

## THE IMPACT OF THE VALUATION OF ASSETS ON THE COMPANY'S PROFITABILITY

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### Abstract:

*The research paper which has the title „The impact of the valuation of assets on the company's profitability” was achieved having as main objective to highlight how an enterprise valuation of assets directly influences the level of its profitability. This was achieved by dividing the relevant assets of agro-industrial companies in Dolj County, is the approach used in evaluating the income, income capitalization method is the method used. The date on which the assessment is held September 21, 2015, therefore this is the date of the assessment.*

*We also emphasized the subjective nature of the evaluation in general and especially of the evaluation method based on capitalization of income, which also can lead to favorable or unfavorable change in the profitability of the company.*

**Keywords:** profitability, valuation, income approach, capitalization

**JEL:** G00, C00, K1.

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### 1. Introduction

Evaluating the activity of an enterprise is based on a complex methodology based on extensive knowledge in various fields. This is done differently depending primarily established primary objective. There assessments carried out to determine the value of an asset or group of assets to accounting and financial reporting at the end of a financial year, but there are

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situations aimed at determining the estimated fair value of these assets to solve various situations such as: the divestiture process to liquidate assets on closure, or we can have and various situations such as: entry into the wealth of assets as a result of donations; entering the heritage as a result of the merger of the two companies; and so on

The situation particularly concerns us in this paper is based on the going concern enterprise, the estimated values in the evaluation process is necessary to correct accounting values remaining amortized under the laws in force in Romania.

How they are resolved accounting differences arising between the carrying amount and the estimated value resulting in the evaluation process is the starting point of our work of research because, depending on the situation created assets and liabilities of financial-accounting documents undergo changes along with them modifying the course and indicators of profitability and beyond.

The main objective of this work is pursued not only through accounting operations needed to be developed as part of the settlement of differences between the values reflected in book keeping - accounting and those offered by the market but also how the assessor can influence one way or other values. So at the same time emphasize the subjectivity of evaluation through specific methods the income approach.

Considering the main objective of the paper and can thus justify the choice of evaluation approach chosen and its specific method. Given that the cost approach most often based on the values of currencies or securities offered by various specialty books unlikely here to discuss a degree of subjectivity high, while the income approach, starting particularly from the market analysis, the degree of subjectivity is increasingly likely give different interpretations raised through the data resulting from this analysis.

The research paper is divided into four parts: the first part of that familiarity with terms used in research; the second part is the highlight research methodology addressed and the main objective of the work; the third part consists of passing the theoretical study in a practical, theoretical elements being emphasized addressed through a case study; and the last part is given by the conclusions of the research.

Moving from theory to practical study of case study is performed following the procedures set out in the methodology of work, elements

considered as the financial and accounting documents presented by agro-industrial society.

## **2. Sections**

The paper is based on a series of concepts and technical terms used both in economic and financial analysis, here speaking of indicators of profitability, but also in the assessments, involving various terms such as gross income reproducible occupancy surface useful, etc.

We begin presenting concepts and terms used by the notion of return which is defined by the author as Colasse B "which is considered investment company's capacity, to get a result; It is measured as the ratio between that result and the investment firm he represents "( Achim Monica Violeta, Borlea Sorin Nicolae, 2012, pg. 295).

Another definition of profitability is seen in Lucina Buse this author stating that "profitability is a synthetic form of expression of economic efficiency, which reflects the ability of firms to realize profit" (Buse Lucian, 2005, pg.244).

The authors Georgescu Nicolae and Vasile Robu define profitability as "the ability of an enterprise to profit by using inputs and capital regardless of its origin" (Georgescu Nicolae and Vasile Robu, Brasov, 2000, pg.190).

A problem on your return we have in common law which makes no distinction between profitability and profitability, considering that they return the same profitability. Good for them the term "profitability" is not found, the prevailing Anglo-Saxon literature is "profitability". For these statements were followed as specialists Helfert Ea (2006), Philip Parker (2006), Ehrardt I. (1999).

