

A LONGITUDINAL ANALYSIS OF INTELLECTUAL CAPITAL

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The term intellectual capital has been appeared recently in economy being debated in literature since 90s playing an important role in the economic activity of an entity of nowadays. The emerging of the "new economy", mainly driven by information and knowledge, has been identified by the Organisation for Economic Cooperation and Development as the explanation lying at the base of the development of intellectual capital, a fundamental topic in business (Hornery, 1999). One way or another, intellectual capital plays a significant role in the economic, administrative, technological and social development of contemporary times, being difficult to quantify. Many researchers avoid defining intellectual capital, but consider it the basic value of an entity, as it contains non-financial and related information (Amir and Lev, 1996; Edvinsson and Malone, 1997; Stewart, 1997; Bontis, 2001). The purpose of our paper is to highlights the contributions of researchers in the field of intellectual capital as far as the published articles in the high quality journals are concerned. Our paper presents a quantitative research by performing, on one side, a content analysis of the prestigious international journals which include papers related to intellectual capital and, on the other side, a content analysis of those articles. The originality of the present article is represented by the personal contribution to the stage of knowledge in the field of intellectual capital by means of analyzing already existent researches in the field. The results of our analysis, demonstrate that the studies conducted until now are very few by comparison to the number it should have existed until now in the literature, which demonstrates that this field of research is still at its early stage.

Keywords: Literature Review, Intellectual Capital, Analysis, Journals, Articles

JEL Classification: M49

I. Introduction

In this sense, in the nineteenth and twentieth century's, were particularly noted the writings of the philosopher Karl Marx, the writings that have scored more than any other intellectual works of the modern age. Although these writings were criticized throughout history, Marxist theory is found in nowadays globalization which means that we are witnessing at the concentration of capital, at the creation of wealth only by industry, even at the upheaval of traditional societies.

In the context of society's development, human factor is very important although there are situations when it seems that the necessary prerequisites are missing in order to develop this factor in society. In the development of the communities and the society, these situations must be approached intelligently, investment in human factor (intellectual capital) being essential to ensure the sustainability of society.

In the classical theory of economics, capital is one of the three factors of production, in addition to land and labor, and refers in particular to buildings, equipment, machinery etc., used for the production of other goods (the term physical capital is also used by the specialized literature). The use of the term „*capital*” alongside with „*intellectual*” evidences the presence of such a capital, different from the financial and physical capital (Jianu and Brătianu 2007: 16). This concept („*intellectual capital*”) has been initially and soundly defined and argued by Thomas A. Stewart, one of the editors from the famous American *Fortune magazine*. According to him, intellectual capital is that intangible capital representing the sum of everything each employee knows to do in a company and which can be used for developing its competitiveness (Stewart 1997).

Therefore, in order to define intellectual capital we should start first with the definition for intangible assets. Intangible assets are considered a company's most criticized resources however most entities cannot define them in a clear and accurate manner (Andreou et al. 2007: 52). The literature indicates that there is a large range of definitions and terms which can be attributed

either to intangible assets or intellectual assets. For instance, a series of researchers define intellectual capital as the difference between the company's market value and its book value (Stewart 1997; Mouritsen et al. 2001), while others feel that the difference between the company's market value and its identifiable book value is represented by the "goodwill" which, in essence, is an intangible asset (Beaver 1998:78; Holthausen and Watts 2001:50). Therefore, we hereby evidence that there is presently no generally accepted definition associated with the concept of intellectual capital, due to the large number of existing definitions, presented from various perspectives and depending upon the areas of activity this capital operates within. The main objective of this paper is to evidence the current status of researches in the field of intellectual capital, and, as far as the research problematic is concerned, we will consider studying the literature presented within prestigious journals, acknowledged internationally.

II. Research design

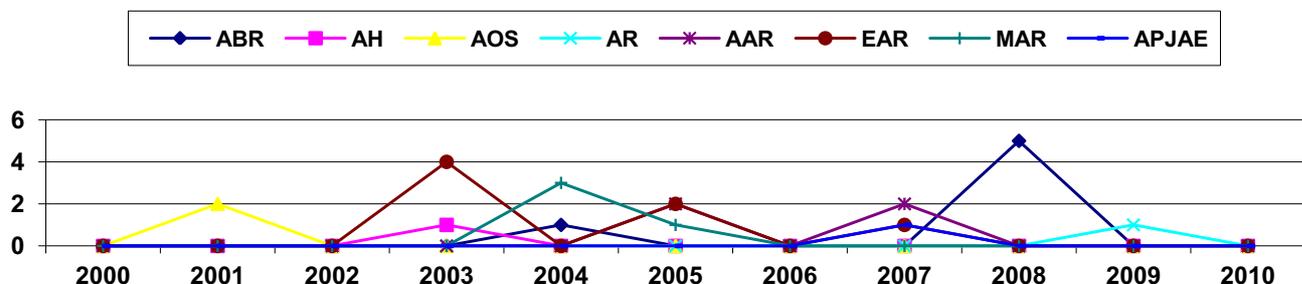
We have performed a quantitative study as part of this paper, thus analyzing the contents of the papers related to intellectual capital published in international journals included in Social Science Citation Index (ISI-rated journals): *Accounting and Business Research (ABR)*, *Accounting Horizons (AH)*, *Accounting, Organization & Society (AOS)*, *Accounting Review (AR)*, *Australian Accounting Review (AAR)*, *European Accounting Review (EAR)*, *Management Accounting Research (MAR)* and *Asia-Pacific Journal of Accounting and Economics (APJAE)*. Regarding this sample of ISI-rated journals, we have studied each journal separated and included in this study only those journals which include articles related to intellectual capital from 2000 to 2010. Thus, from a total of 18 ISI-rated accounting journals, only 8 (figure 2) of them have been containing articles on intellectual capital over the past 10 years.

