An Insight Into the Two Costing Technique: Absorption Costing and Marginal Costing

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Abstract
This paper will investigate the controversy that is innate between the two costing techniques; Absorption Costing and Marginal Costing and would throw light on which costing technique better serves its purpose in helping management for decision making process and if Marginal Costing technique is concluded as better technique then why it should not be used for external reporting purpose. This paper will only crystallize and highlight the issues descriptively and will not resolve the issues that are inherent between the two costing techniques. The unique thing about this paper is that it is in favor of treating fixed cost as product cost that is it is supporting the advocates of Absorption Costing Technique but it is against to consider profit as a function of production rather it believes that profit should only be considered as function of sales for stock valuation and to help management in decision making process that is, regarding this point it is supporting advocates of Marginal Costing.

Introduction
Accounting figures just show current scenario of an organization. But if we want to understand the basics of these accounting figures we still need to understand Management Accounting Techniques. The intention of accounting by and large portrayed the course of providing information to owners, creditors, governmental regulatory agencies, and operating management. In an extensive sense, accounting helps in assistance of the economic resources management (Seiler, 1959). So, accounting encompasses collection and measurement of financial data and presents this to relevant parties who are engage in decision making process. (Chandra and Paperman, 1976)

Despite having knowledge of all these techniques we still left at a place where we need to think which technique in a more excellent manner gratifies our need, help management in decision making process and also more importantly; fulfills the constraints, demands and needs of International Accounting Standards as well as regulatory agencies and tax authorities. Marginal Costing and Absorption Costing (the subject under discussion) are two such accounting practices and there is an innate controversy that born with the birth of Marginal costing technique that which technique better fulfills the purpose of management in decision making process. (Chandra and Paperman, 1976)

For external reporting purpose, the difference between the techniques is very critical and important. The profit reported by two techniques is altogether different in many cases and so it affects critically decision making process of management (Ijiri et al., 1965; fremgen, 1962). The controversy is the valuation of stock either by including fixed overhead cost or not and if the stock is valued exclusive of fixed overhead cost whether it should be presented externally? (Chandra and Paperman, 1976)

The objective of this paper is to throw light on the usage of two accounting techniques and to determine which technique better serves its purpose to aid management in decision making
process and if marginal costing technique concluded as better technique then why it should not be used for external reporting purpose

The limitation of this paper is crystallization of the issues and not to resolve the issues that are innate between the two costing techniques.

**Literature Review**

Marginal costing is enjoying the position of a hot issue in cost accounting techniques for about a century. Whether someone is in favor or against of marginal costing it was considered again and again both by its advocates and by its opponents to have a 3-dimensional analysis of it. (Fremgen, 1964)

**History**

The history of Absorption Costing is as old as Cost accounting. (Cunagin and Stancil, 1992) Metcalfe, Garcke and Fells, Norton, Lewis, and later with Church, Nicholson and Clark introduced the concepts of various costing techniques including Absorption and Marginal Costing (Cited by Chandra and Paperman, 1976). The usage of marginal costing was found in early 1900’s but the term first used by Harris in 1936 (Harris, 1936). In the mid of 20th century cost accountants began to think about the allocation of fixed factory overhead which is the foundation of controversy between Absorption Costing and Marginal Costing. (lal and Srivastava, 2008) Cost Accounting is usually used for internal decision making which does not require to follow GAAP standards, so organizations develop their own secret standards that help them to enhance knowledge in decision making process. (Cunagin and Stancil, 1992) But the progress of cost accounting in that period was quiet slow because of the firms who invent various techniques keep them to themselves only; in the name of corporate secrecy. (Chandra and Paperman, 1976)

The development of cost accounting is tiered in three stages or steps; (Marple, 1951)

1) Inventory Valuation Stage
2) Cost Control Stage
3) Cost Analysis Stage. (Marple, 1951)

In the first stage when cost accounting was born, the need was not felt about the separation of variable and fixed cost and not until the second stage but at third stage; at cost analysis stage it was felt that the classification or difference between these costing techniques can provide better information to management that could be helpful in decision making. (Marple, 1951)

One study conducted in 1960 which found that the experience of organizations is favorable by using variable costing technique. (NAA Research Report cited by Chandra and Paperman, 1976) another study survey conducted on about 400 companies of US found that 22% of companies are using variable costing for external reporting and from every 2 out of 3 companies have changed their system from absorption to variable costing. (Smith and Ashburne, 1960) But still marginal costing technique is not recognized by Financial Accounting Standards Board (FASB) and Internal Revenue Service in tax preparation for external reporting.

