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# Conservatism and Non-Conservatism in Inventories Assessment

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Keywords: Inventory, Evaluation, IAS 2, Caution ABSTRACT

This paper has two main objectives namely to identify the main inventories assessment methods used in the economic entities listed in manufacturing and reflecting the extent to which entities surveyed recorded impairment of inventories at the balance sheet date as well as highlighting the presentation of information regarding the method of calculation of net realizable value.

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#### 1. Introduction

In the accounting of the company, inventories are classified and defined according to four criteria: physical, destination, operating cycle phase, and place of creating administration (Ristea, 2004). Inventories, according to IAS 2, are items that are held to be sold in the normal course of business in the same state or in the form of raw materials and other supplies to be used in the production process or to be consumed during first use during the provision of the services (IAS 1). According to Romanian regulations, inventories are: current assets held for sale in the ordinary course of business, current assets in production, for sale in the normal course of business or current assets in the form of raw materials or other supplies that are to be used in the production or supply of services (OMPF 3055/2009 for the approval of accounting regulations compliant with European directives). This definition does not take into account the nature of the item considered, but its destination, which is strongly influenced by the activity of the company that owns the goods. For example land and buildings are fixed in most businesses, but they represent inventories for a real estate trader. Also, inventories may have an intangible nature. Thus, for entities providing services, work performed and non- invoiced at the end of the year represent stock.

Evaluation in accounting is the process that determines the value at which items are recognized and disclosed in the balance sheet and profit and loss account. Based on the importance of assessing the accounting, the first objective of this paper is to identify the main methods used in the stock assessment of economic entities in manufacturing, companies listed both on the main segment of the Bucharest Stock Exchange and RASDAQ segment. In the context of the financial crisis still felt in the EU countries, it is important to note to what extent economic entities exhibit caution in accounting by taking into account the depreciation of inventories at the balance sheet date. Observance of the principle of caution for the integration on uncertainty in the accountancy assessment aims to avoid the transfer risk in the future periods of the present uncertainties. A main consequence of this principle is the establishment of adjustments for the depreciation of inventories. Therefore the second objective of this paper is to reflect the extent to which entities surveyed recorded adjustments for the depreciation oof inventories at the balance sheet date and in highlighting the presentation of information on how to calculate the net realizable value.

## 2. Research methodology

The purpose of this research is to demonstrate the importance of reflecting in the annual financial statements of treatment, assessment methods and accounting policies applicable to inventories. The objectives of the research topic are oriented to highlight how economic entities applying IFRS are compliant with disclosure on evaluation methods and depreciation of inventories in the notes to the financial statements.

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With the stated purpose of observing compliance with IFRS, we embark on an empirical research to verify these hypotheses:

**Hypothesis 1**: Economic entities applying IFRS in the notes to financial statements present information on the accounting policies used in measuring inventories, including the cost formula used in accordance with IAS 2

**Hypothesis 2**: Economic entities applying IFRS financial information present in the notes to the fiancial information the amount of any impairment of inventories recognized as an expense during the period under IAS 2 and disclosure of the method of calculation of net realizable value.

To verify these hypotheses we conducted a empirical research by gathering data from the annual reports published by the entities in manufacturing listed in both segments of BSE. The sample analyzed consists of 11 listed companies, randomly chosen, which have submitted annual reports has given us a comprehensive view of what it means financial reporting. Economic entities under study are shown in the table below:

Table 1. Presentation of entities surveyed

Nr.	Name of the entity	Activity		
1	ELECTROAPARATAJ	The main Romanian manufacturer of low voltage electrical apparatus. I is an important actor of the Romanian industry, fully applying the principles of corporate governance and transparency in business ethics		
2	MECANICA CEAHLAU	It produces machinery for agriculture and forestry.		
3	MARTENS	Company producing beer and malt and soft drinks		
4	AVIOANE CRAIOVA SA	Produce military aircraft (components, parts) or assemblies and service, including military aircraft repair, mechanical, electrical and electronic components, computer aided design and manufacturing, heat treatment for steel and aluminum alloys, coatings and so on		
5	ELECTROMAGNETICA Company producing measuring equipment and instruments in Romania			
6	PETROLEXPORTIMPORT  The main foreign trade agent in the import of oil and export of oil products in the Romanian refining system			
7	SINTEZA ORADEA	Company with tradition in the Romanian chemical industry		
8	VRANCART	Manufactures and sells corrugated cardboard, products from corrugated cardboard, hygienic and sanitary paper		
9	BERMAS  It produces beer, malt and other alcoholic and soft drinks, provide services for third parties			
10	ARTEGO  Leader in the domestic market of conveyor belts and one of the larges producers of rubber goods in the world.			
11	TURBOMECANICA Produce engines, mechanical assemblies and equipment for aircraft			

