

## **METHODS USED IN DETERMINING THE VALUE ADDED USED IN THE ASSESMENT OF THE COMPANY'S REAL ECONOMIC POWER**

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**ABSTRACT:** *When analyzing the value of a product or service, our goal is to obtain a product or service value that exceeds the cost of producing the good or service provision. Their cost includes the value of all resources used in its production, so it is necessary to examine each activity or resources involved in making a product or providing a service. Value added is the indicator that measures the economic performance of an economic entity which has a fairly long history of application at both micro and macro level.*

*The purpose of this article is to set out the determination of the value added of a company through the synthetic and analytical method considered to be methods of determining the increasing level of the wealth of a business and of measuring the income.*

*The research methodology used consists in the application of the two methods for determining the value added, the synthetic and analytical method, and also the use of the factorial method to reveal the factors of influence on value added.*

**KEY WORDS:** *value added; synthetic method; analytical method; economic performance.*

**JEL CLASSIFICATION:** *D24*

### **1. LITERATURE REVIEW ON VALUE ADDED**

**Value added** is one of the most important indicators that result from the economic activity of a company, reflecting its economic power. From previous studies concerning the analysis of value added it can be noticed that the respective authors have considered value added not as a simple indicator which finds its applicability in

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the company's results, but also as a complex indicator which has a multitude of meanings and implications over the economic and financial results of the company.

When it first appeared, the use of value added was put forward as an alternative to profitability or return on investment supported by accountants who were seeking an alternative measure of company's performance (Wood, 1978). So, purchasing performance on providing value added to the company was measured and evaluated on changes in the purchasing price of materials and the cost of the departmental operation.

A series of previous studies highlight a many complex meanings regarding the value added, the authors of these studies emphasize the role and importance of value added in different areas of activity, either on the methods of determination of it. We present a few studies as example:

► In the article "*Analysis of the value added by the additive method*" published in the University of Oradea Annals, the Economic Sciences series from 2010, by Popa Ana Maria, Csegedi Sándor and Tiplea Augustin Livie the value added is presented through the use of the additive method, highlighting the importance of it through the following aspects: value added is the main source of self-financing the economic activity, the source of remuneration of staff, the source for financing the budget, the source to increase reserves for the entity.

► In the article „*Comparative analysis of value-added and traditional measures of performance*”, presented at Southern Agricultural Economics Association Annual Meeting, Lexington, KY January, 2000, Acheampong J.B.&Wetzstein M.E. (2001), are highlighted a series of meanings:

- value added measures are useful information for managers in that with this information managers have a guide to help them in decisions that lead to value creation;

- value added means value creation to a business. So more companies are now looking at performance measures that depart from traditional ones.

- value added measures of performance are based on economic theory rather than on accounting profits.

In the article "*Economic value added as a modern performance indicator*", published in the International Cross-Industry Journal, Perspectives of Innovations, Economics & Business, Volume 6, Issue 3, 2010, Maja Ilic presents the value added as a modern indicator which reflects the company's performance. The main aspects concerning the value added presented by Maja Ilic in the article are:

- the economic value added as an innovative approach to the measurement of business performance gives us a more realistic overview about the current state of the company.

- the economic value added gives a central role to the drop or increase in value of own capital. Economic value added positive amount in a given period means that the management increased the value for owners, and EVA negative amount means that there is a decrease of the value for owners.

- the application of the concept of economic value added could lead to significant improvements and developments in companies. Through additional reports,

shareholders would be better informed, which would contribute to attracting new investors and the reduction of additional debt.

And the examples may continue.

Many authors discuss about the concept of value added, but there exist many differences in the way the concept is approached and discussed. So, further we present some definitions of value added given by different authors from our specialty literature:

➤ Value added, the resulting combination of production factors, consists the source of remuneration and determination of their behaviour, ensuring the company's maintenance on the market'. (Petcu, 2003, p. 332)

➤ Value added is a fundamental synthetic indicator that expresses a new value created, representing a wealth of a business and results of its overall activity, minus materials costs. (Popa & Miculeac, 2009, p. 235)

➤ Value added is an extremely important index allowing the precise determination of the company's own contribution. It accurately expresses the efficiency of the management acting starting with the phase of products conceiving up to the phase of their turning to good account as commodities; it also more accurately shows the company's contribution to its productive processes. The rate of value added represents the share of the newly created value of the company within the company's total activity. (Răscolean et al., 2008, p.140)

➤ Value added measures are an application of economic profit, a concept developed by Marshall (1890).

➤ Value added expresses the surplus of value which results through the use of production factors: labour and capital (technical and financial), in the context of a general infrastructure ensured by the state. Value added represents the source of the accumulations which allow the remuneration of the direct and indirect participants in the economic activity of the company. (Petcu et al., 2005, p.75)

➤ Value added is a fundamental synthetic indicator which expresses a new created value, representing the wealth of a company and it results from the activity of it from which are deducted the material expenses. (Popa et al., 2012, p.243)

Value added is a synthetic indicator of results which expresses the volume of activity of the company and presents the advantage that it reflects the volume of what really has been produced in the company, not taking into account the entries from outside of it.