**Difference between Fixed Cost and Variable Cost**

To produce single unit of commodity or product, whatever the expenses incur to produce that unit is called the Total Cost. In short period this total cost is divided into two categories that is Fixed Cost and variable cost. (Jain and Khanna, 2010)

Fixed Costs are costs which remain same irrespective of the quantity of output (Jain and Khanna, 2010; Lay, 2011). For example office rent, which we have to pay each month whether we are producing or not commodity (Lay, 2011).

Variable costs are those costs which are incurred on the use of variable factors of production that is direct material, direct labor and variable overhead. (Jain and Khanna, 2010; Lay, 2011) for example, in a manufacturing concern if $1 material is needed to produce 1 unit then $200 material is used to produce 200 units of output that is, they vary with the level of production. (Lay, 2011)
Difference between Product cost and Period Cost

External Financial accounting requires manufacturing costs to be divided into Product Cost and Period Cost for stock valuation. The valuation of units, either sold or in inventory, are called stock valuation. (Drury, 2008)

Product costs are those costs that are identified with goods purchased or produced for resale. (Drury, 2008) Product cost is used for stock valuation and it becomes the part of per unit cost. Product cost is incurred in the period in which it is produced and taken to profit and loss account and charged when product is sold. (Drury, 2008)

Period cost is that cost that expires with the passage of time, regardless of production activity. (Fremgen, 1964) and are not included in the inventory valuation and as a result are treated as expenses in the period in which they are incurred. (Drury, 2008) Period cost is incurred and charged in the same period to profit and loss accounts as an expense. Selling and administrative expenses in a manufacturing concern are an example of period cost. (Drury, 2008)

Treatment in Two Techniques

Fixed factory overhead cost is treated as product cost in absorption costing and fixed factory overhead cost is treated as period cost in marginal costing. (Seiler, 1959; Drury, 2008)

Absorption Costing or Full Costing:

Absorption costing is a method for appraising or valuing a firm’s total inventory by including all manufacturing costs as product costs, regardless of whether they are variable or fixed and therefore it is frequently referred as the full cost method. (Seiler, 1959; Chandra and Paperman, 1976; Lal and Srivastava, 2008)

Marginal Costing

Under variable costing, only those manufacturing costs that vary with output are treated as product costs. This would usually include direct material, direct labor, and the variable portion of manufacturing overhead. Variable costing is sometimes referred as direct costing or marginal costing. Fixed manufacturing overhead is treated as period cost just as selling and administrative expenses. Thus in inventory valuation or in cost of goods sold fixed manufacturing overhead is not treated as product cost in marginal costing technique. (Seiler, 1959; Chandra and Paperman, 1976; Lal and Srivastava, 2008; Swamidass, 2000)

Difference between Absorption and Marginal Costing Technique
Under Absorption Costing Technique

Under Marginal Costing Technique

A comprehension of the two costing techniques

Features of Absorption Costing

1. The total cost that is fixed cost and variable cost is charged to cost per unit and total overheads are absorbed according to level of production (Rajasekaran and Lalitha, 2010)
2. Period cost, under absorption costing technique, is selling & administrative and distribution charges and is not charged to unit cost (Rajasekaran and Lalitha, 2010)
3. Under absorption costing technique, the profit is affected in the situation of fluctuating stock volume, which is carried forward from one period to another (Rajasekaran and Lalitha, 2010)
4. The separation of total cost into fixed cost and variable cost is not done under absorption costing technique (Rajasekaran and Lalitha, 2010)
5. Under absorption costing technique the closing stock is valued at total cost that is fixed cost and variable cost (Rajasekaran and Lalitha, 2010)

