

PROFITABILITY ANALYSIS BASED ON INCOME STATEMENT

Abstract: *To survive and prosper in the new global economy, companies must improve their performance and achieve a high quality of products to qualify as a world-class enterprises. In this context, it must, on the one hand, analysis of performance factors generating and effects exerted by these human factors, strategic, contextual, structural and technological efficiency of economic activity of the enterprise and, on the other hand, identifying ways to improve performance.*

The globalization of markets, the increasing complexity of customer needs, the impact of information technology and intellectual capital are interrelated phenomena whose manifestation poses new challenges for businesses. Although with fewer financial resources, human and technological compared to large enterprises, small and medium enterprises have the advantage of flexibility, rapid response and a capacity for innovation.

Key words: *financial performance, accounting standards, profit forecast.*

Change and innovation implies a systemic vision of the company and the determinants of performance-based vision system operational and management information system, including mutations in the adopted strategy and management practices, and operational information, based on the principles of consistency and adaptation to the environment.

In this context, enterprise performance goals aimed at multiple levels, including individual (worker, consultant, policy makers) working group (team, administrative unit), organization (enterprise). Also, the performance can be approached from multiple perspective: functional (marketing, production, accounting and finance) and process (supply chain management, customer relationship, management innovation). Performance can be measured quantitatively (financial results, indicators of productivity) or qualitative (strategic flexibility).

1. Financial components of return

Enterprise productivity and efficient use of capital leads to economic results when production is sold, resulting measured by gross surplus of exploitation. Figure 1 highlights how a fraction of EBE remains available to shareholders.

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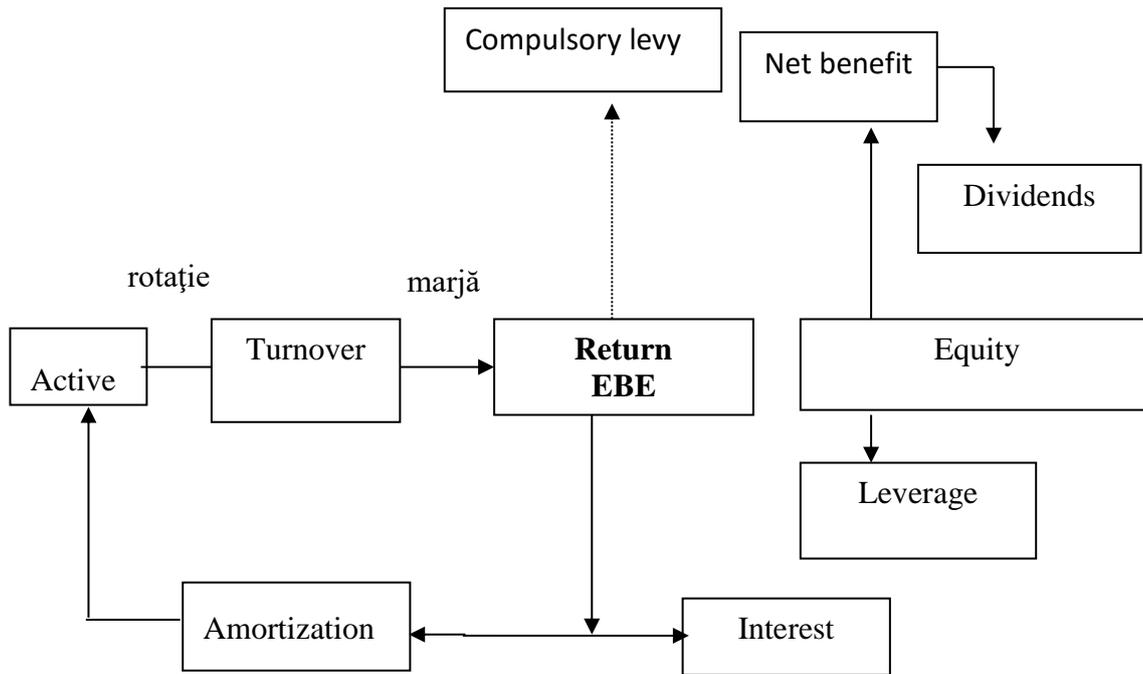


