

## INVESTMENTS IN HUMAN CAPITAL IN THE ECONOMY AND THEIR ANALYSIS

**Nargiza Khakimovna Ruzibayeva**

PhD. Associate Professor of the  
Department of Investment and Innovations,  
Samarkand Institute of Economics and Service

**Abstract.** *Human capital is a key element of a knowledge-based economy. The competitive advantages of the economy and its modernization potential in today's conditions are directly determined by the human capital accumulated and used in the country. The relevance of the problem under study arises from the need to reconsider state policy aimed at increasing the value of human capital, which should have a decisive impact on the economic growth of the state. Therefore, the purpose of this article is to assess and analyze the direction of state policy in the field of human capital formation. It shows the importance of analyzing detailed indicators that combine the processes of formation, accumulation, capitalization and use of human capital.*

**Key words.** *economic growth, cost of human capital, knowledge economy, business education, investment, human capital, resource efficiency.*

**Introduction.** One of the most important factors contributing to a country's economic growth is human capital. Various factors, including product and process growth, healthy enterprise spaces, financial capital effects, and regional economies of scale, have traditionally been the basis of companies' strategic tactics. However, financial assets in the business environment no longer provide lasting competitive advantages,

characterized by market fragmentation, increasing demand, and the rapid pace of technological change. The contribution of an organization's human resources to the business and the people working within it brings significant benefits to the people working within the group. This tends to make the development of the workforce more effective and keep the company healthy. In today's business world, human capital is a competitive asset that is considered by every organization. By attracting a skilled workforce in enterprises, production efficiency has been controlled. Today, almost all industries and sectors are making effective use of and investing in human capital.

Uzbekistan ranked 106th out of 193 countries in the 2024 UNDP Human Development Index. The index provides data for 2022. The country has dropped one place compared to 2021 (it was 105th). The index is compiled using indicators such as life expectancy at birth, expected and actual years of education, and gross national income per capita in purchasing power parity. Uzbekistan's Human Development Index was estimated at 0.727, with a maximum value of 1.000. Thus, the country was included in the category of countries with a high Human Development Index.

The Human Development Index is an index ranging from 0 to 1, where 0 corresponds to the lowest level of human development and 1 to the highest level. Countries are divided into highly developed, moderately developed, and least developed countries based on their Human Development Index levels. The Human Development Index is an important tool for comparing the level of human development between different countries and assessing the effectiveness of socio-economic policies in the areas of health, education, and income.

**Literature analysis.** To transform the country's economy to a qualitatively new state, ensure competitiveness, flexibility and subsequent economic growth, large investments are required. Today, one of the most important tasks is to create an economy based on the development of individual potential. In New Uzbekistan, where a person and his abilities, knowledge, and skills have become the main factor in the well-being of any society and the economic development of the state, human capital is undoubtedly a priority area of socio-economic policy. Because the development of human capital is a prerequisite for the development of an innovative economy, a knowledge economy, investments, global information systems, the latest technologies, and new forms of business.

Economist Mincer has explored the concept of "investing in human capital" and argued that organizations should invest more in people than in other physical capital [1]. He added that investing organizations should identify the potential of their employees to achieve maximum results. Therefore, he emphasizes the organizational ability to identify the specific training needs of employees to ensure that investments are used appropriately, rather than providing employees with general training that does not lead to effective improvement of human capital.

According to P. Tharenou, A.M. Sachs and C. Moore, formal training development programs begin with the expectation of a return on investment that will lead to improved organizational performance [2]. It has been reported that there is a sense of doubt about the relationship between training and outcome measures, as it is associated with greater investment in human capital and employee retention.

In order to make decisions on investing in human capital and evaluating human resources in terms of potential economic benefits, management must have all the relevant information related to human resources. Insufficient attention to investments in human resources or distortion of the information obtained leads to significant losses in capitalization and significantly reduces the market value of companies. Based on the above considerations, it can be said that the level of education and professionalism helps to increase the value of using human capital. Highly qualified employees increase the demand for human capital.

**Analysis and results.** The innovative economy is based on the flow of innovations in determining the scientific, technological and socio-economic development of the country. In this context, employees, their knowledge and experience are an important factor in financial and economic activity. In the context of the country's globalization into the world economy, the use of new information resources and technologies, the development of new sectors of the economy become a requirement of the time. This, in turn, affects the fact that the need for the development of human capital is increasing from year to year. Therefore, today the development and implementation of measures aimed at investing in human capital is a requirement of the time. In this regard, as our esteemed President Sh.M. Mirziyoyev noted, "Developing human capital and educating a creative young generation is one of the strategic tasks that Uzbekistan has set itself. We believe that open and quality education for all is the most effective factor in eradicating poverty, increasing people's well-being, and achieving sustainable economic growth. Our country has gained extensive experience in this regard in

recent years - the education system is undergoing fundamental changes. Over the past six years, coverage in preschool education has increased from 21% to 70%, and in higher education from 9% to 38%. By 2030, every child will have the opportunity to attend kindergarten, and every second school graduate will have the opportunity to study at a higher education institution” [3].

