



Module 2 Discussion

by Venkata Reddy Keesara - Sunday, 8 September 2019, 9:34 PM

COST VOLUME PROFIT RELATIONSHIP:

Generally, cost volume profit relationship deals or analyze related to the different section they are on product selling amount or price per a single element or unit and that defines the total sales amount. The cost in the form of total and it may be in the variable cost or fixed cost. Cost volume prices are defined as the tool related to accounting and discuss the relationship between the profit, total sales and the total cost assigned to it. These techniques play a major role in the market for calculating all about the produced and profit that it gains, the loss it renews. It is mostly used in the decision-making areas and particularly the time will be reduced while using it. It is prominently utilized as a short cut method while performing calculations (Anna. (2016).

The total image of the profit structure will be defined in a single part by applying this method. In the section of accounting management, the CVP relationship is utilized more. Its furtherly measures the ratio related to the rate of change in the profit because of change appearing in the volume of sales. Even change is always fixed that does not affect any profit volume ratio. It has a formula according to that the Profit volume ratio calculated (Tse, 1962).

Formula: $(\text{contribution} \times 100) / \text{sales}$

For a change in sales, the formula is: $(\text{change in profits} \times 100)$

Whenever the Profit volume ration gets a slight increase in sales then it automatically indicated as high. When the profit volume gets too low then it can be increased by using the selling price. Variable cost is more important because it helps in deciding the profits gained through the fixed costs and that can be ignored through marginal costing. The marginal cost can be evaluated through:

*Sales Revenue – Variable cost

*Fixed cost-profit

As a manager, I suppose for the profit volume cost method to get a clear statement about the calculation of functionalities related to the market or company or organization. Even any fluctuation get appeared we can solve it through retaining or preferring the statement which we have done through the profit volume cost method (Fremgen, (1962).

Variable costing is a methodology that only assigns variable costs to **inventory**. This approach means that all overhead costs are charged to **expense** in the period incurred, while **direct materials** and **variable overhead** costs are assigned to inventory. There are no uses for variable costing in financial reporting, since the accounting frameworks (such as GAAP and IFRS) require that overhead also be allocated to inventory. Consequently, this methodology is only used for internal reporting purposes. However, it is quite commonly used in this role, where variable costs are used to:

- Conduct breakeven analysis to determine the **sales** level at which a business earns a zero profit.
- Establish the lowest possible price at which a product can be sold.
- Formulate internal financial statements into a contribution margin format (which must be adjusted before they can be issued to outside parties).

Variable costing is a concept used in managerial and cost accounting in which the fixed manufacturing overhead is excluded from the product-cost of production. In accordance with the accounting standards for external financial reporting, the cost of inventory must include all costs used to prepare the inventory for its intended use. It follows the underlying guidelines in accounting – the matching principle. Absorption costing better upholds the matching principle, which requires expenses to be reported in the same period as the revenue generated by the expenses. Variable costing poorly upholds the matching principle, as related expenses are not recognized in the same period as related revenue. In our example above, under variable costing, we would expense all fixed manufacturing overhead in the period occurred.

References

Tse, J. (1962). Profit Planning Through Volume-Cost Analysis. *Economica*, 29(114), 227. doi: 10.2307/2551577

Fremgen, J. M. (1962). Variable Costing for External Reporting--A Reconsideration. *Accounting Review*, 37(1), 76. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=buh&AN=7098035>

Anna Dyhdalewicz. (2016). The implementation of variable costing in the management of profitability of sales in trade companies. *E-Finanse*, (3), 116. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=edsd&AN=edsdof.f4fc2bc242a54840af6ff80d1e30fb4c>



Module 2 Discussion Forum

by FNU Syed Abdus Samad - Thursday, 5 September 2019, 12:08 AM

A. Using the Internet, review at least 3 articles on Profit-Cost-Volume relationship. Summary (300 words or more) the articles in your own words.

