total								**300**		**3,525.00**

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

First Expired First Out (FEFO):- Under the FEFO method, it is presume that items procure with earliest to expire are must sold or consumed for production first, which means that the items in hand are having more period of durability. Cost of goods sold or the material utilized are the one which is supposed to expire in recent time. The advantage of with this method is the oldest stocks are flushed out and inventory remain in hand is always the most fresh one.

Solution with Method – 2

Dated	Particulars	Receipts				Issued				Balance			
		Quantity (Units)	Date of Expiry	Units Cost ($)	Total Cost ($)	Quantity (Units)	Date of Expiry	Units Cost ($)	Total Cost ($)	Quantity (Units)	Date of Expiry	Units Cost ($)	Amounts ($)
1st January	Balance b/d									500.00	21st January 2018	12.00	6,000.00
4th January	Requisition Slip No.					200	21st January 2018	12	2,400.00	300.00	21st January 2018	12.00	3,600.00
	Requisition Slip No.									300.00	21st January 2018	12.00	3,600.00
5th January	Goods Received Note No.	200	28th January 2018	12.5	2500					200.00	28th January 2018	12.50	2,500.00
10th January	Requisition Slip No.					300	21st January 2018	12	3,600.00				
						100	28th January 2018	12.5	1,250.00	100.00	28th January 2018	12.50	1,250.00
12th January	Goods Received Note No.	150	30st January 2018	12.75	1912.5					100.00	28th January 2018	12.50	1,250.00
										150.00	30st January 2018	12.75	1,912.50
15th January	Requisition Slip No.					100	28th January 2018	12.5	1,250.00	150.00	30st January 2018	12.75	1,912.50
19th January	Requisition Slip No.					100	30st January 2018	12.75	1,275.00	50.00	30st January 2018	12.75	637.50
20th January	Goods Received Note No.	300	3rd February2018	12.1	3630					50.00	30st January 2018	12.75	637.50
										300.00	3rd February2018	12.10	3,630.00
25th January	Goods Received Note No.	400	4rd February2018	11.75	4700					50.00	30st January 2018	12.75	637.50
										300.00	3rd February2018	12.10	3,630.00
										400.00	4rd February2018	11.75	4,700.00
26th January	Requisition Slip No.					50	30st January 2018	12.75	637.50				
						150	3rd February2018	12.1	1,815.00	150.00	3rd February2018	12.10	1,815.00
										400.00	4rd February2018	11.75	4,700.00
30th January	Requisition Slip No.					150	3rd February2018	12.1	1,815.00				
						100	4rd February2018	11.75	1,175.00	300	4rd February2018	11.75	3,525.00
Total										300			3,525.00

FIFO VS FEFO

FIFO or FEFO are important methods of Inventory accounting for organizations that produce or distribute products with limited shelf life, such as food and beverage or pharmaceuticals. With FIFO, the goods are utilized or selected first are the lot which procured first or when yield are chosen for an indent, fresh arrived products slide forward from the back to replace the just-picked item. Replenishment occurs from the back of the shelves. Whereas, with FEFO, when new stock purchased the goods are scheduled in the line of expiry, so goods nearby to expiry are selected first. This is also useful for groceries, medical products and pharmaceuticals that can perish rapidly. The basic objective of the FIFO or FEFO is to keep the inventory or goods in hand fresh, but with FEFO method, the objective can be achieved 100% even though inventory has the involvement of Procurement department, whether they play their role vigilantly and efficiently or not but the freshness of inventory in hand will remain better than FIFO method due to the strategy of issuing the raw material or finished goods for sale which are supposed to expire first. In case of FIFO it may be possible that by mistake goods may be purchased which has less expiry date or old lot, in such case organization may have to suffer loss and that loss may be hefty due to its policy first in first out.

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

Last In, First Out Method (LIFO):- Under the LIFO method, it is presume that items procure last are must sold or consumed for production first, which means that the items in hand are the oldest ones. This strategy does not go with the natural flow of stock in most firms, in reality, the method is banned under International Financial Reporting Standards presuming that the last units procured are the first ones utilized it means that the cost of goods sold be apt to be higher, which therefore leads to a lower amount of operating earnings, and fewer income taxes. The problem with this method is the oldest layers of stock may not be flushed out for years.