Through realizing this article we have tried to fill in the development of the specialty literature which treats the concept of value added, contribution that has been materialized through the approach and analysis of the value added seen by as an indicator of maximum importance through which is reflected the economic power of the company. Also, on the basis of this research we have developed a series of opinions and conclusions that have resulted from the approach of the methods of determination of value added and which implicitly has needed also a general approach of it. The article itself argues in a certain measure the role and importance of value added in the economic environment of the company.

## **2. INTRODUCTION**

The value added is important not only as a performance indicator, but also as it measures the contribution to the GDP of the company. This indicator is suitable for comparisons between companies, without introducing distortions between companies in different stages of transformation and distribution as the value added neutralizes the incidence of intermediate consumption. Value added is the intermediate balance management that expresses a value creation or an increase of value that the company brings to goods and services from third parties and allows to measure the economic strength of the company.

The main performance indicator measuring the income and the economic activity of companies is the value added created by its own work and is one of the most important indicators used in the evaluation of the company's activity. The value added expresses the increasing value resulting from using the production factors, especially labour and capital over the value of goods and services from third parties during the current activity of the company. It represents the source of accumulations that allow remuneration for direct and indirect participants to the economic activity of the company.

We can discuss the role of value added in establishing the company's tax burden, given the indirect contribution to the calculation of value added tax. The computation methods for the value added that the literature presents are the synthetic and the additive methods.

Value added take two forms: gross value added and net value added. These are defined as: ➤ Gross value added is the value indicator expressing the value size made during the company's activity, respectively the ability of firms to create wealth. (Spătaru, 2010, p. 199); ➤ Net value added is the value indicator that expresses the size of the new value created in a certain period (Spătaru, 2010, p. 199).

The value added is one of the most important indicators reflecting the economic and financial performance of a company. Unlike turnover, which includes the amount of purchases of raw materials and services found in the turnover of the providing companies, the value added includes only the equivalent of the company's activity. Therefore, value added is more important than turnover, that cannot give a true image of the enterprise, in the sense that there are companies with the same turnover, very particular as to the business, but that realize different value added, the only that can measure them.

Value added is the results synthetic indicator that expresses the volume of the activity of an enterprise and has the advantage that it reflects only the volume of what actually occurred within the company, ignoring entries beyond it.

## **3. ANALYSIS OF THE METHODS OF DETERMINING THE VALUE ADDED**

### **3.1. Analysis of the subtractive or synthetic method**

By this method, the value added of enterprises carrying out complex activities (production and trade) is the difference between production year (and commercial

margin) and intermediate consumption of goods and services purchased from third parties (Petrescu, 2004, p.55). Calculation of value added using the subtractive method shows also the company's policy that may be taken regarding the increase of value added, taking into account different variants.

According to the subtractive method, value added is determined as follows:

<b>VALUE ADDED</b>	Represents creating value or increasing the value that the company brings to goods and services from third parties and allows measurement of economic strength of the company.
=	
<b>COMMERCIAL MARGIN</b>	Is the intermediate balance management that is determined as the difference between the total turnover and cost of goods sold.
+	
<b>PRODUCTION YEAR</b>	It is composed of all goods and services produced by a company during a year. Is determined as follows: ± production sold ± variation of stocks (short credit / debit balance) + capitalized production.
-	
<b>INTERMEDIATE CONSUMPTIONS FROM THIRD PARTIES</b>	It is determined as follows: raw materials and consumables expenses + other material expenses + other external expenses (energy and water expenses) + expenditure on external services.

Considering the relationship:  $VA = Mc + Qe - Ci$  (1)

where:

$$Mc = CA_t - C_{bv} \tag{2}$$

$$Qe = Q_v \pm Q_s + Q_i \tag{3}$$

$$Ci = Ch_{mpmc} + ACh_m + ACh_{ex} + Ch_{pex} \tag{4}$$

Factorial system for value added is as follows:

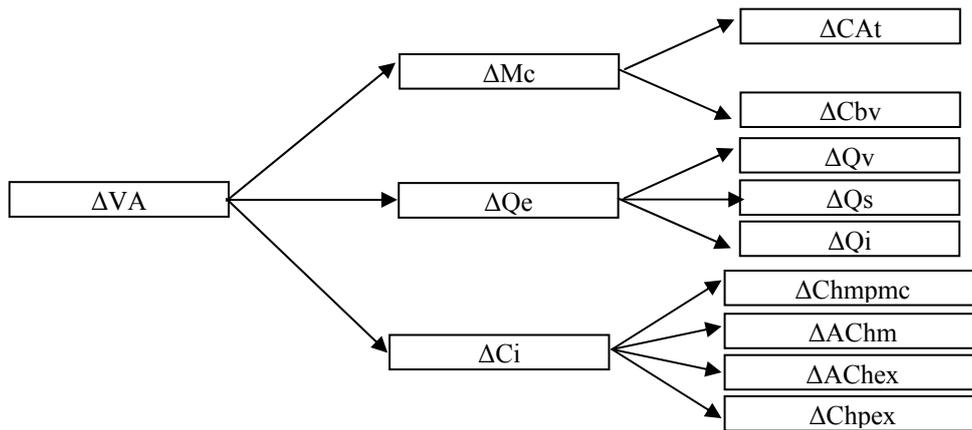


Figure 1. The factorial of the value added calculation relationship after subtractive or synthetic method

