OCKHAM'S RAZOR IN THE ANALYSIS OF INTANGIBLE CAPITAL?

PhD. student **Cristina Ionela FĂDUR**"Alexandru Ioan Cuza" University, Iaşi, Romania
cristina.fadur@yahoo.com
PhD. student **Daniela CIOTINĂ**"Alexandru Ioan Cuza" University, Iaşi, Romania
ciotina daniela@yahoo.com

Abstract:

Purpose – Economic development has determined deep changes in economic thinking. In the new information era, the wealth of the nations resides in intangible capital: human capital and the know-how of the workers. This article aims to analyze intangible capital at a micro and macroeconomic level, looking at specific scientific statements through the perspective of the principle of parsimony – Ockham's razor.

Methodology/design — We have resorted to the analysis of the reports drawn after performing regional and international research concerning the issue of intangible assets, and respectively intangible capital. The epistemological analysis of intangible capital has allowed us to identify the efforts made at an international level to reach harmonized practices in what concerns the acknowledgement, evaluation, and presentation of intangible capital.

Conclusions: Intangible capital is the key resource of the companies, as well as one of the main components of the wealth of nations. Within it, we can make a distinction between the term of goodwill, a concept that appeared as early as the 16th century in economy, respectively the beginning of the 19th century in the field of law. Although the term itself is quite "old", being in time the object of numerous studies, the divergences related to the its evaluation and recording in accounting are still present. In M&A operations (Mergers&Acquisitions), the role of the commecial fund is vital, as it supports the decisions of the judges. Goodwill is the part of the unidentified intangible assets that quantifies the benefits obtained by the acquiring company.

Keywords: intangible capital, mergers, market value, MERITUM, RICARDIS

JEL Classification: M41, G34

PROLEGOMENA TO THE NOTION OF INTANGIBLE CAPITAL

"Creative thinking is nowadays the most precious and profitable feature of each individual, of each corporation and country. It has the ability to change both you and your business" – Robert P. Crawford.

The aspects related to intangible capital are a challenge for the current economic thinking: it is not first of all an accounting concept, being of interest for accountants as well as for managers, marketing and human resources specialists.

The binomial human capital—intangible assets is the driving force of the sustainability of the current economic development in the sense that it makes economic efficiency compatible with social justice and with the fight against the process of damaging the environmental factors (Zaman, 2007).

The issue of intangible resources has been approached both at a macroeconomic and at a microeconomic level, and intangible capital can be found in the contents of several standards drawn by the International Accounting Standards Board (IASB), as well as by the Financial Accounting Standards Board (FASB).

In accounting, the term of *intangible capital* is often mistaken for intangible assets, although they are just a part of intangible capital. Indeed, intangible assets are elements of intellectual capital susceptible of being acknowledged as assets if a series of recognition criteria imposed by the international accounting standards are met (Meritum, 2002).

Accounting rules state that intangible assets are non-monetary identifiable assets, without any material basis, owned in order to be used in the production process, in the provision of goods or services, in order to be rented to third parties or to administrative purposes.

The acknowledgement criteria (control, future economic benefits, credible cost measurement and the separation from goodwill) must be met before an intangible asset can be

recognized. For this reason, intangible assets can be considered elements of intangible capital, but accounting norms do not allow their global acknowledgement and measurement.

INTANGIBLE CAPITAL – COMPONENT OF THE WEALTH OF A NATION

At a macroeconomic level, intangible capital is the headstone of the wealth of a country, a conclusion drawn after numerous studies performed by the World Bank and the European Union. Therefore, in 2002, the MERITUM project is launched (MEasuRing Intangibles To Understand and improve innovation Management), a research project funded by the European Union within the "Targeted SocioEconomic Research (TSER)" program.

The MERITUM project suggests the classification of intellectual capital into:

- ➤ Human capital, which is the part of intangible assets that leave the organization at the end of the workday;
- > Structural capital, which is the part of the value of the intangible assets that stays after the workers leave after a workday;
- Relational capital, which is the part of the value of the relations that exist between the company and the various economic and social agents with which it interacts.

The objectives of the project have aimed, in fact, the following: obtaining a taxonomy of intangible assets; identifying and analyzing the models used by European companies to measure intangible assets; the possible advantages obtained from reporting intangible capital and the analysis of the effect of not including intangible assets in establishing the market value; creating general directives to measure intangible assets and presenting information on them, and drawing conclusions and suggestions for accounting policies.

