

THE INFLUENCE OF THE HUMAN CAPITAL IN THE ECONOMIC DEVELOPMENT OF ORGANIZATIONS

Emanoil MUSCALU¹
Silvana Nicoleta MUNTEAN²

ABSTRACT

Contemporary society, characterized by an accent on the critical evaluation of the resources it possesses, considers performance at the level of the human capital a possibility of problem solving, since it is the only component capable to provide pertinent solutions for the present and high quality strategies for the future.

Human capital has been one of the most intensely used and analyzed concepts by economists along time. As any other notion, it has been defined and redefined to fit a great variety of theories and models. If initial economic theories mentioned the human capital by simply referring to it in working terms and considering it absolutely interchangeable, further theories have fundamentally revised this way of thinking.

Starting from such observations, we approached here specific aspects which define the human capital concept and analyze its place and role within the organization. Our field research aimed at identifying the main contributions of the human capital when developing organizations and increasing their quality.

KEYWORDS: *development, human capital, human resource, organizations*

JEL CLASSIFICATION: *O15, O1*

1. INTRODUCTION

Theories in general and particularly economic theory have tried, not only nowadays, to identify the main aspects of social functioning by valorising its resources meant to serve the human being. Thus, we can notice scientists' research in order to discover the mechanism of social and economic progress, so as to satisfy the increasing needs of society. It is in this direction that theoretical concern regarding the analysis of the human capital appears and develops.

At present, the kernel of the notion defining human capital is connected to investments made in human resources in order to improve their productivity. Costs are generated for the sake of future benefits; hence the term "investment" in human resources. As with all types of investments, the key-problem here as well is if they are justified from an economic point of view. The answer to this question depends on whether benefits are or are not higher than costs with a satisfactory amount and if the standard investment criteria are applied or not. There is thus a direct analogy between investment in human capital and investment in physical capital, but there are also differences. First, human capital cannot be considered a guarantee because it cannot be sold. On the other hand, the possessor of such capital cannot disperse or diversify risk as it can be done with physical capital. Apart from these factors, the parallel between human and physical capital has also common aspects; for instance, human capital, as well as the physical one can undergo depreciation. If there are unanimous opinions in the direction of considering economic development the main factor of social progress, there are also many points of view claiming that human resource remains the only

¹ "Lucian Blaga" University of Sibiu, Romania, emanoil.muscalu@ulbsibiu.ro

² "Lucian Blaga" University of Sibiu, Romania, silvana.muntean@yahoo.com

potential with considerable provisions meant to lead to organizations' development. It is therefore obvious why the approach of the relation between organizations' development and human capital, of the aspects that are specific to human capital, have become the main objectives of some theoretical models of economic analysis and economic practice.

To continue with, we will focus on some ideas referring to human capital, the development of organizations and the relations between them.

2. THE HUMAN CAPITAL – CONCEPTUAL DELIMITATIONS

Capital represents an economic category with a historic character. The first forms of manifestation of the capital were *commercial capital*, based on developing merchandise trade and *usury capital*, connected to lending money at interest. These two capital types have contributed to forming and developing *exchange economy*, *industrial capital* and then *financial capital*, which is a mixture of industrial and bank capital. Consequently, as asserted, "merchandise circulation is the starting point of capital" (Marx, 1952, p. 177).

For Karl Marx, capital represents "the dead workforce, which, as a vampire, lives by consuming living workforce and the more it exhausts the latter, the longer it can live" (Marx, 1952, p. 177). Being an economic category with historic character, the capital concept has generated varied and controversial opinions. Thus, in David Ricardo's opinion, capital is "that part of a state's welfare used in the production process, and consisting in food, clothing, tools, rough materials, etc, necessary to workforce in order to perform its activity" (Gavrilaş, 2007, p.34). In modern terms, capital represents "the production factor which depends highly on the workforce activating it, being, in fact, a derived factor in connection with it" (Gavrilaş, 2007, p.34, after Ciornea and Haiduc, 1998, p. 102).

Specialized literature also uses this term a lot, as well as the concept of intellectual capital, which includes knowledge capital. From Thomas Stewart's point of view (Nicolescu O and Nicolescu C, 2011, p.89), intellectual capital represents not only knowledge, but also persons, equipments and networks participating in the process of creating economic goods and services. Figure 1 presents in detail the components of intellectual capital, as they have been delimited by this specialist. We notice with this author the tendency of diminishing physical capital among the elements contributing to obtaining goods, services, etc.