According to Kipsha (2016), the cost-volume-profit analysis looks at the effects of different activities in a business and their effects of the financial performance of the business. The volume is normally used in looking at the performance of business since items like labor, the selling price of items and the cost of materials are relatively known in short-run. However, Said (2016) explains that the volume of sales is not easily predictable making it difficult to predict profit. Therefore said adds that in performing a CVP analysis, several assumptions are made. They include the unit price of a product is constant, the variation cost of each unit is same, the total fixed cost is constant, the business sells everything, the costs change due to changes in activity and all products sold in the business are sold as the same mix.

An analysis of the cost-volume-profit, the business aims at breaking even. According to Hemmati et al. (2018), break-even is a situation where the business income is zero. At this point, the business does not make any profit nor does it make any losses. In other words, it means that the sales revenue of the business is the same as the total variable cost added to the total fixed costs. Besides, CVP is used to determine the volumes of items that can be sold to get to a specific level of income. This is also referred to as targeted income. To get the required sales level in units, the target income is added to the fixed cost, the total is then divided by the contribution margin ratio given in dollars. Hence, CVP is used by many businesses to find the profitability of the business in terms of unit sales of the business.

B. As a manager, why is Profit-cost-volume important in planning? Support your response with numerical example(s)

CVP helps in understanding the effects of activities of the business which influences profit. Cost, volume and profits determine the profitability of a business, hence CVP helps in budgeting and planning. For instance, the contribution margin can tell whether the company is making a profit before subtracting fixed costs. For example, if company A makes sales of \$600,000 and the total variable cost of \$300,000. If we assumed that company A sold 150,000 units this year, the cost per unit is \$4 and the variable cost per unit is \$2. The contribution margin per unit is \$4-\$2=\$2. The contribution margin ratio is (contribution margin divided by sales) $(600,000-300,000)/600,000=50\%$. This means that company A is making positive income after selling 150,000 units.

C. Using the Internet, review at least 3 articles on Variable Costing. Summary (300 words or more) the articles in your own words.

In managerial accounting, variable costing assigns variable to inventory. What this means is that fixed manufacturing overhead is excluded from the product-cost of production. The overhead costs in such as a case are changed into expenses during the financial period incurred. Variable costing is different from absorption costing because, in absorption costing, the input overhead is allocated to the final products produced. (Absorption Vs. Variable Costing, 2019). Variable costing is not used in financial reporting since financial frameworks such as IFRS and GAAP require the overhead to be part of the inventory. Therefore, variable costing is only used for internal reporting.

For the internal purpose, therefore, variable costing is used in analyzing a break-even point where the sales level of the business does not make profit or loss, determining the lowest price a unit can be sold in the business and establishing internal financial statement into contribution margins. However, the financial reports in the contribution margin format must be changed into financial reports before they are presented to outside parties. The costs that go to the variable costing include direct material (DM), direct labor (DL), variable manufacturing overhead (VMO), fixed manufacturing overhead (FMO), variable sales and administrative (VS&A) as well as fixed sales and administrative (FS&A) (Bragg, 2019).

According to accounting standards and requirements, the cost of inventory includes all the costs that are used in the preparation of the inventory. This is known as the matching principle which also requires that expenses be reported at the same time the revenue is created (Variable Costing, 2019). Variable costing does not obey this matching principle hence cannot be used in external reporting.

D. As a manager, discuss how you would use Variable Costing in managerial decisions Support your response with numerical example(s)

Managers can use variable costing to determine whether to process an order that is below or above the manufacturing costs. For instance, if a company manufactures watches and allocates \$580,000 for manufacturing 1,000,000 watches but receives an order of manufacturing 1,000,000 at a cost of \$400,000, the manager can use variable costing to determine whether to process the order or not as below.