The constant renewal of technological processes, the increasing number of innovative developments and intensive economic growth factors further increase the demand for qualified personnel who can quickly adapt to these processes. That is why the New Uzbekistan Development Strategy, which is the legal basis for the development of our country until 2030, recognizes “...human capital development” as one of the top priorities [4]. This situation indicates that attention is paid to the development of human capital at the state policy level in our republic and significant investments are being made for these purposes.

Studies have shown that modern aspects of human capital theory distinguish three types of investments in human capital, namely:

- educational costs (general and special, formal and informal, without interruptions from work);
- health costs (disease prevention, medical care, dietary nutrition, improvement of housing conditions);
- mobility costs (relocation of workers from places with relatively low productivity).

It follows that among all types of investments in human capital, investments in health and education are the most important. The benefits of education and other forms of investment in human capital can be both financial and spiritual. This means higher income in the future.

This is the widest access to interesting, pleasant and promising work.

This is a high prestige of the profession or high satisfaction from activities that are not marketable in the future. Investments in education can be made at different levels, namely:

macro-level - financing from the budget;

meso-level - investments by companies;

micro-level - investments by private individuals.

The quality of life of the population is directly related to the investment in people that has increased in developed countries in recent years. Thus, investment in human capital there grows faster than in physical capital, and the total expenditure on health, education and social security is three times higher than investment in production. According to some estimates, the return on higher education is from 8% to 12%, while the average return on physical capital rarely exceeds 4%. The contribution of education to the growth of national wealth (at least 30%) can be very significant.

Of course, people who invest more in education will later have a higher income to continue their full-time gainful activity than those who invest less in education. It is worth noting that investments in health care bring income. According to researchers, the death of a 16-year-old person causes a total loss to society; A 40-year-old man brings benefits to society, while a 65-year-old man brings twice as many. Thus, it can be argued that investments in human capital have a number of characteristics that distinguish them from other types of investments. These include:

➤ the amount of profit from investments in human capital depends on the expected life expectancy of the owner (work experience);

➤ the sooner funds are invested in a person, the sooner they begin to bring profit;

➤ human capital is not only subject to physical and moral deterioration, but also has the ability to accumulate and multiply;

➤ with the accumulation of human capital, its profitability increases to a certain extent, is limited by the upper limit of active labor activity (active working age), and then sharply decreases;

➤ Not all investments in people can be called investments in human capital, for example, expenses related to criminal activity are not investments in human capital, since they are socially unacceptable and harmful to society;

➤ The nature of investments in human capital is determined by historical, national and cultural characteristics and traditions;

➤ Compared with investments in other types of capital, investments in human capital are the most profitable for both the individual and society as a whole.

It is not for nothing that in our country, and in the world in general, the effective use of human capital is considered a key factor in economic development. In economically developed countries, the share of human capital in national wealth is up to 80 percent. Therefore, special attention is paid to the development of human capital in developed countries of the world.

Government measures to educate the population, protect their health, and guarantee social protection are of great importance today not only for the development of a person as an individual, but also for the country to become more competitive and prosperous. Of course, internal and external factors significantly affect the formation and development

of human capital. If internal factors are directly related to the person himself, then external factors are associated with the influence of other entities on the formation and development of human capital.

Any investment in human capital will only pay off if it has a sufficiently high profitability and payback period. Therefore, when implementing an investment policy related to investing in human capital, it is important to analyze the risks in this regard and assess the economic efficiency of investments.

In the context of the development of science, technology and artificial intelligence, human capital is becoming an indispensable factor determining the future of a country. Investment in human capital is an investment in the development and improvement of human capabilities, skills, and the main goal of which is to increase productivity. It also represents a strategy that includes the time, effort, and financial resources spent on helping people learn, improve their knowledge, and restore and improve their health. This concept recognizes the inherent value of the individual and recognizes the long-term benefits that arise from investing in the socio-economic growth and well-being of a person at the household and societal levels.

Investing in education is an important aspect of human capital development. It includes formal education at school, college, and university, as well as vocational training programs. The professional competencies acquired at each new stage have a positive effect on increasing the economic efficiency of human capital in the future. Education provides people with the essential knowledge, critical thinking, and adaptability needed in a constantly changing world. It also guarantees high wages, a good career, material well-being, and financial

stability. Education and preparation for production increase a person's level of knowledge. This, in turn, has a positive effect on the volume and quality of human capital. According to research, a 10 percent increase in educational attainment increases productivity by 8.6 percent.

