

TEORETICAL AND METHODOLOGICAL PRINCIPLES OF INFORMATION SOCIETY HUMAN CAPITAL DEVELOPMENT

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Abstract. Under conditions of information society development more and more attention is paid to the human capital conception research and its investments efficiency determination, because a high level of individual capabilities, which were created in the process of investing, provides a worker competitiveness, flexibility and realization in economic activity, stimulates subsequent development and self-perfection under conditions of the information society formation. The development of the concept «human capital», basic approaches to its determination and modern development features in domestic and foreign scientists' research works are researched in the article. The process of a human capital formation is analyzed, general and excellent lines with contiguous concepts are selected.

Keywords: human capital, information society, human potential, investments

1. Introduction

In the conditions of transformation changes and country socio-economic development ways of increase search more attention is paid to the human capital theory research. A large value is acquired by establishing a connection between the processes of investing in a human capital, of new technologies production and the long-term economy growing providing, due to inventions and innovations applying in industry.

Indisputable is a fact of agrarian and industrial public structures completion and gradual transition, and in the developed countries is postindustrial or information society prevailing, which is characterized by the economic relations development on the basis of the comprehensive use of information by deep application of the received knowledge and personality role growth, as a transmitter of these knowledge.

2. Materials and methods

In the history of economic opinion of the last decade's one of the most prominent events become a human capital theory development, the founders of which were T. Schultz and G. Becker, human capital investment efficiency was researched by J. Kendrick, L. Thurow, J. Heckman and other foreign economists.

Well-known Ukrainian scientists devoted works to human capital theory research, in particular L. Semiv, S. Vovkanych, E. Libanova, V. Kutsenko, O. Hrishnova, V. Heiets, L. Shevchuk, M. Azhazha, V. Antonyuk, O. Zakharova. Information economy development is investigated in works of F. Machlup, M. Castells, J. Akerlof, Y. Masuda, D. Bell. Ukrainian scientists A. Kolodyuk, L. Melnyk, L. Fedulova, A. Chukhno and other also research the problem of information economy and information society.

In spite of the human capital theory presents scientific achievements, the problem of the probed category formation and development under conditions of information society and necessity of its investment recreation providing is not studied enough.

Taking into account the resulted unsolved parts of problem there is a necessity and actuality of the theoretical approaches research of the essence determination of information society human capital on the basis of existent approaches analysis and processes of its forming.

3. Results

An information society transition determines the modern type of economy, where capital of knowledge in a greater degree, than physical, plays a major role in providing of successful changes on the way of state innovative development, actualizes the usage of the intellectual and innovative factor in community development, stimulates development of intellectual work, introduction, of the newest technologies, inventions, knowledge-intensive products, programs, front-rank now-how in the public production.

Postindustrial society formation and information revolution require including to the production process all worker capabilities that concern information perception, working and comprehension. Automation, network forms of production organization and management, oust a man from a direct production and require high development of intellectual, creative, social and organizational capabilities of a person.

For this reason all more and more attention is paid to the human capital conception research and its investments efficiency determination, because a high level of individual capabilities, which were created in the process of investing, provides a worker competitiveness, flexibility and realization in economic activity, stimulates subsequent development and self-perfection under conditions of the information society formation.

The economic idea classics researched the human role in a production process, the influence of person's high-quality features on economic development and at the same time did not reach to the conclusion, that a man can be subsumed «capital» (tabl.1).

Table 1.

The evolution of the human capital theory research by foreign scientists

Period	Author	Author Interpretation
Labour force expense interpretation		
Classical political economy 18-19 century	William Petty [1]	The author considered that the human intellectual capabilities influenced on the level of his profit, and the cost of man equals twentyfold earnings that he's paid
	A. Smith [2]	The author considered that formation of labour skills, knowledge, capabilities which he examined as elements of the fixed assets, required capitalist's additional investments, which were equated with other capital charges
	D. Ricardo [3]	The author detailed the labour force production structure and marked that the level of workers education influenced on the country development level
Tradition interpretation of human knowledge and abilities as a capital		
Neoclassical political economy the end of 19 century beginning of the 20 century	A. Marshall [4]	The author did not subsume a man capital, at the same time examined human knowledge and productive capabilities as one of capital constituents
	F.List [5]	Asserted that knowledge and capabilities perfection was a capital accumulation, and a mental capital is basis of a nation development
	J.Mill [6]	Asserted that a man was not a capital, but knowledge and experience, that realized through labour could be attributed to the capital
	Alternative interpretation of man as a capital	
	L.Walras, I. Fisher, J.McCulloch [7, c. 48]	Used the extended approach to the determination of man as capital and attributed to the human capital not only received knowledge and capabilities but also physiology, view-cultural, psychological and public features
Integral interpretation of human capital on the basis of rational optimizing individuals conduction		
Chicago Economic School 50-60 yy. of XX century	T. Schultz [8]	The author was the first who created the concept of human capital, the value of which erected to knowledge and capabilities development that received in the education and preparation process
	G.Becker [9]	The author probed a human capital investments efficiency and features of making decision about their realization, divided human capital to general and specific
	J. Mincer [10]	The author probed the individual profits in dependence of his knowledge and capabilities development by the use of salary built-in function for determination of norms of return from investments in education
70 yy of XX century	J.Kendrick [11]	Considered a man a capital, that is why to human capital investments except investments in education, included healthcare investment. Divided human capital into material and not material
	E.Denison [12]	The author grounded the role of human capital investments in the economy growing, proved that such investments gave in five a higher return in compared to material, and their recoupment considerably depends on the increase of labour force education level
Theory of filter		
70-80 yy. of XX century.	P.[Wiles 13], R. Layard [14]	Considered that education played a selective (informative) function, but did not productive, was the mean of selection, because more gifted people get higher education levels which in same time can serve as a signal for an employer about potential capabilities and productivity of worker. Scientists asserted that the labour productivity growth did not depend on education, but depend on the personal qualities and talents
Endogenous theory of human capital development		
90 yy. of XX century . - 2012	R. Lucas, R. Solow, P. Romer [15]	Scientists plugged in a production function a human capital, formation of which takes place under act of education which provides the increase of the labour productivity during all labour activity