It is difficult to have a discussion about inventories without a brief information about what they represent and what happens to them in the accounts of the economic entity. And if we consider the activity of economic entities, the discussion can lead to disagreements about the levels of perception and representation of interlocutors. Therefore, an explanation of things is required at this time. A wholesaler or a retailer buys assets such as books and sell them in their current form. Assets held for sale are called stock. Thus, a wholesaler or a retailer will have to balance a single account called commodity stocks. Instead, a production company that will obtain the products, such as cars, uses multiple accounts to track inventories: inventories of raw materials, production in progress, finished goods. IAS 2 uses the term stock to represent tangible items that are held for sale, are being produced for sale, is consumed in the production process to obtain goods or services available for sale. From the above it is clearly understood that encountering, and especially the presence of inventories occurs, namely is present in all functions of the economic entity: purchasing, production, sales directly; financial and accounting, R & D and human resources indirectly.

Trying to proving the two hypotheses will entail both a quantitative analysis and a qualitative analysis.

To reflect the size of the inventories in the entities analyzed we considered a presentation, in Table 2, of the Balance sheet inventories and their share in the current assets and total assets of the economic entities.

Table 2. Share of inventories in total current assets, respectively in the total assets

No	Name of the company	Stock value	Value of current assets	Total value of assets	Share of inventories in	
					Current assets %	Total assets %
1	ELECTROAPARATAJ	7.185.011,00	14.904.755,00	17.037.743,00	48,20	42,17
2	MECANICA CEAHLAU	31.915.365,00	81.482.259,00	125.196.768,00	39,16	25,49
3	MARTENS	13.248.742,00	18.910.871,00	41.593.791,00	70,05	31,85
4	AVIOANE CRAIOVA SA	3.877.754,00	7.121.567,00	38.883.257,00	54,45	9,97
5	ELECTROMAG-NETICA	15.386.542,00	91.186.917,00	311.722.305,00	16,87	4,94

6	PETROLEXPORT- IMPORT	1.259.807,00	62.353.410,00	73.106.489,00	2,02	1,72
7	SINTEZA ORADEA	6.461.404,00	51.345.030,00	109.612.195,00	12,58	5,89
8	VRANCART	20.061.141,00	60.246.424,00	220.978.857,00	33,30	9,08
9	BERMAS	12.991.789,00	15.470.958,00	32.644.165,00	83,97	39,80
10	ARTEGO	50.605.145,00	89.967.010,00	151.102.844,00	56,25	33,49
11	TURBOMECANICA	24.937.055,00	74.975.245,00	140.050.753,00	33,26	17,80

The situation depicted is suggestive, helping to shape the idea that inventories represent a significant asset, both in absolute and percentage in the total value of assets of the entity. Moreover, the sale of inventories at a price above cost is the main source of sustainability of the entity. For this reason, stock accounting is extremely important.

#### 3. Results and discussions

Economic entities applying IFRS in the notes to financial statements present information on the accounting policies used in measuring inventories, including the cost formula used under IAS 2.

# Quantitative analysis

By analyzing the information submitted by entities surveyed in the notes to the financial statements on stock assessment methods, we have found that nine entities present in their notes details about their accounting policy on stock assessment, while two entities do not have any information on stock assessment in the notes to the financial statements. Regarding the formulas for calculating the cost, the situation is better in the sense that all nine economic entities who presented the policies of stock assessment, also presented information on formulas, while the two entities do not have any information relating to the calculation of cost. The following table shows the information on the methods of assessment and costing analysis provided by entities in their notes to the financial statements.

Table 3. Information on stock assessment methods and the methods of calculating the cost of inventories for the economic entities surveved