Features of Marginal Costing

1. Total cost is separated into fixed and variable cost and semi-variable are also separated (Rajaesekaran, 2010; Bhattacharyya, 2011)
2. Only variable costs are regarded as product costs fixed costs are recovered from contribution (Rajaesekaran, 2010 ; Bhattacharyya, 2011)
3. The fixed costs, incurred during a period are not charged to the product cost. They are treated as period costs and charged to the P & L account. (Rajaesekaran, 2010)
4. Stocks of work in progress (WIP) and finished products are valued at only the variable costs (Rajaesekaran, 2010; Bhattacharyya, 2011)

5. Prices are based on variable cost and contribution margin, which in the normal course, cover costs in total. (Rajaesekaran, 2010; Bhattacharyya, 2011)

6. Profit remains ineffective of any change in stock carried from one period to another (Rajaesekaran, 2010)

7. Break-even analysis and cost volume profit (CVP) are integral parts of this technique (Bhattacharyya, 2011)

8. Under this technique, profit is calculated in two parts;
   a. Contribution = sales - variable cost
   b. Profit = contribution – fixed costs (Bhattacharyya, 2011)

**Limitations of Absorption Costing**

1. In absorption costing technique uniform unit cost is available only at constant level of production and different unit costs is available at different level of output (Bhattacharyya, 2011)

2. Under absorption costing technique the process of cost comparison and cost control becomes difficult because of different unit cost at different production level, that does not give a proper idea for analysis and decision making (Bhattacharyya, 2011)

3. In absorption costing technique as closing stock is valued at total cost that is fixed and variable, so fixed cost is transferred to next accounting period as closing inventory (Bhattacharyya, 2011)

4. The opponents of absorption costing technique argue that fixed cost- which is controversy between the two techniques- should be treated as period cost rather than product cost (Bhattacharyya, 2011)

5. Absorption costing technique does not give true picture about the firm’s profit because fixed cost is treated as product cost and does not charged in the period in which they are incurred (Bhattacharyya, 2011)

6. Absorption costing technique does not aid management in decision making process whenever they are encountered with the problem of product mix, pricing decision and temporary stoppage of production activity (Bhattacharyya, 2011)

**Limitations of Marginal Costing**

1. The foundation at which marginal costing technique lies is that the total cost can be divided into fixed and variable cost. In practice, such segregation is a difficult task. (Bhattacharyya, 2011)

2. The segregation of total cost into fixed cost and variable cost cannot be accurate under all circumstances. Factors like quantity discounts on material and labor efficiency variances might affect this assumption. (Lal And Srivastava, 2008)

3. Product cost is not only dependent upon variable cost. In long-run one have to consider fixed cost for decision making regarding pricing and policy making (Lal And Srivastava, 2008)

4. Customer goodwill should be kept in mind if he management decides to expand business or drop a product line by merely looking at income figures obtained under marginal costing technique (Bhattacharyya, 2011; Lal And Srivastava, 2008)

5. The execution of fixed cost from product cost may sometimes mislead in decision making process (Bhattacharyya, 2011)

6. With the development of technology and advancement in automation industry, fixed cost can no longer be ignorable. But marginal costing technique totally ignores fixed cost in decision making (Bhattacharyya, 2011)
7. Marginal costing technique does not provide any solid ground through which cost can be efficiently controlled (Bhattacharyya, 2011)
8. Marginal costing technique remains no longer useful for inventory valuation in case of abnormal loss. (Bhattacharyya, 2011)
9. The time factor and the investment needed to determine product cost is ignored in marginal costing technique (Bhattacharyya, 2011)
10. In marginal costing technique, the reported profit is a function of sales, selling price per unit and variable cost per unit and total fixed cost. But the profit is entirely independent of production volume (Bhattacharyya, 2011)
11. The income statement comparison under the two techniques show that the marginal costing technique is failed to distinguish between wastage of productive capacity and its utilization (Bhattacharyya, 2011)

