

Definition and Content Interpretation of Human Capital

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ABSTRACT: The article is devoted to researching the nature of human capital, its internal structure, comparative characteristics of human capital and other economic categories; factors of its forming under present conditions of transformations in the economy of Ukraine.

KEYWORDS: human capital, physical capital, social capital; structure, types of human capital; investing in human capital, labour potential; factors of forming human capital; intensive factors, extensive factors.

1. Introduction

The processes of dynamic development and fast renewal of scientific and technical basis of modern society caused deep transformations in all areas of its life activities, led to changes of human's place and role in socio-renewing process.

Up to recently researching the problems that concern the aspects of improving quality of labour force there have been focused on using but not forming of human resources. However scientific – technical revolution, changes to socially – oriented market policy demand theoretical understanding of numerous tasks related with creating qualitatively new labour force. Structure changes in the economy of developing countries have become an objective basis for appearing the theory of human capital. Immediate impulse to creating this concept is related with the problem of economic growth: in the epoch of scientific – technical revolution and changes in structure of productive forces the employee is becoming the

factor of economic growth and the efficiency of company's functioning depends on the quality of human capital.

But from our point of view the idea of human capital moves back to the long history of economic thought. One of its first wordings appears in "Political Arithmetic" of W. Petty. Later it was studied in works of A. Smith, A. Marshall, K. Marks, I. Fisher and other scholars. However, as a special field of economic analysis the theory of human capital was formed only at the frontier of 50-60s in the twentieth century. T. Shultz is accomplished for this theory and basic theoretical model of educational market was developed by G. Becker in his work "Human Capital".

2. Setting objectives

The article is objected to analyze different approaches to comparative characteristics of the categories "human capital" and "physical capital", "human capital" and "social capital", "human capital" and "labour potential"; researching the factors of human capital forming and analysis of their structure and characteristics.

3. Results

Traditionally human capital is defined as incarnated fund of human abilities, knowledge, skills and motivations to encourage human productivity. So human capital is not only the body of knowledge, abilities that a human has; at the same time human capital involves acquired knowledge as well to use in this or that area of social activity that contributes to growing productivity of labour and production. At that, using of accumulated resources of human capital leads to the increase of earnings (income flow) of the given employee, that, in its turn, encourages forming interest among employees and in the next cycle leads to the growth of investments in human capital. Consequently motivation is a necessary element to make the process of renewing the human capital (forming – accumulating - using) cyclically closed.

As A. S. Dyatlov considers, at the end of 19-th – beginning 20-th centuries there were formed two directions of economic thought which discussed the definition of the term "human capital". The majority of scholars defined the man himself as capital: L. Valras, G. M. Clark, H. D. McLeod, G. McKulokh, I. Tunen, T. Witshtane, W. Farr, I. Fisher were

addicted to this point of view. The representative of another direction, such as F. List, G. Mill, W. Rosher, N. Senior, Kh. Sidjuic, G. Z. Walsh, considered that the capital is presented as inherited and possessed by man qualities and abilities. As G. Mill wrote, "An individual himself ... is not capital. A human is an aim for whose sake the wealth exists. But his possessed abilities that act only as a method and are being realized only by means of work can be referred to the category of capital without any doubt".

Forming of human capital like accumulating physical and financial capital requires taking assets out of current consuming to get extra return in future. It is also considered as a long – term benefit; it needs expenditures to be repaired and exploited; it can become out of date before its physical amortization. These two types of capital are similar to be main factors of social renewing process, and in conditions of modern market economy they are able to make a special income; their interaction takes place as a component of total production capital that makes income. Forming of both capitals needs essential expenditures and taking a lot of assets and time out of current consuming that makes a loss. Investments to both types of capital allow providing long – term effect; both capitals can accumulate and act as a reserve. Every type of capital can be expressed in monetary terms and the result of their use can be measured in natural and monetary forms. Both types of capital have physical and moral amortization.

