Impact of Inventory Valuation on Financial Position of the Enterprise

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Abstract

Inventory is an asset of significance for an enterprise. Inventory valuation has an impact on the enterprise asset, current profit, current cash flow, overall financial ratios and tax issues like income tax. It also influences the operating performance among enterprises to a significant level. This paper investigates effectiveness of different inventory valuation methods stipulated in current accounting standards of India. Present research paper also focuses on effect of different inventory valuation methods on company's financial position. The present study is mainly based on secondary data. The study shows that improving accuracy of accounting and profit reporting by using accurate information, usually through an integrated software system leads to efficiency reporting for running an efficient and profitable enterprise.

***Keywords*:** Inventory valuation method, financial performance

Introduction

The American Institute of Certified Public Accountants states: "A major objective of accounting for inventories is the proper determination of income through the process of matching appropriate costs against revenues" It is significant to observe that there exists direct relationship between cost of goods sold and closing inventory. Cost of goods sold is measured by deducting closing inventory from cost of goods available for sale. Inventory is one of the major problem that accountants face today. It is difficult to value it in terms of cash. It is almost impossible to assess its value in terms of future profits. The basic reason for holding inventories is that it is physically impossible and economically impracticable for each inventory item to arrive exactly where it is needed exactly when it is needed. Inventory is not purchased as investment or to hold or to realize a gain from possession but rather to sell and realize a gain from resale. In fact, each purchase of saleable goods is in anticipation with the very next sale.Inventory should be considered as an investment and should compete for funds with other investments contemplated by the business firms. Inventory represents a type of business insurance which assures the company that it will not have to close down due to shortage of saleable goods. Inventory is a variable cost insurance .That is the cost of this insurance will vary in the same direction as the value of the shares. As the sale increases the company will find it necessary to maintain a larger and larger inventory to meet the expanded sales volume.According to Accounting Standard (AS) – 2 (revised), issued by the Institute of Charted Accountants Of India, inventories are assets,

i. Held for sale in the ordinary course of business,
ii. In the process of production for such sale, or
iii. In the form of materials or supplies to be consumed in the production process or in the rendering of the services.Inventory includes tangible property that is held for sale in the normal course of business or will be used in producing goods or services for sale. Inventories are current assets and reported in the balance sheet. As current assets they can be used or converted into cash.
iv.

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Within one year or within the next operating cycle the business, whichever is longer. Inventories are kept by manufacturing firms and merchandising firms. For merchandising firms, inventories are often the largest or most valuable current asset.
The inventory valuation methods are undergoing constant change and development, during which there are several methods as follows: 1) Methods on the condition of non-actual cost: planned cost method, fixed cost method, and selling price method. 2) Methods on the condition of actual cost: first, methods based on time sequence include FIFO (first-in, first-out) method, LIFO (last-in, first-out) method, moving weighted average method, and next-in first-out method. Second, methods based on unit price include specific identification method, high-price, first-out method, low-price, first-out method, and last invoice price method. Third, weighted average at the end of month method, and basic stock method. Although there are lots of methods of inventory valuation, enterprises are restricted to some degree in the choice of pricing method in terms of inventory ex-factory, no matter in which country's accounting system or the IAS(International Accounting Standards),so it's very important to study effect of different inventory valuation methods on company's financial position. This paper investigates different inventory valuation methods adopted by Indian enterprises stipulated in current accounting standards of India, and their effectiveness arising out of selection of different valuation methods.

Literature review

Recently many practitioners and academicians have cited examples of firms suffering from excess inventory to discuss issues related to supply chain management Fisher et al. (2000) Lakenana et al.(2001), Barnes-Schuster et al. (2002), Bellington et al. (2002), Chopra and Sodhi (2004), Narayanan and Raman(2004).It is widely accepted that supply-demand mismatches have a negative impact on performance Raman (1997), Fisher (1997), Lee et al. (1997), Radjou (2002) evidence on the magnitude of the performance effects of supply-demand mismatches is just beginning to emerge. Hendricks and Singhal (2003, 2004, and 2005) analyze the stock price and profitability effects of production and shipment delays. Earlier work examines the relationship between Just-In-Time (JIT) implementation and financial performance Huson and Nanda(1995), Balakrishnan et al. (1996), Lieberman and Demister (1999),Fullerton et al. (2003). Roumiantsev et al. (2005) , Gaur et al. (2005) identify drivers of inventory levels. Rajagopalan and Malhotra (2001), Chen et al. (2005) examine trends in inventory levels, and Cachon et al. (2005) examine whether the bullwhip effect really exists. Shin and Wood (2004) use industry level data to study the relationship between inventory turnover, information technology investment, and profitability. Chen et al. (2005) examine the relationship between inventory turnover and stock returns. They find that firms with high inventories relative to industry peers have poor long-run stock returns whereas firms with low inventories relative to industry peers have average stock returns. After review of available open literature there is need of study of different inventory valuation methods adopted by Indian enterprises and their effectiveness arising out of selection of different valuation methods. This paper investigates different inventory valuation methods adopted by Indian enterprises stipulated in current accounting standards of India, and their effect on financial performance of the enterprise.

Research methodology

Objectives

1. To study importance of Inventory Valuation and its methods.
2. To analyze Effect of different Inventory Valuation methods on Company's Financial Position of the enterprise.