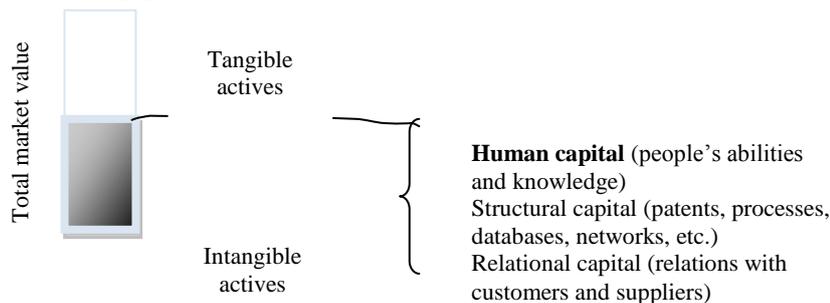


Figure no. 1 – The intellectual capital model, designed by Thomas Stewart

(Source: Nicolescu O. and Nicolescu C., 2011, p.89)

Mention should be made that not every specialist subscribes to the approach presented above, which is also the most commonly used. For instance, the Indian author C. Srinivasan (Nicolescu O and Nicolescu C, 2011, p.90) states that there are two components within the intellectual capital of a firm:

- The basic knowledge of the organization, which is incorporated in all the activities, systems and processes within; a part of it is included in documents (instructions, standards, methodologies, guides, strategies, etc.);

- The supplementary individual knowledge and values of the employees; about 42% of the intellectual capital is said to be found in the minds of the employees focused on knowledge, which economy uses only to a relatively small extent.

As we can easily notice, the Indian specialist practically considers knowledge capital and intellectual capital equal notions. A similar approach is found with the American specialist C. Maughan. Another model of intellectual capital was elaborated by two Romanian authors and its essential elements are represented in figure no. 2.

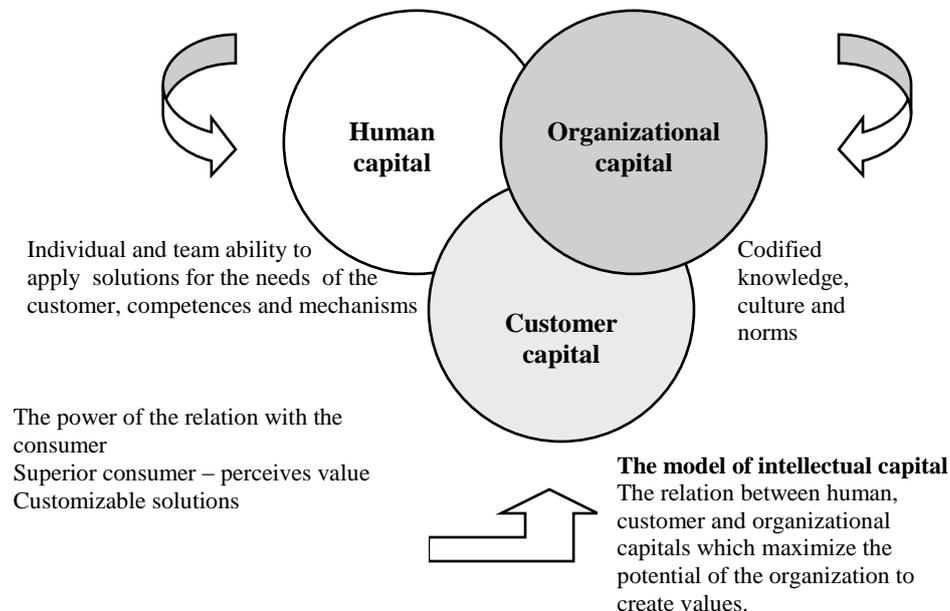


Figure no. 2 – The model of intellectual capacity
(Source: Nicolescu O. and Nicolescu C., 2011)

We can therefore conclude that there are three main components of intellectual capital: **Human**, Structural, Relational.

The human component incorporates the intellectual capital elements which are placed at the level of the human resources: their tacit and explicit knowledge, the managerial and practice abilities.

Thus, *human capital* can be considered *the absolute sum of all abilities, knowledge and aptitudes of the employees of an organization, irrespective of the modality through which they were obtained: through education, individual study, learning at work. Adam Smith is the one who defined human capital as the sum of abilities, dexterity (physical, intellectual, psychological, etc.) and good judgment, the good news being that this human capital can be developed through formal education and training.* (www.portalhr.ro).

