

ANALYSIS OF THE FACTORS AND SUBFACTORS AFFECTING PROFIT BEFORE TAXATION

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Rezumat

The result of the exercise, either profit or loss, is always a guideline indicator for a company's management. At the end of a management period It highlights the way in which one has used, both qualitatively and quantitatively, material financial and human resources, in short, the degree of efficiency with which these resources were used.

Taking into account that the result that is pursued in the course of a financial exercise is profit, we can say that it is of particular importance to any economic agent. From this point of view, the profit fulfills a multitude of functions such as: managerial and managerial indicator, self-financing source, performance criterion, source of strengthening the economic and financial management, etc.

The results of the theoretical and practical research based on the profit approach have always been and will always be of great interest to the future researchers, providing the necessary information for the development of various studies and researches in the field.

Taking into account that the profit is not a homogeneous indicator, it contains elements, such as the results from different activities, I will use the factorial diagnosis analysis. This will help me write an analysis of the magnitude of factors and sub-factors that influence profit before taxation, that is the gross profits.

Keywords: gross profit, factorial analysis, influence factors, operating result, financial result, extraordinary result.

Clasificare JEL: L2 - Firm objectives, organization and behavior

1. Introduction

In any market economy, profit has been and will remain the purpose and motivation of any economic agent in opening and pursuing an economic activity, regardless of the branch of activity in which he wishes to operate. Generally, it is perceived as a positive difference between the revenue received and the expenses incurred by the firm during a financial exercise.

The origins of the concept of profit come from Latin, meaning to progress, to produce results, and nowadays it means profit making.

Without the direct purpose of the activity, profit has a special significance for the economic agent, given its functions: a source of self-financing, a common unifying material interest for employees, a source of formation of the necessary sources of the activity employed in normal conditions. Profit is the expression of profitability in absolute size. [5]

2. Speciality literature

In the economic field, the concept of profit covers a wide range that refers to: growth, profitability, efficiency, value of a firm, success. It is also one of the most well-known concepts in the economic literature that has been and continues to be the subject of many studies in the field. It is an area of great interest for both the theoreticians and the practitioners working in the financial and accounting field.

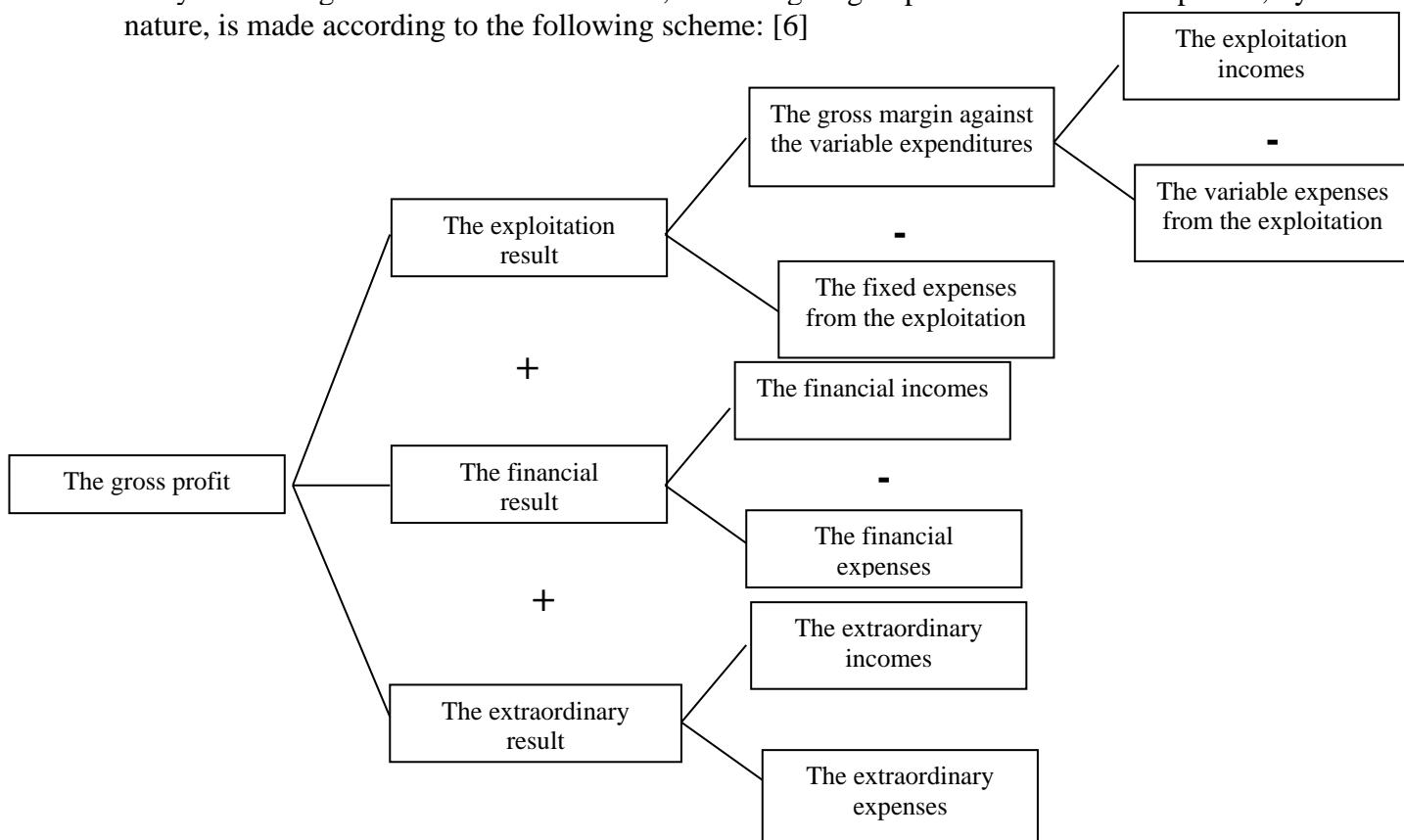
Starting from the topic, I consider that a lot of specialized studies are available in the literature, and in this respect I mention some bibliographic sources that reflect the theoretical and methodological aspects regarding the company's profit:

- Anghel Ion, coordonator, Analiza și evaluarea economico-financiară. Studii de caz, Ed. ASE, București, 2016;
- Ciora Costin, Analiza performanței prin creare de valoare, Ed. Economică, București, 2013;
- Căruntu Genu Alexandru, Ecobici Mihaela Loredana, Profitability of the company expressed under rentability rates, Annals of "Constantin Brâncuși" University of Tg. Jiu, Economy Series, nr.3/2018,
- HadaIzabela Diana, BurjaVasile, Between profit and cash-flow in evaluating economic performance, Annals of the „Constantin Brâncuși” University of TârguJiu, Economy Series, Issue 3/2018;
- Hristea Anca Maria, Analiză economică și financiară a activității întreprinderii, de la intuiție la știință, vol.1, vol. 2, ediția a doua, Ed. Economică, București, 2015;
- Păvăloaia Willi și colab., Analiză economico-financiară. Concepțe și studii de caz, Ed.Economică, București, 2010.

3. Theoretical aspects of structural and factorial analysis of progression before taxation

The factorial analysis of gross profits is a type of analysis that highlights the action of the factors and sub-factors that influence gross profit. In this respect, in order to find out what the gross profit factors are, I will resort to structural analysis. This will help determine exactly what are the factors and sub-factors that act on the gross profit.

The structural analysis of profit aims to determine the contribution of different types of results to total change, as well as to highlight the changes in the components. The structural analysis of the gross result of the exercise, according to groups of incomes and expenses, by their nature, is made according to the following scheme: [6]



Scheme no. 1
The structural analysis of gross income of the financial exercise
Source:

<http://www.universitatea-cantemir.ro/CursuriRei/documente/C10Analiza%20perform%20pe%20baza%20CPP.pdf>

Considering the above scheme, the main factors of influence of the gross profit are the result of the exploitation, the financial result and the extraordinary result, while the subfactors are: the gross margin against the variable expenditures, the fixed expenses from the exploitation, the financial incomes, the financial expenses, the extraordinary incomes and extraordinary expenses.

4. Methodology

Regarding the methodology for elaborating this theme, it is based on a theoretical and methodological approach. As far as the theoretical part is concerned, it is based on the opinions and approaches from the theory of economic literature collected from specialized bibliographic sources. For the practical part, I have used quantitative methods with which I have conducted an empirical research, based on the data extracted from the financial statements provided by www.bvb.ro.

