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THEORETICAL AND METHODOLOGICAL ANALYSIS OF THE INTERRELATION BETWEEN THE EDUCATION SYSTEM AND THE CONCEPT OF HUMAN CAPITAL

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Abstract

This article presents reflections on the concept of human capital, the historical process of its introduction into scientific discourse, and the stages in the development of human capital theory as an independent field of scientific inquiry. It examines the contributions of American economist Theodore Schultz in this area and explores the research conducted by Western economists and sociologists during the 1960s. Additionally, it investigates the specific socio-economic conditions that emerged in Western societies in the latter half of the twentieth century, which contributed to the formation of the human capital theory.

Keywords

Human capital, investment, physical and intellectual abilities, research, motivation, education and upbringing, sociological approach, labor productivity, healthcare expenditures, human factor.

Introduction

It is well known that the concept of human capital did not emerge spontaneously but is the natural outcome of the evolution of global philosophical and later economic thought. The sociological approach to human capital developed alongside economic theories. Within this framework, the individual evolves into a social person endowed with traits that contribute to labor productivity—such as morality, cultural orientation, religious belief, attitude toward labor, spiritual outlook, health, and creativity. The mechanism that cultivates all these qualities is the system of education and upbringing.

From a historical perspective, during the era of slavery, slave owners viewed humans as mere instruments to generate income through their labor. In ancient times, people worked tirelessly just to secure basic necessities like food and shelter. As democratic processes gradually took root in Western European countries, individuals began to be compensated based on their labor capacity. With the onset of industrial society, theoretical foundations for the concept of human capital began to emerge.

One of the pioneers of classical political economy and statistics, William Petty of Oxford University, introduced the term "active labor force" and considered it an integral part of national wealth. Issues related to human capital began to be actively discussed by Western economists in the mid-20th century, though the topic had been touched upon since the early development of economics as a distinct discipline. The theory of human capital eventually developed into a separate branch of economic science, thanks to the significant contributions of many economists.

By the 20th century, economists working within the framework of human capital theory initiated the first attempts to quantify its effectiveness in economic terms. They began employing economic, mathematical, and statistical tools to analyze issues such as the impact of national education systems on economic development, household expenditures related to enhancing human economic value, and the formulation and utilization of public expenditures for education and upbringing. Prominent economists like L. Dublin, F. Crum, I. Fisher, and S.H. Forsyth laid foundational principles that significantly influenced the modern theory of human capital.

The scientific approach to human capital theory enabled the examination of various issues such as income dynamics by age, the distribution of personal incomes, wage disparities between men and women, and the reasons for migration. Some scholars have defined human capital as the accumulation of knowledge, skills, and motivations inherent to each individual. Since it is inseparable from the individual, it is termed human capital.

Dutch economist M. Blaug described human capital as an "investment" concept, asserting that it does not represent the intrinsic value of individuals themselves, but rather the value added by previous investments in their skills. Russian economist Sergey Dyatlov defined human capital as the stock of health, skills, abilities, and motivations accumulated by individuals as a result of targeted investments in various sectors of public reproduction, which ultimately influence labor productivity and personal income. Another Russian economist, S. Kurganskiy, described human capital as the measure of capabilities and qualities accumulated through investment, whose targeted utilization leads to increased labor efficiency and income.

To fully comprehend the essence of human capital, it is essential to study it in relation to the broader concept of capital. This involves integrating historical and logical approaches in economic research and taking into account the origins and nature of capital itself. While human capital shares features common to capital in general, it also possesses specific characteristics unique to it. In the early 20th century, American economist I. Fisher stated that capital should be understood as anything capable of generating a stream of income over time, and that every form of income is the result of some kind of capital.

The formation of human capital theory as an independent scientific discipline was driven by research conducted in Western countries during the 1960s and by specific socio-economic conditions that emerged in Western societies during the latter half of the 20th century. Although the concept of human capital was introduced into scientific discourse in the early 20th century, it began to be widely applied across various sectors—such as production, science, education, politics, and culture—on the eve of the 21st century. The term first appeared in the works of American economist Theodore Schultz, who won the Nobel Prize in 1979 for his research on economic issues in developing countries. According to Schultz, human capital refers to investments made to develop an individual's competencies through education and training, whether these abilities are innate or acquired.

Broadly speaking, human capital refers to the long-term investments made in an individual's education, training, healthcare, moral and intellectual development, experience, and skills, all aimed at transforming the individual into a well-qualified professional in a specific field. Schultz's theoretical framework was later refined by G. Becker's seminal work "Human Capital" (1964), which presented a classical interpretation of the concept. These two scholars are closely associated with the development of human capital theory.

Theodore Schultz's fame grew worldwide following the publication of his two co-authored works, "Capital Formation in Education" and "Investment in Human Capital," in 1960–1961. In the latter, he argued that the concept of capital must be based on the existence of real entities that possess economic value capable of providing services in the future.

Schultz's concept of human capital rests on several key ideas:

• Human capital enables individuals to earn additional income due to their acquired knowledge, skills, and competencies.

• Education is a form of capital that serves as a key driver of economic growth.

• Educational capital is inherently linked with human capital and is considered one of its essential components.

• Education is a source of future prosperity and income.

• Additional investment in education is required to improve the productivity and quality of the labor force.

