

Introduction to Accounting

CASE STUDY

Executive summary

The purpose of this report is to analyse marginal costing and absorption costing in management accounting. The findings are that profits are higher under absorption costing when the sales volume is lower than the production volume. Besides, absorption costing is suitable for more companies than marginal costing. It has been recommended that companies should choose the suitable costing method based on the concrete situation.

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1. Introduction

This report is going to address the issue of marginal costing and absorption costing. Both marginal costing and absorption costing are widely used although they always give different results. This report will first analyse a case using marginal costing and absorption costing and compare the results. Then the choice between absorption costing and marginal costing will be discussed. Lastly, The importance of budgeting and the most suitable approach for the new company will be evaluated.

2. Forecasted profit statements using marginal costing or absorption costing

This part will first introduce marginal costing and absorption costing, then a certain case will be analyzed as an example to identify the difference between marginal costing and absorption costing.

2.1 Introduction of marginal costing and absorption costing

Marginal costing method is a method in management accounting. Under marginal costing method, all costs are classified as fixed costs and variable costs (Simpson, 2013). The logic of marginal costing is that to produce a product, variable cost will be changed, and fixed cost is paid for regardless of production volume (Simpson, 2013).

Absorption costing method refers to the calculation of product using the costs of production within a certain period. The production costs include direct materials, direct labor, variable overhead and fixed manufacturing overhead costs (Gupta, 2001). As for non-production costs, they will be treated as period costs (Will, 2005).

2.2 Forecasted profit statements using marginal costing

Table 1 Profits using marginal cost

Month	Profit
1	£7,150.00

2 £4,750.00

It can be seen that the profit is higher in the first month. Profit in the second month is only 66.63% of the profit of the first month. That is because the unit cost is higher when the sales is lower.

2.3 Forecasted profit statements using absorption costing

Table 2 Profits using absorption cost

Month	Profit
1	£7,150
2	£5,310

It can be seen that the profit is higher in the first month and the profit of the second month is 74.26% of the first month.

2.4 Differences and discussion

As it can be seen, the profit of the first month is the same under marginal costing and absorption cost. That is because all the costs happened in the first month has been deducted from the sales. So it can be concluded that if all the products produced in that month are sold, the profits are the same under marginal costing and absorption cost.

In the second month, the profits under absorption cost is higher. That is because left products' value is £16 under marginal costing and £21.6 under absorption costing. Parts of the fixed costs remain in the unsold products under absorption costing.

3. The choice between absorption costing and marginal costing

As we can see, the profits will be different under marginal costing and absorption costing. When the production volume is high than the sales volume, profits under absorption costing are higher. Otherwise, profits under absorption costing are higher when sales volume is greater. One of the reasons is that the production fixed costs are absorbed by the products,

as the result, when production volume is higher, parts of the production fixed costs remain in the products unsold. The other reason is that only the non-production fixed costs are treated as period cost under absorption costing while all the fixed costs are treated as period cost under marginal costing.

3.1 Break-even analysis (advantage of absorption costing)

Under marginal costing, the break-even point is when the contribution margin equals the total fixed cost. In this case, the break-even sales volume is 203 pieces. 203 pieces is only 40.6% of the capacity. When there is a target profit of £500, which could be used to make new investments or make the company keep operation, the sales volume should be 223 pieces.

Under absorption costing, the break-even point is when the gross profit equals the total non-production fixed cost. In this case, the break-even sales volume is 112 pieces, which is almost 90 pieces less than the break-even sales volume under marginal costing. As for sale volume of a target profit of £500, the sales volume should be 139 pieces. Therefore, for new companies, the break-even sales volume under absorption costing may be much easy to be achieved.

As we know, when the sales volume is greater than the production volume, profits will be higher under marginal costing (McCormick, 2015). However, it is hard for new companies to make so much sales. Therefore, it is suggested that for companies which have trouble to make good sales and want to look better in its financial statements should choose absorption costing.

