

# EMPIRICAL STUDY ON THE DEGREE OF HOMOGENEITY OF FINANCIAL REPORTING CONCERNING INTANGIBLE ASSETS

**CRISTINA-IONELA FĂDUR, DANIELA CIOTINĂ, MARILENA MIRONIUC**  
“ALEXANDRU IOAN CUZA” UNIVERSITY, THE FACULTY OF ECONOMICS AND BUSINESS  
ADMINISTRATION, IASI, cristina.fadur@yahoo.com, ciotina\_daniela@yahoo.com, marilena@uaic.ro

## **Abstract:**

*The purpose of this paper is to identify to what extent is the information presented by Romanian companies quoted in the Bucharest Stock Exchange, concerning intangible assets, homogenous and what are the intangible assets included in financial reporting. We have also monitored a series of indicators of intangible capital, made up of human, relational, and structural capital, in order to identify to what extent the Romanian accounting environment meets the challenges of acknowledging intangible elements. We have analyzed the financial statements corresponding to the fiscal year ended on 31.12.2010 and the annual reports drawn according to the regulation of the National Commission for Tangible Values (CNVM) no. 1/2006 for 35 companies.*

**Key words:** *intangible assets, human capital, relational capital, structural capital, disruptive innovation*

**JEL classification:** *M49*

## **The Financial Reporting of Intangible Capital – A Requirement of the New Economy**

The importance of intangible capital in generating innovation, and, as a result, in supporting economic development and competitiveness, is largely acknowledged. However, its intangible, tacit nature still represents an impediment in determining its influence on the economic performance of companies. We often hear that it is impossible to evaluate intangible assets and that, for this reason, companies should continue to reveal the same traditional financial-accounting information. This argument reflects the confusion that reigns in what concerns evaluation and the information declared by companies: the difficulties encountered in the evaluation of intangible assets – a dimensioning issue – should not prevent revealing, in the explanatory notes to the financial reports or by other means, the factual, important information, such as that concerning the investment technology, the training of the employees, the customer acquisition costs, and the activities performed on the Internet (Lev, 2001, *apud*. Cohen, 2005, p.93).

A study performed by Corrado, Hulten, and Sichel, published in 2009 in the USA, proves that, in spite of the fact that intangible assets are an important factor of economic growth in the new economy, the intangible capital continues to be ignored by the financial-accounting practices of the companies, a fact also stressed by the Innodrive Project. Developed between 2008 and 2011, this project shows that intangible assets justify to a great extent the market value of the companies, and that this aspect is only partially captured by the standard economic analyses (Piekkola, 2011).

Business development is important because this is the only way in which the companies' shares can grow. However, it is a proven fact that, after a company has reached a certain maturity, approaching new development directions and methods

implies considerable risks, sometimes even discouraging. Only one company out of ten is capable to sustain a development that would provide to its shareholders dividends over the average value of the market, for more than several years in a row (Christensen and Raynor, 2003, p. 11). Although a certain company can support, through its main activity field, a vigorous increase in the price of the shares, the only manner through which the leaders of the respective company can offer to its shareholders and investors earnings from dividends higher than any other interest offered by another investment or savings instrument, with a controllable degree of risk, is to develop faster than its shareholders expect. In this context, the business solution is innovation. The business world abounds in examples in which consolidated companies have been defeated by new-comers, the most illustrative example being the defeat of the integrated steel works in the USA, in the period 1970-1990, by the small steel plants. How was this possible? The answer can be found in the structure of a business idea as a disruptive innovation. In disruptive circumstances – when a simpler and more convenient product is marketed at smaller prices, and which target new or unattractive categories of customers – the new-coming companies have every chance of defeating the large companies. In case of supporting innovations – when competition justifies making better products that can be sold at higher prices to attractive customers – strong companies almost always win. Disruption gives results because it is much easier to defeat a competitor that is more motivated to run than to fight back (Christensen and Raynor, 2003, pp.32-43). Therefore, a disruptive activity model, which can generate attractive profits at low prices necessary to win over the lower market levels, is a valuable asset for growth.

