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Empirical Study on the Financial Reporting of Intangible Assets by Romanian Companies

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Abstract. *The purpose of this paper is to identify to what extent Romanian companies quoted in the Bucharest Stock Exchange present information concerning intangible assets (IA), what the structure of the assets of the analyzed companies is, and what the difference between the accounting value of companies, computed through the net accounting asset, and their market value is, determined as the product between the number of shares and the average quotation price.*

We have analyzed the annual financial statements corresponding to the fiscal year closed on 31.12.2010 and the annual reports drawn according to the regulation of the National Commission for Mobile Values no. 1/2006 concerning the issuers and mobile operations for 23 companies quoted in the Bucharest Stock Exchange. In the data collection stage, we have resorted to mediated data collection techniques from the annual financial statements and from the management reports, and in the processing and analysis stage we used the empirical comparative analysis in order to identify the resemblances and differences between the information published by companies in various activity fields and the quantitative analysis. The data have been processed using the SPSS software.

Keywords: intangible assets; explanatory notes; administrators' report; accounting net asset; market value.

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1. Introduction

We are at the beginning of a process of research and discovery. Many of the things we do not know about intangible assets have not yet been discovered and may represent the subject of another scientific study. This unknown part cannot be included in a single article, but what we know today is for certain very little in comparison with what we will know in 10, 30, or 50 years.

In the last two decades, the economies of developed countries dematerialized. They have switched from an economic system where competitive advantages depended on material and financial resources, managed and controlled by companies, to an economic system where reaching performance is mainly conditioned by immaterial, intangible resources created in the prior activity of the companies. The global economic system tends to become a system of "technological ideas and innovations" (Bianchini, 2004, p. 58).

The intensification of the competition, the development of new business sectors and technological progress have determined the expiration of traditional financial statements. Financial-accounting reports provide inaccurate information, irrelevant for making forecasts and for determining risks. In this context, financial analyses stress the need to present non-financial information in the annual reports that would support the decision process. "Achilles' heel" in the accounting of intangible capital is, therefore, acknowledging it in annual reports: financial statements lose their relevance as the source of value creation in a global economy changes, residing in the intangible part of the asset (Grasenick, Low, 2004, pp. 268-281). It is therefore necessary to modify the traditional accounting model, to include intangible assets into the analysis, with the purpose of obtaining a faithful image of the financial position, of the economic performance, and of their changes.

In this context, a challenge for researchers is to identify the various practices adopted by different countries to the purpose of evaluating and reporting intangible capital and to suggest solutions that would catalyze the accounting harmonization process.

In accounting, the term *intangible capital* is often mistaken for intangible assets, although the latter are just a part of intangible capital. Indeed, intangible assets are elements of intellectual capital that can be acknowledged as assets if the criteria imposed by the International Accounting Standards are met (Meritum Project, 2001, pp. 13-16).

In our approach, we attempted to identify the degree of dissemination in the annual financial statements of the information on intangible assets, with the purpose of determining the extent to which it is included in the analysis of the results obtained by the entities.

2. Current knowledge

In the context of the new economy, the problematics of intangible assets raise the interest of researchers as well as of European and world organizations. For example, the concept of intangible assets has become an important topic in the analysis of the European policy for industrial competitiveness**.** Starting with 1994, the European Commission has launched a series of studies, actions, and projects with the purpose of understanding the essence of the knowledge economy and the importance of intangible assets as factors of competitiveness. Of the research projects under way, the most noteworthy are the MERITUM project *(MEasuRing Intangibles To Understand and improve innovation Management)* and the MAGIC project *(Measuring and AccountinG Intellectual Capital).* The aim of the MERITUM project is to investigate the measuring and reporting capabilities of intangible assets, and it is achieved through the collaboration of nine universities and research institutes in six European countries: Denmark, Finland, France, Norway, Spain, and Sweden. The general objective of the MAGIC project is to develop an IT solution for measuring and evaluating intellectual capital in the field of engineering and production.

The report issued by the World Bank in 2006 concludes that the wealth of a nation mainly in its intangible capital, which includes human capital, the skills and know-how of the labor force, social capital, that is, the degree of confidence people have in society, as well as their ability to work together for a common purpose, and a series of governance elements that encourage productivity in economy. In over 85% of the analyzed countries, intangible capital accounts for over 50% of the total wealth, which confirms the hypothesis generated by the transformation of the economic environment: human capital and other intangibles play an important role in economic development.