Based on this factorial analysis we can realize the factorial analysis of the value added:

I. Value added deviation:

$$\Delta VA = (Mc_1 + Qe_1 - Ci_1) - (Mc_0 + Qe_0 - Ci_0) = \pm W \text{ lei} \quad (5)$$

II. Influence of component elements:

1. Influence of commercial margin:

$$\Delta_{Mc}^{VA} = Mc_1 - Mc_0 = \pm x \text{ lei} \quad (6)$$

2. Influence of production year:

$$\Delta_{Qe}^{VA} = Qe_1 - Qe_0 = \pm y \text{ lei} \quad (7)$$

3. Influence of intermediate consumption from third parties:

$$\Delta_{Cit}^{VA} = -(Cit_1 - Cit_0) = \pm z \text{ lei} \quad (8)$$

III. Verify:

$$\Delta VA = \Delta_{Mc}^{VA} + \Delta_{Qe}^{VA} + \Delta_{Cit}^{VA} \quad (9)$$

Based on this analysis we can draw many conclusions on the two factors influential of first degree on the value added, production year and intermediate consumption from third parties. It also should not be overlooked factors of second degree, components of the production exercise and intermediate consumption from third parties.

Value added indicator fulfils very important functions in the system of qualitative performance indicators used in the analysis. Thus it is used to calculate labour productivity, in the calculation of economic efficiency indicators and in the determination of VAT. In this respect, value added must be linked to other indicators of operating performance, with production year and turnover from which it can result in issues relating to factors and growth correlations to value added and also the impact of these increases. The higher the share of value added in production year, the faster is demonstrated the rapid growth of effort creating the labour and the relative reduction of consumption from outside. (Petrescu, 2010, p. 73)

### 3.2. Analysis of additive or analytical method

Additive method involves a reverse approach, targeting elements that make up value added distribution that actually includes the cost of inputs to be paid. (Petrescu, 2004, p.55)

**Additive method** involves determining the value added by adding elements: personnel expenses, taxes and fees, excluding VAT, financial expenses, depreciation of tangible assets and profits from the production. From this model it results that value added serves at: (Păvăloaia & Păvăloaia, 2009, p.100)

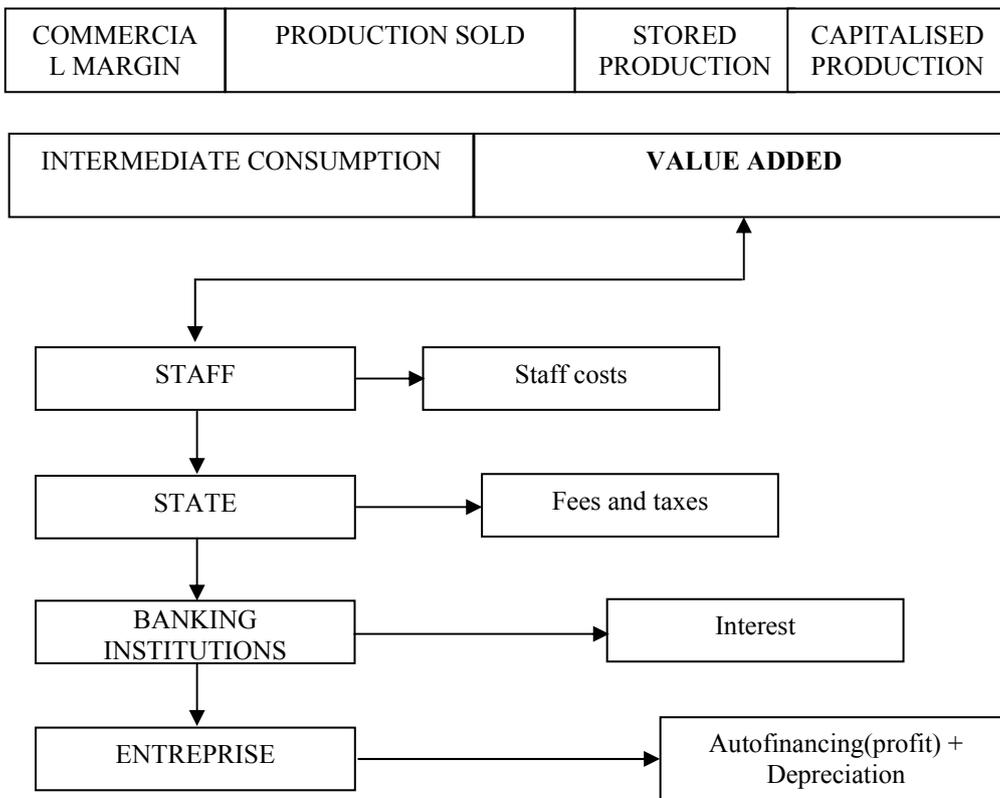
- Labour remuneration (Chp);
- State remuneration as a participant to the social production (It);
- Banking institution remuneration (Cf);
- Equipment remuneration (Az);
- Owner remuneration (P).