The diagnosis of the factorial type can be exemplified as follows:

$$Gp = TI - TE$$

where:

TI – Total income = operating income + financial income + extraordinary income

TE – Total expenses = operating expenses + financial expenses + extraordinary expenses

$$Gp = TI \cdot \overline{gp}$$

where:

Gp – gross profit;

TI – total income;

$\overline{gp} = \frac{\text{Gros Profit}}{\text{Total Income}}$ - the average profit of the exercise at 1 leu total income.

0 – the previous period;

1 – the current period .

The depreciation of the gross result (profit) of the year:

$$\Delta Gp = Gp_1 - Gp_0 = (Op Re z_1 + Fin Re z_1 + Extr Re z_1) - (Op Re z_0 + Fin Re z_0 + Extr Re z_0) = \pm lei$$

The influence of factors:

The influence of operating result:

$$\Delta_{Gp}^{OpRez} = Op Re z_1 - Op Re z_0 = \pm lei$$

The influence of financial result:

$$\Delta_{Gp}^{FinRez} = Fin Re z_1 - Fin Re z_0 = \pm lei$$

The influence of the extraordinary result:

$$\Delta_{Gp}^{ExtrRez} = Extr Re z_1 - Extr Re z_0 = \pm lei$$

For check up, we shall use the following relationship:

$$\Delta Gp = \Delta_{Gp}^{OpRez} + \Delta_{Gp}^{FinRez} + \Delta_{Gp}^{ExtrRez}$$

The above relationships indicate that the change in the gross result is due to the positive or negative change of the three main factors.

5. Data processing and interpretation of results

The data required for applying this methodology are presented in the table below.

Table no. 1 Evolution of indicators in the perioda 2015-2017 for SC OMV PETROM SA

Nr. Crt.	Indicator	2015	2016	2017	Deviation	
					2016/2015	2017/2016
1.	Total income	16.079.380.685	14.076.569.600	16.454.420.480	-2.002.811.085	+2.377.850.880
2.	Total expenses	16.776.216.384	13.024.857.088	13.731.456.000	-3.751.359.296	+706.598.912
3.	Operating result	-1.101.536.758	866.652.032	2.692.072.192	+1.968.188.790	+1.825.420.160
4.	Financiar result	404.701.059	185.060.304	30.891.808	-219.640.755	-154.168.496

Source: <http://www.bvb.ro/FinancialInstruments/Details/FinancialInstrumentsDetails.aspx?s=SNP>

Graphically speaking, the table above results as follows:

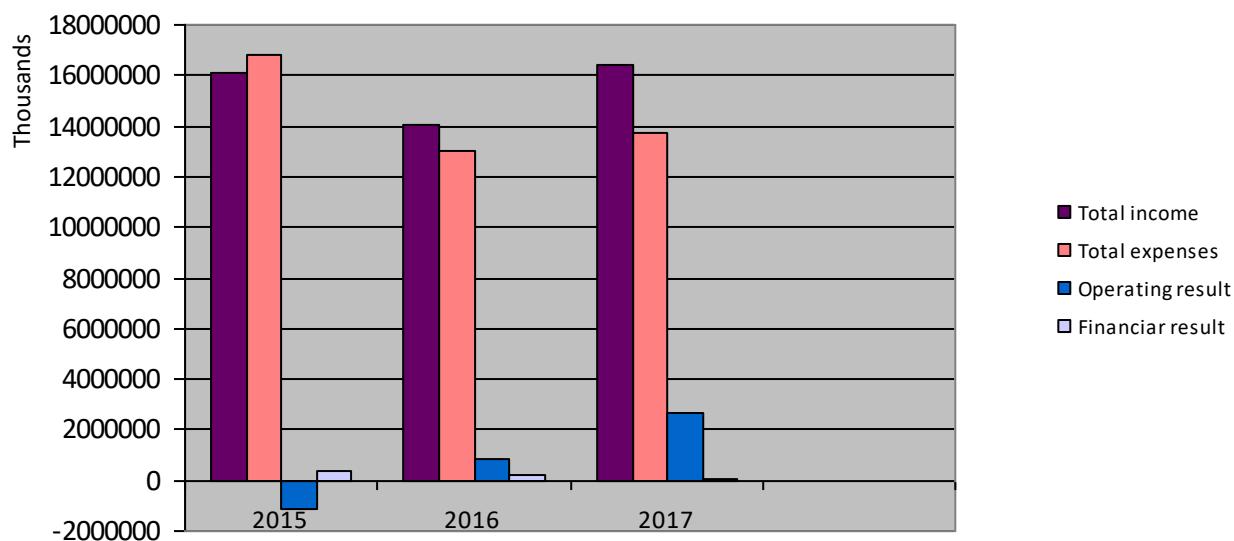


Chart no. 1
The evolution of indicators in the perioda 2015-2017 for OMV PETROM

From the data presented, it can be observed that the four indicators have different evolutions as follows:

- total revenues compared to the reference year 2015, registered a decrease of 2,002,811,085 lei in 2016 and an increase of 2,377,850,880 lei in 2017;
- total expenditure compared to the reference year decreased in 2016 by -3,751,359,296 and increased in 2017 by +706,598,912;
- the operating result in 2015 had a negative value because the increase in operating expenses was outweighed by the increase in operating income of the same year; in the following years, respectively 2016 and 2017, the operating result had a positive evolution, namely +1,968,188,790 (2016) and +1,825,420,160 (2017);
- the financial result decreases both in 2016 and in 2017; this is due to the significant increase in financial expenses.

Based on the above data, the factorial analysis of gross profits and factors of influence has the following values:

The depreciation of the gross result (profit) of the year (2017/2016):

$$\begin{aligned}\Delta Gp &= Gp_{2017} - Gp_{2016} = \\ &= (Op Re z_{2017} + Fin Re z_{2017} + Extr Re z_{2017}) - (Op Re z_{2016} + Fin Re z_{2016} + Extr Re z_{2016}) = \\ &= (2.692.072.192 + 30.891.808 + 0) - (866.652.032 + 185.060.304 + 0) = \\ &= 2.722.964.000 - 1.051.712.336 = +1.671.251.664 \text{ lei}\end{aligned}$$

The influence of factors:

The influence of operating result:

$$\Delta_{Gp}^{OpRez} = Op Re z_{2017} - Op Re z_{2016} = 2.692.072.192 - 866.652.032 = +1.825.420.160 \text{ lei}$$

The influence of financial result:

$$\Delta_{Gp}^{FinRez} = Fin Re z_{2017} - Fin Re z_{2016} = 30.891.808 - 185.060.304 = -154.168.496 \text{ lei}$$

The influence of the extraordinary result:

$$\Delta_{Gp}^{ExtrRez} = Extr Re z_{2017} - Extr Re z_{2016} = 0 \text{ lei}$$

For check up, we shall use the following relationship:

$$\begin{aligned}\Delta Rbex &= \Delta_{Rbex}^{Re xp} + \Delta_{Rbex}^{R fin} + \Delta_{Rbex}^{Re xtr} \\ &+ 1.671.251.664 = (+1.825.420.160) + (-154.168.496) + 0\end{aligned}$$

The above-mentioned factorial model highlights three factors that influence gross profit, and the mechanism for transmitting their action is explained as follows:

- the variation of the operating result in the direction of the +1.668.188.790 lei increase has a positive influence on the gross profit;
- the variation of the financial result, in the sense of the decrease by 154,168,496 lei, has a negative influence on the gross profit;
- since the third factor is zero, it has not influenced gross profit in any direction.

The depreciation of the gross result (profit) of the year (2016/2015):

$$\begin{aligned}\Delta Gp &= Gp_{2016} - Gp_{2015} = \\ &= (Op Re z_{2016} + Fin Re z_{2016} + Extr Re z_{2016}) - (Op Re z_{2015} + Fin Re z_{2015} + Extr Re z_{2015}) = \\ &= (866.652.032 + 185.060.304 + 0) - ((-1.101.536.758) + 404.701.059 + 0) = \\ &= 1.051.712.336 - (-696.835.699) = +1.748.548.035 \text{ lei}\end{aligned}$$

The influence of factors:

The influence of operating result:

$$\Delta_{Gp}^{OpRez} = Op Re z_{2016} - Op Re z_{2015} = 866.652.032 - (-1.101.536.758) = +1.968.188.790 \text{ lei}$$