Exploratory Methodology

Research has been used to analyse effect of different inventory valuation methods on financial performance of the enterprise. The present study is mainly based on secondary data. The secondary data were taken from the various websites, books, journals reports, articles etc. Descriptive statistics methods have been used to analyse the variable under investigation.

Results and Discussions

A) Effect of different inventory valuation methods on company's financial position

The Following illustration assumes the sale of 250 units of finished goods for Rs.15/unit. As per individual method i.e Average inventory method, FIFO method and the LIFO method the ending inventory is calculated keeping the opening stock and purchases constant. The goods available for sale is the total of beginning inventory and the purchases. We get the cost of goods sold by deducting the closing inventory from goods for sale. We arrive at gross profit by deducting cost of goods sold from sales. From the above example we understand that the gross profit gets affected by selection of the inventory valuation method. By letting the first inventory out , we get higher gross profit while it's the reverse case in LIFO method.

Illustration of LIFO, FIFO & weighted average method on net income of a company (table no. 1)

Particulars	Weighted average method	FIFO method	LIFO method
Sale 250 units rs.15/unit	Rs.3750	Rs.3750	Rs.3750
Beginning inventory	500	500	500
Purchases	3150	3150	3150
Goods for sale*	**3650**	**3650**	**3650**
Ending inventory	840	860	820
Cost of goods sold	2810	2790	2830
Gross profit	940	960	920

* Goods available for sale include the beginning inventory as well as additional purchases within the accounting period.

1) Effect of FIFO inventory valuation method on company's financial position

FIFO refers to "first in first out". The basic principle of FIFO is that it ensures that the first items into inventory are always the first items sold. FIFO adopts the general rule of inflation. This means that because prices rise over time, the first items into a company's warehouse are often less expensive. This allows companies to increase their gross profit per-sale by selling products with lower costs. FIFO allows companies to increase gross profit by using cheaper inventory. However, because the gross profit is higher as shown in table no. 1 , the company's

stated income is higher as well, and that always results in a higher tax burden or tax rate. So, while the gross profit and income statement is higher with FIFO, the tax rate is also higher.

2) Effect of LIFO inventory valuation method on company's financial position

While FIFO draws upon the first inventory purchased, LIFO calls upon the last inventory purchased. LIFO refers to "last in first out". LIFO allows companies to reduce their gross profit as shown in table no.1. Lower gross profit means a lower net income. Companies use LIFO to reduce their tax burden. While the gross profit and net income is lower, companies that use LIFO aren't burdened by high tax rates. While some companies may see a lower tax rate as a plus, it's important to note that the longer inventory is held, the more expensive that inventory becomes. The costs of inventory rise over time due to the cost of money, costs to warehouse and move parts, and the costs of damage and obsolete inventory. Because of this, LIFO is viewed as a less popular inventory valuation method as it leads to lower gross profit, lower net income. Major disadvantage of this method is higher incidence of damage & inventory obsolescence.

3) Effect of Average cost inventory valuation method on company's financial position

Average cost can be seen as the middle ground between FIFO and LIFO. It makes little to no distinction between "first in" or "last in". The premise behind average cost is that it applies an average value to inventory. While it's important to remember that average cost makes no distinction between which inventories should be sold first, it's equally important to note that companies that run average cost always ensure they mitigate their inventory holding costs by not holding inventory for too long. To be successful means the company must move all inventories. When it comes to deciding upon an inventory valuation method, companies must be cognizant of the implications of LIFO, FIFO and average cost.

B) Selection of inventory valuation methods by different countries:

From the analysis of Table no. 2, it shows that internationally Weighted Average Method is widely adopted while India favours the FIFO Method more.

Choices of inventory policies in different countries (Table no. 2)

Country	FIFO	Weighted average	Combination of Two Methods	Total Number
Australian	6	9	2	17
British	10	11	2	23
China	1	25	1	27
France	5	15	7	27
Germany	4	10	2	16
Italy	1	7	0	8
New Zealand	9	6	1	16
Sweden	7	0	0	7
Switzerland	3	5	1	9
Spain	0	3	1	4
India	13	10	2	25
Total Number	59	101	19	179

Source：Lao Chuanqi, 2011, *Research on Accounting Cultural Background of Global Convergence of Accounting Principles*

C) Inventory Valuation Issues

There are other inventory valuation methods like Retail method that is an alternative way, under which the total selling price of the ending amount of goods in stock is reduced by the average markup percentage to derive the cost .Direct costing in which Valuing inventory for tax purposes under the direct costing methodology is not allowed by the IRS, since no overhead costs would then be applied to inventory, resulting in much lower costs being accumulated in inventory , Lower of cost or market which is allowable for tax purposes to reduce the recorded value of inventory to the lower of its cost or market value, but not if the goods are being sold under a firm fixed price contract, or if the LIFO valuation method is being used and Multiple valuation methods that is allowable to employ several different inventory valuation methods, one for book purposes and one for tax purposes. However, if the company is using LIFO valuation for tax purposes, it must also use this method for book reporting purposes.

Conclusion

Under the circumstance of economic globalization, the accounting principles of different countries are becoming more and more convergent. Our national conditions differ from that of other developed countries as well as other developing countries. However, in the future development, great attention should be paid to the convergence between the accounting standards in India and the International accounting standards adopted world widely. The present study shows that improving accuracy of accounting information and profit reporting usually through an integrated software system leads to efficient inventory valuation. Automated computer systems will provide more accurate information needed to maintain an optimal inventory level and facilitates decision regarding best possible inventory valuation method which enhances the financial performance of the enterprise.

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