To what extent does the traditional accounting system manage to encapsulate these aspects? In what follows, we aim to analyze the financial statements of the companies quoted in the stock exchange from the viewpoint of the homogeneity of the information concerning intangible assets.

### **Methodology of the Research**

According to the provisions of the Order of the Ministry of Public Finances no. 3055/2009 concerning the approval of the Accounting Regulations according to the European directives, modified by OMFP 2869/2010 for the completion and amendment of accounting regulations, intangible assets are classified into: building expenses, development expenses, concessions, patents, licenses, trademarks, similar rights and assets, if they have been acquired in an onerous manner, commercial fund, to the extent to which it has been acquired in an onerous manner, and deposits and intangible immobilizations under way. The research and development expenses, concessions, patents, licenses, copyrights and trademarks are identifiable intangible assets, benefiting from a certain acknowledgment or legal protection. Not less important are the non-identifiable intangible assets, which remain hidden, at least from an accounting perspective, until a certain transaction leads to their identification. The commercial fund has a very specific accounting meaning, which does not reflect only an accumulation of customer loyalty or satisfaction, repeated business or good relationships. This is the result of other tangible and intangible assets. Although there are other non-identifiable intangible assets, the accounting regulations do not provide details on their evaluation.

Accounting normalization supposes applying the same accounting norms within a specific economic and social location. Starting from the premise that Romanian companies use homogenous practices imposed by OMFP 3055/200, modified by OMFP 2869/2010 concerning the acknowledgment and registration of intangible assets, we will analyze the degree of homogeneity of the intangible assets published by companies in their annual financial statements.

The main indicator we will use is the ratio between intangible assets and the total asset, starting from the following hypothesis: if a company acknowledges the

importance of intangible elements in its activity, it will consider them as assets and present them in its statement; otherwise, it will consider them as expenses for the period. We assume that a significant value of this ratio translates an acknowledgment of the intangible elements. Second, we will identify the similarities and differences between the annual financial statements of the Romanian companies quoted in the Stock Exchange from the point of view of the type of information presented and of the degree of detail in the explanatory notes.

The research implies both a qualitative and a quantitative approach, based on empirical data recorded on a sample of 35 Romanian companies quoted in the Bucharest Stock Exchange. In the data collection stage, we resorted to techniques of mediated data collection from the annual financial statements and from the management reports published by companies quoted in the Bucharest Stock Exchange. In what concerns data processing and analysis, the used methods were: the empirical comparative analysis – for identifying the similarities and differences between the information published by companies in various activity fields – and the quantitative analysis.

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	14.29%	100.00%
Information and telecommunications	5	6	14.29%	83.33%
Professional, technical, and scientific activities	25	25	71.43%	100.00%
<b>Total companies</b>	<b>35</b>	<b>36</b>	<b>100.00%</b>	

In building the sample, we considered only the companies quoted in the Bucharest Stock Exchange in three activity fields. We have taken into account the entire population of the companies in the pharmaceutical industry and of the companies that perform professional, technical, and scientific activities, respectively legal and accounting activities, management and management consultancy activities, architecture and engineering activities, and research and development activities. In what concerns the companies activating in the provision of services in information technology and in cinematographic and video production and in television programs, we have not included into the analysis the company Soft Chim SA Bucharest, which has changed its activity field from editing to leasing locations.

## Results Analysis

The principle of prudence, around which the provisions of the national accounting regulations gravitate, limits area of intangible assets that can be acknowledged in annual financial statements. For example, customer lists are not acknowledged as intangible assets, as this type of assets is mentioned in the statement only if it is estimated that it will generate economic benefits for the entity, and if the cost of the asset can be evaluated in a credible manner.