We estimate that research in the field of the human capital has envisaged both the concept and the measurement of the investments' level in human capital and the connection between the latter and economic growth. The pioneer in this field, Adam Smith, considered that we find abilities and "useful" knowledge among the elements of the capital.

The modern theory of human capital developed around the group formed at the Chicago University, coordinated by Theodore Schultz, for whom competences and knowledge are forms of the capital, and this type of capital and its existence is essential when explaining the economic growth of occidental societies after World War II. Jacob Mincer developed the "model of human capital" which claims that noticeable achievements depend on "the human capital" incorporated in a person. Gary Becker and Barry Chiswick analyzed the types of investments in human capital which individuals can choose. In the work *Human Capital, A Theoretical and Empirical Analysis*, Gary Becker examined the consequences of investment in human capital, which was defined as a reserve

of productive resources incorporated in individuals, made up of various elements as education level, professional training and experience, health, or knowing the economic system (www.portalhr.ro).

The human capital theory, put forward by the representatives of the new Chicago school in the second half of the 20th century, contains both a theoretical slogan "Man is the most precious asset of a country" and significant differences of theoretic development. The promoters of this theory, Th. W. Schultz, G. Becker and G. Stigler, have approached the problems connected to human capital but have also contributed significantly to other fields of economic research.

Gary Becker, promoting human capital, emphasizes for the first time the fact that the individual is not a mere final consumer, but a true producer, who through education and professional training practices an investment in human capital. In his opinion, the individual is a true firm, who uses rare resources (the remunerated work and housework of the family members) and who produces satisfaction through work and has a structure which involves investments and calculation based on relative prices, time cost, etc.

Although we have identified both common and different points of view, the present analysis leads to the conclusion that human capital is *the stock of knowledge, abilities and talent which individuals possess; some authors include population's health within this concept, starting from the idea that human resources characterized by a better health condition will be more productive.* (Mărginean, 2003, p.284).

3.THE PLACE AND ROLE OF HUMAN CAPITAL FOR ECONOMIC DEVELOPMENT ORGANIZATIONS

The evolution and the progress of any society over time are significantly determined by a combination of factors, including the economy and its development which has been, is and will remain fundamental.

The history of mankind is the permanent unrest witnessed- sometimes combined, sometimes not, sometimes agitated, even violent, sometimes enjoying a smoother path, but not necessarily easier or less expensive - by which people, nations and entire nations, states or empires are trying to overcome their own limitations, producing more, accumulating new resources and amassing wealth, increasing its size. The worth of economics is that proposes to achieve these goals on the way of economic action, so the interests can be satisfied without resorting to methods more expensive, painful and less human - territorial annexations, wars, colonial domination etc. (and yet, the results in this area are still modest.)

In this sense, human capital was, is and will be one of the prerequisites for the society development in general, economic development organizations in particular. Analyzing how human capital affects economic development organizations, especially considering that it is the primary resource of development, represents an area of interest in economic practice and specialist literature.

If specialists familiar names also used the term capitalism in different ways - like "global capitalism" to George Soros, "post capitalist society" in Peter F. Drucker - doing it just to highlight better the differences from classical and traditional capitalism. "Global capitalist system" is an abstract concept. He governs our live in the same way that any regime is governing people's lives. Global capitalist system is purely functional by its nature and the function it serves is (not surprisingly) the economic one: production, consumption and exchange of goods and services "(Soros, 1999, p 107).

Peter Drucker is even more clearly: "The new society - it already exists - is a post-capitalist society. But the center of gravity in post-capitalist society - its structure, its economic and social dynamics, social class and its problems - is different from that which dominated the last two hundred and fifty years." The moving of the center of gravity has already been done from the capital one to human resources one. In this context, the importance of labor in the development process increases. It is about the qualitative size, the only one which is directly related to the economic development nowadays.

However, even the economists know the difference between correlation and determination and they have developed rather directly methods of determining the extent to which income increasing is due to an increase in human capital. In an excellent study for the United States, Edward Denison (1985) finds that the increasing average of worker schooling, between 1929 and 1982, explains a quarter of the increase of individual income in this period, which is not able to explain the rest of growth. This happens, mainly, because he can not measure the effects on earnings from improved health, schooling at work and on other types of human capital.

