

TANGIBLE ASSETS REVALUATION POLICY AT ENTITIES LISTED ON THE BUCHAREST STOCK EXCHANGE - TIER I.

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***Abstract:** Each year in preparation of annual financial statements must be evaluated the entity's assets to be presented, so that these assets to be recorded in the financial statements at fair value need regular revaluation. Revaluations should be made with sufficient regularity so that the accounting value to does not differ substantially from that which would be determined using fair value at balance sheet date, so is guaranteed the true and fair view of the financial statements. The study contains an analysis of the 25 listed entities on the Bucharest Stock Exchange (BSE) tier I. of the revaluation policy, in relation with debt ratio of the entity, size of the entity, amount of tangible assets (tangible assets share in total assets) and in relation with the seniority (age) of tangible assets.*

***Key words:** revaluation policy, debt ratio, amount of tangible assets*

***JEL classification:** M41*

1. ABOUT THE REVALUATION CONCEPT

In the national accounting concept are defined two bases of evaluation that can be used in preparing financial statements: historical cost, the basic evaluation rule and the revalued amount / fair value, the alternative rule allowed for tangible assets. The IASB accounting conceptual framework defined four bases of evaluation that can be used in preparing financial statements: historical cost, current cost, realizable value and present value. There is no indication of preference for one or other of these bases of evaluation, but choosing one or more of these bases of evaluation must be consistent (consistent with) the concept of capital maintenance (which is the investor's wealth), depending on which entity's performance (profit) is measured.

Revaluation is the modification and replacement of elements input values with new input value. The new input value usually is equal to the index multiplied by old input price changes, which usually equals the market value or fair value. If the revaluation of fixed assets is made, the difference between the value resulting from revaluation and the value at historical cost must be submitted to the revaluation reserve as a distinct sub-element in equity.

On the revaluation, some authors consider that is more relevant and meaningful to do the revaluation of fixed assets, in the detriment of the revaluation of land and buildings. After other authors, the reason that managers are not indifferent to how and when do the revaluation of assets is due the costs which affectes the company.

The International Accounting Standards Board (IASB) allows revaluation of the assets at fair value, which must be made with sufficient regularity so that the carrying amount (accounting value) does not differ substantially from fair value at balance sheet date. The reason being that such disclosures in the financial statements will present fairly the entity's asset value. We believe that the reasen of revaluation is to present in financial statements information that reflects a fair view of the entity, as argued Aboody et al., (1999) cited by Cheng & Lin (2009).

Whittred and Chan (1986 cited by Cioara & Tiron Tudor, 2010) presented five possible reasons for which is used reevaluation into an entity:

- when provided a profit lower than current profit;
- to provide information in the balance sheet;
- to create reserves for revaluation value resulting from the revaluation;
- to improve the financial coverage of shares and increase the price of the shares;
- when the report is to improve the debt / asset

Scott Henderson and Jenny Goodwin (1992 cited by Cioara & Tiron Tudor, 2010) consider that revaluation plus is not treated as income, and the new book value of the asset is amortized starting point for calculating depreciation in subsequent years. Following a positive review (increase value) of an asset amortized in the financial statements are the following effects:

- a greater expense to depreciation resulting profit lower. This does not refer to a movement of profits from one period to another. The expenses are high, profits are lost in the current year and are no longer recover in subsequent periods;
- earnings from eventual sale of an asset is less reassessed, since the value of accounts is higher;

Empirical literature has provided a number of factors to explain the decision of the revaluation in different contexts and environments. Among these reasons is remember:

- if a value resulting from a reassessment of the entities could obtain larger loans or new loans because the entity would report a rate of indebtedness, less due to increases in asset values, argued the reason Brown and all, in 1992, and Cotter Zimmer, 1995, and all Black, 1998; Cotter, 1999, Lin and Peasnell, 2000, Jaggi and Tsui, 2001 processed by Cioara & Tiron Tudor, (2010).
- revaluation allows the entity to make the historic level of market value, a phenomenon resulting in decreased profitability of a public offer subevaluate (Brown et all, in 1992, Easton all et, 1993).