At the same time the similarity between human capital and capital in its traditional understanding can't be considered absolute. Firstly, in nowadays society an individual is not the subject for buying – selling. As a result, market sets only the prices on renting human capital (as wage and salary rates) while there is no price on its assets. Secondly, human capital is able to increase its efficiency in market sector as well as out of market. Obtainable income may be expressed in monetary or not monetary forms. Consequently, consuming aspects of investments in human capital are not less important than manufacturing ones.

Besides differences among qualitative characteristics of human capital we should recognize human and social capital that is defined as capital of interaction. If physical capital takes evident materialistic forms we could hardly say that about human capital. It appears in skills and knowledge acquired by an individual. Social capital is less tangible as it appears while interacting of individuals. Like physical and human capital, social capital makes easier manufacturing activity. As any other social capital inclines to grow or depreciate depending on its place in the system of social, market relations among participants of the social process.

As the comparative analysis of individual and social human capital shows the concept of social human capital highlights on mutual relations of economic entities but not an individual (Table 1).

Table 1. Comparison of human and social capital concepts

Feature	Human capital	Social capital
Object of research	Individual	Mutual relations
Parameters of estimation	1. the length of studying 2. the level of qualification	1. relations/ values 2. partnership/ participation 3. level of trust
Directions of action	1. Direct: income, production 2. Indirect: health, social activity, etc.	1. social unity 2. economic achievements 3. higher level of social capital

From our point of view the social capital should rationally be considered not as part of human capital but as an independent category that is defined as accumulated in community source of trust and predictability that essentially stipulates effectiveness of using the resources and human resources in particular. The total human capital is heterogeneous and has difficult interior structure that is not stable but dynamically changes with time.

Two types of human capital can be distinguished:

- consuming, created by services consumed directly (creative and educational activities);
- productive, its consuming encourages social utility (designing means of production, technologies, manufacturing services and products).

According to the forms of realization in terms of human capital the following can be distinguished:

- 1) alive capital which includes knowledge, health incarnated in a human;
- 2) subjective capital that is created when knowledge is being accomplished in physical, material forms;
- 3) institutional capital that is the institutions contributing to use all kinds of human capital.

Besides human capital is classified according to the types of investments emphasizing educational capital, health capital and culture

capital. The health capital is the investments to a human to form, support and improve his/her health and ability to work. Investments in health, its care, helping to reduce the sickness and death rate, extend human's able-to-work life and consequently the time of human capital functioning. Culture capital is a system of culture values accepted by an individual. Culture capital is forming under the influence of educational technologies - purposeful studying in specialized institutes as well as studying by accumulating experience and information in everyday and work life.

In more details we can present the given classification with the following elements:

- 1) intellectual capital (level of education, knowledge);
- 2) fund on training at manufacturing (qualification, skills, experience);
- 3) fund of health (psycho – physical and emotional characteristics);
- 4) fund of economy – important information (about prices and earnings);
- 5) fund of migration (mobility of human resources);
- 6) motivation of economic activity;
- 7) fund of free time (recreating and general cultural level of renewing human resources).

At the same time it is necessary to distinguish intellectual capital as an element of human capital and as a broader general category that includes human capital as a necessary element.

Comparing terms “working capital” and “human capital” we can find rather close link between them. So, demographic and medical – biological elements of labour potential (according to the classification developed by M. I. Dolishniy) absolutely logically can be compared with the health capital as the component of human capital. Educational and professional – qualification components of these categories are similar except of the fact that psycho – physiological characteristics of a human are considered in terms of professional – qualification capital, but M. I. Dolishniy emphasizes on morale potential of a human.

Including competence, mobility and knowledge awareness of information – communication technologies to the structure of human capital is the result of the transformation to the information community with the high mobility of all its components.

The term “labour potential” according to its content is closer to the term “human capital”. In a simple way human capital can be interpreted as working potential that is realized under market conditions accepting productive nature of investments in economy of a human.