In essence, this new paradigm of human capital in relation to economic development represents, largely, a return to some classic truths, known and widely accepted until the 30s of the twentieth century: private property, free market, the state focused on its fundamental functions first of all on creating a clear and coherent legal system, and the control over the operation of the system. Experiences of socialism, extreme form of manifestation of η – midway in the economy and other various systems statist socialist Third World, have made this doctrine to lose any ground. Possibility of: rapid development and long-term specific intervention is not provided by the state, but the co-existence of certain conditions that can be called "basic factors of development" (Balcerowicz, translated by Cojocaru, 1998, pp. 41 - 42).

Human capital is, potentially, one of the prerequisites of fast economic development. Trained and well-trained people are able to assimilate quickly new methods, to use the innovations and become in this way more productive. However, there is no automatic correlation between education level and rate of economic development (Balcerowicz, translated by Cojocaru, 1998, p 39), which should not surprise us, because the chances and how people can use their own level of training depend very much on the internal structure of the economy. In socialism, people had a good training level, but the system did not allow them to use appropriate their knowledge and skills. For this reason, productivity increased slowly and therefore economy development was still slow.

It is considered that, at the microeconomic level, the most important analyst of human capital is Gary S. Becker, Nobel laureate in economics (Mărginean 2003, p 285). He treats especially family role in investment in human capital through direct binding of demography issues. In the book titled "Human Capital" (Gary S. B., 1997) are analyzing investments in this asset, based on the idea that a systematic study of human capital provides a unified explanation of a wide range of empirical phenomena, such as:

1. Earnings increase, usually with age, with a decreasing rate. Both growth rate and the delay tend to be positively correlated with skill level;
2. Unemployment rates tend to be inversely correlated with the level of qualification;
3. In the relationship with employees, the companies from the underdeveloped countries tend to be more "paternalistic" than those from the developed countries;
4. Younger people often change their work place and receive more education and workplace training than older people;
5. Earnings distribution has positive slope, especially for professionals and other skilled workers;
6. More capable people receive more education and other professional training than the others;
7. Division of labor is limited by market size;
8. Typical investor in human capital is more impetuous and thus more likely to make mistakes than typical investor in tangible capital.

All these problems and many other practical implications can be explained in the opinion of the author with human capital.

The direct connection between the human capital and economic increasing of the organizations, is achieved in "Human capital, fertility and economic growth" study, written by Gary S. Becker, OT Kevin Murphy and Robert Tamura, that stuck a reference title in the literature. Thus, the authors propose a model that puts human capital in the center, an element that distinguishes him as Malthusian model, as well as neoclassical approaches. One of the most important assumptions is related to the increasing profit rates from investments in human capital, as the capital stock

increases, thus is formulated the assumption of increasing returns of human capital. The explanation is that education and other sectors that produce human capital using data related educational or professional qualifications more intensive than other sectors producing consumer goods and physical capital. Authors consider that this leads to multiple stable stages: 1. stable stage with little undeveloped human capital and low rates of profit for investment in human capital; 2. stable stage developed with much higher profit rates and a large stock, probably increasing human capital (Mărginean, 2003, p 286).

We believe that if at the individual or family level, the bond that exists between education and income level in a well-defined social system is easily observed and demonstrated the explanation of the economic success of some nations by sustained investment in human capital are more difficult to prove and modeled.

Not only that we can talk about investment in human capital, but we can say that is one of the few assets characterized by increasing returns. Analyzes exceeded the individual level considering the effects of macro and world economics that has generated by the impressive increasing of the stock of knowledge in the last century.

However, economists have explained well the difference between correlation and determination and have developed rather direct method of determining the measure in which income increasing is caused by an increasing in human capital. In a special study for the United States, Edward Denison (Mărginean, 2009, p 290, by Denison, 1985) finds that increasing average worker schooling environment between 1929 and 1982, explains a quarter of the increase of the individual income during this period. But they did not show us the rest of the increase. Probably at the base of the increase there are difficult causes to measure, which has significant effects on growth improving health, schooling at the workplace and other kinds of human capital.

We consider that issue, concerning human capital has become one of the distinct areas that presents particularly interest for the theory and practice of economic development in general, economic development organizations in particular. Above views come and support this claim, and the empirical study data strengthens, in our opinion, this evident fact of nowadays.