Empirical studies (Brennan, 2001, pp. 18-30, Gröjer, Johanson, 1998, pp. 14-21) have revealed the differences existing between the market value of a company and its net accounting value, as a result of the existence of intangible assets, which has lead to concentrating the efforts in the direction of identifying and quantifyng the "missing assets". On the other hand, 2004 statistics showed that the Microsoft market value was 286.2 billion dollars, while its financial value was only 57.5 billion dollars, which means a 5:1 ratio in favor of intangible resources. For eBay, the market value was 54.5 billion dollars, and its financial value was 4.9 billion dollars, resulting in a ratio of 11:1 (Dess et al., 2006, p. 119).

In order to meet the needs for information of the various users, some companies draw special reports where they present the nature and value of

intellectual capital, structured into: human capital, structural capital, and relational capital (Castilla, Gallardo, 2008, pp. 353-363). Efficiency and effectiveness in customer relations, the correct management of the providers, obtaining guarantees, as well as gaining the partners' loyalty are more than "trendy" concepts in specialized literature, but make the difference between the success or failure of a business and define the ability of a company to coordinate and combine all the resources, be they endogenous or exogenous, in order to obtain a final positive, sustainable, and increasing result. This set of relations and interactions can be capitalized upon economically and, therefore, is a patrimonial element of the entity.

The following conclusions go in the same direction of revealing the importance of the financial reporting of intangible assets: there is a directly proportional relation between the companies' profitability and the amount of information referring to intangible assets presented in annual reports (García-Meca, Martínez, 2007, pp. 57-81) and the presentation of a large quantity of non-financial information is highly important in the monitoring and control process for the companies (Widener, 2006, pp. 198-221).

In today's economy, intellectual capital is considered a critical resource for insuring a real and sustainable competitive advantage (Steenkamp, Kashyap, 2010, pp. 368-390).

3. Methodology of the research

In our approach, we have analyzed if the companies in the sample meet the minimum information criteria concerning the inclusion in the explanatory notes of significant elements related to the intangible assets, as imposed by OMFP no. 3055/2009 regarding the approval of the Accounting Regulations in compliance with the European norms, modified by OMFP no. 2869/2010 for the completion and amendment of accounting regulations.

In order to meet this objective, we have built a set of six questions:

1. Does the company present the movements, developments, and reductions for the period, providing details that explain the dynamics of intangible assets (IA)?
2. Does the entity present the depreciation adjustments accompanied by a short explanation of the corresponding causes?
3. Is there a mention of whether there are assets under pledge or mortgage and of their value?
4. In case there are assets taken in financial leasing, what period does the leasing cover and what is the value of these assets?
5. Are there details provided on the intangible assets under execution?

6. Does the annual report, drawn according to the provisions of regulation no. 1/2006 of CNVM, present information concerning the intangible assets?

Each answer was subsequently graded with points from 0 to 1, where 1 referred to a complete, detailed answer.

Secondly, we have computed the difference between the market value (MV) and the value of the net accounting asset (NAA), with the purpose of noticing if there is any connection between the computed difference and the degree of dissemination of the information on intangible assets.

The research approach presupposes both a qualitative and a quantitative approach, based on empirical data recorded for a sample of 23 Romanian companies quoted in the Bucharest Stock Exchange. The qualitative side of the research is explained through the fact that the study is based on interpretation, explanation, understanding, and its quantitative side is explained through the use of measurements, quantification, numeric expressions of the phenomena to be studied.

In the data collection stage, we resorted to averaged collection techniques of the data in the annual financial statements and in the management reports published by companies listed in the Bucharest Stock Exchange. In what concerns data processing and analysis, the following methods were used: the empirical comparative analysis – to identify the resemblances and differences in the information published by the companies in various activity fields – and the quantitative analysis.

The procedures circumscribed to the used techniques are: statistical grouping, variance estimation, average estimation, and classification. The indispensable instruments in achieving the research approach were: official statistics, reports, the database, the observation sheet, and statistical and financial indexes.

The sample subject to analysis has the following structure:

Table 1

Structure of the sample and of the analyzed population

Activity branch	No. analyzed companies	No. quoted companies	% Sample	% Population
Pharmaceutics	5	5	21.74	100.00
Metallurgy	11	22	47.83	50.00
Extractive industry	2	7	8.70	28.57
Research & development activities	5	9	21.74	55.56
Total companies	23	43	100.00	-