Specific indicators of profitability, to highlight how profitability is influenced by the value resulting from the valuation of assets, the ones we have chosen are the economic rate of return and the rate of financial return.

A definition of the rate of economic return we find the author Ana Maria Hristea, which is defined as "indicator expressing the company's ability releasing results using global equity, particularly in the form of assets financed through capital stable" (Hristea Ana Maria, Bucuresti, 2013, pg.150).

The authors Vasile Robu, Ion Anghel and Claudia Elena Serban define the economic rate of return as one of the most important rates of return. From their point of view this indicator, "highlights the performance of invested capital use in a firm, respectively of the total assets used to obtain

these performances" ( Robu Vasile, Anghel Ion, Serban Elena-Claudia, București, 2014. pg. 358)

The other indicator is financial rate of return is also defined by a many authors, specialists in the economic field.

A definition of financial return we find the authors Antonio Partal Urena, Fernando Moreno Bonilla, Manuel Cano Rodriguez and Pilar Gomez Fernandez Aguado in "Direccion Financiera de la empresa": "the financial return generated by investment firm investments that have basic financing of shareholders, express or net profit per share benefit resulting at the end of the financial year " (Antonio Partal Urena, Fernando Moreno Bonilla, Manuel Cano Rodriguez, Pilar Gomez Fernandez-Aguado, Madrid, 2012).

The authors Aurel Ișfănescu, Vasile Robu, Anca Maria Hristea and Camelia Vasilescu presents in his "Economic and financial analysis" a definition of the rate of financial return "indicator that expresses the relative value, pay equity shareholders contributed or net profit left to the company to finance itself" (Aurel Isfanescu, Vasile Robu, Anca Maria Hristea, Camelia Vasilescu, 2012). Another concept met during the assessment work is defined by experts as "determining the approximate size that reflects the size of quantitative and qualitative or entity that is not measurable objects of communication"( Maxim Emil, Iasi, 2010, pg.11).

French experts define the concept of evaluation as "estimate of the market price at a certain time based on internal and external elements of the enterprise. Item price is negotiated between a seller and a buyer during the sale " ( Hugues Fronville, Alexandre Streel, Paris, 2011).

The Economist Dominique Thouvenin "is a quest objective assessment, the real value of assets. A good evaluation is given by the precision and accuracy of the estimated value" ( Dominique Thouvenin, Paris, 2008).

The author Emil Maxim highlights the concept of such assessment "to determine the approximate size that reflects the size of quantitative and qualitative or entity that is not measurable objects of communication" (Emil Maxim, Iasi, 2010).

Income approach, the approach we use in the case study represents a general way of estimating the value of an asset by one or more methods by which value is estimated by converting the gains and benefits of active capital value ( Denis Karpicek, Canada,2010).

The income approach involves estimating the value of intangible assets by reference to the net present value generated by this cash flow or expenditure savings.

Income capitalization method consists of converting expected future revenues worth by dividing this income, usually annually, with a capitalization rate or by multiplying revenue with a multiplier (which is the inverse of capitalization).

It is known the selling price of an asset can be determined by dividing revenue generated by multiplying the selling price.

The two major problems with the income capitalization method is to estimate and determine the annual income capitalization rate.

The capitalization rate is determined by dividing the annual income from the sale price of this machine. After analyzing capitalization rates obtained for several similar goods on the market, used as comparable evaluated subject, and after applying any correction for differences between comparable and subject, extract the appropriate capitalization rate.

Considering these terms have thought and implemented a range of research methods and techniques so that the main objective of the work to be better off in value.

### **3. Research methods and techniques**

The impact of the valuation of assets on financial-accounting documents directly and indirectly on profitability, we emphasized applying research methodology and specific assessments and also specific economic and financial analysis.

Moving from theory to practical study was conducted based on the statement given fixed assets of fixed assets belonging to agro-industrial company chosen. These were summarized in the table below table we started with market analysis and processing of data for its assessment. Actual notation of fixed assets included in the assessment is the same as the cadastral plan of the company.