Assuming

Direct material of \$150,000

Direct labor of \$75,000

Variable manufacturing overhead of \$80,000

Total = \$305,000 / 1,000,000 units produced = \$0.305 variable cost per case

Cost to produce special order of 1,000,000 phone cases = \$0.305 x 1,000,000 = \$305,000. Therefore, there is a contribution margin of \$400,000 - \$305,000 = \$95,000.

The special order adds a profit of \$95,000 hence should be accepted.

References

Advantages & Disadvantages of Using Absorption Vs. Variable Costing. (2019). Retrieved 4 September 2019, from <https://smallbusiness.chron.com/advantages-disadvantages-using-absorption-vs-variable-costing-34282.html>

Bragg, S. (2019). Variable costing — AccountingTools. Retrieved 4 September 2019, from <https://www.accountingtools.com/articles/variable-costing-definition-and-usage.html>

HEMMATI, H., Zeynolabedini, M., Khalili, A., & QADERI, B. (2018). An Overview of the Existing Literature about Cost and Profit Drivers Research.

Kipsha, E. F. (2016). FINCARE LTD: Cost, Volume and Profit Analysis. Case Studies Journal ISSN (2305-509X)-Volume, 5.

Said, H. A. (2016). Using Different Probability Distributions for Managerial Accounting Technique: The Cost-Volume-Profit Analysis. Journal of Business and Accounting, 9(1), 3.

Variable Costing - Overview, Examples, and Accounting Formulas. (2019). Retrieved 4 September 2019, from <https://corporatefinanceinstitute.com/resources/knowledge/accounting/variable-costing/>

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by Sachin Mara - Wednesday, 4 September 2019, 4:44 AM

Profit-Cost-Volume:

After reviewing at least three articles I found certain things that are related to the relationship of the Cost-Volume-Profit. By reviewing all these three articles I got a brief and proper knowledge of the term Cost-Volume-Profit Relationship (Deutsch, Fiáth, Virág & Berényi, 2018). It is seen that this relationship is basically an analysis that mainly studies the relationship that emerges under certain factors and the impacts that occurs on the amount of the profit. The first factor that comes to existence is that the price of selling and the number of total sales. The next factor that comes to existence is the total cost that can be of any form and that is mainly the variable cost and the fixed cost.

The next factor that can be taken in accordance is the sales volume. In general terms, it can be seen that the CVP is mainly a tool of management accounting and it mainly expresses the relationship that occurs between the sales that are total and overall cost and the profit (Brown, 2018). CVP is mainly a relationship that is termed to be one of the most important techniques of the management and cost of accounting (BONITA Y, 2018). This acts as a very powerful tool that mainly furnishes the overall picture of the structure of the profit and also helps in the profit planning process. With the help of this which is CVP, it can be seen that all the answer are given to the questions by the telling the required volume that is needed to be produced. It can be seen that this process acts as the most relevant process in the areas of the decision making that acts as a short run. It can be seen that there are certain assumptions that are seen in this context and the major one is that the sales that are per unit are termed as constant.

Example of Profit-Cost-Volume:

The example that can be taken in contrast with CVP is as follows. It can be seen as ABC wants to make their total profit of \$100000 from the sale that has been achieved by the organization by their appliances. All the brief details of the annual and the manufacturing capacity are as follows:

Capacity of the Production	10000 units
The cost that is Fixed	\$ 30,000
Per unit cost of the Variable	\$ 30

From the above table, the calculation of the CVP is done.

- $P \times 10000 = (10000 \times 30) + \$ 30000 + \$ 100000$
- $P \times 10000 = (\$ 300000 + \$ 30000 + \$ 100000)$
- $P \times 10000 = \$ 430000$
- Price per Unit is equal to $(\$ 430000 / 10000) = \$ 43$

Hence, it can be seen that the price that comes out to be is dollar 43 and that shows that the ABC company should have to price all their product at the price of dollar 43 and have to sell all the 10000 units that would help to achieve the profit of \$ 100000 that is made as a target by the company. It can be also seen that there is the consistency of the fixed cost which is dollar 30000 and this is totally irrespective of the sales level.