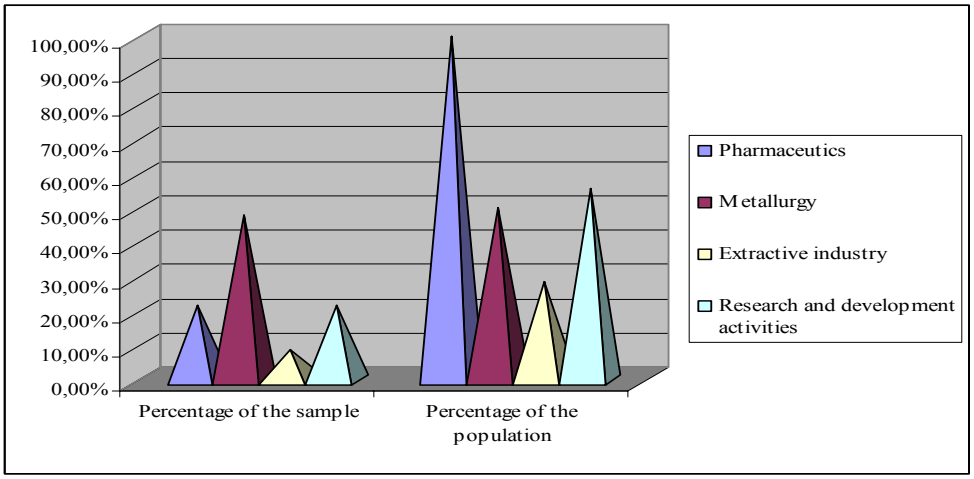

Figure 1. *Structure of the sample and of the analyzed population*

The sampling was performed according to the principle of random selection. The constraints in creating the sample were represented by the lack of publication of the explanatory notes or the existence of a structure of intangible assets made up exclusively of tangible assets. As a result, of the total of seven companies in extractive industry, code Caen 0811, only two entities were selected, representing 28.57% of the total number of listed companies that perform their activity in the respective sector. On the other hand, the entire population of the companies that perform their activity in the pharmaceutical industry, half of the population of the listed companies in metallurgy, and over 55% of the companies that perform research and development activities and which are present in the Bucharest Stock Exchange have been analyzed.

4. Analysis of the results

In our study, we have analyzed the weight of intangible assets in the fixed assets, the degree of dissemination of the information concerning intangible assets, and the difference between the accounting value (the net accounting assets), determined as the difference between total assets, on the one hand, and total liabilities and assets with no value, on the other, and the market value, represented by the product between the number of shares and the average transaction price.

The stock exchange rate of the shares is considered to be a good indicator for estimating the real wealth of the shareholders, as it includes both

quantitative information and qualitative data referring to the evolution of performance, the company's development potential, the quality of management and of the staff, the company's image on the market, etc. Also, it takes into consideration both past information and the investors' forecast concerning the future evolution of the company's activity. We have used in our analysis the average price of a share, because the average value expresses synthetically and generally what is normal, essential, and typical. The net accounting asset is computed based on the data in the balance sheet, and is therefore based on elements that have been corrected and brought to their real value by stocktaking.

The degree of dissemination has been computed as the arithmetical average of the points given for the answers to each of the six questions. Since after studying the explanatory notes of the companies in the sample it was noticed that none of them referred to questions 3, 4, and 5 mentioned above, they were eliminated. As a result, the degree of dissemination of the information concerning the intangible assets is the arithmetical average of the answers to the questions referring to the dynamics of intangible assets, their value adjustments, and the information presented in the annual reports drawn according to the CNVM regulation no. 1/2006 concerning the issuers and operations with mobile values.

Table 2 "Case Summaries", obtained after processing the data using the SPSS software – *Statistical Package for the Social Sciences* – presents the information obtained at the level of each activity field.

In what concerns the companies in the pharmaceutical industry, the degree of dissemination is 1.5 points out of maximum three possible points, the weight of intangible assets varies from one entity to another, and the market value is higher than the accounting value only in two cases out of five. Companies in the metallurgical industry are characterized by a high degree of dissemination of the information of 64.40%, six companies out of 11 having a market value higher than the accounting value. The entities that perform research and development activities disseminate 48.33% of the information required by the applicable regulations, and only one of the five analyzed companies has a market value higher than that of the net accounting asset. The financial reports of the companies in the extractive industry are more analytical than those of the companies in the other activity fields.

Table 2

Case Summaries

			Weight of IA in fixed assets	Degree of dissemination of the information about IA	Difference between NAA&MV
ACTIVITY BRANCH	Pharmaceutics	1	0.65	50.00	150632556.00
		2	173	50.00	68636817.00
		3	33.98	50.00	-5709275.00
		4	0.28	50.00	-5980588.00
		5	1.18	50.00	-43707793.00
		Total N	5	5	5
	Metallurgy	1	3.07	83.33	1151080256
		2	0.01	58.33	423946616.00
		3	3.11	66.67	72422780.00
		4	0.44	66.67	61554487.00
		5	0.11	53.33	29320322.00
		6	0.06	50.00	27348019.00
		7	0.10	83.33	-18449730.00
		8	0.15	58.33	-44514164.00
		9	0.34	75.00	-49692334.00
		10	0.02	50.00	-106658907
		11	2.55	63.33	-134899467
		Total N	11	11	11
	Extractive industry	1	1.59	63.33	49052915.00
		2	1.02	78.33	-3361900.00
		Total N	2	2	2
	Research and Development activities	1	5.27	41.67	3401541.00
		2	0.29	58.33	-414999.00
		3	4.90	33.33	-505059.00
		4	0.96	41.67	-6641336.00
		5	0.07	66.67	-19130045.00
		Total N	5	5	5
	Total	N	23	23	23

Centralized information on the financial reporting of intangible assets is presented in Table 3 “Degree of dissemination of the information on intangible assets”.