Cotter & Richardson (2002) sought the answer to the (hypothesis) question: The information resulting from the revaluation of non-current assets by independent appraisers is more reliable than those resulting from the revaluation made by internal specialists?

Previous research suggests that upward revaluations are relevant for the capital markets, and that they are associated with future operating performance (Easton, Edey and Harris, 1993; Barth and Clinch, 1998; Harris and Muller, 1998; Aboody, Barth and Kasznik, 1999 cited by Cotter & Richardson, 2002).

In particular, Barth and Clinch (1998) find that the market considers both reassessments made by director and by independent evaluators are relevant values. They suggest that the capital market values the private information of the directors, and this outweighs potential manipulation by opportunistic directors. While Barth and Clinch find no difference in value relevance, their work is not discussed the possibility of differential reliability of the informations established by director and by independent evaluators. Indeed, most tests of value relevance are common tests of relevance and reliability.

So, in their work of Cotter & Richardson (2002) entitled “Reliability of Asset Revaluations: The Impact of Appraiser Independence”, the authors came to the conclusion that, their research results demonstrate that revaluations made by independent evaluator are no more reliable than revaluations made by the directors, except revaluation of plant and equipment. There appears to be no statistically significant difference in reliability to other asset classes.

Entities, investors and / or users of financial statements need of revaluation of assets? There are close links between the revaluation of assets and fair view in the financial statements? The argumentation we can start with financial accounting subject, which consists in reflecting the company's external patrimonial circuit and the calculation in a synthetic form, at the entity level, the structure of assets and liabilities and results. So, the subject of accounting is to reflect in money terms of the entities patrimony, of the movement and its transformation as a result of economic and financial operations and obtained results. Then, the presentation in financial statements the fair view we can say that it is obligatory. To reach to the fair view in the annual financial statements must be reflect the reversible and irreversible changes in the value of the assets of the entity, so it must be revaluated, because if the accounting through the financial statements may not reflect the real patrimony of an entity, then we talk only about some statistical informations that have almost no use for current and future owners or investors of the entity (Márton & Csősz, 2010).

2. EMPIRICAL STUDY: TANGIBLE ASSETS REVALUATION POLICY

To [accomplish/realize](#) the empirical study we analyzed the annual financial statements of the entities listed on the Bucharest Stock Exchange - Tier I. for the 2011 financial year. The sample consists of 25 entities listed on the Bucharest Stock Exchange - Tier I.

In this study we used a number of variables:

- *Revaluation policy*, variable reflecting the decision to revalue or not the tangible assets of the entity. To quantify this variable, we used the following coding: 1. Historical cost (the entity not revalue the tangible assets); 2. Fair value (the entity applies the revaluation policy for all tangible assets); 3. Historical cost / Fair value (the entity applies the revaluation policy only for some categories of tangible assets).
- *Debt ratio*, that indicates what proportion of debt of the entity has relative to its assets. Is calculated as ratio of total debt and total assets.
- *Size of the entity* expressed by *turnover* and *Shareholders' equity* calculated for 2011 financial year.
- *Tangible assets size* quantified by total tangible assets in 2011 and *tangible assets share in total assets*, calculated by ratio of tangible assets and total assets.
- *The tangible assets age* quantified by ratio of tangible assets amortization and total tangible assets.

We want to check if there is correlation between revaluation policy and the other variables (debt ratio, entity size, tangible assets size, tangible assets share in total assets and the tangible assets age).

Correlation between the dependent variable (revaluation policy) and the independent variables is evidenced by Spearman coefficient, the coefficient can take values between -1 and 1.

