



## INVESTMENTS IN HUMAN CAPITAL IN THE SERVICE SECTOR

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<b>Received:</b> 20 <sup>th</sup> July 2023 <b>Accepted:</b> 20 <sup>th</sup> August 2023 <b>Published:</b> 20 <sup>th</sup> September 2023	This article describes the necessity and importance of investing in human capital in the service sector, the specifics of investing in human capital in the service sector, and the algorithm for effective use of human capital in the service sector. The article also presents the results of investments in human capital, the factors affecting them, and the share of human capital in the countries of the world

**Keywords:** human capital, investment, investment in human capital, efficiency of investment in human capital, education index, human capital assessment

### INTRODUCTION

Any person planning their future, the state pays special attention to investing in human capital. Because it is the basis of economic growth in the country. Investing in human capital differs from other types of investments by a number of features.

Research shows that investing in human health is just as important as investing in education. Because the importance and economic value of health is extremely necessary for the acquisition of human capital. Low life expectancy in the country makes investing in health a priority expenditure

### MATERIALS

During our research, we looked at 5 features.

1. Research shows that the effectiveness of investments in human capital directly depends on the life expectancy of the person to whom these investments are made. The earlier investments are made in people, the sooner they start to bear fruit. It should also be taken into account that better quality and long-term investments bring higher and longer-term results.

2. Human capital not only wears out physically and mentally, but also accumulates and increases. Depreciation of human capital is determined, firstly, by the natural aging of the human body (old age level), and secondly, by the degree of obsolescence of knowledge or the degree of change in the value of acquired knowledge. Human capital is accumulated in the process of regular training of employees, improving their skills and enriching them with production experience. If this process continues continuously, the qualitative and quantitative characteristics of human capital will improve and increase.

3. With the accumulation of human capital, its profitability increases up to a certain limit. More specifically, the upper limit is limited by the active

working age of a person, after which the income may decrease.

4. It should be said that human capital has the nature of reproduction. It can be explained as follows: the quality and quantity of human capital directly depends on the quality of the education system and the relationship between the learner and the teacher. A teacher should be not only a teacher, but also a person who creates skills from the knowledge he has given, explains how to use the knowledge he has acquired in practice, and develops creative thinking.

5. Research results show that investments in human capital should have a positive effect on the individual, his family and society, or should be socially acceptable and economically necessary.

A study conducted by Robert Zemsky, a professor of education at the University of Pennsylvania in the United States, along with Lisa Lynch, an economist at Tufts University's Fletcher School of Business, and Peter Copelli, a professor at Wotton University, found that "with a 10.0 percent increase in education, total labor productivity increases by 8.6 it was determined that it increased by percent. By comparison, labor productivity increased by only 3.4 percent when fixed assets were increased to this level. In other words, the return on investment in human capital is three times higher than the investment in technology"<sup>1</sup>.

World-famous economists K. McConnell and S. Brew distinguished three types of investment in human capital:

- educational expenses, including general and special, formal and informal education, training in production;
- health care costs (prevention of diseases, medical services, food, housing improvement);

<sup>1</sup> Dobrynin A.I., Dyatlov S.A., Tsykenova E.D. Human capital and transitive economics: formation, otsenka, effektivnost ispolzovaniya.- SPV.: Nauka, 1999.- p.127



- mobility costs that allow employees to move from relatively low-performing locations to more productive locations<sup>2</sup>.

Research shows that investing in human health is just as important as investing in education. Because the importance and economic value of health is extremely necessary for the acquisition of human capital. Low life expectancy in the country makes investing in health care a priority. This helps to extend human life, that is, to extend the life of human capital.

Unsatisfactory state of personal health reduces labor productivity. Physically weak and sick workers cannot fully demonstrate their human capital. Therefore, companies have an economic interest in investing in the health of their employees.

There are different approaches to evaluating the effectiveness of investing in human capital. J. Fitts-entz proposed to calculate the effectiveness of investments in human capital by determining it in a simple way: income divided by the number of employees<sup>3</sup>:

**Human Capital Investment Efficiency**

$$\text{Ratio} = \frac{(\text{Profit} - (\text{Costs} - [\text{Salary} + \text{Benefits}]])}{\text{Salary} + \text{Benefits}}$$

This was the first indicator presented in the 1985 Human Resource Performance Report.

Investments in an employee's education form his human capital and after a certain period bring benefits to the owner according to the following formula:

$$Y_n = X_0 + RC_n,$$

where  $Y_n$  is the salary of a person with  $n$  years of education;

$X_0$  is the salary of an employee with zero education;