Solution with Method - 3

Dated	Particulars	Receipts			Issued			Balance		
		Quantity (Units)	Units Cost ($)	Total Cost ($)	Quantity (Units)	Units Cost ($)	Total Cost ($)	Quantity (Units)	Units Cost ($)	Amounts ($)
1st January	Balance b/d							500	12.00	6,000.00
4th January	Requisition Slip No.				200	12.00	2,400.00	300	12.00	3,600.00
								300	12.00	3,600.00
5th January	Goods Received Note No.	200	12.50	2,500.00				200	12.50	2,500.00
10th January	Requisition Slip No.				200	12.50	2,500.00			
					200	12.00	2,400.00	100	12.00	1,200.00
12th January	Goods Received Note No.	150	12.75	1,912.50				100	12.00	1,200.00
								150	12.75	1,912.50
15th January	Requisition Slip No.				100	12.75	1,275.00			
19th January	Requisition Slip No.				100	12.00	1,200.00	50	12.00	600.00
								50	12.00	600.00
20th January	Goods Received Note No.	300	12.10	3,630.00				300	12.10	3,630.00
25th January	Goods Received Note No.	400	11.75	4,700.00				400	11.75	4,700.00
26th January	Requisition Slip No.				200	11.75	2,350.00	50	12.00	600.00
								300	12.10	3,630.00
								200	11.75	2,350.00
30th January	Requisition Slip No.				200	11.75	2,350.00			
					50	12.10	605.00	**50**	**12.00**	**600.00**
								250	**12.10**	**3,025.00**
Total								**300**		**3,625.00**

Highest In, First Out (HIFO):- Under the HIFO method, it is presume that items procure with highest in value are must sold or consumed for production first, which means that the items in hand are the inexpensive one. In phase of increasing cost (which is most of the time prevalent in most of the economies), presuming that the most costly units procured are the first ones utilized means that the maximum amount are charged to the cost of goods sold first. Cost of goods sold tends to be higher means operating revenue leads to a lower amount therefore less burden of income taxes and dividend. The problem with this method is the lowest value layers of stock may not be flushed out for years.

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

Solution with Method - 4

Dated	Particulars	Receipts			Issued			Balance		
		Quantity (Units)	Units Cost ($)	Total Cost ($)	Quantity (Units)	Units Cost ($)	Total Cost ($)	Quantity (Units)	Units Cost ($)	Amounts ($)
1st January	Balance b/d							500	12.00	6,000.00
4th January	Requisition Slip No.				200	12.00	2,400.00	300	12.00	3,600.00
								300	12.00	3,600.00
5th January	Goods Received Note No.	200	12.50	2,500.00				200	12.50	2,500.00
10th January	Requisition Slip No.				200	12.50	2,500.00			
					200	12.00	2,400.00	100	12.00	1,200.00
12th January	Goods Received Note No.	150	12.75	1,912.50				100	12.00	1,200.00
								150	12.75	1,912.50
15th January	Requisition Slip No.				100	12.75	1,275.00	100	12.00	1,200.00
								50	12.75	637.50
19th January	Requisition Slip No.				50	12.75	637.50			
					50	12.00	600.00	50	12.00	600.00
20th January	Goods Received Note No.	300	12.10	3,630.00				300	12.10	3,630.00
25th January	Goods Received Note No.	400	11.75	4,700.00				400	11.75	4,700.00
26th January	Requisition Slip No.				200	12.10	2,420.00	50	12.00	
							-	100	12.10	1,210.00
								400	11.75	4,700.00
30th January	Requisition Slip No.				100	12.10	1,210.00			
					50	12.00	600.00			
					100	11.75	1,175.00	300	11.75	3,525.00
Total								**300**		**3,525.00**

LIFO VS HIFO

LIFO and HIFO are the most important methods of inventory accounting for organizations, HIFO has no pre-conditions to achieve its objective and this method can be applied in any type of organization whereas LIFO used in the firm which sale products on demand, rather than groceries and produce with expiration dates or in this method sale of the products takes place with very long date of expiry or no expiry date, the method is banned under International Financial Reporting Standards presuming that the last units procured are the first ones utilized it means that the cost of goods sold be apt to be higher, which therefore leads to a lower amount of operating earnings, and fewer income taxes. The problem with this method is the oldest layers of stock may not be flushed out for years but this concern is not with HIFO (if for discussion sake we accept that the lowest price items will not flushes out for year, in that condition the loss will not be meager). Firms that use, LIFO and HIFO, inventory accounting are normally those with comparatively hefty inventories, LIFO usually outcomes in lesser revenue, lesser taxes, and as a consequence superior cash flow. It is assumed that the price of raw material is tend to increase but it is not must as we can see in the solution with method 3 and 4 the value of inventory is increased in LIFO method due to decreased of the price of raw material and hence the value of inventory increased.