First we analyzed the correlation between revaluation policy and the debt ratio and entity size. Analyzing the coefficient we note that between the two variables (revaluation policy – debt ratio; revaluation policy – turnover; revaluation policy – Shareholders' equity) there are no correlation (Sig. > 0.05). That mean the debt ratio does not influence the revaluation policy, respectively the size of the entity expressed by turnover and Shareholders' equity not determined the entities to revalue the tangible assets.

Correlations between revaluation policy and the debt ratio, Shareholders' equity and the turnover

			Revaluation policy	Debt Ratio 2011	Shareholders' Equity	Turnover 2011
Spearman's rho	Revaluation policy	Correlation Coefficient	1.000	-.134	.049	-.049
		Sig. (2-tailed)	.	.532	.821	.821
		N	24	24	24	24
	Debt Ratio 2011	Correlation Coefficient	-.134	1.000	-.167	.387
		Sig. (2-tailed)	.532	.	.425	.056
		N	24	25	25	25
Shareholders' Equity	Correlation Coefficient	Correlation Coefficient	.049	-.167	1.000	.644(**)
		Sig. (2-tailed)	.821	.425	.	.001
		N	24	25	25	25
Turnover 2011	Correlation Coefficient	Correlation Coefficient	-.049	.387	.644(**)	1.000
		Sig. (2-tailed)	.821	.056	.001	.
		N	24	25	25	25

** Correlation is significant at the 0.01 level (2-tailed).

Correlations between revaluation policy and the tangible assets value, tangible assets share in total assets and tangible fixed assets age

			Revaluation policy	Tangible assets value	Tangible assets share in total assets	Tangible assets age
Spearman's rho	Revaluation policy	Correlation Coefficient	1.000	-.256	-.195	-.098
		Sig. (2-tailed)	.	.227	.360	.650
		N	24	24	24	24
	Tangible assets value	Correlation Coefficient	-.256	1.000	.670(**)	-.070
		Sig. (2-tailed)	.227	.	.000	.744
		N	24	24	24	24
Tangible assets share in total assets	Correlation Coefficient	Correlation Coefficient	-.195	.670(**)	1.000	-.331
		Sig. (2-tailed)	.360	.000	.	.114
		N	24	24	24	24
Tangible fixed assets age	Correlation Coefficient	Correlation Coefficient	-.098	-.070	-.331	1.000
		Sig. (2-tailed)	.650	.744	.114	.
		N	24	24	24	24

** Correlation is significant at the 0.01 level (2-tailed).

Second we analyze the correlation between revaluation policy and the tangible assets size, tangible assets share in total assets and the tangible assets age. Analyzing the coefficient we note that between the two variables (revaluation policy – tangible assets size; revaluation policy – tangible assets share in total assets; revaluation policy – tangible assets age) there are no correlation (Sig. > 0.05). That mean, the tangible assets size and tangible assets share in total assets does not influence the revaluation policy. The entity must be made the tangible assets revaluation with sufficient regularity, regardless of assets size or tangible assets share in total assets, so the value of the tangible assets presented in the annual financial statements not differ substantially from fair value of them. Regarding tangible assets age we can note, this variable is not an important factor taken into account of the governance of the entities to revalue the tangible assets.

Analysing the evaluation bases used to present assets in annual financial statements of the studied entities we mention the following: joint evaluation system (historical cost and revaluated value) in number: 14, representing 56% of the total, revaluated value (alternative rule): 10, representing 40% of the total. The historical cost is not used by any entity as single evaluation basis.

In 2011, eight entities recognize adjustments to tangible assets and seventeen not. The most used depreciation method was the linear depreciation method. Twenty-two entities of twenty-five used the linear depreciation method, two entities used linear and degressive depreciation method to reflect how the economic benefits are consumed of the tangible assets, respectively an entity have not tangible assets in patrimony. We mention that, three entities use all of amortization methods for fiscal amortization. Within the entities were not recognized any entity residual value of fixed assets, as depreciable value in all cases was equal to the input value.

It can be noted that most of the entities analyzed, has used the services of an independent evaluator to revalue the tangible assets. In analyzed period 2009-2011 only one entity revaluated the tangible assets with commission made by the entity, the other in number of 22 were made by independent evaluators.