The additive model provides an opportunity for a structural analysis of value added by determining the share of each element of value added in the total value added: (Păvăloaia & Păvăloaia, 2009, p.100)

$$g_i = \frac{E_i}{V_a} \cdot 100 \tag{10}$$

**where:**  $g_i$  – share of each element in total value;  $E_i$  - „i” element of value added

After the additive method the distribution of value added between the participants at production is presented as follows:



Source: Păvăloaia Willi, Păvăloaia Daniel, *Analiza economico-financiară*, Editura Tehnopress, Iași, 2009, p. 100

**Figure 2. Value added distribution**

The value added by the enterprise as a consequence of performing a gainful activity is distributed, generally, between five participant parts:

**1. Staff remuneration:**

- 1.1. expenses with staff remuneration;
- 1.2. employees participation to profit.

**2. Fees and taxes for the state:**

- 2.1. insurance and social protection;
- 2.2. fees, taxes and similar payments;
- 2.3. income tax;
- 2.4. dividends tax.

**3. Creditors:**

- 3.1. financial costs regarding interest.

**4. Shareholders:**

- 4.1. net dividends.

**5. Auto financing for the company:**

- 5.1. depreciation expenses;
- 5.2. reinvested net profit;
- 5.3. other elements of financing.

Analysis of the distribution of value added is important to highlight the evolution of the part of each participant and thus determine its level of payment compared to the effort. Based on previous statements, according to the additive method the value added is calculated as: (Popa & Miculeac, 2009, p. 237)

**VA = (staff costs + employees participation to profit) + (Fees, taxes and contributions – including the income tax) + Interest expenses + Dividends + (Reinvested income + Depreciation)**

We also mention that value added through the additive method can be determined taking into account the net result of the exercise, as follows:

**VA = Staff costs + Value adjustments on tangible and intangible assets + Value adjustments on assets + Adjustments for provisions + Fees, taxes and contributions costs + Financial expenses + Financial revenues + Extraordinary expenses + Net result – Other operating revenues – Other operating expenses**

Or

**VA = Staff costs + other operating expenses + Value adjustments regarding tangible and intangible assets + Value adjustments regarding assets + Adjustments for provisions + Operating result**

Basically, the additive method emphasizes the value added as an indicator that aggregates the extent to which the participant factors to the activity development are paid: labour, banking, fixed capital, the state shareholders.

Used in comparisons between sectors, the value added can reflect structural differences on similar companies, through the light of the ratio between the factors of production incorporated in the economic activity.

For a profound approach, we shall realize also the structural analysis of the value added which highlights the percentage ratios of the distribution elements that reflect the remuneration of the production factors. Therefore we must take into consideration the following ratios:

- 1. labor remuneration:

$$R_m = \frac{\text{Expenditure on staff}}{\text{Added Value}} \cdot 100 \quad (11)$$

- 2. state remuneration:

$$R_s = \frac{\text{Taxes and fees}}{\text{Added Value}} \cdot 100 \quad (12)$$

3. creditors remuneration:

$$R_c = \frac{\text{Financial expenses}}{\text{Added Value}} \cdot 100 \quad (13)$$

4. investments remuneration:

$$R_i = \frac{\text{Depreciation and provisions}}{\text{Added Value}} \cdot 100 \quad (14)$$

5. company remuneration:

$$R_{\hat{i}} = \frac{\text{Net result}}{\text{Added Value}} \cdot 100 \quad (15)$$

The remuneration of value added inputs reveals that each factor incorporates two parts: one that corresponds to an added cost to the company and one that corresponds to samples of results. The added cost to the business is added to goods and services purchased from outside. The samples of the results are components of the net income that are distributed to inputs in various forms (interests, dividends, income tax, self-financing). Analyzed as a sum of costs and shares of the result, value added offers an insight into the evolution of these costs, resulting in useful information for management.