Investing in health and well-being is also an integral part of human capital development. Access to quality medical care, preventive measures, and the promotion of a healthy lifestyle help increase labor productivity. It reduces the number of working days that can be lost due to illness. Poor health reduces productivity. Because physically weak and sick workers cannot fully realize their potential. That is why enterprises and organizations invest in the health of their employees.

The modern market economy is directly expressed in financial revenues. The market value of an organization is formed by financial and intellectual capital. However, the role of intangible capital in the market value of an object is increasing. Currently, the expression of the value of an organization is more focused on retaining key employees and using their knowledge and innovative abilities, emphasizing the image, brand, and increasing the organization's fixed (financial) capital. The general knowledge of employees in enterprises is used to generate wealth. Much of an organization's value depends on the innovative attitudes of its employees and can be increased by materially motivating employees. Organizations that use their ability to identify and develop the human capital necessary to achieve competitive advantage have greater opportunities for innovation. Many operating organizations have realized the important truth that their true value is reflected not only in financial capital, but also in intellectual capital. Intellectual capital is now a strategic element of an industrial enterprise. The relationship between

the creation of an organization's market value and individual capital is schematically presented in Figure 1.

The financial capital of an organization is represented by cash and securities.

The intellectual capital of an organization is represented by the knowledge that creates the wealth of the organization. Such knowledge can be considered intangible assets that help improve the quality of internal processes and create added value. Intellectual capital is considered an asset that can be used to generate profit, attract new customers, create new products, or improve the business. In general, intellectual capital can be defined as the sum of all information resources available to an organization. The components of intellectual capital are a combination of human capital, structural (organizational) capital, and relational (social) capital. Intellectual capital also includes information capital, intellectual property, customer capital, brand recognition, and learning capital. Intellectual capital refers to the accumulation of useful explicit and tacit knowledge in an organization.

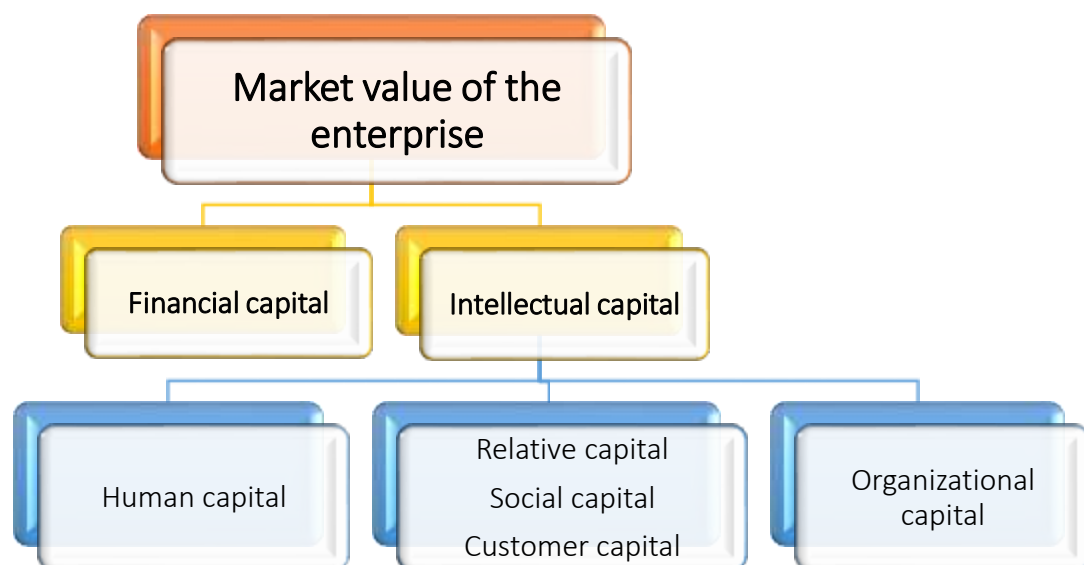


**Figure 1. Market value of the enterprise**

The human capital of an organization is created by employees, their innate and acquired knowledge, skills, abilities, talents and qualifications. The formation of the human capital of an organization is carried out by the following methods:

- acquisition (selection and recruitment);
- attraction and retention;
- development and training;
- merger and (or) merger.

The human capital of an organization can be defined as the knowledge, skills, experience and initiatives of employees and can be expressed by the following formula:

$$\text{Human Capital} = \text{Knowledge} + \text{Skills} + \text{Experience} + \text{Initiative}$$

Depending on the industry, the amount of human capital in the total cost of a business ranges from 30% to 80%. The contribution of people is the most important factor in the organization's activities. Human potential increases the competitiveness of the organization. The ability of a person to produce products and services becomes human capital. The difference between human capital and human potential is not so great; in practice, these concepts are interchangeable. Therefore, human capital can be considered as an integral part of the market value of the organization from the position of an employee who creates the success of the organization, and as a dynamic indicator and a very important factor in the development of the organization. People create added value for the organization. The human capital of the organization has a positive effect on innovation.