Table 3

Degree of dissemination of the information on IA

Activity field	Mean	N	Std.Deviation
Pharmaceutics	50.0000	5	.00000
Metallurgy	64.3939	11	12.04788
Extractive industry	70.8333	2	10.60660
Professional, scientific technical, and research & development activities	48.3333	5	13.69306
Total	58.3333	23	13.27639

At the level of the analyzed sample, we can notice that there are differences concerning the quantity of the presented information on intangible assets. All the companies include in Note 1 "Fixed assets" numerical data on the developments, resignations, and transfers of intangible assets during the fiscal year, but these numbers are rarely accompanied by explanations on the performed operations. The presented values are neither explained nor interpreted. Some companies mention in note 6 "Principles, policies, and accounting methods", intangible elements, presenting the amortization method and duration.

In what concerns the analysis of the difference between the market and the accounting value, approximately 57% of the analyzed companies have an accounting value higher than the market value. The causes that lie at the basis of this difference are numerous, but they mainly concern subjective factors, related to the investors' confidence.

Table 4

Sample structure according to the difference between the market value and NAA

Count

		DIF>0(FILTER)		Total
		Not Selected	Selected	
Degree of dissemination of the information on intangible assets	33.33	1	0	1
	41.67	1	1	2
	50.00	4	3	7
	53.33	0	1	1
	58.33	2	1	3
	63.33	1	1	2
	66.67	1	2	3
	75.00	1	0	1
Total	78.33	1	0	1
	83.33	1	1	2
		13	10	23

where DIF = number of shares × average price – NAA, representing the difference between the market value and the accounting value.

We have tried to identify correlations between the degree of dissemination of the information on intangible assets and their weight in the fixed assets, as well as between the degree of dissemination and the market and accounting value, but statistical tests have show the lack of such dependences. Apparently, for the analyzed companies, presenting information on intangible assets is not conditioned or influenced by their weight in the fixed assets (actually, their weight is generally low), nor by the differences between the market and the accounting values. Reporting the financial information concerning intangible assets is limited to the minimum requirements of OMFP no. 3055/2009 *concerning the approval of the Accounting Regulations compliant with the European directions*, modified by OMFP no. 2869/2010 *for the completion and amendment of accounting regulations* and CNVM, but without any analyses concerning the importance of intangible assets in performing the activity.

The results have been influenced by the reduced size of the sample, but the study is, in essence, a basis for further research. Are Romanian companies prepared to acknowledge, evaluate, and report elements related to human, relational, and structural capital? To what extent are the costs of identifying, measuring, and reporting the "invisible side" of the business covered by benefits, by increased performance and credibility?

5. Conclusions

In the Romanian accounting system, the main users of the financial statements are the creditors and the revenue authority, unlike in the Anglo-Saxon system, where financial reporting is mainly addressed to investors. Looking at things from this perspective, we can understand why, in financial reporting, the accent falls on the tangible side of the fixed assets. Accounting norms are restrictive in what concerns the acknowledgement and evaluation of the intangible assets, and on the other hand, the identification and measurement of the asset elements that determine the difference between the net accounting value and the market value imply additional costs. Many of the solutions suggested in order to solve the "problem" of intangible assets are based on providing additional information on the intangible assets in the yearly report.

In what concerns the analyzed companies, they comply with the provisions of OMFP no. 3055/2009, as well as of the CNVM regulation, but they present only the information strictly required by accounting norms, without stressing the intangible part of their business. Reports mainly compute the traditional financial and accounting indicators, and the results are interpreted only from their perspective. Romanian companies are characterized

by a low degree of dissemination of the information on intangible assets, and the differences between the market value and the accounting value can be explained based not on the intangible assets recorded in accounting, but starting from extra-financial factors, related to the investors' confidence.

We must also notice that, of the analyzed entities, only SC ALRO SA presents a sales fund as a result of its merger through absorption with SC ALPROM SA. The sales fund is, however, a value non-dissociated with the company, being determined by the quality of management, by the technical competence and the knowledge accumulated by the staff, the industrial know-how, the customer base, the goodwill, studies and research, the reputation and image of the company. All these aspects are included more or less in the reports drawn according to the provisions of CNVM, but not all of them are acknowledged or presented in the explanatory notes. In the end, it is all about prudence.

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