### CONSIDERATIONS ON HUMAN CAPITAL CONCEPT

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#### Abstract:

The present study is capturing the defining elements of the concept of human capital as they are seen from different approaches and perspectives, conducted by researchers in the field. For this purpose, twenty-three research articles from scientific journals and relevant legislation of the last three years have been closely studied. Any source taken from previous books was quoted only when we considered it to be a representative element of reference. This is a fundamental study with a positivist epistemological approach.

The final part of the study outlines a series of conclusions on the current state concerning the directions of approach, the meaning, the defining elements and the forms of recognition, and also the implications of human capital on economic and social development. After consulting the literature on human capital problem, it was concluded that this is a current and frequently approached issue, representing the main source of innovation, flexibility and economic growth.

Assuming the fact that the development of a society is practically impossible without the direct involvement of human factor, the present study deals in a modest manner with the literary approaches on the defining elements that can be associated with the term **human capital**.

This study aims to highlight not only the most important aspects and elements that contribute to human capital creation, but also the factors that define it and give it substance.

Keywords: human capital, economic development, education, knowledges, Knowledge Society

JEL Classification: O15, E24

#### **INTRODUCTION**

Nowadays, we hear people talking more and more about the Knowledge Society. The contemporary world is named this way due to the significant changes that have occurred, namely the place of the material resources was taken by knowledge. The crucial role that knowledge have in ensuring economic prosperity, with positive effects on GDP (Gross Domestic Product) growth has been proved over time. Therefore, the human factor, an important holder of intellectual capital, has become a subject of interest and research. It was and is necessary to establish the contribution of human capital on economic development, in order to take the best decisions concerning the investment policy both at the enterprise level and nationwide.

The success of economy or of an organization is no longer guaranteed by financial capital, equipment or land. Human capital has that responsibility because it is the only form of capital that is not consumed in production processes and cannot be imitated. In the same vein, if a particular resource can be easily replaced, there is no substitute for human capital. Thus, employee training and competence are key factors, distinct, that ensure the success of an organization, more than the availability of financial and material resources do. It is obviously required a combination of all factors, without denying the usefulness and importance of any.

Starting from this economic reality, we made a research based on specialized studies on the concept of human capital to see what it means, what are the elements that define it and also the importance of it.

The manner in which the research was structured delineates and highlights the main considerations, drawn from studies of authors who have tackled this area.

#### BODY

The whole world is influenced by the globalization process, including professional and business field in particular. The new technologies, the innovation process, the complexity of transactions and processes determine a continuous refresh of the knowledge about the human factor. "*The exponential growth in scientific and technical field recorded during the twentieth century, has accredited the new concept of* **Knowledge Society**, *outlining the role of creativity as a basic and resulting factor of knowledge - now the main factor of progress in all fields*" (Burtic , & Pop, p. 489). Although physical work has been mostly replaced with automated forms of doing productive activities, in achieving performances human factor plays a decisive role because it establishes development goals, the strategies for achieving them and the forms of control, and also the adaptation strategies to constantly changing conditions of internal and external environment. Human factor is permanently accumulating knowledge that can continuously be developed and renewed.

Defining human capital is not a simple thing to do, taking into consideration the fact that in literature there are many approaches to this. Leif Edvinsson, Skandia, and Pat Sullivan define human capital, equivalent to the term *intellectual capital*, as "*knowledge that can be converted into value*" (Sveiby, 2001). This is not a complex and demanding definition, but this simplicity does not necessarily mean "non-including". In our opinion it may well mean clarity and relevance, as it is in this case.

To bring additional clarity to this aspect, we will say that, *for employers*, human capital is the higher qualification, the theoretical and practical knowledge degree, the multitude of skills and abilities that give high quality and efficiency to the activity performed. On the other hand, *in terms of employee*, human capital is equivalent to the effort and the task to develop his skills and to consider both education and improvement a continuous and a lifelong process.

# HUMAN CAPITAL IN DIRECT, POSITIVE RELATION WITH THE EDUCATIONAL LEVEL AND THE LEVEL OF SOCIAL DEVELOPMENT

Studies have shown that, in education, the investments have resulted in the formation of human capital and its profitability is higher than the profitability for investments in material capital.