The World Bank has performed in 2006 a study called "Where Is the Wealth of Nations? Measuring Capital for the 21st Century", which analyzes the economic context in the various countries in the world on three dimensions – natural capital (soil and natural wealth), produced capital (the actual result of the people's work), intangible capital (the quality of education, the efficiency of the legal system, effective governance) – from whose composition there results the total value of that nation.

According to the World Bank report, the wealth of a nation primarily resides in intangible capital, which includes human capital, the skills and know-how of the work force. It also includes social capital, that is, the degree of confidence people have in society, as well as their ability to work together to a common purpose. It is also made up of those elements of governance that encourage productivity in economy.

The most surprising result of the study refers to the fact that in over 85% of the analyzed countries, intangible capital is more than 50% of the total wealth, which confirms the intuition of classical economists: human capital and other intangible assets play an important part in economic development. Over 90% of the variance of intangible capital, at a macroeconomic level, is explained by human capital (measured in years of education) and by the governance system (measured by those governance elements that encourage productivity in economy: a very effective legal system, clearly defined property rights).

Leif Edvinsson, a business mind sensitive to the "intangible acquisitions" of a company, states that "the world's economies are nowadays lead by invisible things. The intellectual capital of the nations is the new capital of the nations".

Most studies referring to intangible capital have been performed at a micro level, stressing the role of intangible assets in explaining the difference between the accounting value and the market value of a company, as well as in increasing the competitive advantage. Recently, pioneers in this field have extended their research area at a **national and regional level**.

The national intangible capital combines knowledge, wisdom, and expertise provided by a specific country in comparison with other countries. It is about an expecting opportunity, sustainability, ability to forecast, and added values. This way, developed countries create value

through the research and development activities and through innovating services (Lin and Edvinsson, 2010, p.3).

Starting from the imperative that Europe must use its knowledge and know-how in order to survive and play a role in the world's economy, the European business environment has initiated the InCaS project (*Intellectual Capital Statements for Europe*), with the purpose of supporting the companies' process of understanding, capitalizing, and presenting intellectual capital. The European Commission has performed several studies, of which of outstanding importance is the RICARDIS report – *Reporting Intellectual Capital to Augment Research, Development and Innovation in SMEs*. The RICARDIS report urges Europe to take immediate steps to stimulate the SMEs to draw statements concerning intellectual capital. Only few European countries have attempted to permanently include intangible capital in the annual statements of the companies. In Germany, accounting standards recommend companies to report their intellectual capital within management statements, although this is not a compulsory requirement. Denmark requests companies to provide information on their human capital only if it is relevant for the economic activity, while in Austria reporting human capital is now obligatory in all universities. Measuring and reporting intellectual capital is an unconditional practice of present management.

The importance of the correct evaluation and presentation of intangible capital has determined the big accounting companies to initiate the WICI global project *–World Intellectual Capital Initiative*. However, in spite of the efforts made by researchers and international bodies, intangible capital is still an unknown factor in its deep meanings...

INTANGIBLE CAPITAL - A KEY RESOURCE OF A COMPANY

There is an obvious synergy between tangible and intangible production.

In time, intangible assets have been considered as highly risky assets. Nevertheless, in present economies, the real value of a company results from its intellectual capital, which in the opinion of Edvinsson and Malone (2000) includes human capital (knowledge, skills and competences of the employees), structural capital (the infrastructure that supports the activity performed by the employees: buildings, hardware, software, processes, patents, trademarks, the organizational structure, information systems and databases), innnovation capital (intellectual property and intangible assets, defined as the set of skills and theoretical knowledge that ensure the functionining of the company) and relational capital (relationships with the customers and providers, their loyalty).

Intangible assets have gradually become the most important sources of competitive advantage. According to the new perspective supported by the theory of endogenous knowledge and by other approaches, traditional production factors (natural resources, labor force, and capital) have gradually reduced their importance. In the new economy, competitive advantage mainly belongs to those who are sufficiently informed and wise so as to know and acknowledge that the true resources of the 21st century are knowledge, information, innovation, creativity, and intellectual capital (Suciu, 2008).

It is precisely these intangible assets, difficult to perceive and most of all to evaluate, that explain the differences between the market value of a company and its net accounting value, which has lead to concentrating the efforts in order to identify and quantify the "missing assets" (Brennan, 2001 and Gröjer and Johanson, 1998).

In what concerns the evaluation of intangible capital – a rather sensitive field because of its intangible nature – the Q ratio, conceptualized and suggested by the Nobel laureate James Tobin, is a successful attempt to transform the impossible into performance. Q is obtained by dividing the global value of the company to its patrimonial value, indicating the extent to which the company, through its functioning, creates value above its patrimonial value, over a specific period.