Epilogue

To wrap up of the study we can say that there is no method for inventory accounting method that can be called as optimal or which can be fit in all situations, though the most popular inventory accounting methods are Weighted Average method, First Expired First Out and Last In, First Out Method besides having immense popularity they are packed with shortcomings, though they accomplishes purposes for which they are selected but they are full of conditions and assumptions, the use and choice of inventory accounting method purely depends upon the nature and size of the organization.

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

Though, in the most popular trio method, no alternative method is available for Weighted Average Method, whereas our study proves that for "FIFO" and "LIFO" alternatives are available that to without any assumptions and presumptions and their results are to the extent 100% as per the expectation of the organization from inventory Accounting Method. Though FEFO and HIFO are the methods which are less popular and are not used frequently in the business world but if entrepreneurs use these methods of inventory accounting instead "FIFO" and "LIFO" in provided circumstances they will get the better results.

REFERENCE

Ahmed, J. U. 2010. "Documentary research method: New dimensions", Indus Journal of Management & Social Sciences, Vol. 4 No. 1, pp. 1-14.

Ali, M.J., Ahmed, K. and Henry, D. 2006. "Harmonization of accounting measurement practices in South Asia", Advances in International Accounting, Vol. 19, pp. 25-58.

Bailey, K. D. 1994. Methods of Social Research, 4th ed., Free Press, New York, NY.

Bar-Yosef, S. and Sen, P.K. 1992. "On optimal choice of inventory accounting method", The Accounting Review, Vol. 67 No. 2, pp. 320-336.

Bernard, H.R. 2002. Research Methods in Anthropology: Qualitative and Quantitative Methods, 3rd ed., AltaMira Press, California.

Biddle, G.C. 1980. "Accounting methods and management decisions: The case of inventory costing and inventory policy", Journal of Accounting Research, Vol. 18, pp. 235-280.

Chung, S. and Narasimhan, R. 2003. "An empirical analysis of the inventory accounting methods of U.S. multinational companies: Segment and industry effects", paper presented at the Seventh International Conference on Global Business and Economic Development, January 2003, Bangkok, Thailand.

Cushing, B.E. and LeClere, M.J. 1992. "Evidence on the determinants of inventory accounting policy choice", The Accounting Review, Vol. 67 No. 2, pp. 355-366.

Dopuch, N. and Pincus, M. 1988. "Evidence on the choice of inventory accounting methods: LIFO versus FIFO", Journal of Accounting Research, Vol. 26 No. 1, pp. 28-59.

Emenyonu, E.N. and Gray, S.J. 1992. "EC accounting harmonization: An empirical study of measurement practices in France, Germany and the UK", Accounting and Business Research, Vol. 23 No.89, pp. 49-58.

Faisal, Khan, A. Aboud (2018), "Study of Managerial Decision Making Linked to Operating and Financial Leverage", International Journal of Accounting and Finance Research, Vol. 7 ,No 1 ,2018 , pp.139-143 doi:10.5430/afr.v7n1p139

Fields, T. D., Lys, T. Z. and Vincent, L. 2001. "Empirical research on accounting choice", Journal of Accounting and Economics, Vol. 31 No. 1-3, pp. 255-307.

Hansen, D. R., Mowen, M. M. and Guan, L. 2009. Cost Management: Accounting and Control, 6th ed., South- Western Cengage Learning, Mason, OH.

Herrmann, D. and Thomas, W. 1995. "Harmonisation of accounting measurement practices in the European Community", Accounting and Business Research, Vol. 25 No.100,

Hughes, P. J. and Schwartz, E. S. 1988. "The LIFO/FIFO choice: An asymmetric information approach", Journal of Accounting Research, Vol. 26, pp. 41-58.