In this respect, The United Nations Development Programme pleads in its annual reports made after 1990, for a new development concept, namely the Sustainable Human Development (Nica, 2008).

The same conclusion can be drawn from the study conducted by Lajos Koteles and Katalin Rozsnyai, who state that the concern for the quality of labor has become an integral part of economic investments, with the highest profitability. In the U.S., two thirds of economic growth gained in the 1990s were triggered by human resource development (Koteles & Rozsnyai, 2008).

The consequences of the human capital formation on economic growth within the state are also presented through a study on the impact of investments in higher education, conducted at the State University of New York. The analysis results show that the investments in higher education and the income are dependent and that the University has a significant positive effect on the economic growth of the state (Vogel, & Keen, 2010).

Another study (Erosa, et al, 2010) examines a heterogeneous model of individuals who invest in the quantity and quality of schooling, quantifying the importance of human capital differences in total factor productivity. It appears that human capital accumulation increases the differences between countries in terms of factor productivity.

This study, unlike others that examine the link between human capital and education, takes into account not only the financial costs incurred in the preparation of the human factor, but also the time factor. The both costs, financial and the time spent learning, are seen as an explanation of the inequalities between countries and between different regions of the same country.

The effects of human capital on economic development, in terms of training and specialization, in five areas: agriculture, information technology, business and services, human sciences and medicine, have been evaluated. The results highlight again the importance of education in the development and economic growth, human capital in the IT sector having major influence (Tsai, et al, 2010). Currently, progress means advanced information technologies that replace the human factor, increasing labor productivity. We must never forget that these technologies are the result of the work and effort of the human factor, and for having advanced technology, we need trained people, able to produce them.

In the paper "*Human capital spillovers, Productivity and Regional Convergence in Spain*", the authors examine the differential impact of human capital on productivity and regional convergence, according to different levels of schooling. The empirical analysis on Spanish provinces between 1980 and 2007, confirms the positive impact of human capital on the regional productivity and convergence productivity.

By another study (Zamarik, 2010), *a direct link between the economic growth of a country and the human capital* was established. This study shows that a higher level of education contributes to the employee value increasement, and at the same time, to the increasement of labor productivity. Using the empirical method, *a direct and positive relationship between school preparation and regional growth* for a group of U.S. states was illustrated.

# HUMAN CAPITAL - THE BASIC RESOURCE IN THE CURRENT KNOWLEDGE SOCIETY

With the information and industrial revolution, we also witness a revolution of knowledge. The fixed assets are necessary for the business to be able to operate, but prosperity is achieved by reconsidering the role of intangible assets. The intellectual capacity of employees, their skills, their knowledge and company's capacity to acquire knowledge are the most important resources on which the Knowledge Society is based. Property and traditional capitalism become "*something new and bizarre*" (Toffler, 2006). The value of a company is given by knowledge, ideas and information held by its employees who, in Cooper's opinion, should have the following skills :

- recovery of basic knowledge, assimilated through education and experience;
- combining and processing information/knowledge, including technology IT, in order to produce new knowledge;
- assimilation of new knowledge and share them with the rest of the employees;
- lifelong learning both from own experience and using databases provided by computer networks.

If until recently human society was not very concerned to find and process exhaustible resources, currently in the Knowledge Society, the emphasis is on the main *inexhaustible resource*, namely human intelligence, which has the task of finding ways to optimize the relationship between resources and needs, and ways of development and prosperity (Dinu, 2008).

# HUMAN CAPITAL - THE MOST VALUABLE ASSET, BUT THE BIGGEST EXPENSE OF THE COMPANY

Human capital, as top employees, can be considered *the most valuable asset* (wealth), but at the same time and *the largest expense* (Davenport, et al, 2010). As part of the property, in order to attract the most professionally advanced and valuable employees, a more careful selection is recommended by removing the instincts, and use methods of analysis and evaluation. In this respect, modern and developed companies increasingly adopt more sophisticated methods of data analysis of the candidates, in order to qualify personnel that can assure competitive advantage increase. Employment, remuneration and development of performing teams that bring added value in a company require, in most of the cases, costs to the extent of their value.