Since the introduction of the notion of "intellectual capital" in 1969 by Galbraith, all research in the field has been centered on intangible assets, seen as a hidden source of value creation, and analyzed from multiple perspectives, with the main purpose of designing a

measurement and evaluation model for intellectual capital. As a consequence, there are over 30 methods of evaluation of intellectual capital. However, the developed models do not take into consideration the possible obligations of the company to its stakeholders of acquiring and maintaining intangible assets. Starting from the classical accounting methods, intangible capital would equal the difference between the intangible assets and the intangible liabilities.

Although some contributions have taken into account the concept of intangible liabilities, they have generally referred to the effects of implementing a wrong idea, which may be seen rather as depreciations of intangible assets than intangible liabilities. Intangible liabilities are obligations associated with intangible assets.

Starting from the premise that goodwill proves the existence of intangible assets, then a net accounting value higher than the market value demonstrates the existence of intangible liabilities. From this perspective, intangible liabilities are the consequence of an inefficient decision process, which leads to the erosion of the company's value. On the other hand, intangible liabilities can be seen as non-monetary obligations. The company's failure in fulfilling its non-monetary obligations to its employees can lead to the depreciation of the human capital, and the non-fulfillment of the non-monetary obligations towards the commercial partners can determine the depreciation of relational capital. As a consequence, intangible liabilities are non-monetary obligations towards the stakeholders, which the company must fulfill, so as to avoid the depreciation of the intangible assets. Intangible liabilities stress the fact that an organization cannot use human and relational capital unless they take on certain obligations towards its internal and external stakeholders. As a result, managers will be able to effectively and efficiently manage intellectual capital only if they take into account both intangible assets and intangible liabilities.

GOODWILL - THE ACE IN THE SLEEVE IN M&A PROCESSES

The term of goodwill (commercial fund) was defined in specialized literature for the first time in the 1880s, both by economists and by legal consultants. Harris (1884) was the first author to introduce the term of commercial fund in economy and to be quoted in specialized literature. However, Leake (1948) states that the term itself had been used for a much longer time, its first occurrence taking place in 1571. The need to define this term also appeared in solving conflicts in court. Leake also claims that the first legal decision reported in the field of goodwill was in the case Crutwell vs. Lye (1810, 17 Ves. 335), when Lord Eldon commented: "the commercial fund that was the object of the sale is nothing else but the probability for old customers to go back to old locations" (by locations meaning stores). In the legal field, the Supreme Court of the United States used in 1892, in the case Metropolitan Bank vs. St. Louis Dispatch (1892) the first definition of "professional goodwill": (commercial fund) is tangible only as an incident, being related to a business, a location, or a name, not being susceptible to be presented independently.

Since then, numerous articles have dealt with the term of goodwill. Entire generations of researchers, both in the field of accounting and in that of law, have promoted different theories, have offered numerous solutions, have tried over time various practices, which have been both accepted and rejected. What is certain is that goodwill is a notion that generates controversies. Still, the various definitions and discussions generated around the term of goodwill have a common element: it is classified rather as an intangible asset than a material, tangible one.

Today, commercial fund is mainly recognized in merger and acquisition operations. The reasoning that lies at the basis of the merger and acquisition processes is that two companies together are more valuable than two distinct companies. The alchemy of a merger or acquisition can be described by the following statement: one plus one is three. The objective followed in any transaction of this sort is to create a higher value than the sum of the value of the two merging companies.

The topic of mergers and acquisitions has continuously developed with respect to the investigations made in specialized literature in the last two decades (Appelbaum, S.H., Lefrancois,

F., Tonna, R., and Shapiro, B.T., 2007), as a result of the increase of the number of mergers and acquisitions worldwide, as well as of the development of the complexity of this phenomenon.

In the field of research, the merger and acquisition process has largely developed along disciplinary lines, and finance specialists focused mainly on the issue of value creation or of reducing the shareholders' value after an acquisition. The multitude of proofs shows that, although company takeovers bring positive short term results for the associates of the target companies, the long term benefit for the investors, in the case of acquiring a company, is questionable (Cartwright, S., Schoenberg, R., 2006). Approximately 35-45% of the buyers achieve positive values in the 2-3 years following the transaction, with a computed standard deviation of 10% around the average (Conn, C., Cosh, A., Guest, p. and Hughes, A., 2001).