The analysis of the structure of intangible assets shows that most companies present in their statement software, which is classified in other intangible immobilizations. No company in the analyzed sample presents a commercial fund. According to the accounting provisions applicable, the internally generated commercial fund is not acknowledged as an asset because it is not an identifiable source – it cannot be separated and it does not come from legal contractual rights, or of another nature – controlled by the entity, which can be evaluated in a credible manner according to the

cost. Commercial fund is usually present in consolidated financial statements, and can appear in individual financial statements only in the case of transferring all the assets or of a part of them. 28.57% of the analyzed companies do not include intangible assets in their structure, and 37.14% present intangible assets as concessions, patents, licenses, trademarks, and other intangible immobilizations. In the analysis of the explanatory notes, in most cases, this category is represented by software and licenses. The other companies present a combination of intangible assets.

Table 2 *Structure of intangible assets*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Does not present IA	10	28.6	28.6	28.6
	Concessions, patents, licenses, trademarks, similar rights and assets and other intangible assets	13	37.1	37.1	65.7
	Concessions, patents, licenses, trademarks similar rights and assets and intangible deposit under way	3	8.6	8.6	74.3
	Development and concession expenses, patents licenses, trademarks, similar rights and assets and other intangible assets	3	8.6	8.6	82.9
	Building and development expenses	2	5.7	5.7	88.6
	Concessions, patents, licenses, trademarks, similar rights and assets and other intangible assets	3	8.6	8.6	97.1
	Building & development expenses, concessions, patents, licenses, trademarks	1	2.9	2.9	100.0
	Total	35	100.0	100.0	

Most companies do not present detailed information on intangible assets in the explanatory notes, only 8.6 % of the companies presenting in Note 1 “Intangible assets” and/or Note 6 “Principles, policies, and accounting methods” information concerning the intangible assets that complete the statement. A percentage of 31.4% of the studied entities have not published explanatory notes, and 34.3 % present explanatory notes that are lapidary under the studied aspects.

Table 3 Explanatory notes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	12	34.3	50.0	50.0
	.25	4	11.4	16.7	66.7
	.50	4	11.4	16.7	83.3
	.75	1	2.9	4.2	87.5
	1.00	3	8.6	12.5	100.0
	Total	24	68.6	100.0	
Missing	System	11	31.4		
Total		35	100.0		

Choong (2008) signals the confusions generated by the definition of intangible capital, as well as the numerous labels associated to this concept. The definitions given to intangible capital are marked by the disciplines that study it or by the national accounting system. However, all the definitions stress the immaterial side of these assets, the non-specific monetary value, and their ability to contribute to value creation for the company. Generally, three components are acknowledged: human capital, relational capital, and structural capital (Edvinsson and Malone, 1999; Gallego and Rodriguez, 2005; Green and Ryan, 2005; Sveiby, 1996).

Human capital includes the individual skills, knowledge, talent, know-how, and experience of the employees (Edvinsson and Malone, 1999). The generally accepted opinion is that this capital is the most important asset of a company, being a source of creativity and innovation (Bontis, 1998; Brooking, 1997; Edvinsson and Malone, 1999). It is also the riskiest, because it does not belong to the organization *per se*, but to each individual employee. Relational capital includes all the resources involved in the relationship between the company and its stakeholders (customers, investors, suppliers, etc.) (Bontis, 1998; Canibano et al., 2000; Grasenick and Low, 2004; Green and Ryan, 2005), as well as the perception of the external actors on the company: image, reputation, brand (Przysuski et al., 2004). Structural capital refers to the internal structure of the organization: patents, strategies, processes, the administrative and technological organization (Edvinsson and Malone, 1999; Egbu, 2004). Other researchers consider that this element of intellectual capital is a mix made up of organizational culture, processes, information systems, and intellectual property (Moon and Kym, 2006).

