

Example 1

The company manufactures products and records variable and fixed costs.

Plan (CZK):

A total budget overheads 5 000 000 of which

- fixed component 4 000 000
- variable component 1 000 000

Variable component set at 100 000 products.

At the end of the period, the following actual overhead values were found:

Actual (CZK):

Total overhead budget 5 500 000 of which

- fixed component 4 000 000
- variable component 1 500 000

Reported: 115 000 products.

Tasks:

1. Evaluate budget implementation using the so-called fixed uncalculated budget procedure
2. Evaluate the implementation of the budget using the so-called fixed recalculated budget procedure
3. Evaluate the budget implementation according to the so-called variant budget procedure

Solution:

Ad 1)

Actual costs	5 500 000 CZK
Budget	5 000 000 CZK
Budget overrun by	500 000 CZK

Ad 2)

Actual costs	5 500 000 CZK
Fixed recalculated budget for 115 000 hours	$(5\,000\,000 / 100\,000) * 115\,000 = 5\,750\,000$ CZK
Saving budget	250 000 CZK

Ad 3)

Actual costs	5 500 000 CZK
Recalculated variable cost budget for 115 000 hours	$(1\,000\,000 / 100\,000 * 115\,000) + 4\,000\,000 = 5\,750\,000$ CZK
Budget overrun by	350 000 CZK

Example 2

ABC produces special jackets. The price of one jacket is CZK 1,300 and its production requires CZK 450 unit material, CZK 120 unit wages, CZK 95 for variable production overheads and CZK 65 for variable sales overheads. The budgeted fixed overhead costs of the company are: production fixed overheads CZK 1 200 000 and sales fixed overheads CZK 950 000.

Establish a revenue, cost and profit budget for an estimated sales volume of 5 000 jackets.

Solution:

Items	Costs per unit (CZK per unit)	Costs for 5 000 units (CZK)
Sales	1 300	6 500 000
Material per unit	450	2 250 000
Wages per unit	120	600 000
Variable production overhead per unit	95	475 000
Variable sales overhead per unit	65	325 000
Total variable costs	730	3 650 000
Margin	570	2 850 000
Production overhead fixed		1 200 000
Fixed sales overheads		950 000
Total fixed costs		2 150 000
Profit		700 000

Example 3

ABC produces liquid soaps. Make a budget for sales and revenue collection for the second quarter, if you know the sales plan and know that the price of 1 liter of soap is 70 CZK, 60 % of customers are small customers who pay at purchase and other customers are large customers who pay their obligations for a month after delivery. The soap sales plan is shown in the following table:

	March	April	May	June
Soap sales plan	500	650	480	520

Example 4

ABC company, a.s., produces two types of irons: Iron A requires a unit variable cost of CZK 270 and is sold for CZK 500. Iron B requires a unit variable cost of 380 CZK and sells for 650 CZK.

Task:

- Which of these products should the company currently focus on as a priority, if both are equally laborious and demanding in terms of machinery capacity?
- Which of the products should the company focus on if the "bottleneck" of the business process is the capacity of the machinery on which iron B spends twice as much time as iron A?

Solution:

	March	April	May	June	2nd quarter
Sales	35 000	45 500	33 600	36 400	115 500
Sales collection (income) - wholesale customers	x	14 000 (40 % of 35 000)	18 200	13 440	45 640
Revenue collection (income) - small customers	x	27 300 (60 % of 45 500)	20 160	21 840	69 300
Total income	x	41 300	38 360	35 280	114 940

Budgeted revenues in the second quarter will be 115 000 CZK and the company's income will be 114 940 CZK.

Example 5

The company management considers variants of the sold volume and price changes based on the calculation of how much it would be necessary to increase the sold quantity in order not to change the original budgeted profit. It is based on the fact that the currently achieved

contribution from sales for the company as a whole amounts to 0.25 or 25 %. The company's management is considering a variant price reduction of 5 %, 10 %, 15 % and 20 %. • Find out what percentage the sales volume would have to increase in the circumstances in order for the company to reach its original budgeted profit.

Solution:

The following applies to the price reduction:

$$\text{Quantity} = \text{reduction} / (\text{contribution from sales} - \text{reduction}) \times 100$$

The following applies to the increase:

$$\text{Quantity} = \text{increase} / (\text{contribution from sales} + \text{increase}) \times 100$$

Intended price reduction (in %)	Required increase in sales (in %)
5	25
10	66
15	150
20	400

$$5\% \text{ reduction} = 5 / (25-5) = 0.25 = 25\%$$