The structure of value added by capital contributions are made according to the following scheme: (Petrescu, 2010, p. 57)

Value Added	=	Added costs	+	Shares of the result
↓		↓		↓
I. Labour	→	Expenses with personnel	+	Profit participants
II. Capital	→	Financial expenses	+	Profit dividends
III. State	→	Duties and taxes	+	Income tax
IV. Company	→	Calculated expenses (Depreciation)	+	Result in reserve (Self-financing)

Source: Petrescu Silvia, *Analiză financiară aprofundată. Concepte-Metode-Studii de caz.*, PH. Sedcom Libris, Iași, 2010, page 58

**Figure 3. Value added structure**

The value added structured in this way is, on the one hand, a performance indicator, since it allows to assess the effectiveness of the company for a given activity (taking into account the material resources put into practice) and, on the other hand, an indicator of economic integration if we consider the external input of material and energy consumption. The external input dependence risk is even greater as the vertical integration of the company is lower. (Petrescu, 2010, p. 58)

#### 4. STUDY CASE ON DETERMINING THE VALUE ADDED

Application of the two methods for determining the value added helps to highlight the complex issues relating to business management. For the methodological exemplification of both methods we use data extracted from the financial statements of a company.

**Table 1. Determination of value added using the subtractive method (RON)**

Nr. crt.	Indicators	Financial year		Deviations
		Previous	Current	
1.	<b>Commercial margin</b>	<b>816</b>	<b>1.257</b>	<b>+441</b>
2.	<b>Production exercise, from which:</b>	<b>412.803</b>	<b>487.665</b>	<b>+74.862</b>
2.1.	Production sold			
2.2.	Production stored: -credit balance -balance due			
2.3.	Capitalized production	0	0	0
3.	<b>Intermediate consumption from third parties out of which:</b>	<b>218.325</b>	<b>218.355</b>	<b>+30</b>
3.1.	Raw materials and consumables materials expenses	164.277	146.601	-17.676
3.2.	Other material expenses	1.890	2.529	+213
3.3.	Other external expenses (with energy and water)	25.032	24.594	+17.505
3.4.	Expenses regarding external dues	27.126	44.877	+17.505
4.	<b>VALUE ADDED (1 + 2 - 3)</b>	<b>195.294</b>	<b>270.567</b>	<b>+75.273</b>

**Table 2. Determination of value added using the additive method (RON)**

Nr. crt.	Indicators	Symbol	Financial year		Deviations
			Previous	Current	
1.	Staff costs	Chp	94.935	112.989	+18.054
2.	Value adjustments on tangible and intangible assets	AVIcIn	21.135	45.084	+23.949
3.	Value adjustments on assets	AVAc	2.223	1.980	-243
4.	Adjustments for provisions	AP	3.600	7.203	+3.603
5.	Expenses with fees, taxes and other similar payments	ChIT	17.592	14.523	-3.069
6.	Financial expenses	Chf	8.556	12.819	+4.263
7.	Other operating expenses	ACHex	23.034	25.149	+2.115
8.	Extraordinary expenses	Chext	0	0	0
9.	<b>Net result</b>	<b>Rn</b>	<b>37.275</b>	<b>59.034</b>	<b>+21.759</b>
10.	Other operating revenues	AVexp	2.448	3.255	+807
11.	Financial revenues	Vf	10.608	4.959	-5.649
12.	<b>GROSS VALUE ADDED (1+2+3+4+5+6+7+8+9)-(10+11)</b>	<b>VAB</b>	<b>195.294</b>	<b>270.567</b>	<b>+75.273</b>
13.	<b>NET VALUE ADDED (12-2)</b>	<b>VAN</b>	<b>174.159</b>	<b>225.483</b>	<b>+51.324</b>

Based on the above data from the table we realize the factorial analysis of value added in order to analyze the influential factors.

I. Value added deviation:

$$\Delta VA = VA_1 - VA_0 = 270.567 - 195.294 = +75.273 \text{ lei} \quad (16)$$

$$I_{VA} = \frac{VA_1}{VA_0} \cdot 100 = \frac{270.567}{195.294} \cdot 100 = 138,54\% \quad (17)$$

$$\Delta_r VA = I_{VA} - 100 = 138,54 - 100 = +38,54\% \quad (18)$$

II. Influence of the composing elements:

1. Influence of staff costs:

$$\Delta_{Chp}^{VA} = Chp_1 - Chp_0 = 112.989 - 94.935 = +18.054 \text{ lei} \quad (19)$$

2. Influence of value adjustments on tangible and intangible assets:

$$\Delta_{AVIcIn}^{VA} = AVIcIn_1 - AVIcIn_0 = 45.084 - 21.135 = +23.949 \text{ lei} \quad (20)$$

3. Influence of value adjustments on assets:

$$\Delta_{AVAc}^{VA} = AVAc_1 - AVAc_0 = 1.980 - 2.223 = -243 \text{ lei} \quad (21)$$

4. Influence of adjustments for provisions:

$$\Delta_{AP}^{VA} = AP_1 - AP_0 = 7.203 - 3.600 = +3.603 \text{ lei} \quad (22)$$

5. Influence of expenses with fees, taxes and other similar payments:

$$\Delta_{ChIT}^{VA} = ChIT_1 - ChIT_0 = 14.523 - 17.592 = -3.069 \text{ lei} \quad (23)$$