4. RESEARCH METHODOLOGY

To identify the influence of human capital in the economic development of organizations we conducted a study using the survey method and questionnaire investigation as a tool. Based on a more realistic delineation of the goal in this study, we established the following objectives:

General objective

Highlighting the influence of human capital in economic development organizations.

Specific Objectives

- Determination of the main contributions of human capital in economic development of the organizations.
- Identifying the main ways of developing the quality of human capital in organizations.
- Identifying a correlation between the characteristics of the human capital and ensuring the development of organizations.

Assumptions

General hypothesis from which we started this investigation is that economic development of the organizations is directly influenced by human capital through its features.

This hypothesis was operationalized, resulting in the following statements:

1. The more it will know and will accordingly apply specific elements of human capital, the possibility of obtaining performance increases at individual level;
2. If the relationships which the persons have with other peers and with the organization are developed when their performances are high;
3. Performance or failure of a person is determined primarily by the relationships with other persons.

Research methods and tools

Investigation as knowledge aims views, attitudes regarding the influence of human capital in economic development organizations, we considered appropriate to use the survey as a research method and questionnaire as a tool of investigation.

Sampling

The research was conducted on a representative sample consisting of 50 people in the SNR Rulmeți SRL Sibiu, selected arbitrarily. It have tried, whenever possible, to select people with different employment statuses of different backgrounds, of different sex and different ages. The sample obtained is shown in the table below:

Table no. 1 Sample configuration within SNR Rulmeți SRL Sibiu

Status	SNR Rulmeți SRL Sibiu			
	Employees		Managers	
Sex	Feminine	Masculine	Feminine	Masculine
Number of persons	17	19	5	9

5. RESULTS AND DISCUSSION

From the questionnaire and analyzing the collected data we obtained a series of responses, some of which are presented below. In this way, we identified respondents' views on the influence of human capital in economic development of the respective organization and the concern for its qualitative growth, by formulating questions four of which are given below, together with the data interpretation.

1. Please appreciate to what extent the following aspects of human capital can influence the economic development of the organization where you work by giving marks from 1 to 5 (1 very least, 5 very much).

Table no. 2. Variable for question 1 of the questionnaire

Variable	
a). professional training	g). motivation for work
b). continuous participation at training courses	h). efficient relationship with clients and suppliers
c). disposition to solve tasks	i). initiative in activities of the organization
d). satisfaction of work	j). appreciation from colleagues
e). experience in the field	k). appreciation from bosses
f). team spirit	l). earned wage

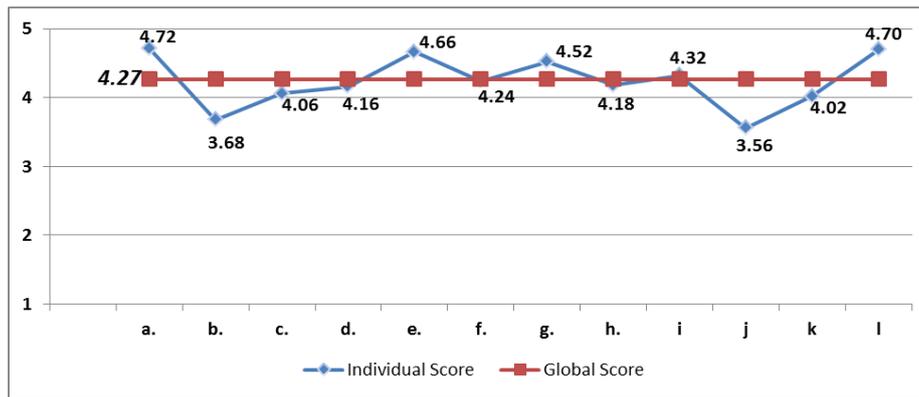


Figure nr. 3 Interpretation of score for question 1

From the figure above we can see that the highest score in the questionnaire for question No.1 is choice (a), namely - *training* (individual score 4.72, with the overall score of 4.27), demonstrating awareness of training by most respondents. The difference is very small with response variable (l), namely *wage*. Thus, we can see that the financial reward plays an important role in motivating human capital.

The third response as score represented by variant(e) - experience in the field, in conjunction with the former. Thus, it appears that the human capital's skills and knowledge in the field accompanied by appropriate financial reward is a strong point for the economic development of organizations. The last place of appreciation from colleagues we consider to be a deficit in the proper functioning of the group.