Advocates of Absorption Costing
1. Absorption costing takes into account very important fact that fixed cost can be ignored in the short period but it is to be met in long run. It is also argued that absorption costing ensures coverage of fixed cost by allocating fixed cost to a product. (Drury, 2008; Bhattacharyya, 2011)
2. When production remains constant but sales fluctuate absorption costing will show less fluctuation in net profit. (Drury, 2008)
3. Production without fixed manufacturing overhead is not possible so fixed manufacturing overhead should be included in product cost for stock valuation. (Drury, 2008)
4. Generally, accepted accounting principles (GAAP) represent the standards that most companies follow for financial reporting. Generally, accepted accounting principles require companies to use absorption costing for all external reporting. Companies who use a different form of product costing for internal analysis still need to maintain an absorption costing system externally for GAAP. Companies who use absorption costing for all products costing have an advantage in that the same costs can be used for all purposes. (www.principlesofaccounting, chapter 23, n.d)

Advocates of Marginal Costing
1. The categorization of cost into fixed cost and variable cost helps in providing relevant information about cost for short-term decision making, which is very beneficial for managers. For example if a manufacturing organization is producing more than one product then to determine which product is more favorable for the Organization regarding cost-benefit analysis can be guessed by Marginal Costing. (Seiler, 1959; Drury, 2008; Bhattacharyya, 2011)
2. In marginal costing technique, profit is a function of sales not production, so in marginal costing the reported profit does not show fluctuations with the fluctuation with inventory. So, the manager of production cannot exploit the situation by increasing the production and shown increasing profit even if no sales occur. (Seiler, 1959; Drury, 2008; Lal And Srivastava, 2008)
3. As marginal costing technique considered fixed manufacturing overhead as period cost so it allocated it as an expense and charged to the relevant period rather than including it in stock valuation. Thus it avoids fixed manufacturing overhead being capitalized in unsalable stock and avoids overstate or understate profit. (Drury, 2008; Murthy and Gurusamy, 2009)
4. Marginal costing provides a great help in the analysis of an organization’s working which is its distinguishing characteristic. (Seiler, 1959) Under marginal costing technique stock is valued only at variable cost and thus the illogical carrying forward of fixed cost to next period is avoided. (Bhattacharyya, 2011) (Murthy and Gurusamy, 2009)
5. Marginal costing technique helps management in profit planning which is the decision/planning regarding optimum production level to attain maximum or desired profit (Bhattacharyya, 2011). The desired profit can be achieved by following ways demonstrated by Bhattacharyya;
   a) By increasing volume
   b) By increasing selling price
   c) By decreasing variable cost
   d) By decreasing fixed costs (Bhattacharyya, 2011)

6. Marginal costing technique helps management by providing useful information, such as division of total cost and thus such information can be helpful in short-term decision-making (Bhattacharyya, 2011)

Discussion

Allocation of Fixed Cost

When the question about allocation of fixed cost arise that is whether the fixed factory overhead should be considered as product or period cost. The advocates of absorption costing technique seem valid because fixed cost can be ignored in short run but it cannot be ignored in long run. A plant is purchased not to resale but to manufacture product and generate revenue (Staubus, Sorter, and Horngren, 1963). In short-run payment of office rent is irrespective of production, but in long run, it definitely affects our product so it should be included in product cost for stock valuation.

The fact is also argued by (Staubus, et al, 1963) According to the product cost approach, fixed costs are assigned to the product rather than to the period because it is the product that generates revenue. The time period is viewed as passive factor, purely incidental to the operations of the firm. Revenue drives from the sale of the product (or at least is ordinarily recognized when the sales takes place), no matter when that sale occurs; and all production costs are matched with the revenue in the period of sale. (Staubus, et al, 1963)

Is Profit a Function of Sales or Production?

In absorption cost profit is a function of sales and production but in marginal costing profit is a function of sales only. When profit is the function of production also, it creates many loopholes for misdeed and the situation can be exploited by a production manager or administrator for his benefit if the firm pays bonuses directly on the profit earned.

