Enterprise Theory : Costs

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- Basic cost groups consist of:
  - operating costs:
    - material consumption
    - Power or energy consumption
    - consumption and use of external works and services (production cooperation, telecommunications, consulting, repair, etc. services)
    - personal expenses (wage expenses including health and social insurance)
    - depreciation of long-term tangible and intangible assets
  - financial costs (interest, insurance premiums, taxes)
  - extraordinary costs (shortage, damage, natural disasters)

Example

Decide whether it is an operational, financial or extraordinary expense:

- car depreciation
- paper consumption in the production of magazines
- consumption of office supplies
- shortfall in the cash register
- insurance premiums against natural disasters
- internet service fee
- exchange rate loss
- social insurance

Breakdown of costs according to place of origin and responsibility (unit and overhead costs)

- Where did the costs occur and who is responsible for their occurrence?
- Classification by internal company departments:
  - Production costs:
    - technology costs:
      - unit costs (directly related to the performance unit (t, kg, piece,...), proportional dependence on production volume)
      - overheads
    - costs of service, provision and management - overhead costs
  - Non-production costs:
    - sales management
    - administrative overhead
    - supply overhead etc.

Cost breakdown (direct and indirect costs)

- what the costs were spent on (which products and services)
- very important for the business world, because it can find out:
  - profitability (profitability) of individual items of products and services provided
  - how individual products or services contribute to the creation of the economic result (profit) and thereby influence the range of products and services on offer
  - whether to operate the given service in-house or rather to buy the given service (outsourcing)
  - the minimum price for the business area
- we monitor costs depending on the method of assigning costs to cost bearers (per performance, so-called calculation unit):
  - direct costs (unit costs and overheads that are directly related to a certain product)
  - indirect costs (common to a group of products, i.e. overhead costs that cannot be assigned to a specific product)

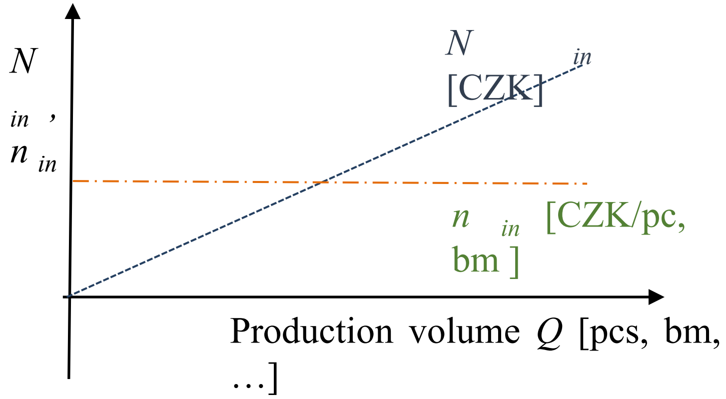
Example

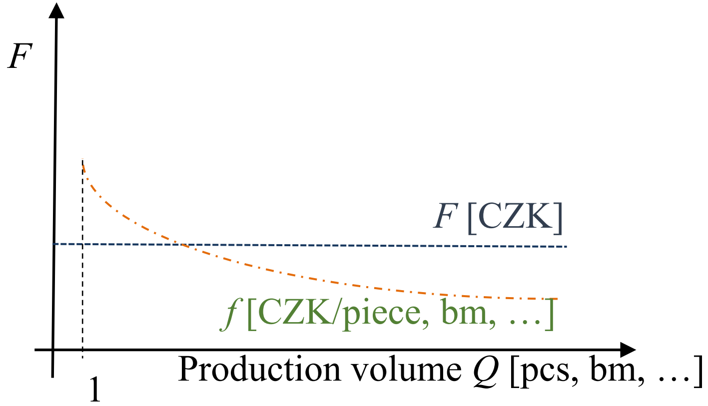
Determine whether it is a direct cost or an indirect cost:

- paper consumption in book production
- company management salaries
- consumption of office paper
- brand promotion
- power consumption
- material warehouse cleaning costs
- social insurance
- water, sewage, waste disposal

Breakdown of costs depending on changes in production volume

- it makes sense when managing costs for a period of less than 1 year
- variable costs – their amount depends on the volume of production
- fixed costs – their amount is not tied to the volume of production





Example

Decide whether it is a fixed or variable cost in each of the following cases:

- monthly wages of company management
- paper consumption in book production
- gas consumption for heating the production hall
- cost of purchasing goods (store)
- brand promotion
- electricity consumption in an office building
- internet connection fee
- petrol consumption of a taxi car
- gasoline consumption in a car used for the needs of executives

COST FUNCTION

- expresses the dependence of the amount of costs C on production volume Q:
  - production volume - independent variable (explanatory, exogenous)
  - costs - dependent variable (explained, endogenous)

$$C = f(Q)$$

- types of cost functions:
  - short-run cost functions
  - long run cost functions

$$C = f(Q) = (v \times Q) + F$$

$$C = V + F$$

where

F … total fixed costs [CZK]

v … unit variable costs [CZK/piece, CZK/kg, CZK/l, …]

V … total variable costs

Q … volume of production [pcs, kg, l, …]

Assignment: Determine the cost function for the production of 10,000 A piece of candy.

Cost item	The amount of costs [CZK]	Variable costs [CZK]	Fixed costs [CZK]
Material consumption	66,000	60,000	6,000
Wages of pastry chefs	45,000	15,000	30,000
Administrative staff salary	20,000		20,000
Technological energy (production equipment drive)	15,000	15,000	
Non-technological energy	1000		1000
Depreciation of tangible fixed assets	20,000		20,000
TOTAL	167,000	90,000	77,000

$$C = (v \times Q) + F$$

$$V = v \times Q$$

$$v = V / Q$$

Solution:

Cost item	**The amount of costs [CZK]**	**Variable costs [CZK]**	**Fixed costs [CZK]**
Material consumption	66,000	60,000	6,000
Wages of pastry chefs	45,000	15,000	30,000
Administrative staff salary	20,000		20,000
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TOTAL	167,000	90,000	77,000

$$F = 77\,000 \text{ CZK}$$

$$v = \frac{90\,000}{10\,000} = 9$$

$$C = 9Q + 77\,000$$

Thank you for your attention ☺