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• Investing in the education system means investing in productive factors that can generate higher-quality goods and services.

Another foundational figure in this field, Professor Gary Becker of the University of Chicago, developed the human capital theory further. Awarded the Nobel Prize in 1992 for his microeconomic analysis of human behavior and social interaction, Becker played a significant role in shaping the human capital framework. In his 1962 work "Investment in Human Capital," he emphasized that human capital is formed through investments in education, vocational training, healthcare, migration, and access to information about prices and incomes. These investments, in turn, enhance an individual's productive capabilities, intellectual and cultural potential.

Becker's 1964 book, "Human Capital: A Theoretical and Empirical Analysis," became a classic in the field and laid the foundation for subsequent research by other scholars. Initially, the concept of human capital was vague and ambiguous. Becker clarified that human capital is inseparable from the individual and is manifested in the form of growing income through productive labor.

Other major contributors to this theory include M. Blaug, M. Grossman, S. Bowles, R. Layard, J. Mincer, M. Perlman, L. Hansen, and L. Thurow. Contemporary interpretations of human capital are closely tied to the transition to a post-industrial society and represent the natural result of the historical development of society. Modern economic theory defines human capital as a product of investments in education and healthcare that aims to preserve and enhance an individual's intellectual and physical capacities, contributing to increased personal income and the development of the market economy.

Beginning in the 1970s, scholars from the U.S. and Europe—including Schultz, Becker, Blaug, Rosen, Welch, and Chizunka—argued that general human development was more beneficial than narrow vocational preparation. Becker's model showed that educational investments lead to increased future income, while poverty results from insufficient investment in human capital. From an economic perspective, human capital is seen as a source of economic growth, evaluated through labor quality and productivity improvements.

Prominent American economist Howard Bowen emphasized that human capital consists of the knowledge, skills, motivation, and energy available to individuals for the production of goods and services. Princeton University economist Fritz Machlup noted that investments enhancing an individual's physical and mental abilities transform underperforming labor into productive human capital. Initially, economists understood human capital as the capacity to earn income as a result of investments. Today, the World Bank includes consumption expenditures, food, clothing, housing, education, healthcare, culture, and relevant state expenditures in the structure of human capital investments.

The necessary conditions for the development of human capital theory can be found in the works of classical Western sociologists such as M. Weber, G. Simmel, H. Spencer, E. Durkheim, and T. Parsons. Their writings link the concept of human capital with the value of human life and personal characteristics—such as morality, culture, religion, and social responsibility in labor. According to sociologist M. Weber, rapidly developing societies place a growing emphasis on the human factor.

American sociologist Talcott Parsons proposed studying social institutions and educational systems as integral parts of the social system. Austrian-born American economist Peter Drucker wrote, "The sole competitive advantage of developed countries remains their skilled labor resources. Unlike unskilled workers, skilled employees possess the means of production: they carry their knowledge with them."

In conclusion, the theory of human capital has been predominantly shaped by economists, while sociological approaches offer a broader perspective that considers the social indicators of individual economic behavior. This sociological framework compares human capital with human potential, the human factor, and social capital.

LIST OF REFERENCES:

1. Quoted from: Lyan D. *The Information Society. Issues and Illusions* / D. Lyan. – New York, 1988. – P. 150.
2. Blaug M. *An Introduction to the Economics of Education*. – London, 1970. – P. 19.
3. Dyatlov S.A. *Foundations of the Theory of Human Capital*. St. Petersburg: Publishing House of UEF, 1994. – P. 83.
4. Kurgansky S.A. *Human Capital: Essence, Structure, Evaluation*. Irkutsk, 1999. – P. 97.
5. Fisher T. *The Nature of Capital and Income*. London, 1927.
6. Cheremnykh Yu.N. *Microeconomics. Advanced Level: Textbook*. – Moscow: NITS INFRA-M, 2015. – 844 pages.
7. Becker G. S. *Investment in Human Capital: A Theoretical Analysis* // Journal of Political Economy. Supplement. Oct., 1962.
8. Schulz T. *Investment in Human Capital* // American Economic Review. – 1961, March – No. 1.

9. Becker G. S. *Investment in Human Capital: A Theoretical Analysis* // Journal of Political Economy. Supplement. Oct., 1962.

10. Becker G. *Economic View of Life. Lecture by Nobel Prize Laureate in Economic Sciences, 1992* / Vestnik of St. Petersburg University, Series 5, Issue 3, 1993.

11. M. Bekmurodov *Human Capital – A Factor of Development*. Tashkent: Ma'naviyat, 2015. – P. 5.

12. Bowen H.R. *Investment in Learning*. San Francisco, 1978. – P. 362.

13. Machlup F. *The Economics of Information and Human Capital*. – Princeton, 1984. – P. 419.

14. *Beyond Economic Growth Student Book. Glossary*. – [Electronic resource] – Access

15. mode: http://www.worldbank.org/depweb/english/beyond/global/glossary.html

16. Durkheim É. *Sociology: Its Subject, Method and Purpose*. – Moscow: Kanon, 1995. – P. 236.

17. Parsons T. *On the Structure of Social Action*. – Moscow: Academic Project, 2000. – P. 94.

18. Drucker P. *On the Profession of Management* / Translated from English. – Moscow, 2008.