**Table 1 - List of fixed assets and defining elements in applying the income**

No. cadastral	Asset name	Area usable	Rent euro/mp/month	Rent euro/month
C1	Guard booth	contribution to property		
C2	Pump house	contribution to property		
C3	Water tank	contribution to property		
C4	Production shelter no.1 – hall	1051,08	2,5	2627,7
	Production shelter no.1 – ground floor + one floor	228	3,5	798
C5	Production shelter no. 2	945,71	2,5	2364,275
C6	Production shelter no. 3	946,229	2,5	2365,573
C7	Deposit forage no. 1	770	1	770
C8	Deposit forage no. 2	767	1	767
C9	Animal waste repository	22,5	2,5	56,25
C10	House gate	183,93	2,5	459,825
C11	Maternity shelter no.1 and deposit forage	929,04	2,5	2322,6
C12	Platform garage	contribution to property		
C13	Deposit cold ground floor + one floor	277,24	3,5	970,34
C14	Drainage tanks	contribution to property		
<b>Total</b>		<b>6121</b>	<b>2,40</b>	<b>13502</b>

Source: Authors table from the processing of sheet fixed assets

From the data presented in the above table we realized then an evaluation of these assets by applying direct income capitalization method.

The essence of this method is derived from utility theory, which gives a certain value a good purchased only if the buyer shall satisfy a need or want.

If a property, this satisfaction is reflected by future earnings from the operation of the property object.

To implement the income capitalization method we had to solve two major problems: first problem was to determine the size of the annual flow reproducible in our case it is gross earnings available for hire; and the second major issue was to establish the capitalization rate related revenue and gross rents.

The capitalization rate we determined based on the trading prices per unit floor area of properties with the highest degree of comparability and rents charged for properties in the same area or in similar areas. Based on these considerations, the capitalization rate related to industrial property ranges between 11% and 12%.

In this paper, taking into account specific local conditions and market value of rents from real estate comparable and the risks of such an activity, was selected a capitalization rate of 12%, representing a high risk to property.

Given that valuation date is September 21, 2015, we report automatically at the exchange rate of BNR said in this day ie 4.4229 lei.

For occupancy we established a level of 85% per year, which is estimated according to the specific business activity, especially in the data submitted by its legal representative and administrator.

The profitability of the company was analyzed in terms of two indicators: the return on assets and return on equity rate. These two indicators were calculated based on data submitted by financial and accounting documents in 2014, the return on assets determined as the ratio between total assets and profit entity and financial rate of return as the ratio between the equity and profit entity.

Thus starting from values obtained from market analysis we conducted a series of assessments related fixed asset values were compared with the results sheet fixed assets, namely the value of their remaining amortized in accounting. Differences in results are then recorded in the accounting firm contributing to the modification of asset and liabilities related balance sheet and income and expenditure to change specific enterprise income statement. Given that the two documents are the starting point in analyzing the profitability of a company in this way we can emphasize the impact on the valuation of assets profitability indicators.

In this illustrated the two rates of return before asset valuation and fixed asset statement submitted by then demonstrated how these rates vary according to performance evaluation, and not just how they can be influenced into one way or another.

#### **4. Case study**

The key point of the research work is given a case study through which emphasize the impact assessment on the company's profitability. Given that self-assessment is a method which estimates and not determined the actual amount of an asset, and also emphasize its subjective nature.

Thus given the data presented in the methodology of the work we determine the estimated value of fixed assets belonging to the company in the agro-industrial sector of Dolj:

**Table 2 - Evaluation of fixed assets through the income capitalization method**

No. cadastral	Asset name	Occupancy	Year Rent euro/year	Year Rent lei/year	Capitalization rate	Value -euro-	Value -lei-
C1	Guard booth	contribution to property					
C2	Pump house	contribution to property					
C3	Water tank	contribution to property					
C4	Production shelter no.1 – hall	85%	26.803	118.545	12%	223.355	987.875
	Production shelter no.1 – ground floor + one floor	85%	8.140	36.001	12%	67.830	300.005
C5	Production shelter no. 2	85%	24.116	106.661	12%	200.963	888.841
C6	Production shelter no. 3	85%	24.129	106.719	12%	201.074	889.329
C7	Deposit forage no. 1	85%	7.854	34.737	12%	65.450	289.479
C8	Deposit forage no. 2	85%	7.823	34.602	12%	65.195	288.351
C9	Animal waste repository	85%	574	2.538	12%	4.781	21.147
C10	House gate	85%	4.690	20.744	12%	39.085	172.870
C11	Maternity shelter no.1 and deposit forage	85%	23.691	104.781	12%	197.421	873.173
	Platform garage	contribution to property					
C13	Deposit cold ground floor + one floor	85%	9.897	43.776	12%	82.479	364.796
C14	Drainage tanks	contribution to property					
<b>Total</b>			<b>137.716</b>	<b>609.104</b>		<b>1.147.633</b>	<b>5.075.865</b>

**Source: Table from the processing authors sheet fixed assets**

One aspect that we want to highlight in view of previous data would be linked to the subjective nature of this method of valuation, as well as having specific bias effect on the financial situation and therefore on profitability.

If the evaluator considers annual occupancy of 85% but not 87% occurs automatically increase the value of each asset evaluated according to the following table:



**Table 3 - The resulting value of fixed assets due to increase employment**

No. cadastral	Asset name	Occupancy	Capitalization rate	Value -euro-	Value -lei-
C1	Guard booth	contribution to property			
C2	Pump house	contribution to property			
C3	Water tank	contribution to property			
C4	Production shelter no.1 – hall	87%	12%	228.610	1.011.119
	Production shelter no.1 – ground floor + one floor	87%	12%	69.426	307.064
C5	Production shelter no. 2	87%	12%	205.692	909.755
C6	Production shelter no. 3	87%	12%	205.805	910.254
C7	Deposit forage no. 1	87%	12%	66.990	296.290
C8	Deposit forage no. 2	87%	12%	66.729	295.136
C9	Animal waste repository	87%	12%	4.894	21.645
C10	House gate	87%	12%	40.005	176.937
C11	Maternity shelter no.1 and deposit forage	87%	12%	202.066	893.719
C12	Platform garage	contribution to property			
C13	Deposit cold ground floor + one floor	87%	12%	84.420	373.379
C14	Drainage tanks	contribution to property			
<b>Total</b>				<b>1.174.636</b>	<b>5.195.297</b>

Source: Table from the processing authors sheet fixed assets

Thus, we see that the change in occupancy as a factor influencing the estimated value of fixed assets, which is determined not by calculation but mathematically exact estimate.

The capitalization rate, another interpretative element of the assessment, although it was obtained by applying a mathematical calculation relations, it has been determined the range of values, the range is 11% - 12%. Even though initially this range seems insignificant in terms of discrepancies that might occur if the capitalization rate would be 12% ie 11.5% but still shows significant differences in results:

**Table 4 - The value of fixed assets due to changes resulting capitalization rate**

No. cadastral	Asset name	Occupancy	Capitalization rate	Value -euro-	Value -lei-
C1	Guard booth	contribution to property			
C2	Pump house	contribution to property			
C3	Water tank	contribution to property			
C4	Production shelter no.1 – hall	85%	11,50%	233.066	1.030.826
	Production shelter no.1 – ground floor + one floor	85%	11,50%	70.779	313.049
C5	Production shelter no. 2	85%	11,50%	209.701	927.486
C6	Production shelter no. 3	85%	11,50%	209.816	927.995
C7	Deposit forage no. 1	85%	11,50%	68.296	302.065
C8	Deposit forage no. 2	85%	11,50%	68.030	300.888
C9	Animal waste repository	85%	11,50%	4.989	22.066
C10	House gate	85%	11,50%	40.784	180.386
C11	Maternity shelter no.1 and deposit forage	85%	11,50%	206.005	911.137
C12	Platform garage	contribution to property			
C13	Deposit cold ground floor + one floor	85%	11,50%	86.065	380.657
C14	Drainage tanks	contribution to property			
<b>Total</b>				<b>1.197.530</b>	<b>5.296.555</b>

Source: Table from the processing authors sheet fixed assets

A reduction in capitalization rate of 0.5% only lead to an increase, according to the table above, the value of each asset by approximately 4% overall increase in society is of 220.690 lei. What would happen if both occupancy and capitalization rate should be changed from the initial thinking evaluator.