2. What, in your opinion, are the most important resources of the organization where you do business?

For this open question 45% of the respondents consider that human resource is the most important factor within the organization, 30% believe that the financial resource is the most important, while only 15% consider information resource as important and only 10% consider material resource to be important.

Placing human resource first shows the correct understanding of its place and role within the organization.

3. Please rate the extent to which investment in human capital is provided in the organization where you work by giving marks from 1 to 5 (1 very least, 5 very much).

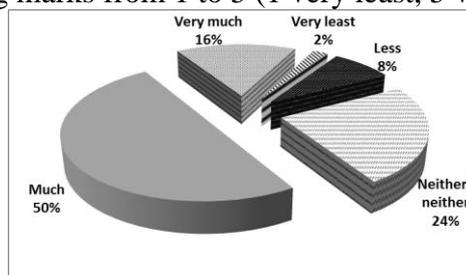


Figure nr. 4 Ensuring investment in human capital

As can be seen from the figure nr. 4, 50% of the respondents believe that the organization in which they operate investment in human capital is much provided and 16% of them consider that it is very much ensured, which demonstrates the implication of the management of the organization in the improvement of their professional training.

4. What are the methods to develop human capital used within the organization in which you work?

Table no. 3. Variable for question 4 of the questionnaire

Variable
a). providing and use of advanced information technology
b). training courses within the organization
c). training courses at national level
d). training courses abroad
e). professional training
f). participation at development projects of the organization

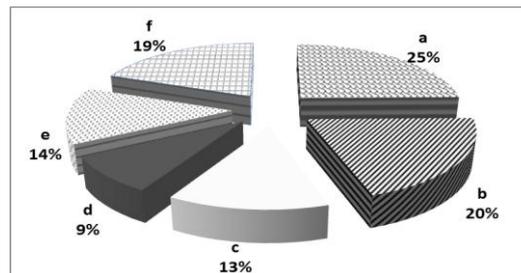


Figure nr. 5 Ways for human capital development

As shown in figure no. 5 23% of respondents answered that the operating organization ensures and uses advanced information technology, 20% responded that there are professional training courses within the organization, and 19% responded that the organization ensures participation in development projects of the organization.

It follows that there is an important concern of the organization to diversify and upgrade human capital development.

As result of the study and interpretation of collected data all respondents consider human capital as particularly important in the economic development of the organization by continuously increasing its quality and interest in, both individually and at organizational level in order to provide all possible ways of its primarily professional development.

In the opinion of those surveyed, human capital is situated at the top of resources according to their importance within organizations. Thus, we consider that the increased interest in the development of human capital can contribute significantly to the economic development of organizations.

6. CONCLUSIONS

Human capital has been and will certainly continue to represent one of the key factors of economic development in general and especially in the development of organizations. As evident in the approaches of great specialists, human capital has become the center of theoretical and practical interest of microeconomics, macroeconomics and worldeconomics.

Consequently, we see the increasing need for human resources and especially the importance of continuous improvement of its quality in order to find the best solutions to the major problems facing contemporary society in general and economic organizations in particular. The study highlights the great importance that should be given to ways of improving human capital and ensuring conditions for increasing its role and place in the development of the organization.

Postmodern society of the XXI century, and its economic organizations require more and more professional human resource able to assimilate and promote efficient economic development strategies and the management of organizations is required to create the necessary enhancement of the potential represented by the human capital.

REFERENCES

- Balcerowicz, L. translated by Cojocaru, D. (1998). *Libertate și dezvoltare. Economia pieței libere*. Bucharest, Editura Compania;
- Gary S. B. (1997). *Capitalul uman*. Bucharest, Editura ALL;
- Gavrilaș, G. (2007). *Costul Capitalului*, Bucharest, Editura Economică;
- Marx, K. (1952). *Capitalul*, volumul I, ediția a III-a. Bucharest, Editura de Stat pentru Literatură Politică;
- Mărginean, S. (2003). *Dezvoltarea economică și populația*. Sibiu, Editura Continent;
- Nicolescu, O. & Nicolescu, C. (2011). *Organizația și managementul bazate pe cunoștințe – Teorie, metodologie, studii de caz și baterii de teste*. Bucharest, Editura Pro Universitaria;
- Soros, G. (1999). *Criza capitalismului global - Societatea deschisă în primejdie*. Iași, Editura Polirom - Arc;
- www.portalhr.ro/capitalul-uman-si-capitalul-intelectual/, last accessed 25.06.2012.