Figura 1 Financial components of return [3, p. 251]

The difference between the concepts of economic and financial profitability "resulting from that debt is likely to reduce the amount of capital invested and, equally, the results in interest expense"[4, p.26]. Thus, cost of equity and debt is directly influenced by the more so, as the interest is tax deductible expenses and reduces the tax paid. From a purely financial point of view and an approach flows of the financial asset profitability relies in part on monetary surplus distributed. This highlights the diversity of viewpoints on profitability reflecting various objectives (sometimes divergent) social groups interested in the results of the company: managerial perspective (using self-financing to maintain business company) and the shareholders (who receive dividend payments for their placement) .

Profitability is directly related to changes in economic activity (economic risk), more reliance on debt also affects profitability (financial risk). The concept of return is inseparable from the risk-return risk is inseparable couple, adding a specific size indebtedness any economic activity.

2. Factor analysis of the result of exploitation

Diagnostic analysis of the operation result is geared towards highlighting this indicator generating causes of variation from one year to the next, these cases constitute premises of weather exploitation income in the future. Factor analysis of the operation result is based on the following model:

$$R_{\text{expl}} = V_{\text{expl}} \left(1 - \frac{Ch_{\text{expl}}}{V_{\text{expl}}} \right)$$

R_{expl} = operation result;

$V_{\text{exp } l}$ = operating income;

$Ch_{\text{exp } l}$ = operating expenses.

Using the data from Table 1, we proceed to the exploitation factor analysis result based on the data from the income statement of S.C. ALFA.

Table 1 Factor analysis of the operation result in S.C. ALFA (RON)

| Explanations | Absolute changes | | | |
|--|------------------|-------|------------|-------|
| | N+1/N | % | N+2/N+1 | % |
| Changing the result of exploitation, of which: | 949997,00 | 100,0 | 2404456 | 100,0 |
| Influence income | 337797,68 | 35,6 | 356214,77 | 14,8 |
| Influence of a lion revenue expenditure | 612199,32 | 64,4 | 2048241,23 | 85,2 |

Changing the operation result in the SC ALFA in the current financial year compared to the base is given by:

$$\Delta R_{\text{exp } l} = V_{\text{exp } l1} \left(1 - \frac{Ch_{\text{exp } l1}}{V_{\text{exp } l1}}\right) - V_{\text{exp } l0} \left(1 - \frac{Ch_{\text{exp } l0}}{V_{\text{exp } l0}}\right)$$

Quantifying the influence of these two factors (operating revenue and expenses respectively a lion revenues) leads to the following relations:

$$\Delta V_{\text{exp } l} = V_{\text{exp } l1} \left(1 - \frac{Ch_{\text{exp } l0}}{V_{\text{exp } l0}}\right) - V_{\text{exp } l0} \left(1 - \frac{Ch_{\text{exp } l0}}{V_{\text{exp } l0}}\right)$$

$$\Delta \left(\frac{Ch_{\text{exp } l}}{V_{\text{exp } l}} \right) = V_{\text{exp } l1} \left(1 - \frac{Ch_{\text{exp } l1}}{V_{\text{exp } l1}}\right) - V_{\text{exp } l0} \left(1 - \frac{Ch_{\text{exp } l0}}{V_{\text{exp } l0}}\right)$$

During N-N + 1, the increase in operating results of 949,997 (RON) reflected in the proportion of 35.56% of revenue, while in the next period, the contribution of the latter drops to 14.82%. The other factor, qualitative - 1 leu revenue expenditure had positive influence on the analyzed indicator predominant (64.44%, respectively, 85.18%).

In order to forecast the outcome of the operation using the previous model can proceed either increase revenue or reduce costs 1 leu revenue.