To test the staff who made revaluation within the analyzed entities we applied the binomial test method.

As the limit of signification is below 0.05 (Sig. = 0,000) that means independent assessors predominate in a significantly greater extent compared to the commission made by the entity of the tested sample.

During 2009 – 2011 were made 25 revaluations at the entities in the sample, at two entities were made two revaluation during of these three years, so at 23 entities have made revaluation and at 2 not, one of two entities not have tangible assets in patrimony, the other have in patrimony machinery (14.064 lei).

Of the total number of 25 revaluation permormed from 2009 to 2011, 9 revaluation representing 36% was performed in 2009, 7 revaluation representing 28% was performed in 2010 and 9 representing 36% revaluation was performed in 2011.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Revaluation of the tangible assets in 2009-2011 * The year of revalue the tangible assets	23	92.0%	2	8.0%	25	100.0%

Revaluation of the tangible assets in 2009-2011 * The year of revalue the tangible assets
Crosstabulation

Count		The year of revalue the tangible assets					Total
		2011	2010	2009	2010, 2011	2009, 2010	
Revaluation of the tangible assets in 2009-2011	Buildings	4	0	2	0	0	6
	Land and Buildings	2	3	4	0	1	10
	Land, Buildings, Plant and machinery, Measurement	0	0	2	1	0	3
	All of tangible assets	2	2	0	0	0	4
Total		8	5	8	1	1	23

Next we test if there is relationship between buildings revaluation year and revaluation upwards or downwards of assets referred in the 2009 – 2011 period using simple regression.

Revaluation year for buildings has no relation to revaluation in upwards or downwards, result from the regression. Model Summary shows that, in our case $R = 0.081$, so the correlation is not strong, so between revaluation year and revaluation upwards or downwards of assets the correlation is not strong. R Square is 0.007 which means that 0.7% of the variance of the dependent variable variance can be explained by the independent variable.

Further, the ANOVA table we obtain the following information: F-test checks whether the regression line is significantly different from 0, namely if the prediction is that we do is better than one based on chance. How $F = 0.139$ is not significant ($\text{Sig.} = 0.713$), that is very unlikely that there is a linear regression to express the relationship between two variables, these two elements are independence to each other.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.081 ^a	.007	-.041	.395

- a. Predictors: (Constant), The year of revaluation buildings
- b. Dependent Variable: Revaluation upwards or downwards of buildings

ANOVA^b

Model		Sun of Squares	df	Mean Square	F	Sig.
1	Regression	.022	1	.022	0.139	.713 ^a
	Residual	3.283	21	.156		
	Total	3.304	22			

- a. Predictors: (Constant), The year of revaluation buildings
- b. Dependent Variable: Revaluation upwards or downwards of buildings