	inventories for the economic entities surveyed			
	Name of the entity	Assessment methods and methods for calculating the cost of inventories		
1	ELECTROAPARATAJ	Inventories are stated at the lower value between the cost and net realizable value. Cost includes direct materials and, where applicable, direct labor costs and expenses that were incurred for bringing the inventories to their present location and condition. Cost is calculated using the weighted average cost method (CMP).		
2	MECANICA CEAHLAU	Inventories are stated at the lower value between the cost and net realizable value. Cost is determined using the first-in - first out ("FIFO"). The cost of semi-finished and finished goods includes materials, direct labor, other direct costs and related production overheads (based on operating activities). Net realizable value is the estimated selling price in the ordinary transactions.		
3	MARTENS	Inventories are valued upon output at the weighted average cost method (CMP). The input value of inventories includes the purchase price and incidental expenses.		
4	AVIOANE CRAIOVA SA	Does not submit information		
5	ELECTROMAGNETICA	Does not submit information		
6	PETROLEXPORTIMPORT	Inventories are valued at the lower value between the cost and net realizable value. The cost of inventories is determined using the formula "weighted average cost" (CMP) in accordance with IAS 2. The CMP cost of each item is calculated based on the weighted average of similar costs in stock at the beginning of the period and the cost of similar items purchased or produced during the period. The average is calculated after each entry in management.		
7	SINTEZA ORADEA	Upon entry into society, inventories are assessed and accounted for at entry value, which is determined as: - at the cost of acquisition - for inventories purchased; - at the cost of production - for inventories produced in society; - at the input value, following the evaluation - for inventories representing company capital; - at fair value - for inventories obtained free of charge or addition to inventory found. At balance sheet date, inventories are valued at the lower value between the cost and net realizable value.  Net realizable value is the estimated selling price in the ordinary course of business minus the estimated costs of completion and costs of selling. On leaving the management, the cost of inventories is calculated by FIFO, first in - first out.		
8	VRANCART	Inventories are valued at the lower value between the cost and net realizable value. The cost of inventories is calculated by FIFO, first in - first out.		
9	BERMAS	The value of inventories is determined based on estimated selling price that could be obtained in the ordinary course of business minus the estimated costs of completion		

	Name of the entity	Assessment methods and methods for calculating the cost of inventories
		and sale, and a reasonable profit margin based on the effort required to complete and sell inventories. The cost of inventories is based on the first-in first-out method (FIFO) for materials and weighted average cost method (CMP) for raw materials, semifinished and finished products, and includes expenditure incurred for the purchase of inventories, production or processing costs and other costs incurred in bringing the inventories to the present form and location.  For inventories produced by the Company and those under production, costs include appropriate share of the administrative costs of production based on normal operating capacity.
10	ARTEGO	Inventories are recognized at cost of acquisition or production. At each balance sheet date, they are valued at the lower value between the cost and net realizable value. The cost of inventories is determined by the FIFO method.
11	TURBOMECANICA	Inventories are valued at the lower value between the cost and net realizable value. Cost comprises purchase costs, production costs and other supply costs. Cost is generally calculated by the weighted average cost method (CMP).

### Qualitative analysis

The accounting policies for evaluation, although the percentage of those that relate to the subject matter is very large, it must be said that it is not indicative, because not all entities actually present what they want to govern, the manner of working is not shown, which makes us think that ththese indicators are present only as a concession to the international regulations.

References to methods of cost allocation between inventories and final cost of goods sold, in fact one of the most delicate issues related to inventories accounts, are as little discussed and only reviewed. Also, we find in the notes to the financial statements no information on determining the quantity of inventories or rather references to the two possible methods: permanent inventory or intermittent inventory. The synthetic manner of presentation of accounting policies on evaluation and formulas for calculating the cost does not correspond to the levels required by IAS 2, reason for which we believe that the first research hypothesis is invalid.

Economic entities applying IFRS present in the notes to the financial statements the amount of any impairment of inventories recognized as an expense during the period under IAS 2 and disclosure of the method of calculation of net realizable value.

#### Quantitative analysis

By analyzing the information submitted by entities surveyed in the notes to the financial statements on value of stock depreciation and method of calculation of net realizable value, we found that only seven entities make their intentions known, two entities provide values of the effective depreciation and the two entities do not discuss this issue. Regarding the method of calculation of net realizable value, only five economic entities submit such information.

The situation in the following table is suggestive for the meaning of the practice of impairment of inventories used by entities analyzed.

Table 4. The adjustments for impairment of inventories and depreciation of inventory information submitted by economic entities surveyed in the notes to the financial statements

	Name of the entity	Adjustments for impairment	
1	ELECTROAPARATAJ	If necessary, there is a depreciation adjustment of inventories.	
2	MECANICA CEAHLAU	Impairment of inventories of materials are recognized for those inventories that have slow motion, are physically or morally worn. There are not subject to adjustment those inventories for which it is possible to predict whetherthey will be given for consumption in the next period, or whether those inventories are safety inventories for certain installations.	
3	MARTENS	The Company does not constitute adjustments for impairment of inventories.	
4	AVIOANE CRAIOVA SA	Depreciation is recorded for all inventories. Impairment occurs due to inventory obsolescence or lack of future sales.	
5	ELECTROMAGNETICA	ETICA 351.477,00 lei	
6	6 PETROLEXPORTIMPORT No information is available		
7	SINTEZA ORADEA	No adjustments are recognized for future operating losses	
8	VRANCART	The Company performs periodic evaluation of inventories to identify the existence of impairment indicators, considering the following aspects: - for inventories whose length exceeds 180 days, provision shall be determined in an individual examination for each product for all finished goods, inventory cost is compared to the sales price of the next period, to present outstanding stock at a minimum value between the production cost and selling price minus the costs of distribution.	