3. Factor analysis of gross profit

Factor analysis of gross profit is based on data from the profit and loss account. As a result of the fact that the activity of the SC ALFA include, in addition to the operating and sales of goods, other financial and extraordinary activities, to consider modifying gross profit and forecast its development in the next period, use the following calculation models:

Option I:

$$Pb = Rcr + Rex = (R_{\text{exp } l} + Rf) + Rex$$

Option II:

$$Pb = Vt - Cht = [(V_{\text{exp } l} + Vf + Vex) - (Ch_{\text{exp } l} + Chf + Chex)]$$

According to variant I, variation in gross profit is explained by the following factors influence mayors:

- Current result;
- Extraordinary result.

As secondary factors influencing the gross profits fall operation result and financial result. Quantifying the influence of these factors on indicator analysis leads to the following relations:

$$\Delta Rcr = (Rcr1 + Rex0) - (Rcr0 + Rex0) \text{ in which:}$$

$$\Delta Rexpl = Rexpl1 - Rexpl0$$

$$\Delta Rf = Rf1 - Rf0$$

$$\Delta Rex = Rex1 - Rex0$$

In version II, modification gross profit is due to the influence of the following factors:

- Change in total revenues (ΔVt);
- Change of total expenditure (ΔCht).

On the second level factorial decomposition, are secondary factors that influence gross profit, respectively:

- Operating income ($Vexpl$), financial (Vf) and extraordinary (Vex);
- Operating expenses ($Chexpl$), financial (CHF) and extraordinary ($Chex$).

Based on balanțiere method, determine the influence of these factors on gross profit. In Table 2 are systematized two factorial analysis models ALFA gross profit society, based on the data in the profit and loss account for the financial years $N + 1$ and $N + 2$.

Table 2 The results of the factor analysis of gross profit SC ALFA during $N + 1$ - $N + 2$ (RON)

| | |
|---|---------|
| Option I | |
| Result for the year (gross profit) for the current period ($Pb1^*$) | 2806091 |
| Result for the year (gross profit) of the reporting period (Pbo^{**}) | 462425 |
| Change year earnings (gross profit) (ΔPb), of which: | 2343666 |
| - Influence the outcome of the current financial year (ΔRcr), of which: | 1722391 |
| - -Influence the outcome of the operation ($\Delta Rexpl$); | 2404456 |
| - The influence of the financial result (ΔRf) | -682065 |
| - Influence extraordinary result for the year (ΔRex) | 621275 |
| Option II | |
| Result for the year (gross profit) for the current period ($Pb1$) | 2806091 |
| Result for the year (gross profit) of the reporting period (Pbo) | 462425 |
| Change year earnings (gross profit), (ΔPb), of which: | 2343666 |
| - Influence of total income (ΔVt), of which: | 4954483 |
| - Influence of operating revenue ($\Delta Vexpl$) | 3320353 |

| | |
|--|----------|
| - Influence of financial income (ΔVf) | 1384941 |
| - Influence of extraordinary income (ΔVex) | 249189 |
| - Influence of total expenditure (ΔCHt), of which: | -2610817 |
| - Influence of operating expenses ($\Delta CHexpl$) | -1579804 |
| - Influence of financial expenses (ΔCHf); | -1403099 |
| - Influence of extraordinary expenses ($\Delta CHex$) | 372086 |

* Pb1 means gross profit for the financial year N + 2

** Pbo is the gross profit recorded in N + 1

Factor analysis of gross profit in the period considered leads to the following conclusions:

- Gross profit increased by 2343666 (RON) in year N + 2, compared with the previous year was mainly due to earnings ratio of 73.49% current extraordinary result with a contribution of only 26.51%. Among the secondary factors (version I), it is noted positive influence solely due to the operation result (2404456 RON materialized in the increase in gross profit), while lowering financial result (due to the increase in financial expenses faster pace compared with revenues same category during N + 1, N + 2) had negative effects on gross profit (causing its reduction with 621275 RON);