CONCLUSIONS

The efficiency and effectiveness in customer relations, the correct management of the providers, obtaining guarantees, as well as gaining the loyalty of the partners are more than just "trendy" concepts in specialized literature, making the difference between the success or failure of a business and defining the ability of a company to coordinate and combine all the resources, both endogenous and exogenous, in order to obtain a positive, sustainable, and increasing final result. This combination of relations and interactions can be capitalized economically, and thus represents an element of the company's patrimony.

In the scientific research of intangible capital, it seems that we have to ignore Ockham's principle: the simple explanation is not the admitted one, the complexity of the evaluation, as well as the difficulty of reporting intangible capital require various explanations, calculations, and methods, which are elaborate and difficult to pin within safe touchlines. The omitted explanations cannot be filled in mentally, through intuition or imagination. The stake is too high: in the dynamics of mergers and acquisitions, goodwill is "Achilles' heel" of certain and rigorously supported calculus.

Although highly important, the evaluation of goodwill still raises problems. The decision to merge or to acquire another company is based on the advantages obtained as a result of such action, which can be measured mainly through the intangible part represented by goodwill. It is necessary to further deepen the research in the field, in order for the decision taken to be appropriately supported.

BIBLIOGRAPHY

- 1. Appelbaum, S.H., Lefrancois, F., Tonna, R., and Shapiro, B.T. (2007). *Mergers 101 (part one): training managers for communications and leadership challenges*. Industrial and Comercial Training, VOL. 39 NO. 3, pp. 128-136.
- 2. Brennan N. (2001). *Reporting intellectual capital in annual reports: evidence from Ireland*. Accounting, Auditing and Accountability Journal, Vol. 10 No. 2, pp. 18-30.
- 3. Cartwright, S., Schoenberg, R. (2006). 30 years of mergers and aquisitions research: recent advances and future opportunities. British Journal of Management, Volume 17 Issue S1, pp. S1-S5.
- 4. Conn, C., Cosh, A., Guest, p. and Hughes, A. (2001). *Long Run Share Performance of UK firms engaging in cross border acquisitions*. University of Cambridge, Centre for Business Related Research Working Paper No. 214.
- 5. 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.
- 6. Gröjer J.-E, Johanson U., (1998). *Current development in human resource costing and accounting*. Accounting, Auditing and Accountability Journal, Vol 11, No. 7, pp.14-21.

- 7. Harris, W., (1884), *The Law and Practice in Relation to Goodwill*. The Accountants' Students' Journal, Aprilie, pp. 256-263.
- 8. Leake, P.D., Commercial Goodwill. Gee\$Company (Publishers) Ltd, 4th Edition, 1948.
- 9. <u>Lin C., Edvinsson L., (2010). National Intellectual Capital: A Comparison of 40 Countries, Springer; 1st Edition, London, available at: http://www.amazon.com/National-Intellectual-Capital-Comparison-Countries/dp/1441973761/ref=sr_1_5?s=books&ie=UTF8&qid=1302013229&sr=1-5, accessed on 5.04.2011.</u>
- 10. Meritum (2002), *Proyecto Meritum: Guidelines for Managing and Reporting Intangibles*, Meritum, Madrid.
- 11. Suciu, M.Ch. (2008). *Activele intangibilie şi capitalul intelectual factori cheie ai convergenței*. The Romanian Academy. The national institution of economic research, Working Papers series, no. 7, available at: http://www.moyak.com/papers/convergence-economy-knowledge-competitive.pdf, accessed on 10.04.2011.
- 12. Zaman Gh., Goschin Z. (2007). Avuţia naţională-factor al integrării economice, in the papers of the symposium dedicated to the Economists' Day sponsored by the General Association of Romanian Economists, the Association of the Romanian Faculties of Economics and the Academy of Economic Studies of Bucharest, and in the organization of the Center of Excellence for Economic Analyses and Policies and the Chair of Economics and Economic Policies, available at

http://store.ectap.ro/suplimente/simpozion 23 nov 2007 ro.pdf, accessed on 10.04.2011.

- 13. *** Where Is the Wealth of Nations? Measuring Capital for the 21st Century", a study performed by the World Bank, available at: http://siteresources.worldbank.org/INTEEI/214578-1110886258964/20748034/All.pdf, accessed on 30.03.2011.
- 14. *** U.S. Supreme Court, Metropolitan Bank v. St. Louis Dispatch Co., 149 U.S. 436 (1893), available at http://supreme.justia.com/us/149/436/, accessed on 12.04.2011.