

Budgeting and Controlling – Part 4

Ratios in the Profit Plan

After describing the structure of a profit plan in the last article of the series Budgeting and Controlling (BTV-Aktuell 1/2000), in this one three ratios are reflected in more detail which can be determined based on the profit plan: minimum turnover, volume range and price range. These ratios allow a quick statement on profitability and scope for action of an enterprise.

Minimum Turnover

Minimum turnover is the key ratio in the profit part and specifies the minimum amount of sales a company must have, to ensure that variable and fixed costs of the company are covered.

A result of exactly zero can be achieved after covering variable and fixed costs of a company.

Minimum turnover is also called Break-Even and the following formula can be used for its determination:

$$\text{Minimum turnover} = \frac{\text{Fixed costs}}{\text{Contribution margin} / \text{Sales}}$$

Volume Range

The ratio Volume Range is also called margin of error and is closely related to minimum turnover.

Volume range shows by what percentage a company's turnover may decrease on the basis of constant trade margins or gross charges resp, without making a loss. A zero result is attained, whereas the decrease for sales only results from a volume reduction. All other factors remain constant: sales price per unit, variable costs per unit and all fixed costs.

The following formula is used to ascertain volume range and is shown as a percentage:

$$\text{Volume range} = \frac{\text{Planned turnover} - \text{Minimum turnover}}{\text{Planned turnover}} \times 100$$

A positive ratio means that a certain range in the sales volume exists. A negative ratio means that the break-even point has not been reached and thus, the sales volume must be increased by a corresponding percentage to attain a positive result.

Price Range

Similar to volume range, price range shows by how many percent a company's turnover may decrease to just attain a zero operating result.

In contrast to volume range, price range emanates from the effects of dropping sales prices, when sales volumes, variable costs and fixed costs remain unchanged. Price range is also called return on sales.

The following formula is used to calculate price range (in a percentage):

$$\text{Price range} = \frac{\text{Operating result}}{\text{Sales}} \times 100$$

A positive ratio means that a certain price range exists before a zero result is attained. A negative ratio means that the sales price must rise to attain the break-even point.

With the help of the three described ratios, a first statement on the profitability and the scope of action of an enterprise can be provided, all based on the profit plan.

After the presentation of the profit plan the following articles of the series Budgeting and Controlling will cover the next steps in the framework of budget compilation: liquidity or finance planning.



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