Methods of Inventory Costing

*Dr. L.D. Bhor
**Prof. Mahale S.A.

Introduction

Material is the essential part of cost of production because large amount of expenditure incurred for material purchase. Therefore business gives more focus on material control. Material control is a systematic control and regulation over purchasing, storing and consumption of materials so as to maintain a smooth flow of production with optimum investment in inventories. Control over material purchase, Consumptions and inventories are important for effective management of a business firm. The main aim of business is to maximise profit and maximise wealth of the firm. For fulfilment of this aim business concern try to minimise per unit cost of production. The term 'Inventory' has a wider meaning than the term 'materials'. Inventory includes stock of raw material, work in progress, finished goods, components and supplies.

Inventory control is a matter of coordination among the various departments. Example purchase, production, maintenance, inspection, stores, accounting department etc. Inventory control is a system which ensures the availability of the right quantity of material, of the right quality, at the right time with the minimum amount of capital by purchasing them at the right price from the right source. The main aim behind inventory control is to determine optimal level of inventory holding which will ensure smooth running of production and also ensure that excessive capital is not blocked.

Objectives inventory control:

1) Fixation of the limits within which the inventories are to be held.
2) Laying down of inventory policy.
3) Setting out the investment pattern keeping in view the individual and collected requirements.
4) Examining the working of the inventory policy and effecting changes as and when needed.
5) Avoiding abnormal wastage by exercising direct control.
6) Providing efficient warehousing facilities.

Methods of inventory costing

Where materials have been purchased for a specific product or specific job, the cost of materials received is wholly debited (charged) to that job. But most often materials are purchased for several products or jobs if all purchases were made at the same price, there would be no problem in costing materials issued and in inventory valuation. However, purchases made at different times usually carry different prices and the storage ledger card shows not on but several prices for the same kind of material therefor, it becomes essential to consider the price at which it should be charged to production. Several methods are in used concerning the pricing of materials issue from the store room. They may be listed as follows:

Inventory cost price method:

A. First-in, First-out (FIFO)
B. Last-in, First Out (LIFO)
C. Simple Average
D. Weighted Average

A. First-in, First out (FIFO):

The FIFO method follows the rules that materials received first are given first. After the first lot or batch of material purchased is exhausted, the next lot is taken up for supply. It does not suggest, however, that the some lot will be used from storage. Sometimes all inventories are marked with their arrival date and issued in date order especially with stocks that deteriorate. The inventory is price at the latest cost.

Advantages:

2. FIFO method saves time and money in ascertaining the exact cost of the inventory being sale out because the cost will depend upon the most former cash flows of purchases to be used first.
3. It is a simple concept which is easy to understand. Even a layman can catch the idea with small explanation.
4. It is a fairly practical approach to use, as sometimes it becomes difficult to identify the costs of the

* Principal C.D. Jain College of Commerce, Shrirampur,Maharashtra, India
** C.D. Jain College of Commerce, Shrirampur,Maharashtra, India

products sold at the point of sale and FIFO rectifies the matter.It is a widely used and accepted approach of valuation which increases its comparability and consistency.

5. It makes manipulation of the income reported in financial statements difficult, as under FIFO policy there remains no vagueness about the values to be used in cost of sales figure of profit/loss statement.

6. FIFO will show increased gross and net profits in times of increasing prices of goods. *Cost of sales(inventory) = opening stock + Purchases – closing stock*
This is because the "cost of sales" consists of figure of inventory and as first inventories will have less cost than recent inventories during inflation, the profits reported would be higher.

Disadvantages:

1. One of the biggest disadvantages of FIFO approach of valuation for inventory/stock is that in the times of inflation it results in higher profits, due to which higher "Tax Liabilities" incur. It can result in increased cash out flows in relation to tax charges.

2. FIFO may not be a suitable measure in times of "hyperinflation". In such times there exist no reasonable pattern of inflation and amount of goods could inflate drastically. And in such cases the similarity of most pre purchases with most recent sales would not be appropriate and may increase profits to present a distorted picture.

3. FIFO will not be an appropriate measure if the materials/goods purchased have fluctuating price patterns, because this can result in misstated profits for the same period as different costs of same goods during that period are recorded.

4. FIFO pricing valuation method although easy to understand may get clumsy and cumbersome to operate and extract the costs of goods, as substantial amount of data is required thus resulting in clerical errors.

5. Just like any other pricing technique, FIFO is based upon the rates of inflation. This oversimplifies the calculation of the amount of costs because the costs may also grabs the effects of many other different variables like supply, transfer pricing, foreign exchange movements etc. and so inventory valuation must be dependent upon all the related factors involved.