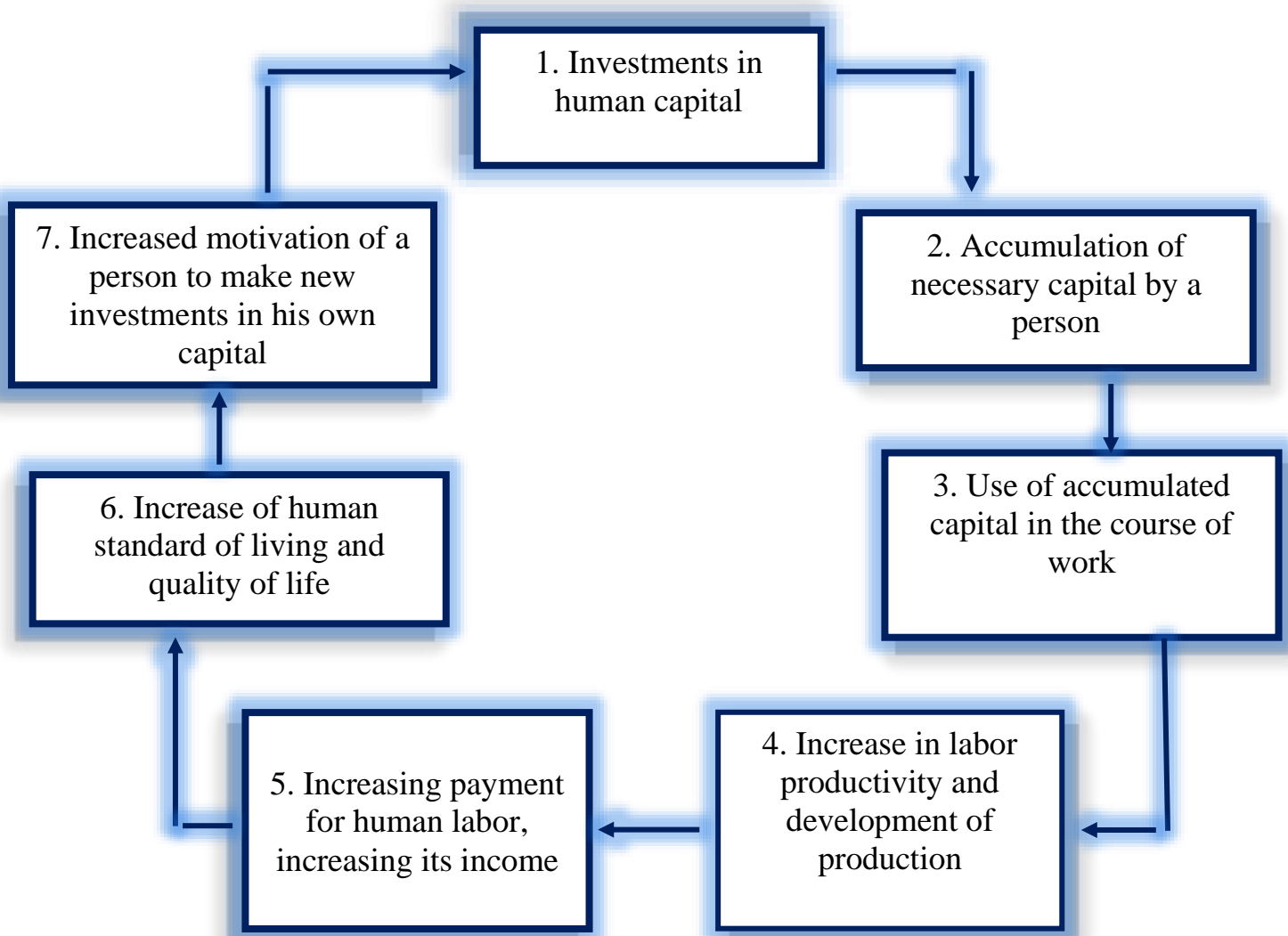
$R$  is the norm of the current effect of spending on education;

$S_n$  - amount of investments during  $n$  years of education.

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<sup>2</sup> McConnell KR, Brew SL. Economics: principles, problems and politics. T. 2. - M.: Respublika, 1992. - p.87.

<sup>3</sup> Fitts-ents Ya. Rentabelnost investitsii v personnel: izmerenie ekonomicheskoy tsennosti personnela / Per. S ang., pod obshch. Ed. V. I. Yarnykh. - M.: Vershina, 2006. - p.137.



**Figure 1. Algorithm of formation and use of human capital in the service sector<sup>4</sup>**

<sup>4</sup> Developed by the author based on research.



After determining the costs of education and the resulting benefits, the amount of benefit received is compared with the amount of expenses. The difference between these two amounts represents the value of the training received.

Economist G. Psacharopoulos determined the social effectiveness of investments in education based on per capita income of countries. "According to their data, in the poorest countries with low per capita income, the efficiency of primary education was 23.0 percent, the efficiency of secondary education was 15.0 percent, and the efficiency of higher education was 11.0 percent. In the most developed countries with a high level of income, the efficiency of primary education was equal to 14.0 percent, secondary education - 10.0 percent, and higher education - 8.0 percent. The governments of these countries project the above-mentioned efficiency in the design of investments in the field of education at less than 8.0 percent<sup>5</sup>".

## METHODS

Methods such as logic, induction and deduction, analysis and synthesis, comparative analysis, statistical and comparative analysis, scientific abstraction, complex evaluation were used in the research

## RESULTS

In our research, we examined the impact of these investments in human capital on the employee, employer and society (see Table 1). According to it, both the society, the employer, and the employee benefit from investments in human capital.