9	BERMAS	Impairment is recorded when the net realizable value of inventories is lower than cost of production
10	ARTEGO	No information is available
11	TURBOMECANICA	4.615.928 LEI

Table 5 shows how the entities analyzed provide information on the method of calculation of net realizable value.

Table 5. Information about how to calculate the net realizable value presented by the surveyed economic entities in the notes to the financial statements

	Name of the entity	Disclosures in the notes on the method of calculation of net realizable value
1	ELECTROAPARATAJ	No information is available
2	MECANICA CEAHLĂU	Net realizable value is the estimated selling price in the ordinary transactions.
3	MARTENS	No information is available
4	AVIOANE CRAIOVA SA	No information is available
5	ELECTROMAGNETICA	Net realizable value represents the estimated selling price in normal business minus selling expenses
6	PETROLEXPORTIMPORT	No information is available
7	SINTEZA ORADEA	Net realizable value is the estimated selling price in the ordinary course of business minus the estimated costs of completion and costs of sales.
8	VRANCART	Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and costs necessary to make the sale.
9	BERMAS	Net realizable value is determined based on estimated selling price that could be obtained in the ordinary course of business minus the estimated costs of completion and sale, and a reasonable profit margin based on the effort required to complete and sell inventories.
10	ARTEGO	No information is available
11	TURBOMECANICA	No information is available

### Qualitative analysis

The amount of any impairment of inventories up to net realizable value and all losses of stock are recognized as an expense in accordance with IAS 2, in the period when the reduction or loss occurs. According to IAS 2, inventories should be valued at the lower value between the cost and net realizable value. If the discussion pertaining to costs is solved almost entirely by the values in the documents accompanying the acquisition, production and entry into possession of items of inventory, the same can not be said about the net realizable value. Estimation of the net realizable value is based on the most reliable evidence that occurs when estimating the amount the inventories that are expected to be realized. These estimates take into consideration fluctuations of price and cost that are related to events occurring after the end of the period. Another element worthy of consideration would be the purpose for which the inventory is held. These are only a few of the regulations that somewhat legislate the inventory practices. From this, it is easy to see that the information we have collected are briefly presented, that they do not follow the regulations drawn by IAS 2 and that they do not lead to comprehensive information to investors, which leads us to believe that for the managers and shareholders of these entities, stock is not a priority, which is why we can say that the second hypothesis of this study is invalidated.

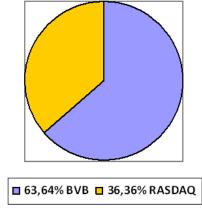


Figure 1. The proportion of the sampled companies listed on regulated and unregulated market is given by the following chart:

Invalidation of the second hypothesis may be due to the fact that some of the companies included in the sample studied are listed on the BSE regulated market, they prepare their financial statements in accordance with Order 1286/2012, their proportion in our sample is 63, 64% and 36.36% of the sample studied are companies listed on RASDAQ unregulated market, financial statements being prepared in accordance with OMPF 3055/2009.

#### 5. Conclusions

Invalidation of our assumptions should not be seen as a failure of scientific endeavor, but as an added value, due to signaling certain dysfunctionalities, of points which are underdeveloped in the practice of financial reporting entities whose accounting is a conglomerate of national, European and international rules. As many efforts that are made for maintaining unaltered one approach or another, we find it difficult to keep this distance and the fact that the information should meet the quality standards imposed by the economic reality and requested by the users. We must believe, in the absence of other arguments, that the only application consistent with the IFRSs ensures us a detailed, complete and fulfilling presentation of the financial information for its users. An entity shall not be able to describe financial statements as complying with IFRSs unless they meet all the requirements of IFRSs in accordance with Article 16 of IAS 1.

Another explanation could be the lack of interest of those who govern the destinies of economic entities towards the issue of inventories, a chapter that at this time can easily be overshadowed. This is supported by the lack of caution in evaluating inventories for more than 50% of the entities studied. This phenomenon is possible as long as business is good, as long as what is bought is also sold.

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