Nr.	Symbol	Variables										Revaluated tangible assets
		Net tangible assets 2011	Tangible assets age 2011	Tangible assets share 2011	Turnover 2011	Gross Profit 2011	Shareholders' equity 2011	Debt ratio 2011	Revaluation year			
1	ALR	888.255.483	0,2925	0,365767	2.241.390.925	280.181.996	1.553.478.084	0,3603	2011	buildings		
2	ATB	173.690.051	0,3601	0,386568	281.847.455	26.397.659	287058407	0,3611	2010, 2011	buildings, machinery		
3	BCC	161.860.041	0,2414	0,042740	390.693.000	-31.989.275	222.959.266	0,9411	2011	buildings		
4	BIO	56.689.637	0,3564	0,306566	93.443.090	16.919.762	153.957.996	0,1674	2009, 2010	buildings, land		
5	BRD	1.306.065.899	0,3333	0,027194	21.534.729.448	562.003.423	5.107.047.158	0,8937	2009	buildings, land		
6	BRK	6.046.499	0,2889	0,064939	3.074.340	-15.599.615	74.982.177	0,1947	2009	buildings, land		
7	COFI	117.750.177	0,1448	0,505666	85.079.877	-51.905.451	61.029.382	0,7379	2009	buildings, land		
8	ELMA	229.277.958	0,2621	0,709019	495.195.622	17.639.483	269.148.045	0,1677	2009	buildings, land		
9	FP				617.888.992	545.577.881	11.120.700.702	0,0050				
10	IMP	60.789.028	0,1171	0,148864	13.540.400	-22.261.046	296.828.111	0,2731	2011	buildings		
11	OIL	358.694.878	0,3257	0,948026	115.773.802	1.890.032	345.226.806	0,0876	2010	all of tangible assets		
12	OLT	1.848.476.597	0,0640	0,840819	1.533.016.194	-278.342.623	-826.884.427	1,3761	2011	all of tangible assets		
13	PERH	188.353.552	0,1939	0,718561	64.764.491	1.322.764	202.531.399	0,2274	2011	buildings, land		
14	RPH	53.954.555	0,4014	0,138934	385.169.835	12.951.541	91.212.485	0,7651	2010	buildings, land		
15	SIF1	5.578.957	0,4537	0,007601	141.752.169	76.689.174	642.598.332	0,1244	2009	buildings		
16	SIF2	15.098.349	0,1396	0,021850	336.996.156	231.997.743	566.155.402	0,1807	2010	buildings, land		
17	SIF3	13.713.252	0,3181	0,015452	325.883.732	248.320.985	769.314.328	0,1331	2010	buildings, land		
18	SIF4	14.064	0,7878	0,000011	196.907.499	83.167.367	1.137.521.392	0,1400				
19	SIF5	15.001.254	0,1892	0,018407	133.228.303	96.119.901	652.841.780	0,1990	2009	buildings, land, machinery		
20	SNP	21.255.612.152	0,2324	0,628501	16.565.465.973	4.478.639.238	18.890.892.162	0,4414	2009	buildings		
21	SOCF	55.629.394	0,3072	0,520895	59.103.455	8.586.345	99.800.086	0,0655	2011	buildings		
22	TBM	105.799.569	0,0884	0,654978	46.491.763	-19.411.417	67.520.493	0,5820	2009	buildings, land, machinery		
23	TEL	3.537.825.681	0,4274	0,678289	3.113.142.778	127.002.003	2.467.436.755	0,5269	2011	all of tangible assets		
24	TGN	3.323.009.903	0,3597	0,812663	1.343.321.806	462.260.472	3.262.877.964	0,2020	2011	buildings, land		
25	TLV	271.188.425	0,5022	0,010534	6.017.117.238	185.770.618	2.128.432.195	0,9173	2010	all of tangible assets		

CONCLUSIONS

Although some studies in the literature explain some correlation between the dependent variable (revaluation policy) and the independent variables (debt ratio and tangible assets age), our study shows that, there are no statistical correlation between them, within the entities listed on the BSE Tier I.

By scientific investigation made, we conclude that the majority of the entities do not use other method than the linear method of depreciation. So by amortization, in many cases, there are not reflected correctly how the economic benefits are consumed by the tangible assets.

Result of these situations, we conclude that the amortization of fixed assets is significantly affected by taxation.

Most entities analysed, use the mixed evaluation bases for tangible assets evaluation. Also, the study resulted that, most of revaluation has been made by independent evaluators, only one entity has revalued assets with commission formed by the entity. Our opinion is the main reason to employ the services of independent evaluators is: fair evaluation, meaning that the independent experts can determine the assets' value better than the commission within the entity and the second reason is transferring of responsibility.

In the analysed period, all of the entities reevaluate building. This fact allows, the formulation of the conclusion: the buildings at the moment are the main assets that are revalued. Our opinion is, some assets are revalued to be presented in annual financial statements in fair value, because usually they have significant value compared to the other tangible assets or because revaluation of these assets is imposed by the Tax Code requirement.

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