In the words of Staubus, Sorter, and Horngren

1. Many fixed costs are caused not by production in the current period but by building capacity to produce.
2. Capacity to produce is constructed on the basis of foreseeable production schedules.
3. Future production is affected by the size of current inventory
4. Hence, current inventories have an effect on the amount of fixed costs to be incurred in the future. (Staubus, et al, 1963)

Here this can be argued that capacity to produce is not built in all accounting periods and in all organizations. So the points seem strong in that particular situation for treatment of fixed cost as product cost that can deferred to next period and provide grounds for profit as a function of production but as we move farther from this situation the points seem invalid and illogical and marginal costing technique’s opinion of profit as a function of sales and treating fixed cost as period cost seems solid.

For example: take the following illustrative example when the firm determines bonuses on profit bases and uses absorption costing for external reporting. But it is encountered with very strange situation when it has data for two months in which profit increases with decrease in sales and they are on a perplex that whether to pay bonus to production manager or not.
Salman Ltd is a small company operating in the pottery industry. Its board of directors believes that managers are best motivated by financial incentives. The company pays a monthly bonus of 10% of profit earned in their respective divisions total cost the divisional managers. Managers are given autonomy over production and sales matters.

The company is split into four divisions. The eastern division has faced a steady demand for its products with some seasonal variation. The manager of the eastern division, however, has reported significantly increased profit in May 2011. The board of directors is now questioning the size of her bonus payment, particularly as she has already resigned and will leave the company in June 2011. Eastern division profit and loss accounts for the last two months are shown below. Salman Ltd. uses an absorption costing system.

The following information is also available
1. Selling price per case of finished product was 250 in both months
2. Variable production cost was 150 per case in both months
3. Fixed production overheads are recovered on the basis of budgeted monthly production of 1,000 cases
4. Actual fixed production overheads were 50,000 in each month, exactly as budgeted

<table>
<thead>
<tr>
<th>MAY 2011</th>
<th>JUNE 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Stock</td>
<td>50</td>
</tr>
<tr>
<td>Units Sold</td>
<td>1000</td>
</tr>
<tr>
<td>Units Produced</td>
<td>1000</td>
</tr>
<tr>
<td>Closing Stock</td>
<td>50</td>
</tr>
<tr>
<td>Non-manufacturing overhead</td>
<td>30</td>
</tr>
</tbody>
</table>

**Absorption Costing Statement**

<table>
<thead>
<tr>
<th>MAY 2011</th>
<th>JUNE 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening stock</td>
<td>10000</td>
</tr>
<tr>
<td>Variable Production cost</td>
<td>150000</td>
</tr>
<tr>
<td>Fixed Production cost</td>
<td>50000</td>
</tr>
<tr>
<td>Closing stock</td>
<td>(10000)</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>(200000)</td>
</tr>
<tr>
<td>Under/Over Applied</td>
<td>--</td>
</tr>
<tr>
<td>Sales</td>
<td>250000</td>
</tr>
<tr>
<td>Gross profit</td>
<td>50000</td>
</tr>
<tr>
<td>Less: Fixed non-manufacturing cost</td>
<td>(15000)</td>
</tr>
<tr>
<td>Less: Variable non-manufacturing cost</td>
<td>(30000)</td>
</tr>
<tr>
<td>Profit Before Bonus</td>
<td>5000</td>
</tr>
<tr>
<td>Bonus</td>
<td>500</td>
</tr>
<tr>
<td>Net profit</td>
<td>4,500</td>
</tr>
</tbody>
</table>

The above case is the worst scenario of the usage of absorption costing technique. In marginal costing technique, the above case is as follows:

**Variable Costing Statement**

<table>
<thead>
<tr>
<th>MAY 2011</th>
<th>JUNE 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening stock</td>
<td>7500</td>
</tr>
<tr>
<td>Production cost</td>
<td>150000</td>
</tr>
<tr>
<td>Closing stock</td>
<td>(7500)</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>150000</td>
</tr>
</tbody>
</table>
### Inventory Fluctuation

Absorption costing and marginal costing shows different profit where opening and closing stock vary. They are shown as follow:

<table>
<thead>
<tr>
<th>Stock Position</th>
<th>Marginal costing</th>
<th>Absorption costing</th>
<th>Situation</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening stock&gt; closing stock</td>
<td>More profit</td>
<td>Less profit</td>
<td>When production exceed sales</td>
<td>The stock valuation under the two technique gives different results because marginal costing technique valued stock only at variable cost whereas absorption costing technique considers fixed cost in addition total cost variable cost. The profit under absorption costing is lower than that shown in the marginal costing</td>
</tr>
<tr>
<td>Opening stock&lt; closing stock</td>
<td>Less profit</td>
<td>More profit</td>
<td>When sales exceed production</td>
<td>Closing stock increases. Under absorption costing, the total fixed costs charged against income are lower than the amount incurred. This is because a portion of the fixed costs is deferred to future by including in the closing stock</td>
</tr>
<tr>
<td>Opening stock= closing stock</td>
<td>Same profit</td>
<td>Same profit</td>
<td>When production (output) is equal to sales</td>
<td>There is no opening or closing stock. The total fixed costs incurred during the period are charged against the income of the period</td>
</tr>
</tbody>
</table>

The above cases depict that situation of profit is largely dependant upon opening and closing inventory. Alternatively, when production is more, more profit in absorption than marginal and when sales is more, more profit in marginal than absorption. The cases are different because in absorption costing the profit is a function of sales and in absorption costing profit is a function of production. This scenario also depicts that in absorption costing by merely increasing production to
unlimited level we can earn unlimited profit --provided that all other things remain constant—and the motive to sale lefts behind

The following case is taken from - Variable Costing: A Tool for Management. (n.d.) in which a case of IBM automated industry is illustrated. IBM produces a batch of 25 wafers which passes through the whole processor without ever being touched by human hands. So, here labor cost is almost nilled and plant can produce unlimited stock production. In this scenario, there is strong temptation to earn profit by just producing inventory because the same reason that profit is a function of production under absorption costing (Variable Costing: A Tool for Management. n.d.).

In one more case, the five famous car-manufacturing companies; General Motors, Chrysler, Ford, Honda, and Toyota use absorption costing technique for external reporting. General Motors, Chrysler, Ford are doing mass production, produce more inventories to enjoy economies of scale but Honda and Toyota produces on order by customer. So the profit of Honda and Toyota is less and this is because profit is a function of production under absorption costing.

The above cases show limitation or drawbacks of absorption costing technique because in above both cases under marginal costing we cannot earn profit unless sales occur, so there is no usage of building inventory unless sales occur.

Illustration of Inventory Fluctuation
Presented below is an illustration of four cases with three different opening and closing inventory

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Unit selling price</th>
<th>Unit variable cost</th>
<th>Fixed costs per each period</th>
<th>Non-manufacturing overhead</th>
<th>Unit selling price</th>
<th>Unit variable cost</th>
<th>Fixed costs per each period</th>
<th>Non-manufacturing overhead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Stock</td>
<td>20</td>
<td>10</td>
<td>50</td>
<td>25</td>
<td>10</td>
<td>05</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>Units Sold</td>
<td>70</td>
<td>100</td>
<td>130</td>
<td>100</td>
<td>100</td>
<td>120</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Units Produced</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

### Illustration of Inventory Fluctuation

<table>
<thead>
<tr>
<th>Period 1</th>
<th>Period 2</th>
<th>Period 3</th>
<th>Period 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Stock</td>
<td>20</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>Units Sold</td>
<td>70</td>
<td>100</td>
<td>130</td>
</tr>
<tr>
<td>Units Produced</td>
<td>100</td>
<td>120</td>
<td>100</td>
</tr>
<tr>
<td>Closing Stock</td>
<td>10</td>
<td>30</td>
<td>-</td>
</tr>
</tbody>
</table>