6. Influence of financial expenses:

$$\Delta_{Chf}^{VA} = Chf_1 - Chf_0 = 12.819 - 8.556 = +4.263 \text{ lei} \quad (24)$$

7. Influence of other operating expenses:

$$\Delta_{AChexp}^{VA} = AChexp_1 - AChexp_0 = 25.149 - 23.034 = +2.115 \text{ lei} \quad (25)$$

8. Influence of extraordinary expenses:

$$\Delta_{Chext}^{VA} = Chext_1 - Chext_0 = 0 - 0 = 0 \text{ lei} \quad (26)$$

9. Influence of net result:

$$\Delta_{Rn}^{VA} = Rn_1 - Rn_0 = 59.034 - 37.275 = +21.759 \text{ lei} \quad (27)$$

10. Influence of operating revenues:

$$\Delta_{AVexp}^{VA} = -(AVexp_1 - AVexp_0) = -(3.255 - 2.448) = -807 \text{ lei} \quad (28)$$

11. Influence of financial revenues:

$$\Delta_{Vf}^{VA} = -(Vf_1 - Vf_0) = -(4.959 - 10.608) = +5.649 \text{ lei} \quad (29)$$

III. To verify we use the relationship:

$$\begin{aligned} \Delta VA = & \Delta_{Chp}^{VA} + \Delta_{AVIcIn}^{VA} + \Delta_{AVAc}^{VA} + \Delta_{AP}^{VA} + \Delta_{ChIT}^{VA} + \Delta_{Chf}^{VA} + \\ & + \Delta_{AChexp}^{VA} + \Delta_{Chext}^{VA} + \Delta_{Rn}^{VA} + \Delta_{AVexp}^{VA} + \Delta_{Vf}^{VA} \end{aligned} \quad (30)$$

Respectively:

$$\begin{aligned} 75.273 = & 18.054 + 23.949 + (-243) + 3.603 + (-3.069) + \\ & + 4.263 + 2.115 + 0 + 21.759 + (-807) + 5.649 \end{aligned} \quad (31)$$

After analyzing the influence of the 11 factors that compose the determination model of value added through the additive method we draw the following conclusions:

- the elements that had a negative influence on value added were the value adjustments on assets, expenses with fees, taxes and similar payments and other operating revenues;
- the value added increase was due to the increase of the distribution values with the exception of fees, taxes and adjustments on assets;
- factors that had the biggest contribution to the increase in value added were: staff costs, depreciation and provisions regarding impairment of assets and net profit;
- analyzing the influence of the above factors we observe that the elements with positive influence on value added are: staff costs, value adjustments on tangible and intangible assets, financial expenses, other operating expenses, net result and financial revenues.

Measuring the economic performance of the firm studied through the structure rates of value added will allow us the transposition of the effects and results obtained through the financial efforts made. To complete the case study we perform also the structural analysis of value added. By calculating the structure rates of value added we obtain the following values:

1. labor remuneration:

$$Rm_N = \frac{\text{Expenditure on staff}}{\text{Added Value}} \cdot 100 = \frac{94.935}{195.294} \cdot 100 = 48,61\% \quad (32)$$

$$Rm_{N+1} = \frac{\text{Expenditure on staff}}{\text{Added Value}} \cdot 100 = \frac{112.989}{225.483} \cdot 100 = 50,11\% \quad (33)$$

2. state remuneration:

$$Rs_N = \frac{\text{Taxes and fees}}{\text{Added Value}} \cdot 100 = \frac{17.592}{195.294} \cdot 100 = 9,01\% \quad (34)$$

$$Rs_{N+1} = \frac{\text{Taxes and fees}}{\text{Added Value}} \cdot 100 = \frac{14.523}{270.567} \cdot 100 = 5,37\% \quad (35)$$

3. creditors remuneration:

$$Rc_N = \frac{\text{Financial expenses}}{\text{Added Value}} \cdot 100 = \frac{8.556}{195.294} \cdot 100 = 4,38\% \quad (36)$$

$$Rc_{N+1} = \frac{\text{Financial expenses}}{\text{Added Value}} \cdot 100 = \frac{12.819}{270.567} \cdot 100 = 4,74\% \quad (37)$$

4. investments remuneration:

$$Ri_N = \frac{\text{Depreciation and provisions}}{\text{Added Value}} \cdot 100 = \frac{26.958}{195.294} \cdot 100 = 13,80\% \quad (38)$$

$$Ri_{N+1} = \frac{\text{Depreciation and provisions}}{\text{Added Value}} \cdot 100 = \frac{54.267}{270.567} \cdot 100 = 20,06\% \quad (39)$$

5. company remuneration:

$$R\hat{i}_N = \frac{\text{Net result}}{\text{Added Value}} \cdot 100 = \frac{37.275}{195.294} \cdot 100 = 19,09\% \quad (40)$$