Variable costing:

Form reviewing a total of three articles the brief knowledge that I got about the topic variable costing is that this costing is mainly a methodology that is used to assign the costs that are variable to the inventory (Järvinen & Väätajä, 2018). This approach shows that the total cost is mainly charged in contrast to the expense that is occurred in a certain period. Also, it is seen that the materials that are direct and the overhead cost that is variable in nature are mainly signed to the inventory. It can be seen that there is a certain place where the variable cost mainly comes into account. The first role that is played by the variable cost is that it helps in conducting the analysis that is breakeven and this helps in the determination of the level of the sales at which the firm earns a profit that is termed as zero. The next place where it can be seen that variable cost takes place is that it helps in the establishment of the price that can be termed as the lowest and can easily sell the product at that price. It is also seen that with the help of the variable cost there is a formulation of the statements that are inter financial and also comes into a margin that acts as a contribution format. It is also a part of the managerial accounting (Garrison, Noreen & Brewer, 2012). It is seen that this concept is widely used in the process of managerial accounting. In this process, it can be seen that the overhead of the manufacturing gets experienced under the period of the product that is been produced (Al-Nahoud & Bani-Khalid, 2019). It can be seen that with the help of this process of costing all the issues are addressed that are mainly of the costing that is seen while there is absorption.

Example of Variable Costing:

The formulae that as a manager I would use for calculating the variable cost are as follow. The total variable cost can be calculated by the overall quantity of the output that gets multiply with the output per unit of the variable cost. The example of variable cost is as follows:

There should be a consideration that there is a bakery that mainly produces muffins. The raw material for making cost as dollar five and the for the direct labor the cost to bake on a muffin is a dollar 20. It is seen that there is a fixed cost of dollar 500 which is mainly known for the equipment that is used for making the muffin. The table below will help to understand more.

Muffin	Cost of Raw Materials	Cost of the Direct Labour	Overall Variable Cost	Costs that are Fixed	Overall Cost
0	\$0	\$0	\$0	\$500	\$500
1	\$5.00	\$20.00	\$25	\$500	\$525
5	\$25.00	\$100.00	\$125	\$500	\$625
10	\$50.00	\$200.00	\$250	\$500	\$750
20	\$100.00	\$400.00	\$500	\$500	\$1000
50	\$250.00	\$1000.00	\$1250	\$500	\$1750

From this table, it is clear that the variable cost always varies. Taking the above case of muffins it is clear that as the muffins are produced more the variable cost also changes.

References:

- Al-Nahoud, I., & Bani-Khalid, T. (2019). The Effect of Activity based Costing (ABC) System on the Corporate Pricing Decisions in the Jordanian Industrial Sector. *Global Journal of Management And Business Research*.
- BONITA Y, D. E. L. V. I. Y. A. N. A. (2018). PENERAPAN COST VOLUME PROFIT MAIN PRODUCT DAN BYPRODUCT SEBAGAI ALAT BANTU PERENCANAAN LABA PADA PETERNAKAN AYAM SLOROK FARM. *JURNAL AKUNTANSI UNESA*, 6(2).
- Brown, A. E. (2018). Fair fares? How flat and variable fares affect transit equity in Los Angeles. *Case Studies on Transport Policy*, 6(4), 765-773.
- Deutsch, N., Fiáth, A., Virág, M., & Berényi, L. (2018). Nuclear power—Additions to wholesale electricity prices and margin of safety. *WSEAS TRANSACTIONS ON BUSINESS AND ECONOMIC*, 15, 197-212.
- Garrison, R. H., Noreen, E. W., & Brewer, P. C. (2012). *Managerial Accounting: ACCT 222*. McGraw-Hill Learning Solutions.
- Järvinen, J., & Väätajä, K. (2018). Customer Profitability Analysis Using Time-Driven Activity-Based Costing, Three Interventionist Case Studies. *The Nordic Journal of Business, Forthcoming*.