- In the second variant, it is noted positive influence due to total revenues (which causes an increase of gross profit of 4954483 RON), while under the influence of total expenditure, gross profit decreased during the same period with 2610817 RON;

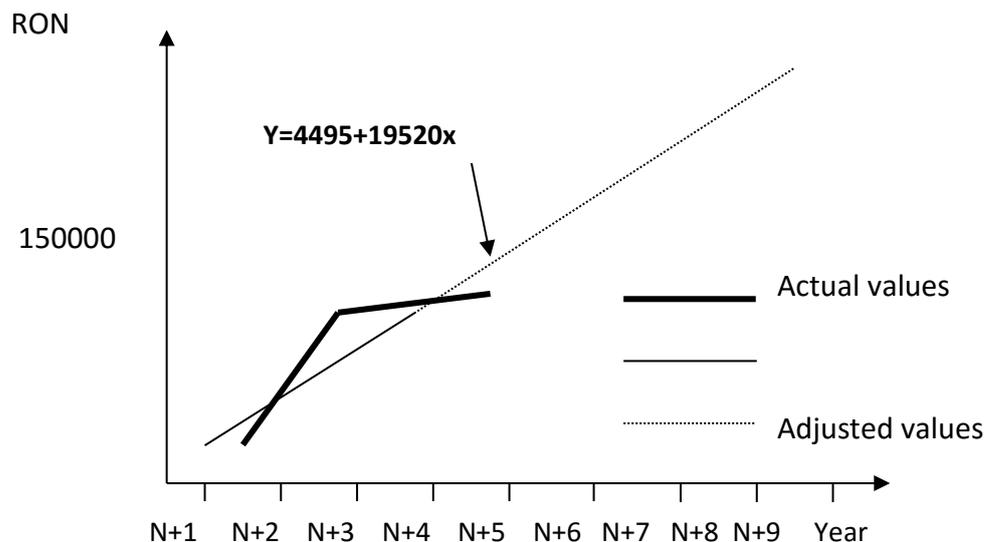


Figure 2 Forecast gross profit by adjusting polynomial SC ALFA

- the secondary factors, the most significant influence lies operating revenues (which have a share of 67% of net profit growth under the influence of income); follows, in order of importance, financial income (27.95%) and extraordinary income (5.05%). The categories of

expenditure, is distinguished by extraordinary expenses positive impact by reducing the previous year, have resulted in an increase in gross profit by 372086 RON. The other two categories of expenditures have been increased for the period N + 1, N + 2, thereby reducing gross profit.

4. Forecast net profit

In practice management, net profit can be estimated by several methods:

- Analytical calculations on production, sales and expenses. In each economic agent shall develop a strategy for production (volume and range structure), a sales strategy (markets, quantities, values) and expenses in connection with the first two;

- Synthetic calculations (average rate, rate of return). It is a common method due to the fact that requires a relatively small volume of data and the calculation process is relatively simple;

- On the coefficients of leverage (economic and financial risk).

In the company ALFA method for forecasting net profit synthetic calculations lead to the results summarized in Table 3. The assumptions underlying the forecast are:

- S.C. ALFA estimates annual turnover growth of 8%;
- annual increase variable costs 1000 lei turnover is 3% due to higher prices of raw materials and utilities;
- change the structure results in that financial results in weight loss operation result by 0.2% per year and 0.03% exceptional result.