In our approach, we aimed to study the extent to which Romanian companies in the three activity fields present elements of intangible capital in the annual report required by CNVM. Therefore, we have considered the following indicators:

Table 4 Indicators of intangible capital

Human Capital Indicators	Relational Capital Indicators	Structural Capital Indicators
Number of employees	National and international certifications obtained in the field of product quality	Price strategies
Number of managers	Launching new products	Product strategies
Time allocated for training the employees	Market share	Distribution strategies
Average age of the employees	Commercial policy – closed contracts	Promotion strategies
Education of the employees	Environmental policy	Investments
Average degree of meeting the objectives per company total		

The computing algorithm of human, relational, and respectively structural capital is simple: if the company presents complete information concerning an indicator,

it is marked with 1, if it does not present information, it receives 0 points, and if it presents only partially certain information, it is marked accordingly: 0.25; 0.5 or 0.75. At the end, each component of intangible capital is equal to the arithmetical average of the points obtained for each indicator. The results obtained for the analyzed sample are presented in the table below:

Table 5 *Case Summaries*

		Human Capital	Relational Capital	Structural Capital
Pharmaceutics	1	0.83	0.95	1
	2	0.50	0.25	0.05
	3	0.21	0.45	0.4
	4	0.63	0.9	0.5
	5	0.50	0.35	0.3
Information and telecommunication	1	0.5	0.85	0.15
	2	0.5	0.1	0.15
	3	0.5	0.25	0.2
	4	0.5	0.6	0.35
	5	0.33	0.4	0.4
Professional, scientific and technical activities	1	0.17	0	0
	2	0.33	0.42	0.33
	3	0.33	0.42	0.33
	4	0.5	0.5	0.67
	5	0.5	0.7	0.10
	6	0.42	0.3	0.2
	7	0.46	0.2	0.35
	8	0.5	0.2	0
	9	0.5	0.15	0.4
	10	0.5	0.20	0.15
	11	0.42	0.45	0
	12	0.33	0.4	0.3
	13	0.33	0.5	0.1
	14	0.67	1	0.5
	15	0.5	0.1	0
	16	0.38	0.65	0.4
	17	0.46	0.1	0
	18	0.5	0.55	0.3
	19	0.5	0	0
	20	0.5	0.5	0
	21	0.5	0.4	0.25
	22	0.33	0.55	0.25
	23	0.5	0.6	0.1
	24	0.5	0.5	0.3
	25	0.5	0.45	0.3

Human capital has higher values in the case of companies in the pharmaceutical field. It seems that these companies give more importance to human capital, to training the employees, and to the average degree of meeting the objectives per company total. The descendent trend is preserved for relational capital, respectively for structural capital.

In what concerns the weight of intangible assets in the total assets, 23 of the companies have a ratio under the value of 0.50, and 6 companies are characterized by a value of intangible assets between 0.50% and 1.51% of the value of the total asset. Only one entity presents a weight of the intangible assets in the total assets of 20.09%, two companies present a weight of approximately 15%, and the other companies are characterized by an indicator between 4% and 7%.

As a result, taking into consideration the values of the ratio between intangible assets and total assets, we can state that only 3 companies of the 35 analyzed acknowledge the importance of intangible elements in their activity, considering them as assets and presenting them in the statement.

The annual financial statements of the analyzed companies do not include information concerning the intangible part of their business. Romanian companies remain exclusively faithful to the traditional accounting system. We have been able to identify few efforts of acknowledging and reporting intangible capital. Some aspects regarding intangible capital are treated in the annual statement drawn according to the regulation of the National Commission for Tangible Values no. 1/2006.

In the performed study, we have also monitored the value of the expenses made for the research and development activity and of the expenses for innovation. No company of the 35 analyzed showed expenses for innovation, while only two companies have made expenses for research and development.

### **Conclusions**

The study performed on the companies quoted in the Bucharest Stock Exchange, in the field of pharmacology, information and telecommunications, and of professional, technical, and scientific activities reveals that financial statements do not stress the information concerning intangible assets. Intangible assets are mainly represented by software and licenses, and the explanatory notes are usually limited to presenting in numbers the dynamics of intangible assets and their amortization. In 2009 and 2010, companies did not make expenses for innovation, while only two companies have made expenses for research and development.