The reason for choosing ISI-rated journals relates to the significance they have been given by the international academic community. Important research articles have been across time (especially during the past 10 years) in such journals by renowned researchers with a vast experience in the field of intellectual capital. These journals are considered important for the area of accounting research and for that matter we have as well deemed them to be relevant for our study.

III. Intellectual capital within literature

As far as our analysis is concerned, we state that the number of published articles in ISI-rated journals between the analyzed period is relatively low. The concerns of researchers in this field are not very many, maybe due to the fact that this subject is difficult to be developed and widely accepted in terms of definitions, structure, evaluation, recognition and reporting information related to it. Therefore, analyzing the published articles within high quality journals, we have obtained the following results:

Figure 1. The number of published articles in ISI-rated journals between 2000-2010



Source: accomplished by author

From the 8 ISI-rated journals taken into consideration, most articles have been published in the EAR (4 in 2003, 2 in 2005 and 1 in 2007) and the ABR (5 in 2008). There have been 3 articles published in the MAR during 2004 and 1 in 2005, and the remaining journals account for a single article throughout the entire analyzed period (2000 - 2010).

Furthermore, after we have established the articles related to our field of research, we have selected for analysis the following significant variables: the development of the conceptual framework (which is referring to definitions, classifications), theories, literature, type of research performed during the study and research trend.

Analyzing each article depending upon the chosen variables, we have reached the results as exposed in the below figure.

Table 1. The analysis of the articles existing in ISI-rated journals

Journals	Authors	Year	Conceptual framework		Theories	Literature	Type of research		Research trend	
			Definitions	Classifications			Quantitative	Qualitative	Positivist	Critic
ABR	Li	2008	x	x		x	x		x	
ABR	Singh & Van der Zahn	2008	x	x		x	x		x	
ABR	Ittner	2008				x		x	x	
ABR	Roslender	2008						x	x	x
ABR	Unerman <i>et al.</i>	2008						x	x	x
AH	Maines	2003	x	x				x	x	
AOS	Power	2001	x				x		x	
AOS	Mouritsen <i>et al.</i>	2001	x	x			x		x	
AR	Hógartaigh	2009						x	x	x
AAR	Ahmad & Abeysekera	2007	x	x		x	x		x	
AAR	Steenkamp & Northcott	2007				x	x			x
AAR	Petty & Cuganesan	2005	x	x		x	x		x	
AAR	Mouritsen <i>et al.</i>	2005	x	x			x		x	
EAR	Cerbioni & Parbonetti	2007	x	x		x	x		x	
EAR	Mora <i>et al.</i>	2005						x	x	x
EAR	García-Meca	2005	x	x	x	x	x		x	
EAR	Lev & Zambon	2003	x	x	x	x		x	x	
EAR	Chaminade & Roberts	2003	x	x	x			x	x	

Journals	Authors	Year	Conceptual framework		Theories	Literature	Type of research		Research trend	
			Definitions	Classifications			Quantitative	Qualitative	Positivistic	Critic
EAR	Habersam & Piber	2003	x	x	x		x		x	
EAR	Fincham & Roslender	2003	x	x	x	x		x		x
MAR	Mouritsen & Larsen	2005	x		x		x		x	
MAR	Chang & Birkett	2004	x				x		x	
MAR	Leitner & Warden	2004	x				x		x	
MAR	McNamara <i>et al.</i>	2004	x					x		x
APJAE	Brander	2007	x		x		x		x	

Source: accomplished by author

From the performed analysis, we can see that the majority of articles develop the conceptual framework of intellectual capital providing definitions and classifications thereof. Thus, from the 26 analyzed articles, only 7 of them fail to mention definitions of intellectual capital, while 13 of them fail to make any classifications of the intellectual capital. This fact explains the increased interest of researchers towards theoretical approach to the detriment of the empirical approach. Also, theories connected to intellectual capital have been subject of debate only in 7 articles, accounting for 27% of the total analyzed studies. Quantitative approaches are predominant in the studies, but the qualitative ones also weigh consistently in the majority of studies and as far as the research trends are concerned, most articles are predominant of positivistic trend.

IV. Conclusions

The present analysis performed within the study provides us the opportunity to understand the existing international research level in relation with the intellectual capital, the significance given by researchers in this field and the degree of difficulty in developing this concept in the sphere of accounting. Simultaneously, this analysis help us in creating a landmark for these aspects which have not been discussed in depth across time, in determining the status of research on intellectual capital as of present times and in identifying possible aspects for future debate and thorough study.

As far as the intellectual capital research is concerned, we would like to state that it is poorly developed. Studies conducted until now are very few by comparison to the number it should have existed until now in the specialized literature, which demonstrates that this field of research is still at its early stage, as most studies approach general descriptive aspects.

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