By increasing employment by 2% and declining capitalization rate is only 0.5 percent noticed a change in the value of each asset, compared to what we had initially by about 7%, equivalent to 345.315 lei overall.

Simulations made by us based on initial thinking evaluator thinking based on extensive experience in the field and an analysis of market depth, led to the conclusion that the assessment by specific methods has a strong subjective, this is a factor influencing results the accounting company and hence on indicators expressing financial position on the one hand, on the other hand the financial stability and profitability as the default form of expression of efficiency of its activity.

But the main objective of the paper is to mirror how the assessment involves enterprise profitability. To highlight this, we refer to the initial data results from the evaluation of fixed assets with income capitalization method, which we will compare the data with the accounting documents submitted by the company. Thus the comparison of the two values, the value resulting from the evaluation and the remaining amortized in the accounting will be a series you register accounts that will have effects on both the asset and the liabilities side of the balance sheet and the revenue and expenditure presented Annex balance sheet which has the income statement the company name.

The resulting differences between value and amortized the remaining estimated value of income capitalization method is reflected by the following table:

**Table 5 - resulting difference between the amortized value and estimated remaining after evaluation**

No. cadastral	Asset name	The remaining value of amortized	The amount resulting from the evaluation	The resulting value due to increase employment	The resulting value due to lower capitalization rate
C1	Guard booth	contribution to property			
C2	Pump house	contribution to property			
C3	Water tank	contribution to property			
C4	Production shelter no.1 – hall	891.500	987.875	1.011.119	1.030.826
	Production shelter no.1 – ground floor + one floor	419.100	300.005	307.064	313.049

C5	Production shelter no. 2	770.220	888.841	909.755	927.486
C6	Production shelter no. 3	863.060	889.329	910.254	927.995
C7	Deposit forage no. 1	285.810	289.479	296.136	302.065
C8	Deposit forage no. 2	284.980	288.351	295.136	300.888
C9	Animal waste repository	26.850	21.147	21.645	22.066
C10	House gate	162.880	172.870	176.937	180.386
C11	Maternity shelter no.1 and deposit forage	756.400	873.173	893.719	911.137
C12	Platform garage	contribution to property			
C13	Deposit cold ground floor + one floor	415.970	364.796	373.379	380.657
C14	Drainage tanks	contribution to property			
<b>Total</b>		<b>4.876.770</b>	<b>5.075.865</b>	<b>5.195.144</b>	<b>5.296.555</b>
<b>The resulting differences in total following evaluation</b>			<b>199.095</b>	<b>318.374</b>	<b>419.785</b>

Source: Table from the processing of authors

The differences resulting from favorable evaluation process are listed or credit to the account of equity, be placed in the category income to the extent that they compensate for unfavorable differences from evaluation of the same asset.

Be unfavorable differences are recognized as an expense or, if those assets were assessed and following the assessment we recorded favorable differences, they are deducted from the surplus resulting from the initial assessment.

To demonstrate how evaluation can influence the company's profitability, we present the following table the two rates of return in the initial stage and then how they vary by the amount resulting from the evaluation:

**Table 6 - level profitability indicators based on the assessment**

Elements	Baseline indicators	Level after initial evaluation	Level after evaluation by increasing employment	Level after revaluation decrease in capitalization rate
Total assets	8.454.643	8.653.738	8.773.017	8.874.428
Personal capital	54.737	253.832	373.111	474.522
Profit	8.437	8.437	8.437	8.437
<b>Economic rate of return (ROA)</b>	<b>0,09979%</b>	<b>0,09750%</b>	<b>0,09617%</b>	<b>0,09507%</b>
<b>Financial rate of return (ROE)</b>	<b>15,41%</b>	<b>3,32%</b>	<b>2,26%</b>	<b>1,78%</b>

Source: Table from the processing of authors

Given the data reflected in the table above we can say that the valuation of assets may be an influencing factor for the profitability of firms. Observe how both the return on assets and the financial results vary depending on the values after evaluation.