Human capital research become an actual scientific problem under condition of information society and knowledge economy development, that is why logically, that the list of determinations and approaches to its interpretation constantly will grow as its role strengthen in economic and social development. The existed approaches to human capital determination are effectively used and operate in industrial society, at the same time, it is necessary to notice that under condition of information society development the role of human capital that formed on investment basis becomes more important and requires working out of new mechanisms of its development and recreation as human capital becomes a key factor of future development.

As a result of origin and distribution of human capital conception in economic science also changed approaches to the interpretation of a term «capital». Ideas that capital it above all things is a physical asset gradually begin to be replaced an idea, that a capital is any asset physical or human which is able to bring a profit in the future.

To our opinion, productive capabilities, experience, abilities are a capital not only because able to generate the future streams of profits and not because carried out due to reduction of current consumption, but because can provide possibility of income receipt as a result of realization in economic activity. For this reason human capital becomes the factor of production, which brings a profit (income) as a

result of the effective use of knowledge, skills, experience, mobility which was received as a result of investments of the basic subjects. More frequent we can face an equation of human capital with a term human potential because of formation and development general sources (rice. 1).

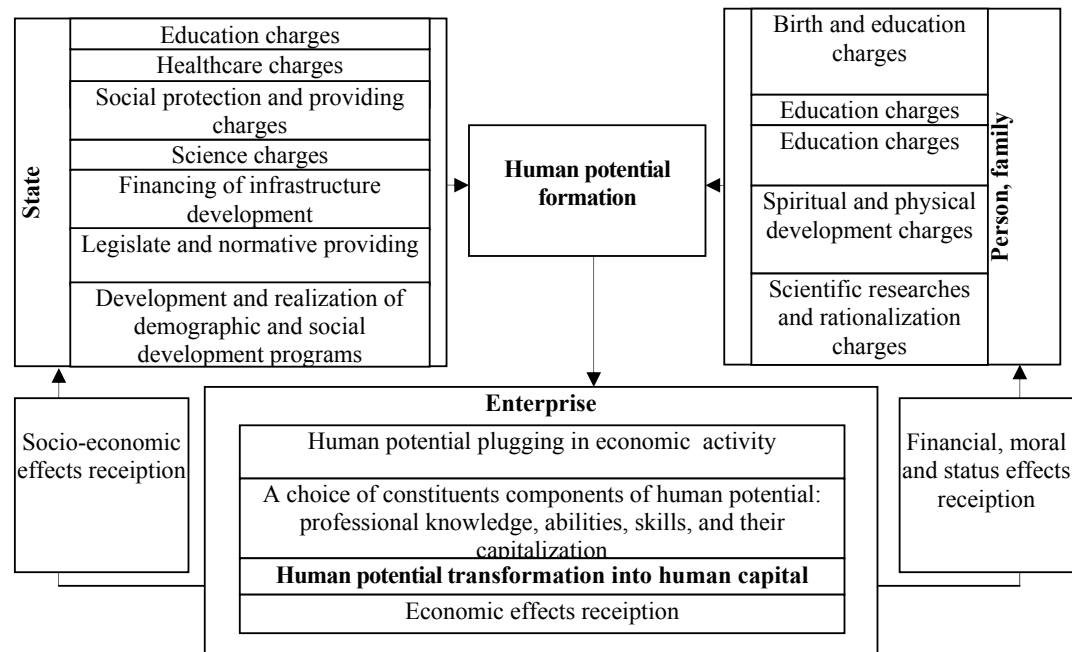


Figure. 1. Human capital formation process

However, human capital – it is only part of human potential which transforms into an asset as a result of plugging in labour activity and its separate constituents capitalizations, that allows to get the planned effects.