In 82.86% of the analyzed cases, intangible assets represent less than 2% of the total assets (fixed assets plus floating assets). Still, we have been able to identify information on human, relational, and structural capital in the annual reports drawn according to the provisions of the Commission for Tangible Values, which, unlike accounting regulations, acknowledges the informative value of intangible aspects in the decision-making process of the investors.

In what concerns the degree of homogeneity of financial reporting in the analyzed companies, the discussion must be carried on two axes: if we consider only the annual financial statements, the degree of homogeneity is high, but they do not meet the information needs concerning intangible capital care; on the other hand, annual reports according to the provision of CNVM have a lower degree of homogeneity, but they better meet the need for information on the intangible part of the business.

### **BIBLIOGRAPHY**

1. Bontis, N. (1998), "Intellectual capital: an exploratory study that develops measures and models". *Management Decision*, Vol. 36, no. 2, pp. 63-76.
2. Brooking A. (1997). „The Management of Intellectual Capital”, *Long Range Planning*, Vol. 30 Iss 3, pp. 364-365.
3. Canibano, L., Garcia-Ayuso, M. and Sanchez, P. (2000), "Accounting for intangibles: a literature review". *Journal of Accounting Literature*, Vol. 19, pp. 102-24.
4. Chrisensen C., Raynor M. (2003) „The Innovator’s Solution: Creating and Sustaining Successful Growth”, Harvard Business School Publishing Corporation, trad. Curtea Veche Publishing, București, 2010.
5. Choong, K.K. (2008), "Intellectual capital: definitions, categorization and reporting

- models”. *Journal of Intellectual Capital*, Vol. 9 No. 4, pp. 609-38.
6. Cohen J. (2005) „Intangible Assets- Valuation and Economic Benefit”, trad. Prims Grup, București: Irecson, 2008.
  7. Edvinsson, L., Malone, M. (1999). “Le Capital Immateriel de l’Entreprise: identification, mesure, management (Immaterial Capital of the Enterprise: Identification, Measure, Management)”, Editions Maxima, Paris.
  8. Edvinsson L., Malone M.S. (2000). „El capital intelectual: cómo identificar y calcular el valor de los recursos intangibles de su empresa”, Gestión 2000, Barcelona.
  9. Egbu, C.O. (2004), “Managing knowledge and intellectual capital for improved organizational innovation”. *Engineering, Construction and Architectural Management*, Vol. 11 No. 5, pp. 301-19
  10. Gallego, I., Rodriguez, L. (2005), “Situation of intangible assets in Spanish firms: an empirical analysis”. *Journal of Intellectual Capital*, Vol. 6 No. 1, pp. 105-20.
  11. Grasenick, K., Low, J. (2004), “Shaken, not stirred: defining and connecting indicators for the measurement and valuation of intangibles”. *Journal of Intellectual Capital*, Vol. 5 No. 2, pp. 268-81.
  12. Green, A., Ryan, J.C.H. (2005), “A framework of intangible valuation areas (FIVA): aligning business strategy”. *Journal of Intellectual Capital*, Vol. 6 No. 1, pp. 43-67.
  13. Moon, Y.J., Kym, H.G. (2006), “A model for the value of intellectual capital”. *Canadian Journal of Administrative Sciences*, Vol. 23 No. 3, pp. 253-69.
  14. Przysuski, M., Lalapet, S., Swaneveld, H. (2004), “Transfer pricing of intangible property –part 1: a Canadian-US comparison”, *Corporate Business Taxation*, Vol. 5 No. 9, pp. 1-9.
  15. Sveiby K. (1996). „Transfer of Knowledge and the Information Processing Professions”. *European Management Journal*, 14 (4), pp. 379-388.

#### **Acknowledgements**

*This work was supported by the the **European Social Fund in Romania**, under the responsibility of the Managing Authority for the Sectoral Operational Programme for **Human Resources Development 2007-2013** [grant POSDRU/CPP 107/DMI 1.5/S/78342]”.*