What we notice is that the variation rate of return on equity is higher than the rate of economic return.

Having said that we could say that due to these changes in asset and liability incurred as a result of the assessment or reassessment of assets, and revenues and expenses based on difference, favorable or unfavorable, there is a variation in profitability indicators, regardless of we speak of absolute or relative indicators, which may be influenced one way or another, but it all depends on the professionalism and fairness evaluator.

## **5. Conclusions**

Analysis of the company's profitability due to revaluation of assets was of great interest element of this research paper. Law of our land has been for us the spark that sparked interest in analyzing these issues through the effects produced in the firm's accounts.

Given the descriptive elements of the assessment have expanded such research, focusing on one of its sides defining in terms of profitability, namely, the degree of subjectivity. Depending on this we have two major

differences between the common values in the paper: the remaining value of amortized value resulting evaluation.

Thus, the analysis carried out using the case study presented at the end of the work we reached the following conclusions defining:

- assessment show high levels of bias only if the assessor wants this or if it is not quite ready in the field;
- market analysis necessary for a good evaluation is the key to any evaluator, this should be the main concern of any evaluator;
- assessment not only affects the profitability indicators indicators but also all of the others on the one hand reflects the company's financial balance; financial structure, etc;
- assess the impact on profitability is the indirect action, acting directly assess the accounting and financial documents via their profitability and other indicators;
- impact of the results of the assessment proved to be stronger in the rate of financial return than the rate of economic return.

That being said, we can say that the research work has as title implications on the profitability of assets of the company not only demonstrates the relationship between assessment - but profitability analyzes and other aspects of evaluation by subjectivity.

## **References**

- Achim Monica Violeta, Borla Sorin Nicolae, *Analiza financiară a entităţii economice*, Ed. Risoprint, Cluj-Napoca, 2012
- Antonio Partal Urena, Fernando Moreno Bonilla, Manuel Cano Rodriguez și Pilar Gomez Fernandez-Aguado, *Dirección financiera de la empresa*, Ediciones Piramide, Madrid, 2012
- Bușe Lucian, Siminică Marian, Daniel Cîrciumaru, Simion Dalia, Ganea Mirela, *Analiză economico-financiară*, Ed. Sitech, Craiova, 2011
- Bușe Lucian, *Analiză economico-financiară*, Ed. Economică, București, 2005
- Denis Karpicek, *Le evaluation de entreprises en pratique*, Arhiva bibliotecii nationale din Canada, 2010
- Dominique Thouvenin, *Regroupements de entreprises et just valeur*, articol în format electronic, 2008
- Hugues Fronville, Alexandre Streeel, *Les principales techniques de evaluation de entreprises*, forum financier, Suport electronic, 2011

- Hristea Ana Maria, Analiza economico-financiară a activității întreprinderii, De la Intuiție la știință, volumul 2, Ed. Economică, București, 2013
- Ișfănescu Aurel, Vasile Robu, Anca Maria Hristea și Camelia Vasilescu, Analiza economico-financiară, material descărcat cu ajutorul linkului:<http://www.biblioteca-digitala.ase.ro/biblioteca/carte2.asp?id=75&idb=6>
- Maxim Emil, Diagnosticarea și evaluarea organizațiilor, Ed.Sedcom libris, Iași, 2010
- Robu Vasile, Anghel Ion, Șerban Elena-Claudia, Analiza economico-financiară a firmei, Ed. Economică, București, 2014
- Robu V., Georgescu N., Analiza economico-financiară, Ed. Omnia Uni, Brașov, 2000
- Siminică Marian, Diagnosticul financiar al organizațiilor, Ed. Universitaria, Craiova, 2008