Comparative characteristic of these categories is conducted according to various criteria (table 2).

Referring to the environment that caused appearing the category of “human capital” we should mention that under the conditions of continuing transformations it is necessary to take into consideration that the economy of Ukraine is on the transition to information society. Its features suppose to be aware of information technologies and the fact that science is becoming an essential productive force.

Table 2. Comparative characteristic of the categories “labour potential” and “human capital”

Criteria of estimation	Category “labour potential”	Category “human capital”
1. Environment for appearing:	Command – administrative economy	Market economy
-hierarchy of interests	Society → Enterprise → Personality	Personality → Enterprise → Society
-type of “social individual”	Traditional (patriarchal) individual	“Economic individual”
2. Levels of forming	-state (macroeconomic); -regional (mezzo-economic); -microeconomic (level of enterprises); -personal (individual, family level).	
3. Elements of internal structure	level of education; professional competence; state of health;	
		-awareness of economy – important information; -being motivated; -mobility; -informativeness;
4. Index of efficiency	Labour production	Wage rate as an index of the efficiency of investments in human capital

Numerous factors influence forming and exploiting human capital. To manage this process effectively it is of great importance to classify these

factors according to various scientific descriptors. Classifying descriptors include the following:

- phases of renewing (factors of forming and factors of using);
- type of influence in the process of renewing (intensive or extensive);
- level of influence (macro-, mezzo-, microeconomic and individual);
- type of influence (direct and indirect);
- result of influence (positive and negative).

Using the classification of the factors that form human capital we can point out the most important of those that suppose adequate representation of socio – economic, nature, demographic, geopolitical, national – cultural and other conditions to provide effective development of the united economic area, in particular, of a region (picture 1).

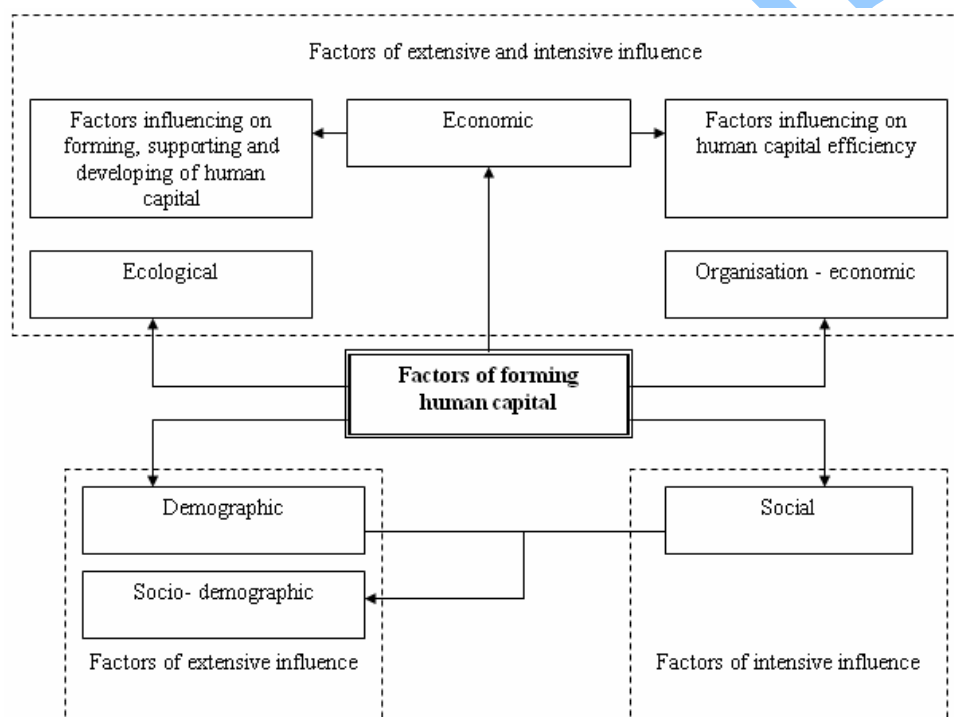


Fig. 1: Factors of extensive and intensive influence

Intensive factors lead to the increase of human capital by mobilizing internal reserves of the system, that is, its qualitative parameters. On the other hand, extensive factors make the same effect due to the growth of quantitative parameters. At the same time, all factors, more or less intensive,