### Variable Costing Statement

<table>
<thead>
<tr>
<th>Period 1</th>
<th>Period 2</th>
<th>Period 3</th>
<th>Period 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening stock</td>
<td>160</td>
<td>80</td>
<td>240</td>
</tr>
<tr>
<td>Production cost</td>
<td>800</td>
<td>960</td>
<td>800</td>
</tr>
<tr>
<td>Closing stock</td>
<td>(80)</td>
<td>(240)</td>
<td>-</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>880</td>
<td>800</td>
<td>1040</td>
</tr>
<tr>
<td>Fixed costs</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Total costs</td>
<td>1080</td>
<td>1000</td>
<td>1240</td>
</tr>
<tr>
<td>Sales</td>
<td>910</td>
<td>1300</td>
<td>1690</td>
</tr>
<tr>
<td>Gross profit</td>
<td>(170)</td>
<td>300</td>
<td>450</td>
</tr>
<tr>
<td>Less: nonmanufacturing cost</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Net profit</td>
<td>(270)</td>
<td>(300)</td>
<td>350</td>
</tr>
</tbody>
</table>

### Absorption Costing Statement

<table>
<thead>
<tr>
<th>Period 1</th>
<th>Period 2</th>
<th>Period 3</th>
<th>Period 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening stock</td>
<td>200</td>
<td>100</td>
<td>300</td>
</tr>
<tr>
<td>Production cost</td>
<td>100</td>
<td>1300</td>
<td>1000</td>
</tr>
<tr>
<td>Closing stock</td>
<td>(100)</td>
<td>(300)</td>
<td>-</td>
</tr>
</tbody>
</table>
The above illustration reveals the following features:

1. In the accounting period 1, the loss calculated under the absorption costing is Rs. 290, which is more than that of the marginal costing where it is Rs. 270. This is due to the fact that the fixed cost relating to the opening stock of 20 units now sold as brought over to the current accounting period.

2. In the accounting period 2, the marginal costing method shows a profit of Rs. 200 whereas the absorption costing method shows a profit of Rs. 240. The reason is due to the fact that portion of the fixed costs, instead of being charged against the profit for the period is charged to the closing stock and carried over to the next period.

3. In the accounting period 3, the profit calculated under absorption costing is Rs. 290 whereas the profit shown under marginal costing is Rs. 350. In this period, the sales exceed the output. A portion of the fixed cost carried over as a part of the opening stock under absorption costing is charged to the product sold in the current period.

4. In the accounting period 4, the profit under both the methods is the same, that is, Rs. 200 the reason is because there is no opening or closing stock. The production level is normal and hence, there is neither over absorption nor under absorption of the fixed costs under absorption-costing method.

5. In the long run, when the sales level and the production level equals, there may not be much difference in profit under both the methods.

The illustration simply depicts that by just producing and stocking inventory, one can earn profit whether or not sales happen. Both the inventory fluctuation and production cases are the worst case scenarios of absorption costing and such situation might mislead a common layman who does not have enough information of cost accounting but he has greater interest with this financial statement and he may wonder why management not increase its profit by increasing its production and he may insist that all resources should be spent on just production to earn maximum profit.

**Conclusion**

All the above discussion provides a strong reason for including fixed cost in product cost for stock valuation and in such case, the advocates of absorption costing are found on solid ground. However, it really shows a betraying picture in cases of fluctuation in production and sales and here the advocates of marginal costing technique are found lying on solid ground by arguing that profit is a function of sales not production.

But both absorption costing affect in cases of a) merely production not sales or b) inventory fluctuation, shows that it could mislead management and common layman because only a cost accountant better knows that what does a financial statement means and what lies beneath these figures is difficult to understand.
Therefore, we conclude that marginal costing technique is better costing technique, which could help management in decision-making and other stakeholders to better understand the position of an organization.

However, this we also suitable for only short period as the above discussion prove the importance of fixed cost as product cost in long run. So, it is suggested that both the costing technique have pros and sons and totally depended upon situation or capacities of organization but it is suggested that where use absorption costing for external reporting don’t give autonomy to production manager and specific pre defined policies and procedures should be implemented regarding optimum production and sales level. Therefore, no chance of exploitation or misleading occurs.

References