Finding, acquiring, developing and keeping the human capital that is needed and that can support the development, is a challenge and also a source of competitive advantage for organizations. In the context of major changes in internal and external environment of organizations, special attention should be paid to human aspects involved in the process of change, especially to change management and staff retraining.

## HUMAN CAPITAL - INTELLECTUAL CAPITAL

In his paper, D. Ulrich attributes to human capital the sense of *intellectual capital*, outlining the need for an appropriate management approach of it, because it is the one that allows the organization to *"learn quickly and continuously"* (Ulrich, 1998), in order to adapt to new conditions.

### HUMAN CAPITAL - A MANAGERIAL AND RELATIONAL PERSPECTIVE

The new economic conditions (the rising international competition, the increasing preference for cost-based economy against the economy based on mass consumption, globalization, profitability through growth, technology, intellectual capital, changes) have changed the personnel policies and have determined a concern about creating new capabilities (Lut, 2007). The author deals with human capital from *a managerial perspective* and talks about a *school of human relations* based on a psychosociological theory of the organizations, focusing on relationships between individuals who work in groups and taking into account: human recognition of belonging to a social group, motivations (professional, intellectual, psychological), ambient factors, interpersonal communications, psychosocial phenomena that occur in small groups, informal relationships, social conflicts.

The study focuses on an economic reality present in all entities: *finding the best strategies* related to personnel policy and creating a harmonious relationship is a challenge for human resource management and it represents an appropriate framework for recovery and development of human capital.

## HUMAN CAPITAL AND SOCIAL ENVIRONMENT

Coleman talks about human capital and physical capital, making a comparative analysis that reveals especially the differences and the influences between them. While physical capital takes a material form and is used predominantly in production, human capital is intangible and is reflected by those personal characteristics embodied in skills and abilities that make the individuals able to act in different ways.

*The social capital* also takes the form of intangible capital and consists of those relationships, between people, that form the base of the activities, with an important role in creating human capital and developing future generations. All three forms of capital work together and facilitate economic activity.

Like Becker, Coleman presents the social influence on human capital issues. He attributes a crucial role to the family, in terms of the investments that it makes in educating children. *The family* is recognized as a major investor in human capital formation process. The next factor as importance is the *State* that must provide an adequate education to individuals, supporting a continuous development of human capital.

On the social connotations line should also be noted that human capital is the product of social environment and a culture, too.

# HUMAN CAPITAL - A LINK BETWEEN TECHNOLOGY, INFORMATION AND DECISIONS

In an information society based on revolutionary technology and information systems that permit the production of high performance, people, as keepers of knowledge, experience, creativity, are the *link between information and knowledge of information technology* (Brezai, 2006). Information systems produce valuable information that require human intervention in order to be capitalized. Without the ability of people to make the best decisions based on valuable information obtained through advanced technologies, the efforts and the costs involved for obtaining them are useless.

# THE QUALITY OF HUMAN CAPITAL UNDER THE INFLUENCE OF BIRTH AND DEMOGRAPHIC CHANGES

The approach of the notion of human capital also captures the relationship between human capital and demographic area. The quality of human capital as influence on fertility rates is analyzed. Thus, the more a country's population becomes larger, the more the quality and preparation of human factor decreases, as a result of the reduction of public expenditure on education for each individual. The school system and the investments cannot be extended in order to cope with the increasing number of students, given the fact that public expenditure on education are low. Thus, a low level of education for a large population will have a negative impact on economic growth.

The novelty of the study is given by the idea that investments in health human capital in the sense of responsibility to birth, should be given priority before the investment in education, internationally speaking, through cooperation and mutual aid. This idea is a valid one because, as long as the public sector has limited financial resources that can be devoted to education, and the population grows, it is impossible to form a valuable human capital in that particular country. According to the author's opinion, the human capital is the root cause and the key of development and, therefore, it must have priority over other investments (Wolfgang, p. 3046).

Gregory Clark subscribes as well to this idea (2006), which examines human capital influenced by fertility and industrial revolution. He stated that the industrial revolution and demographic changes are the two major forces underlying revenues in the current context.