The influence of financial result:

$$\Delta_{Gp}^{FinRez} = Fin Re z_{2016} - Fin Re z_{2015} = 185.060.304 - 404.701.059 = -219.640.755 \text{ lei}$$

The influence of the extraordinary result:

$$\Delta_{Gp}^{ExtrRez} = Extr Re z_{2016} - Extr Re z_{2015} = 0 \text{ lei}$$

For check up, we shall use the following relationship:

$$\begin{aligned}\Delta Rbex &= \Delta_{Rbex}^{Re xp} + \Delta_{Rbex}^{R fin} + \Delta_{Rbex}^{Re xtr} \\ &+ 1.748.548.035 = (+1.968.188.790) + (-219.640.755) + 0\end{aligned}$$

For the 2016 values compared to 2015, the mechanism for transmitting the action of influence factors is explained as follows:

- the variation of the operating result in the increase by 1,825,420,160 lei manifests a positive influence on the gross profit;
- the variation of the financial result, down by -154,168,496 lei, has a negative influence on the gross profit;
- since the third factor is zero, it has not influenced gross profit.

The increase in gross profits in both 2016 and 2017 as against 2015 is due to the increase in revenues, in this case of operating income, and the average profit per 1 leu of total revenues.

Considering the second gross profit determination relationship, it is necessary to calculate the average profit per 1 leu of total income. For this we need the following data:

Table no. 2 Evolution of gross profit and total income between 2015-2017 for OMV PETROM

Nr. Crt.	Indicator	2015	2016	2017	Abateri	
					2016/2015	2017/2016
1.	Rezultat brut	-696.835.699	1.051.712.320	2.722.964.224	+1.748.548.019	+1.671.251.904
2.	Venituri totale	16.079.380.685	14.076.569.600	16.454.420.480	-2.002.811.085	+2.377.850.880

Source: <http://www.bvb.ro/FinancialInstruments/Details/FinancialInstrumentsDetails.aspx?s=SNP>

$$Gp = TI \cdot \overline{gp}$$

where: Gp – gross profit; TI – total income;

$\overline{gp} = \frac{\text{Gros Profit}}{\text{Total Income}}$ - the average profit of the exercise at 1 leu total income.

The average profit per 1 leu total income records the following values:

$$\overline{gp}_{2015} = \frac{GP}{TI} = \frac{-696.835.699}{16.079.380.685} = -0,043337 \text{ lei}$$

$$\overline{gp}_{2016} = \frac{GP}{TI} = \frac{1.051.712.320}{14.076.569.600} = 0,074714 \text{ lei}$$

$$\overline{gp}_{2017} = \frac{GP}{TI} = \frac{2.722.964.224}{16.454.420.480} = 0,165485 \text{ lei}$$

Based on this data, I will calculate and determine the evolution of the gross result at SC OMV PETROM SA:

1.Deviation of gross profit (2017/2016):

$$\begin{aligned} \Delta Gp &= Gp_{2017} - Gp_{2016} = (TI_{2017} \cdot \overline{gp}_{2017}) - (TI_{2016} \cdot \overline{gp}_{2016}) = \\ &= (16.454.420.480 \cdot 0,165485) - (14.076.569.600 \cdot 0,074714) = \\ &= 2.722.959.773,13 - 1.051.716.821,09 = +1.671.242.952,04 \text{ lei} \end{aligned}$$

1.1.Influence of total revenues:

$$\begin{aligned} \Delta_{Gp}^{TI} &= (TI_{2017} - TI_{2016}) \cdot \overline{gp}_{2016} = (16.454.420.480 - 14.076.569.600) \cdot 0,074714 = \\ &= 2.377.850.880 \cdot 0,074714 = +177.658.750,65 \text{ lei} \end{aligned}$$

1.2. Influenced by average profits to 1 leu total revenues:

$$\begin{aligned} \Delta Gp &= TI_{2017} \cdot (\overline{gp}_{2017} - \overline{gp}_{2016}) = 16.454.420.480 \cdot (0,165485 - 0,074714) = \\ &= 16.454.420.480 \cdot 0,090771 = +1.493.584.201,39 \text{ lei} \end{aligned}$$

The above-mentioned factorial model highlights two factors that influence the gross profit, and the mechanism for transmitting their action is explained as follows:

- the variation of the total revenues in the direction of the increase by 2.377.850.880 determines the change of the gross profit + 177,658,750,65 lei;
- the variation of the average profit to 1 leu total revenues in the sense of the increase by 0,090771 lei determines the change of the gross profit + 1,493,584,201,39 lei.