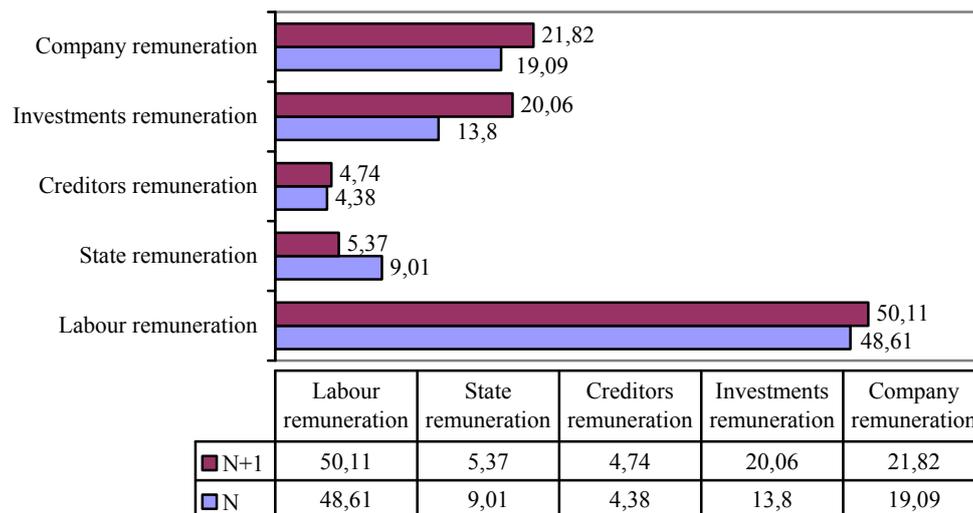
$$R\hat{i}_{N+1} = \frac{\text{Net result}}{\text{Added Value}} \cdot 100 = \frac{59.034}{270.567} \cdot 100 = 21,82\% \quad (41)$$

In summary, the data obtained can be represented as follows:

**Table 3. The structure rated of value added (%)**

Nr. crt.	Indicators	Symbol	Financial year		Deviation
			N (0)	N+1 (1)	
1.	Labour remuneration	Rm	48,61	50,11	+1,5
2.	State remuneration	Rs	9,01	5,37	-3,64
3.	Creditors remuneration	Rc	4,38	4,74	+0,36
4.	Investments remuneration	Ri	13,80	20,06	+6,26
5.	Company remuneration	R $\hat{i}$	19,09	21,82	+2,73

Graphically, the results regarding the rates of return look as follows:



**Figure 4. Rates of added value structure**

The level of these rates helps to track progress over time and the changes that occur between the five categories. A normal situation for the company would be that when an upward trend appears in the share of dividends and self-financing in value added and a decreasing trend in the share of interest expense and taxes due to the state. It can be seen that the highest value is registered by labour remuneration, followed by the company remuneration and the investments remuneration.

From the above it can be seen that these results are reflected in the participation rates of capital contributions to achieving the newly created value added, given the fact that the increase in value added is important to the participants of the company's life.

## 5. CONCLUSIONS

Both computation methods for the value added, but especially the additive method, allow a value added analysis on its components with the view of observing each element generally. The main structural elements that have to be analyzed are: (Spătaru, 2010, p. 200)

**a) staff costs**, having a significant proportion in the total value added (between 30% and 45%, depending on the specifics of the unity and on the economic policy of the state, their amount could be even higher); within them the following are highlighted separately:

- salaries expenses
- social security contributions
- social protection expenses

**b) depreciation**, representing the gradual cost of the investment, its share depending on the investment policy of the company's, time since putting into operation the main fix assets etc.

**c) financial expenses**, mainly the bank interest for loans being employed or to be returned, representing the cost of the financial capital attracted: their weight, varies over time, depends on various factors (average interest rate, inflation rate, country and bank rating, company's credibility, its creditworthiness etc.)

**d) operating result** (without financial expenses), that can be positive or negative, depending on the weight of other elements, as it underlies the profit calculation.

**e) other elements similar to value added** resulted from the situation of the market, the economy in general, the legislative changes etc.

Based on the presented facts we can state that the importance of value added analysis results from the following considerations:

- represents the main auto financing source for the economic agents activity;
- represents the main auto financing source for the net result of the exercise;
- represents the main auto financing source for the operating results;
- represents the new created value by a company from its whole activity;
- by comparing with turnover, value added expresses the economic contribution of the company, the surplus value that it generates as a consequence of the effort in the production process;
  - expresses the degree of economic integration of the company;
  - the distribution of value added reflects the evolution of each participant part, thus setting the level of his remuneration in relation to the effort;
  - represents the source of remuneration of staff;
  - represents the source of financing the budgetary obligations;
  - represents the source of increasing the reserves of the company;
  - measures the company's contribution to achieving the country's GDP and represents the main component of GDP.