influence on forming and using human capital. Nevertheless, we can point out three main factors that directly define the size of regional human capital: number of economic – active population and its growth rate, index of educational level and state of health of the population. Other factors influence mostly indirectly (Table 3).

Table 3. *Characteristic of the factors forming human capital*

Factors	Characteristic	Level of performance
1	2	3
Demographic	-population; -sex – age structure of population; -rate of natural growth of population; -average length of life.	Mezzo-economic and macroeconomic
Socio - demographic	-number of economic – active population; -division of economic – active population according to the industries and sectors of economy; -number of employed and unemployed population; -administrative – territorial division of employed and unemployed population; -length of work – active life period	Mezzo-economic and macroeconomic
Social	-level of general education and professional competence of population; -state of health and level of culture; -level of development of social infrastructure on a territory; -internal migration of the population; -growth rate of migratory balance.	Individual, microeconomic, mezzo-economic and macroeconomic levels
Economic: -factors of forming, supporting and developing	-real income of the population; -income division according to the population groups; -paying capacity of the population; -rate of inflation and economic stability.	Individual, microeconomic, mezzo-economic and macroeconomic levels

Table 3 - continued

1	2	3
-factors influencing on use efficiency	-quantitative and qualitative characteristics of labour market demand (or job vacancies); -level of technical – economic development; -general current economic situation; -management efficiency at all levels of economy.	Individual, microeconomic, mezzo-economic and macroeconomic levels
Organization - economic	-organizational mechanism of economy functioning (credit–fiscal mechanism, tax system, system of work stimulation, location of labour force on a territory); -level of specialization, concentration and cooperation of production; -state of international economic links.	Microeconomic, mezzo-economic and macroeconomic levels
Ecological	-general ecological condition of a territory; -quality of drinking water and food; -nature – climatic conditions; -sanitary – hygienic working conditions; -recreating characteristics of a territory.	Individual, microeconomic, mezzo-economic and macroeconomic levels

Conclusion

So, human capital possesses the dominating place in the system of national wealth of modern community: physical capital (that is usually counted and interpreted as national wealth), or accumulated material benefits total only 16% of overall world wealth; natural resources, or natural capital, are estimated of 20%; human capital – accumulated investments in an individual – are 64% of world wealth.

Undertaken research studies of human capital revealed its following features:

1. Human capital is the main value of modern society as well as basic factor of economic growth.

2. Forming of human capital requires substantial expenditures from an individual and the society as a whole.
3. Human capital can be accumulated and an individual can gain certain skills, abilities, improve his/her health.
4. With time human capital grows as well as experiences amortization both physical and morale. Individual's knowledge becomes out of date, that is, cost of human capital changes in the lifetime. Human capital's amortization is empirically grounded. In modern society the period of knowledge renewing is no more than 5 years and only knowledge but experience as well are under amortization.
5. Investments in human capital give their owners, as a rule, higher income in future. These investments provide the community with longer (time duration) and integral (according to their nature) economic and social effects.
6. Investments in human capital are estimated as long-term: average period of investing in education is 12-20 years, and health capital is invested by an individual during lifetime.
7. Human capital differs from physical capital according to liquidity rate as it can't be separated from an individual.
8. An individual controls his/her direct incomes independently on the resource of their origin.

Functioning of human capital depends on an individual's decisions and his/her will. Efficiency of human capital is determined by individual interests of a person, his/her preferences, material and moral interest, scope and general level of culture.

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