Cost-Volume Profit Analysis

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Contribution: Contribution Margin Ratio, Margin of Safety and Target Profit

Contribution Margin

The contribution margin ratio is the difference between a company's sales and variable expenses, expressed as a percentage. The total margin generated by an entity represents the total earnings available to pay for fixed expenses and generate a profit.

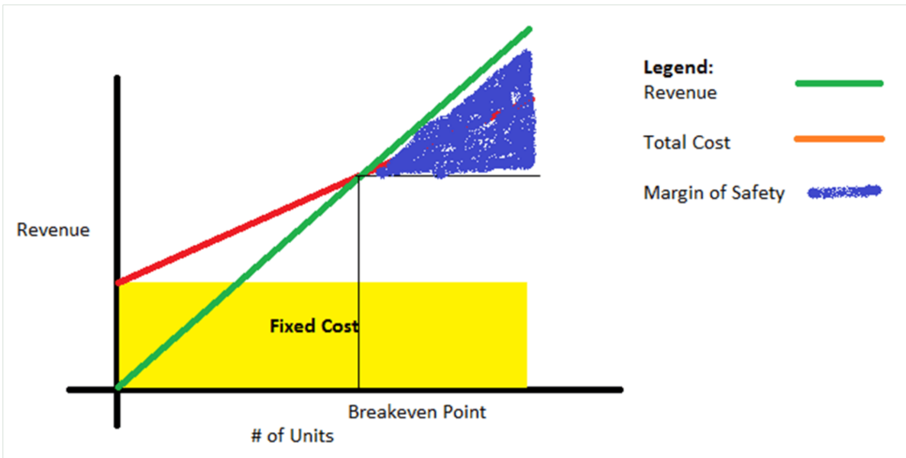
	Product A	Product B
Sales	$ 38,400	$ 20,000
Less variable cost of goods sold	16,000	8,000
Gross contribution margin	22,400	12,000
Less variable marketing and selling exp.	6,400	2,000
Contribution margin	$ 16,000	$ 10,000
Contribution margin ratio (CM/sales)	0.42	0.50

Margin of Safety

Margin of safety is a principle of investing in which an investor only purchases securities when their market price is significantly below their intrinsic value. In other words, when the market price of a security is significantly below your estimation of its intrinsic value, the difference is the margin of safety. Because investors may set a margin of safety in accordance with their own risk preferences, buying securities when this difference is present allows an investment to be made with minimal downside risk.

In accounting, the margin of safety, or safety margin, refers to the difference between actual sales and break-even sales. Managers can utilize the margin of safety to know how much sales can decrease before the company or a project becomes unprofitable.

Margin of safety is the difference between the intrinsic value of a stock and its market price. Another definition: In break-even analysis, from the discipline of accounting, margin of safety is how much output or sales level can fall before a business reaches its break-even point.



Target Profit

Target profit is the expected amount of profit that the managers of a business expect to achieve by the end of a designated accounting period. The target profit is typically derived from the budgeting process, and is compared with the actual outcome in the income statement. This results in a reported variance between the actual and target profit figures, for which the accounting staff may provide a detailed explanation. However, budgets are notoriously inaccurate, and become more inaccurate the further into a budget year that you go.

Thus, a secondary derivation of the target profit that tends to be more accurate comes from a rolling forecast, where the target information is updated regularly, based on a company's short-term expectations for the next few months. This tends to result in relatively small differences between the target and actual profit.

Yet another alternative is formula-based. This approach, known as cost-volume-profit analysis (or CVP analysis)

Operating Gearing

Operational gearing is the effect of fixed costs on the relationship between sales and operating profits. If a company has no operational gearing, then operating profit would rise at the same rate as sales growth (assuming nothing else changed). Operational gearing is simple and important - and often neglected. It can also be said to be the relationship between contribution and fixed cost.

Discuss weaknesses of BEP analysis

Break-even analysis enables a business organization to: Measure profit and losses at different levels of production and sales. Predict the effect of changes in sales prices. Analyze the relationship between fixed and variable costs.

Unrealistic assumptions – products are not sold at the same price at different levels of output; fixed costs do vary when output changes

Sales are unlikely to be the same as output – there may be some build up of stocks or wasted output too

Variable costs do not always stay the same. For example, as output rises, the business may benefit from being able to buy inputs at lower prices (buying power), which would reduce variable cost per unit.

Most businesses sell more than one product, so break-even for the business becomes harder to calculate

Break-even analysis should be seen as a planning aid rather than a decision-making tool