**As a position**, value added is situated between purchases (upstream market) and sales (downstream market) being the instrument of undertaking independent actions of the company that accurately characterize its performance. The sum of all

economic agents' value added represents the gross domestic product (GDP). In practice, value added represents both an analysis instruments and a means of management.

**As an analysis tool**, value added allows assessing the economic and financial performances of the company: its real economic power, the production factors contribution to creating its wealth, company's contribution to GDP, its ability to secure itself a number of production phases ( depending on the level of economic integration). Used in comparisons between sectors, value added can reflect structural differences between similar companies, through the relationship between inputs incorporated in the economic activity. (Petrescu, 2010, p. 66)

**As a means of management**, value added characterizes the running of the company, being used in forecasting management, in management control and taxation, to determine the value added tax. (Petrescu, 2010, p. 66)

## REFERENCES:

- [1]. **Acheampong, J.B.; Wetzstein, M.E.** (2001) *Comparative analysis of value-added and traditional measures of performance*, [Online], <http://agecon.lib.umn.edu>
- [2]. **Achim, V.** (2010) *Analiză economico-financiară*, Revised edition, Editura Risoprint, Iași
- [3]. **Bini, F.; Dainelli, L.** (2011) *The informational capacity of financial performance indicators in European Annual Reports*, Maggioli Editore, Dogana (Republica di San Marino)
- [4]. **Borghi, A.; Paolo, B.; Criso, P.** (2011) *Bilanci-Gestione, Controllo-Servizi - 2011*, IPSOA, Gruppo Wolters Kluwer, Milano
- [5]. **Buglea, A.** (2004) *Analiza situației financiare a întreprinderii*, Editura Mirton, Timișoara
- [6]. **Ganea, M.** (2012) *Modelarea performanței economico-financiare a întreprinderii*, Editura Universitaria, Craiova
- [7]. **Gitman, L.J.** (2003) *Principles of managerial finance (10th edition)*, Addison Wesley Longman Inc. Unite States of America
- [8]. **Hal, R.V.** (2011) *Análisis microeconómico*, Tercera edición, Spania
- [10]. **Ilic, M.** (2010) *Economic value added as a modern performance indicator*, Perspectives of innovations in Economics & Business, volume 6, issue 3, [Online], [www.pieb.cz](http://www.pieb.cz)
- [11]. **Marshall, A.** (1890) *Principles of Economics*. New York NY: Macmillan and Co.
- [12]. **Miralles, P.G.** (2010) *Análisis de estados contables, elaboración e interpretación de la información financiera*, Ediciones Pirámide, Madrid
- [13]. **Păvăloaia, W.; Păvăloaia, D.** (2009) *Analiza economico-financiară*, Editura Tehnopress, Iași
- [14]. **Petcu, M.** (2003) *Analiză economico-financiară a întreprinderii*, Editura Economică, București
- [15]. **Petcu, M.** (2005) *Analyse economice et financiare*, Editura ASE, București
- [16]. **Petrescu, S.** (2010) *Analiză și diagnostic financiar - contabil*, 3<sup>rd</sup> Edition, Editura CECCAR, București
- [17]. **Petrescu, S.** (2004) *Diagnostic economico-financiar. Metodologie. Studii de caz*, Editura Sedcom Libris, Iași
- [18]. **Petrescu, S.** (2005) *Analiză financiară aprofundată. Concepte-Metode-Studii de caz*, Editura Sedcom Libris, Iași
- [19]. **Popa, A.; Csegedi, S.; Tiplea, A.** (2010) *Analysis of the value added by the additive method*, [Online], <http://anale.steconomieuoradea.ro/volume/2010/n1/061.pdf>

- [20]. **Popa, I.L.; Miculeac, M.** (2009) *Analiză economico-financiară. Elemente teoretice și studii de caz*, Editura Mirton, Timișoara
- [21]. **Popa, I.L.; Miculeac, M.** (2012) *Analiză economico-financiară. Elemente teoretice și studii de caz*, Editura Mirton, Timișoara
- [22]. **Popescu, D.D.** (2009) *Entreprise Analysis*, Editura ASE, București
- [23]. **Popescu, D.D.** (2011) *Practical guide to company analysis*, Editura ASE, București
- [24]. **Răscolean, I.; Dura, C.** (2008) *The grounds of the decision of financing a company*, Annals of the University of Petroșani, Economics, 8(2)
- [25]. **Spătaru, L.** (2010) *Analiza economico-financiară, instrument al managementului întreprinderilor*, 2<sup>nd</sup> Edition, Editura Economică, București
- [26]. **Vîlceanu, G.; Robu, V.; Georgescu, N.** (2005) *Analiză economico-financiară*, 2<sup>nd</sup> Edition, Editura Economică, București
- [27]. **Wood, E.G.** (1978) *Added value, the key to prosperity*, The Anchor Press Ltd.
- [28]. [www.univath.ro](http://www.univath.ro)
- [29]. [www.rubinian.com](http://www.rubinian.com)