3.2 Advantages and disadvantages of marginal costing

Marginal costing also has its advantages. First of all, it is simple to understand and calculate. For newly-set companies, they may not have professional financial workers and if that is the case, marginal costing will save them some troubles. Secondly, it helps control of costs by separating fixed costs and variable costs (Uozumi, 2015). Thirdly, it is logical

that the fixed cost should be deducted in the period when they happen because it seems like a period costs.

There are also some disadvantages of marginal costing. First of all, it may be unreasonable to count only the variable costs as the cost of products when the production fixed costs are significant. Secondly, for companies which have many kind of different goods, it is less useful (Simpson, 2013). Thirdly, there are some semi variable costs which may be hard to classify under marginal costing.

Based on the analysis above, absorption costing applies to more companies than marginal costing.

4. The importance of budgeting and the most suitable approach for the new company

Budgeting is very important because it is always hard to achieve something without a good plan. For new companies, they may have little experience in budgeting and in the area they are intended to do business.

Budgeting approaches can be divided to top-down and bottom-up approach as well as flexible and fixed approach (Shim, 2012). For new company, it should adopt flexible approach because there are many unknowns that need to be addressed when they happen. As the structure of new company is always flat, the issue of top-down and bottom-up does not needed to be addressed.

5. Conclusion

In conclusion, profits under absorption costing and marginal costing are always different. For many companies, absorption costing may be better while marginal costing is suitable for some kinds of companies such as new companies and companies with uniform product. Besides, budgeting is very important and new company should choose flexible budgeting.

6. Recommendations

Companies should choose between absorption costing and marginal costing carefully based on their own situation.

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Annex

Chart 1

Cost Items	Details	Cost Classification under		
		Fixed or Variable	Direct or Indirect	Production or Non-production
Service fee paid to Ebay	£300/ month	Fixed	Indirect	Non-production
Hire charges for 2 heat transfer machines	£1,300/ month	Fixed	Indirect	Production
T-shirt purchase cost	£12/ piece	Variable	Direct	Production
Transfer paper	£2/ piece	Variable	Direct	Production
Printing charges	£2/ piece	Variable	Direct	Production
Packaging tools & materials	£1,500/ month	Fixed	Indirect	Production
Stationery expenses	£250/ month	Fixed	Indirect	Non-production
Advertising fee (a fixed amount charged by an advertising firm)	£1,500/ month	Fixed	Indirect	Non-production

The total fixed cost=£1,500+£1,300+£250+£1,500+£300=£4,850

The variable cost for each piece=£12+£2+£2=£16

Contribution per piece=£40-£16=£24

Cost per piece in first month=£16+£4,850/500=£25.7

Cost per piece in second month=£16+£4,850/400=£28.125

Using marginal cost, the total variable costs of products sold in the first month and second month are respectively £8,000 and £6,400 (£16*500 pieces and £16*400 pieces). And the sales of the first month and second month are respectively £20,000 and £16,000 (£40*500 pieces and £40*400 pieces).

The profit for the month=sales - total fixed cost- total variable cost

The profit for the first month= £20,000-£8,000-£4,850=£7,150

The profit for the second month= £16,000-£6,400-£4,850=£4,750

This is the profits using marginal costs and next profits under absorption method will be calculated.

The total fixed cost=£1,500+£1,300=£2,800

Cost per piece=£2,800/500+£16=£21.6

Gross profit per piece=£40-£21.6=£18.4

Non-production cost=£250+£1,500+£300=£2,050

Therefore the total costs of products sold in the first month and second month are respectively £10,800 and £8,640 (£21.6*500 pieces and £21.6*400 pieces). And the sales of the first month and second month are respectively £20,000 and £16,000 (£40*500 pieces and £40*400 pieces).

The profit for the month=sales - total period cost- total production cost

The profit for the first month= £20,000-£10,800-£2,050=£7,150

The profit for the second month= £16,000-£8,640-£2,050=£5,310

Break-even analysis

Under marginal costing, the break-even sales volume is 203 pieces (£4,850/£24). And when the profit is £500. the break-even sales =(£4,850+£500)/£24=223

Under absorption costing, the break-even sales volume is 112 pieces (£2,050/£18.4). when the profit is £500. the break-even sales volume is 139((£2,050+£500)/£18.4) pieces.

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