

METHODS TO DETERMINE THE ENTERPRISE'S RESULT MEASURE/SIZE

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The enterprise's performances measurement is related first by profit measure. From practice activity point of view, the most important calculation pattern is the accounting/book-keeping pattern, due the fact that it has an official compulsory character. On these bases, profit has become known under the name of benefit and it is determined as difference between the incomes and expenses produced by commercial activity of one economic agent.

self-finance, cost, efficiency, amortization

The profit made from difference between total income minus production cost (total, option or opportuneness) is named economic profit and it is, as a rule, lower then legal obtained profit.

There is many methods to determine the enterprise's result size, such as:

- a) Patrimonial method: by comparison the value of one enterprise, made at two different moments in time, using the same valuation methods.
- b) Economical method: by subtract the total expenses from total incomes, related to same period.
- c) Financial method : by subtract the depreciation from treasury net flows (this last measurement method is derived from the economic method).

From patrimonial point of view, enterprise method measurement proceed from the legal equation of balance sheet:

$$\text{ASSETS} - \text{LIABILITIES} = \text{EQUITY}$$

Afterwards, by comparison of own resources of two successive periods, are determined the result :

$$\begin{array}{rcc} \text{EQUITY} & - & \text{EQUITY} & = & \text{RESULT} \\ \text{AFFERENT TO EXERCISE} & & \text{AFFERENT TO EXERCISE} & & \text{EXERCISE} \\ \text{N} & & \text{N-1} & & \text{N} \end{array}$$

Due the fact that this equation don't takes into account the possible changes of registered capital (basic element of equity) intervened during the exercise/period (capital increasing by cash contribution and by nature items contributions or due to debts exchange, decreasing of registered capital) also the fact that a part from profit could be distributed to associates as dividends, the equation which allows to determine the period' s result is :

$$Re = Vcp - Ccs + Dd \quad (1)$$

which:

Re = period's result;

Vcp = evolution of owner's equity between 2 successive periods (N și N-1);

Ccs = Increasing of registered capital afferent to exercise/period N;

Dd = Distribute of dividends and, eventually, decreasing of registred capital afferent to exercise/period N.

Determined the result through the patrimonial method is criticazable in period of prices increasing, due the fact that adjustments brought to patrimonial elements, as a consequence of prices variation could be achieved by different methods, fact that conducts to supply of many measures/sizes for the result.

The economic method recognizes the period's result as difference between total incomes and total expenses :

$$\text{TOTAL INCOME} - \text{TOTAL EXPENSES} = \text{EXERCISE/PERIOD RESULT}$$

The result could be a positive measure, named profit or benefit, when the incomes are higher than the expenses, or a negative value, named losses, in opposite situation.

From financial point of view the exercise result appears as variation of enterprise treasury during a period by comparison of incomes flows and payment flows.

Due the fact that enterprise self-financed is ensured by exercise result (profit) and increase of amortization and provisions calculated expenses, un-generate payments, the equation which illustrates the result's size in this approach is :

$$Re p = Ca - Cha$$

where:

Rep = Exercise/Period result;

Ca = Self Finance Capacity ;

Cha = Depreciation Expenses, provisions.

Theory and financial practice from our country take in account many methods to profit forecast, the most used being:

1. Syntetic method, which starts from taking into account of many syntetic indicators, with levels designed for future period, following the underneath methods :
 - a) Exploiting expenses measurement, as being the value of production for sales which from are deducted the value added tax, multiply by maximum level of expenses made to 1000 ron production, thus:

$$Ce = (Qpv - TVA) \times \frac{\sum Ce}{Q} \times 1000 \quad (2)$$

which:

Ce =total exploiting expenses ;

Qpv = volume of production for sale, illustrated in sale prices:

$\frac{\sum Ce}{Q} \cdot 1000$ = maximum expenses made to 1000 ron production;

- b) Profit establishment from sale of manufactured production, as difference relationship between gross sales which from has deducted the value added tax and exploiting activity :

$$Pi = (Qpv - TVA) - Ce \quad (3)$$

which from:

Pi = the initiate profit from current exploiting activity;

- c) Determine the stocks influence and the influence of invoices issued and unpaid from start and end of year over profit volume :

$$DP = Pi + Pf \quad (4)$$

Which from:

DP – difference ± of profit;

Pi – profit to year's beginig;

Pf – profit to year's end;

- d) The volume of obtained gross profit :

$$PB = Pi \pm DP$$

2. The direct method could be applied to enterprises with small number of products, due the fact that is necessary a large volume of calculus. In fact, is determined the profit on each product, and the profit/benefit calculation on every product are achieved by proceeding the following phases:

a) product profit, as difference between the value of production for sale less TVA and exploiting expenses necessary to product's manufacture:

$$PQ = (Q_{pv} - TVA) - q_{ce} \quad (5)$$

Which from:

PQ – product profit;

Q_{pv} – product value in selling price;

TVA – value added tax ;

q_{ce} – the exploiting expenses afferent to manufactured product dedicated to sell

b) The profit afferent to stocks and factors measured from the year's start and year's end for the respective product:

$$D_{pq} = p_{qi} \pm p_{qf} \quad (6)$$

Which from:

D_{pq} – profit difference;

p_{qi} – profit to year's start;

p_{qf} – profit to year's end;

c) The total profit, obtaining as sum relation of profit for manufactured products and profit difference related to stock and unpaid invoices:

$$PB = PQ \pm D_{pd} \quad (7)$$

In extended form, the profit calculate by direct method presents the following relation:

$$PQ = [(Q_{pv} - TVA) + (S_{iqpv} - S_{fqpv})] - [(Q_{ce} + S_{iqce}) - S_{fqce}] \quad (8)$$

Which from:

Q_{pv} – product express in sell price;

TVA – value added tax;

S_{iqpv} si S_{fqpv} – stock value to begin (i) and end period (f) of product, express in sell price without TVA;

Q_{ce} – product value express in exploiting cost;

S_{iqce} si S_{fqce} – stock from product express in exploiting cost, to period begin (i), respectively to period end (f).

3. The method reference to bases period is proceeding in enterprises with a large assortment of products, to which the direct method becomes useless/ inoperative through the large number of analytic calculations which imposed.

The succession of working phases in the frame of this method is as follow :

a) Establish of efficiency rate afferent to the previous year, as division between the total profit sum and the sum of exploiting costs for the goods sold:

$$\frac{\sum P_0}{\sum Ce_0} \cdot 100 \quad (9)$$

consisting of :

$\sum P_0$ – the profit volume from the base period ;

$\sum Ce_0$ – the sum of exploiting expenses from base period .

- b) Determined of profit afferent to production of goods prognosed to be sell or cash in future year, accordingly to the efficiency rate from the previous year:

$$P_1 = \frac{Q_{pv1} \cdot R_{r0}}{100} \quad (10)$$

Which from:

Q_{pv1} – value of goods production dedicated to sell in forecast period, expressed to sell price;

R_{r0} – the efficiency rate from the base period.

- c) The measurement of increasing (decreasing) profit as effect of decreasing (increasing) of exploiting cost :

$$P_2 = Q_{pv1} \times I_{cel/0} \quad (11)$$

which from:

$I_{cel/0} = \frac{Q_{ce1} - Q_{ceo}}{Q_{ceo}} \cdot 100$ -value production index, express in exploiting cost

Q_{ceo} – production value, express in exploiting cost from base period ;

Q_{ce1} – production value, express in exploiting cost afferent to the presented period.

- d) Modification of profit mass due to change of production assortment, calculated as deviation of prognosis efficiency rate versus the one from the base year, accordingly to product structure share in total goods production:

$$R_0 = \frac{(a_0 \cdot x) + (b_0 \cdot y) + (c_0 \cdot z)}{100} \quad (12)$$

Consisting of :

a, b, c – share of products (assortments)

$$R_{ri} = \frac{(a_i \cdot x) + (b_i \cdot y) + (c_i \cdot z)}{100} \quad (13)$$

Which from:

x, y, z – the efficiency rate from the previous year to the assortments taken into account from year:

$$DP_3 = \frac{Q_{ice0} \cdot (\pm DRr)}{100} \quad (14)$$

Which from :

Q_{ice0} = the forecast goods production value express in exploiting cost from the base year ;

$\pm DRr$ = difference between the average rate of efficiency rate from the base year and the rate afferent to programmed structure of production from the next year.

- e) Establishment of profit afferent to products which have not made in previous year (no comparable production) which are proceed accordingly to direct method:

$$P_4 = (Q_{ipv} - Q_{ice}) - (Sf_{pv} - Sf_{ce}) \quad (15)$$

Consisting of :

Q_{ipv} = the value of goods production express in sell prices;

Q_{ice} = the value of goods production express in exploiting costs from the designed year;

Sf = haunch of factors and stocks from year's end express in sell price, respectively the exploiting costs.

- f) Establishment of total gross profit from current activity by adding the following elements:

$$Pt = P_1 + P_2 + P_3 + P_4, \text{ respectively: } Pt = P_{Rr0} \pm D_{Pce} \pm D_{PSp} + P_{pn} \pm D_{Ps} \quad (16)$$

P_{Rr0} = profit afferent to forecast goods production, calculated accordingly to efficiency rate from the base year ;

$\pm D_{Pce}$ = profit result from decreasing (increasing) of exploiting cost;

$\pm D_{PSp}$ = profit result from modification of assortment structure of production in conditions of maintaining the efficiency rate from the base period;

P_{pn} = profit which will be obtained from manufacture, sell and cash of no comparison production;

$\pm D_{Ps}$ = profit which will be obtained from stocks and uncash invoices reevaluate.

4. Other methods to forecast the profit mass : a) the method of direct costs and b) method of linear programme/schedule
 - a) Method of direct costs takes into account to determine the variable expenses on each product unit, and the constant expenses are taken under the form of a global sums, independently by production volume and marketing variation, that's mean in a simple relation : $Pb = (P - Cv) \times D$, consisting of Pb = gross profit ; P = production price ; Cv = the various costs on product unit; D = sellings volume from the period considered.
 - b) Method of linear programme/schedule, the mathematical method, processes the economic-financial evidences included in a simple tabel related to costs, the maximum use of production capacities, the specific consumption, the assortments, the production quantities which could be manufacture and other elements.

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