**Table 1**  
**The effectiveness of investments in human capital<sup>6</sup>**

<b>For Society</b>	<b>For Employer</b>	<b>For Employee</b>
<p><b><u>Benefits:</u></b></p> <ul style="list-style-type: none"> <li>• increase in state competitiveness;</li> <li>• increase in tax revenues;</li> <li>• improvement of public health;</li> <li>• increase in the level of employment;</li> <li>• poverty reduction, etc</li> </ul>	<p><b><u>Benefits:</u></b></p> <ul style="list-style-type: none"> <li>• increase in profit due to improvement of service quality;</li> <li>• strengthening of competition in the market;</li> <li>• reduction of losses due to employee absenteeism due to illness</li> </ul>	<p><b><u>Benefits:</u></b></p> <ul style="list-style-type: none"> <li>• salary increase;</li> <li>• reduced risk of unemployment;</li> <li>• reduction of loss of wages due to illness</li> </ul>
<p><b><u>Costs:</u></b></p> <ul style="list-style-type: none"> <li>• reduction of tax revenues during the period of public education;</li> <li>• direct general expenses for social purposes</li> </ul>	<p><b><u>Costs:</u></b></p> <ul style="list-style-type: none"> <li>• direct costs for equipment safety, medical services for employees;</li> <li>• indirect losses associated with a decrease in labor productivity during the period of training and retraining of employees;</li> <li>• the risk of losing qualified employees</li> </ul>	<p><b><u>Costs:</u></b></p> <ul style="list-style-type: none"> <li>• direct personal expenses for education and medical care</li> </ul>

The experts of the World Bank proposed their own methods for estimating the value of human capital. For this, they subtract the value of national wealth - land, minerals, forest and marine resources, productive capital and other assets - from the total national wealth income. The resulting amount is the value of human capital.

The value of human capital calculated in this way is about half of the national income even in poor countries, and three-quarters in developed countries.

The data of the BMSH Development Program also substantiates that the country's GDP index depends on the main part of human capital - the education level index (see Table 2)

<sup>5</sup> Psacharopoulos D. A comparative approach to the assessment of education and professional training. // D. Psacharopoulos; Per. English E.V. Zimina //Economic education.- 1999. - N 2. - p. 71-72

<sup>6</sup> Developed by the author based on research.



**Table 2**  
**Correlation of the GDP index with the level of education index<sup>7</sup>**

Countries	Education level index	Gross domestic product index
High-income countries	0,97	0,96
Middle-income countries	0,84	0,70
Low income countries	0,58	0,52

According to many researchers, the long-term strategy for the development of national human capital should be implemented according to the following principles:

1. Formation of national human capital based on the recognition of the state's priority tasks in the field of reproduction.
2. Investing in the formation of human capital, taking into account the social status of the population.
3. Priority development of the social sphere using tools and mechanisms that ensure the stable development of the national economy.

The quality of this human capital is the most important factor in the social and economic development of the country.

In the process of human capital formation, strong mutual cooperation of investors is required. In this interaction, the function of the state is to create common human capital. That is, it means the need to develop general education and health care as a social system, which is necessary for the performance of labor functions.

**Table 3**  
**Weight of human capital in countries of the world<sup>8</sup>**

Countries	Amount of human capital (trillion USD)	The share of human capital in the total amount of national wealth,
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<sup>7</sup> Representative office of the United Nations Development Program in the Republic of Uzbekistan // <http://www.undp.uz>.

<sup>8</sup> According to the World Bank // <http://www.worldbank.org>

		%
USA	95	77
China	25	77
Brazil	9	74
India	7	58

Today, in most countries, the main attention is focused on the development of education and science, which are considered important parts of human capital. It is noteworthy that "100 years ago, state spending on education was 1.0% of GDP. Today, this figure has reached 5.1 percent. As a result, the number of people with primary education in the world has exceeded 94.0% of the total population<sup>9</sup>.

The formation and development of human capital known to us takes place during the entire activity of a person's life. In this process, the enterprise plays an important role, because a person spends most of his life at work. Having determined that the innovative development of service sector enterprises depends on human capital, it is necessary to consider at the level of the enterprise the factors that prevent the full formation of human capital and, as a result, do not bring a large amount of income.

### CONCLUSION

In conclusion, it can be said that investing in the full cycle of education means investing in the upbringing and education of a child from 3 to 22 years old. It is during this period that depending on how much money each country invests in human capital, it is evaluated what kind of changes the country will bring in the future.

A typical example is that the state spends an average of 231,000 dollars on young people between the ages of 3 and 22 in the United States, while the state spends 3.1 million dollars on those between the age of 22 and the retirement age. while in South Korea, the state spends an average of 130,000 dollars on young people between the ages of 3 and 22, and 2.6 million dollars to the state from the age of 22 to the retirement age. while returning in the amount of dollars. If you pay attention, it will return almost 15-17 times.

In Uzbekistan, this indicator is very low, 19,000 dollars were spent, and 77,000 dollars were returned only 4 times.

Human capital is the determining factor of this future. Therefore, special attention is paid to it in developed countries..

<sup>9</sup> From the World Bank // <http://www.worldbank.org>



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