B. Last-in, First Out (LIFO)

The first out (LIFO) inventory record method is used to place an accounting value on inventory recording. The LIFO method operates under the assumption that the last material unit of inventory purchased is the firstly sold out. Clerk adds items from the front, and customers also take their selections from the front; the left out content of inventory that are located further from the front of the shelf are infrequently picked, and so remain on the shelf – that is a LIFO method.

The trouble with the LIFO scenario is that it is rarely encountered in practice. If a company were to use the process flow embodied by LIFO, a significant part of its inventory would be very old, and likely obsolete. Nonetheless, a company does not actually have to experience the LIFO process flow in order to use the method to calculate its inventory valuation.

Effects of LIFO:

The reason why companies use LIFO method is the assumption that the cost of inventory growing over time, which is a causable assumption in times of inflating prices. If you were to use LIFO in such a situation, the cost of the most recently acquired inventory will always be higher than the cost of earlier purchases, so your remaining inventory balance will be valued at earlier costs, while the closest costs appear in the cost of goods sold.

Advantages of LIFO:

(1) LIFO matches most recent costs against current revenues:

The LIFO method provides a better measurement of current profit by matching most recent costs against current incomes.LIFO methods match previous costs against current income. When old costs are matched against current income in an inflationary scenario, the inventory profit is generated. Inventory profit generated when replacement cost of inventory is more than the inventory cost matched with revenues. This inventory profit understates cost of goods sold and overstates profit.

The LIFO helps in reducing the inventory profits by matching the most recent costs against revenues. It results in deductions of understatement of cost of goods sold and overstatement of profit. Because of the quality and reliability of earnings are increased under Last in First out.

(2) Tax benefits and improvement in cash flows:

The major reason of the popularity of last-in, first-out (LIFO) inventory valuation method is its tax benefit. When LIFO is used in the periods of inflation, the current purchases at higher prices are matched against revenues that alleviate the overstatement of profit and therefore reduce income tax bill. The reduction in income tax results in improvement of cash flows of the company.

(3) LIFO minimizes write-downs to market:

The net income of a company that uses LIFO is less likely to be affected by decline in price in future. Normally, the companies using First out method do not have much inventory at current increased prices because, in this method, most recent inventory purchased at higherprice is issued first. So the chances of write-downs to market in future due to decline in inventory prices are minimized or even eliminated under LIFO.

(4) Physical flow of inventory:

In some situations, the physical flow of inventory corresponds to the LIFO cost flow. For exa., in the case of a Files, the most recent files added to the Files is always on the top of the files. Therefore, the last file in is always the first file out.

This advantages is not a reason of the famous of Last in First out method because the conditions where actually flow of inventory corresponds to the Last in first out cost flow are very rare to find. The advantages 1, 2 and 3 explains above are the main arguments of the widespread employment of this method.

Disadvantages of LIFO

(1) Reduced earnings in inflationary times:

The LIFO method decreases reported incomes during the times of inflation. Because of, many companies fear that an accounting change to Last in First out will have aninverse effect on investors and will decrease the price of company's shares because large number of investors may not be able to understand the effect of Last in First out and inflation on the reported incomes.

(2) Understatement of inventory:

In theLast in First out method, the balance sheet stock figure is generally understated because it is based on the oldest unit costs of material. Because of understatement of inventory, the working capital position may look bad than it really is.

(3) Problem of LIFO liquidation:

The LIFO liquidation may increase the reported income for a given time period that results in more tax payments for the time period. To avoid this problem, a company may purchase goods in large quantities with the purpose to match them with revenues. Therefore, the adoption of LIFO may develop poor buying habits among companies.

(4) Manipulation of income:

A company using last-in, first-out method can easily change its reported revenues for a period by changing its purchase pattern at the last of the year.

Conclusion

Now this competitive environment each firm tries to minimize cost of production. There are three elements of cost namely Material, Labour, And Other expenses. In this three elements of cost material is most important. So through proper control over material cost of production can be minimized. For calculation of value of inventory few methods are used by store department. This method has some advantages and disadvantages.

References

1) Cost Accounting ,Author- JawaharLal, Publication: McGrow-Hill Companies
2) Cost and works Accounting, Author- Mahesh Kulkarni Publication: Nirali

Websites:

3) https://int.search.tb.ask.com/search/GGmain.jhtml?searchfor=slide+share&enableSearch=true&rdrct=no&st=sb&tpr=omni&p2=%5ECPC%5Echr999%5ETTAB03%5E&ptb=2C0CD247-F880-41A4-89DB-454203A5FB52&n=NaN&si=
4) https://int.search.tb.ask.com/search/GGmain.jhtml?searchfor=meaning+of+lifo+and+fifo&enableSearch=true&rdrct=no&st=sb&tpr=omni&p2=%5ECPC%5Echr999%5ETTAB03%5E&ptb=2C0CD247-F880-41A4-89DB-454203A5FB52&n=NaN&si

#####