Hunt III, H. G. 1985 "Potential determinants of corporate inventory decisions", Journal of Accounting Research, Vol. 23 No. 2, pp. 448-467.

Ibarra, V. C. 2008. "Choice of inventory costing method of selected companies in the Philippines", Journal of International Business Research, Vol. 7 No. 1, pp. 17-31.

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

Iryna Anatoliyivna Karabaza, Lyudmyla Ihorivna Lezhnenko- 2015, "Introduction Directions Of International Accounting And Management Practices Into Domestic Experience Of Accounting And Analysis" Periodyk Naukowy Akademii Polonijnej 23 (2017) Nr 4, DOI: http://dx.doi.org/10.23856/2312

Jaafar, A. and McLeay, S. 2007. "Country effects and sector effects on the harmonization of accounting policy choice", Abacus, Vol. 43 No. 2, pp. 156-189.

Johnson, C. E. 1954. "Inventory valuation – the accountant's Achilles heel", The Accounting Review, Vol. 29 No. 1, pp. 15-26.

Khalid, Omar and Syed "An Empirical Study of Technological Innovations in the Field of Accounting - Boon or Bane" Business and Management Studies, Vol. 4 , No. 1; March 2018, https://doi.org/10.11114/bms.v4i1.3057

Khan, M. Y. and Jain, P. K. 2010. Management Accounting: Text, Problems and Cases, 5th ed., Tata McGraw-Hill Education Pvt. Ltd., New Delhi.

Kuo, H. 1993. "How do small firms make inventory accounting choices", Journal of Business Finance & Accounting, Vol. 20 No. 3, pp. 373-392.

Lee, C. J. and Hsieh, D. A. 1985. "Choice of inventory accounting methods: Comparative analyses of alternative hypotheses", Journal of Accounting Research, Vol. 23 No. 2, pp. 468-485.

McLeay, S., Neal, D. and Tollington, T. 1999. "International standardisation and harmonisation: A new measurement technique", Journal of International Financial Management and Accounting, Vol. 10 No. 1, pp. 42-70.

Mohammad, Khan, Al Aboud 2018, "Muamma (conundrum) of Riba (Interest and Usury) in Major Religions in General and Islam in Particular" The International Journal of Social Sciences and Humanities Invention, 5(02): 4438-4443, DOI:10.18535/ijsshi/v5i2.08

Morse, D. and Richardson, G. 1983. "The LIFO/FIFO decision", Journal of Accounting Research, Vol. 21 No. 1, pp. 106-127.

Narayanaswamy, R. 2011. Financial Accounting: A Managerial Perspective, 4th ed., PHI Learning Pvt. Ltd., New Delhi.

Needles, B. E., Powers, M. and Crosson, S.V. 2011. Financial and Managerial Accounting, 9th ed., South-Western Cengage Learning, Mason, OH.

Omar , Ahmad and Faisal, "An Investigation Of Indian Security Market The Viewpoint Of FMCG Companies Who Voyage From Good To Great" International Journal of Economics, Commerce and Management, Vol. V, Issue 12, December 2017, http://ijecm.co.uk/wpcontent/uploads/2017/12/51258.pdf

Parker, R. H. and Morris, R. D. 2001 "The influence of U.S. GAAP on the harmony of accounting measurement policies of large firms in the U. K. and Australia", Abacus, Vol. 37 No. 3, pp. 297-328.

Shahiduzzaman, M. 2009. "Measuring core inflation in Bangladesh: The choice of alternative methods", The Bangladesh Development Studies, Vol. 32 No. 1, pp. 23- 44.

Stickney, C., Weil, R., Schipper, K. and Francis, J. 2010. Financial Accounting: An Introduction to Concepts, Methods and Uses, 13th ed., South-Western Cengage Learning, Mason, OH.

Sunder, S. 1976. "Optimal choice between FIFO and LIFO", Journal of Accounting Research, Vol. 14 No. 2, pp. 277- 300.

Tongco, M.D.C. 2007. "Purposive sampling as a tool for informant selection", Ethnobotany Research & Applications, Vol. 5, pp. 147-158.

Woon-Oh Jung-2010, "Strategic choice of inventory accounting methods*" Contemporary Accounting Research, DOI 10.1111/j.1911-3846.1989.tb00742.x

ISSN 2053-4086(Print), ISSN 2053-4094(Online)