1.Deviation of gross profit (2016/2015):

$$\begin{aligned} \Delta Gp &= Gp_{2016} - Gp_{2015} = (TI_{2016} \cdot \overline{gp}_{2016}) - (TI_{2015} \cdot \overline{gp}_{2015}) = \\ &= (14.076.569.600 \cdot 0,074714) (16.079.380.685 \cdot (-0,043337)) = \\ &= 1.051.716.821,09 - (-696.832.120,745) = +1.748.548.941,83 \text{ lei} \end{aligned}$$

1.1. Influence of Total Income:

$$\Delta_{Gp}^{TI} = (TI_{2016} - TI_{2015}) \cdot \overline{gp}_{2015} = (14.076.569.600 - 16.079.380.685) \cdot (-0,04337) = \\ = (-2.002.811.085) \cdot (-0,04337) = +86.795.823,99 \text{ lei}$$

1.2. Influenced by average profits to 1 leu total revenues:

$$\Delta Gp = TI_{2016} \cdot (\overline{gp}_{2016} - \overline{gp}_{2015}) = 14.076.569.600 \cdot (0,074714 - (-0,043337)) = \\ = 14.076.569.600 \cdot 0,118051 = +1.661.753.117,84 \text{ lei}$$

Taking into account the period 2016/2015, the mechanism for transmitting the action of the factors on the gross profit is explained as follows:

- the variation of the total revenues in the decrease by -2,002,811,085 determines the change of the gross profit + 86,795,823.99 lei;
- the variation of the average profit to 1 leu total revenues in the sense of the increase by 0.118051 lei determines the change of the gross profit level + 1,661,753,117.84 lei.

6. Conclusions

As stated in the literature, gross profit is a result indicator, the variation of which allows the global appreciation of the profitability of OMV PETROM SA. Gross profit has a positive dynamics, except for the year 2015, when the company is experiencing a crude downturn due to the evolution of total expenditures that outstripped the evolution of total revenues. In 2017 compared to 2016 the gross profit increases by an absolute value of +2,377,850,880 lei.

On the whole, SC OMV PETROM SA presents a good situation, the profit increasing for 2 years in a row, which reflects an efficient management, good use of the resources used, sales growth, etc.

In conclusion, the pre-tax profit analysis has as a starting point its structural analysis based on component components and sources of origin as presented in the Profit and Loss Account. Given the information provided by this, the pre-tax profit is determined either as a difference between the total expenditure and the total income, or as an amount between the operating result, the financial result and the extraordinary result.

The absolute and relative variation of profits allows a global appreciation of the absolute profitability of the enterprise's business and it will have direct effect on relative profitability.

The results obtained for each type of activity, that is from exploitation, both financial and extraordinary, are subject to the economic and financial policy that the company management has adopted.

4. Bibliography

- [1] **Anghel Ion, coordonator**, Analiza și evaluarea economico-financiară. Studii de caz, Ed. ASE, București, 2016;
- [2] **Căruntu Genu Alexandru, Ecobici Mihaela Loredana**, Profitability of the company expressed under rentability rates, Annals of "Constantin Brâncuși" University of Tg. Jiu, Economy Series, nr.3/2018, http://www.utgjiu.ro/revista/ec/pdf/2018-03/11_CaruntuEcobici.pdf
- [3] **Ciora Costin**, Analiza performanței prin creare de valoare, Ed. Economică, București, 2013;
- [4] **Hristea Anca Maria**, Analiză economică și financiară a activității întreprinderii, de la intuiție la știință, vol.1, vol. 2, ediția a doua, Ed. Economică, București, 2015;
- [5] **Păvăloaia Willi și colab.**, Analiză economico-financiară. Concepțe și studii de caz, Ed.4Economică, București, 2010;
- [6]*** [www.universitatea-cantemir.ro](http://www.universitatea-cantemir.ro/CursuriRei/documente/C10Analiza%20perform%20pe%20baza%20CPP.pdf)
<http://www.universitatea-cantemir.ro/CursuriRei/documente/C10Analiza%20perform%20pe%20baza%20CPP.pdf>
- [7]*** www.bvb.ro