Demographic changes, in terms of birth rate and aging population, show that aging results in an increased demand for welfare, which may lead under certain conditions, to an increased quality of the human factor and to an increased consumption per capital (Lee, & Mason, 2010).

The small number of children in a family means a greater investment in children's education, which adds an extra point to human capital value and economic development.

### HUMAN CAPITAL - ACCOUNTING APPROACHES (KNOW-HOW)

Employees are considered to be valuable assets of the organization, because they are key actors in the process of knowledge. The market value of an enterprise is mostly generated by intangible assets and secondly by the material component.

From an accounting perspective, human capital is recognized as an intangible fixed asset. In the international approach, an intangible asset is a fixed asset, an identifiable and non-monetary asset, without physical substance (IAS 38, 2009).

In the national approach, intangible assets are identifiable non-monetary assets, without physical support, held for being used in the production process or for good/services supply, for being rented to others or for administrative purposes.

We can note that according to both approaches, *human capital is recognized in accounting field as the know-how*, meaning that specific knowledge, held by an individual or a company, on a

product or process, often achieved through researches and costly development work (Horga, & Grosu, 2008).

There are research studies that try to evaluate and to "measure" human capital, in order to account it and record it the company's financial statements.

# HUMAN CAPITAL - LIMITED LIFETIME CAPITAL

A new approach to the research, outlines the fact that *human life is limited*. Therefore, the accumulation of human capital that can influence and support the long-term development is impossible (Growiec, 2010).

Although we acknowledge this inconvenience, we should mention, contrary to this view, that people who possess human capital come from different generations and some knowledge can be transmitted from generation to generation. New generations appear to be more intelligent and with a greater capacity for acquisition of value, that allows the "inheritance" of knowledge from previous generations, knowledge which is eventually developed and passed other generation. Only the financial resources that contributed to the creation of human capital are lost, the knowledge is not. Further investments are needed in order to create and develop human capital, without reaching the conclusion that they are useless.

## **STREET GANGS - A SOURCE OF HUMAN CAPITAL ?**

Dnes, A. & Garoupa, N., (2010) offer an interesting approach of the human behavior as a *member of a gang*. They draw attention to the fact that abnormal behavior can hide behind a valuable human capital, resulted in valuable personal characteristics that can help to form groups and to strengthen the relations within them. This potential of human capital can be exploited by increasing the opportunities for gang members to integrate into society.

Finally, we must retain a professional opinion - Arvetta Powell, HR Director at Wal-Mart Stores Inc., the manager of more than 3.000 employees: "the future success of organizations may well depend on people's strategic skills". Reed-Woodard subscribes to this view as well (2010) by highlighting an obvious reality: the human capital acquires an increasingly important place in the market value of the society and it represents the advantage of the competitive companies that increasingly rely more on performance.

## CONCLUSIONS

Our conclusion is that the importance and the value of human capital is widely recognized, with a diversified approach and substance. It attracts researcher's attention more and more because the importance that it wins to the detriment of other areas is growing day by day.

After researching the literature, we concluded that the human capital issues, the influences, the relationships and the connections established in the modern society are complex and timely. The approaches and the research directions are multiple and diverse. They point out, every time, the importance of human capital as factor of development and progress at enterprise level and, therefore, at society level.

The concept of human capital refers to the emotional and cognitive capacities of individuals, whose role is to raise capital and to enhance development at economic entity level and generally at city, country, society in generally.

When we talk about human capital, we need to reserve a special place to education. It is the main factor which helps to create and develop human capital. Investments have a major role for this. Human capital involves public investment, private investment and self-development.

Development and utilization of human capital is not only a prerequisite for progress. Limitation and even the danger of the exhaustion of available resources, the growing demands,

globalization, the economic crises, the climatic disturbances, are just some elements that require human factor development and innovation in order to find new solutions that are necessary to sustain the development of the society, and even its survival.

The study made an inventory of the main issues that should not be neglected when we are talking about human capital. At the same time, it can stimulate interest and curiosity, creating a promising path for future research on this area.

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