**Table 3 Forecast net profit at SC ALFA average rate method over the period
N + 3- N + 5 (RON)**

| Nr. crt. | Indicators | N+3 | N+4 | N+5 |
|----------|-------------------------------|----------|----------|----------|
| 1 | Turnover | 16727031 | 18065193 | 19510408 |
| 2 | Variable expenses | 10657293 | 11564071 | 12489197 |
| 3 | Gross margin (1-2) | 6069738 | 6501122 | 7021211 |
| 4 | Fixed expenses | 3356421 | 3356421 | 3356421 |
| 5 | Result of the operation (3-4) | 2713317 | 3144701 | 3664790 |
| 6 | Financial result | 508476 | 583027 | 685316 |
| 7 | Extraordinary result | 265091 | 306294 | 355851 |
| 8 | Gross profit (5+6+7) | 3486884 | 4034022 | 4705957 |
| 9 | Income tax | 871721 | 1008506 | 1176489 |
| 10 | Net profit | 2615163 | 3025516 | 3529468 |

Determination of budget indicators for the year N + 3 from the assumptions above, is based on the following calculation:

- Turnover:

$$15487992 \times 1,08 = 16727031 \text{ (RON)}$$

- Variable costs 1000 lei turnover:

$$I'_{CV} = \frac{CV}{CA} \cdot 1000 = \frac{9821457}{15487992} \cdot 1000 = 634,13 \text{ ‰}$$

$$CV_{t+1} = 16727031 \cdot \frac{637,13}{1000} = 10657293 \text{ (RON)}$$

- The share of the financial result in the operation result:

$$\text{In the year N+2: } \frac{437486}{2310114} \cdot 100 = 18,94\%$$

$$\text{In the year N+3: } 18,94\% - 0,2\% = 18,74\%$$

$$R_{f_{t+1}} = 18,74\% \cdot 2713317 = 508476 \text{ (RON)}$$

- Share the extraordinary result in the operation result:

$$\text{In the year N+2: } \frac{226421}{2310114} \cdot 100 = 9,80\%$$

$$\text{In the year N+3: } 9,80 - 0,03 = 9,77\%$$

$$R_{ex_{t+1}} = 9,77 \cdot 2713317 = 265091 \text{ (RON)}$$

In Figure 3, is presented net profit forecast to S.C. ALFA, exponential adjustment method.

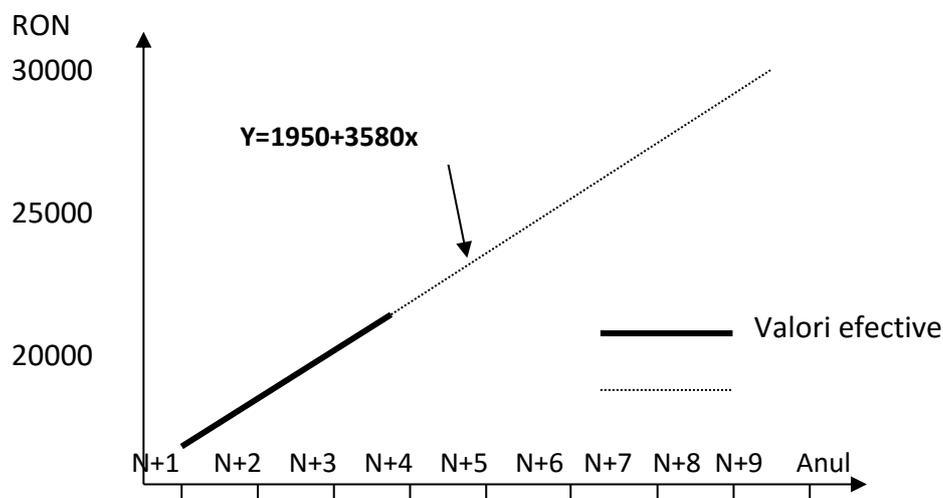


Figure 3 Forecast net profit in S.C. ALFA exponential adjustment method

5. Conclusions

Profit analysis forecasting models based on exponential adjustment principle is characterized by a high degree of utility in that they allow continuous updating of information, which significantly reduces the degree of error.

In the current economic conditions, increased business complexity (high uncertainty and risk) generate strategic stakes related to company performance, its desire is to reach the level of efficiency, productivity and competitiveness meant to ensure its global market penetration .

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