Complication of essence of «human capital» concept rises a problem of a category mess and frequent equation with contiguous concepts, that is why we offer to consider and define differences of them (table 2).

Thus, human capital differs from previous economic categories that is not only characterize individual potential capacities in labour or enterprise activity realization, but determines the real productive capabilities use which provides possibility of additional earnings or profit reception.

This capital is the unique among other resources, which has update, perfected, develop ability.

4. Conclusions

The modern approaches to a «human capital» concept enabled to develop own vision

of the category, define features of its formation process and development characteristic features under conditions of information society, which is connected with hardwires, methods, technologies production for new knowledge creation.

Table 2.

Human capital essence and basic differences between contiguous concepts

Concept	Description	Content difference
1	3	4
Human potential	The essence and component elements of human potential is determined as a volume of human capabilities in general, no matter plugged it in a financial or immaterial production or not, and the possible use term is determined [16]	Human potential can transform into a human capital in a result of realization at the labour market which will provide capitalization of the received knowledge
Work force	The essence of work force as capacity for labour, which is formed on the basis of physical and spiritual forces aggregate that can be plugged in a production process is determined. It was set that, term work force include work capable persons from 16 to the retirement age accepted in a country, employed or unemployed persons [17]	A category does not represent the investing aspects in individual productive capabilities development
Labour resources	It was found out that labour resources category is a part of work capable population, that by the level of physiological, psychological and mental development can be plugged in economic activity. It was set that to the labour resources belong working persons to 16 years old and after retirement age, do not belong invalids of the 1 and 2 groups, persons which get a pension on privilege conditions [18]	Despite of a human capital labour resources does not foresee the possibility of additional cost creation in the process of realization at the labour market as a result of high-quality features capitalization
Labour potential	Labour potential is defined as a resource category, measure of incarnate high-quality features, formed on the basis of natural information, education, which are included to the economic activity with the purpose of current and future necessities satisfaction. Labour potential is classified by the level of person, enterprise, society [19]	The researched labour potential components are examined as potential possibilities to labour activity, and the human capital components are really used in economic activity with the purpose of financial, social or status effect reception
Intellectual capital	The features of formation, usage and structure of an intellectual capital are defined. Its role in additional cost creation and of competitive edges formation is defined [20]	An intellectual capital unlike human can move away from a transmitter through the objects of intellectual property

A human capital becomes a valuable resource, and investments in it become a source of individual future profit and enterprise profit as a result of human potential capitalization and at the same time such investments have social efficiency, which is expressed through the increase of life standards, population stratification and social tension diminishment, possibility of self-realization and high social status acquisition.

References:

- [1] W.Petty (1940) "Economic and statistical works", Moscow, 126 p.
- [2] A Smith (1993) "An Inquiry into the Nature and Causes of the Wealth of Nations", Moscow, Vol., 1, 572 p.
- [3] D. Ricardo (1995) "Composition", Moscow, Vol., 1, 365 p.
- [4] A. Marshall (1993) "Principles of Economics", Moscow, Vol., 1, 415 p.
- [5] F.List (1891) "National system of political economy", Moscow, pp. 190-191.
- [6] L. Korniiichuk (2001), "History of economic science", Kyiv, 564 p.
- [7] V. Vasylchenko (2005) "Labour potential management", Kyiv, 403 p.
- [8] Schultz T (1971) Investment in Human Capital: The Role of Education and of Research, N.Y., 129 p.
- [9] Becker G. (1993) Human Capital: Theoretical and Empirical Analysis, with Special Reference to Education, University of Chicago Press, 390 p.
- [10] Mincer J. (1974) Schooling, Experience, and Earnings, Columbia University Press, 167 p.
- [11] J.Kendrick (1976) Formation and stocks of total capital, N. Y., 275 p.
- [12] Denison E.F. (1962) The source of economic growth in the United States and the alternatives before us, N.Y.
- [13] Wiles P. (1974) The Correlation between Education and Earnings: The External-Test-not-Content-Hypothesis (ETNC), Higher Education, vol. 3, № 1., 53 p.
- [14] I. Chekan (2006) "Actuality of aproblem of human capital health protection and ways of its decision", Lviv university announcer, Vol., 16, pp. 190-197.
- [15] I. Radionova (2009) "The economy growing by the impact of human capital", Ukrainian economy, Vol., 1, pp. 19 – 30.
- [16] S. Zlupko (2001) "Human potential, employment and social defence of population in Ukraine", Lviv national university, 192 p.
- [17] L. Mykhailova (2003) "Personnel Management", Sumy, 256 p.
- [18] V. Okienko (2004) "Methodology of labour force demand and supply adjusting", Employment and labour-market, Vol., 18., pp.7 – 14.
- [19] V. Hrynova (2010) "Economy of labour and sociallabour relations", Kyiv, 310 p.
- [20] S. Vovkanych (2004) "Globalization calls and national identity maintenance: aspects of good and evil", Lviv university announcer, Vol., 25, pp. 67-82.

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