The next group of capital from the composition of intellectual capital has a very similar definition and concept, and in different sources it is called by different names - relational capital, social capital, customer capital, but from the point of view of purpose, these types of capital have similar parameters.

Relational capital consists of market relationships with customers; relationships and partnerships with suppliers, organizations; brands and names that have meaning only because of relationships with customers; licenses and franchises. Relational capital develops local knowledge, which is important for the innovative activity of the organization. Social capital represents the expected collective or economic benefits derived from the cooperation between individuals, groups, social networks and the relationships between them in society. Social capital is the stock and flow of knowledge that arises from relationships within and outside the organization. The flow of knowledge is crucial for intellectual capital in organizing the processes in which people work and act together. Social ties affect the growth of the productivity of individuals and groups. The term "social capital" has been widely used since 1990 [5].

Organizational capital is represented by knowledge created and owned by the organization, stored in databases, training manuals, work processes, organizational standards, technological processes, know-how, property, etc. Structural capital allows human capital to function. Structural capital belongs to the organization and remains in the organization even when employees leave the organization.

Of course, human capital does not appear by itself, and it is also wrong to expect results from it in one day, one month or one year. It is a process based on regularity and must be constantly supported and

developed by the state. It should be noted that Uzbekistan has set its own goals in this regard. In particular, in accordance with the decree of the head of our state dated January 28, 2022, the Development Strategy of New Uzbekistan for 2022–2026 and the State Program for its implementation in the “Year of Human Dignity and Active Neighborhood” were approved. It is noteworthy that the development strategy of New Uzbekistan includes a total of 100 goals, 34 of which are tasks related to conducting a fair social policy and developing human capital.

It is also planned to spend 55 trillion soums and 11.7 billion dollars to implement the measures provided for in the State Program, which consists of 398 items, approved by the decree. The program, as we have already mentioned, prioritizes the issue of improving the quality of education in the direction of conducting a fair social policy and developing human capital. Because the future of any society is determined, first of all, by the quality of education and the ability of the learner. At the same time, last year alone, 134 new companies in the field of information technology were established in our country, including 50 foreign ones, and the number of exporting enterprises in this area increased by 2 times. The number of residents of the technological park of software products and information technologies, as well as the type of services, is also increasing. In the first 6 months of this year, they exported services worth 53 million dollars, and this figure is expected to exceed 100 million dollars by the end of the year.

According to experts, the global information technology market will grow by an average of 10 percent until 2026. For example, in 2020 its value was \$7.8 trillion, and in 2021 it was \$8.2 trillion. This figure is

expected to reach \$9.3 trillion in 2022. By 2026, it will be almost \$14 trillion. If exports are one of the factors that develop the state economy and promote the country, then this opportunity will expand even more in the export of intelligence. Considering that more than half of our country's population is young people and about a million young people enter higher education every year, this is a huge strength and opportunity for us. A synergistic approach to this area is based on analyzing the enterprise as a single interconnected system that takes into account the interactions between subsystems and the external environment. Interactions actually create feedback loops within the system that can contribute to the development and degradation of the enterprise [6]. The synergistic approach is based on the analysis of nonlinear dynamic processes, which are characterized by coherence and consistency, which leads to the mutual support of different subsystems in achieving the goals set by the enterprise.

**Conclusion.** The human capital of an enterprise should be considered as a complex system characterized by self-organization processes. The source of self-organization here is that the knowledge and skills that form the basis of human capital are embodied in time and space, and as a result, they grow by themselves. Using the potential of synergy in assessing the human capital of an enterprise, in our opinion, allows us to identify new aspects that have not been taken into account within the framework of traditional approaches and to design a trajectory for the development of human capital.

It is advisable to include only professional knowledge and skills, which represent a dynamic asset that develops over time. In particular, they form the basis for assessing the quality of human capital, presented

in the Global Human Capital Index of the World Economic Forum.

Building a knowledge graph in the process of implementing the production process allows us to characterize the relationships between its components at different stages of human capital and, in general, to obtain a qualitative picture of the human capital of the enterprise.

The present era itself requires investment in human capital. Because today, investors are not as likely to bet on cheap labor as they were before. The reason is that rapid scientific and technological progress is sharply reducing the need for unskilled workers. If at some point in time, a person was considered a labor force, a labor resource, then today the scope of human influence on economic processes is expanding. A person is no longer an additional resource of production, but a unique resource that organizes production with its own abilities and creates new innovations. This has created the basis for the emergence of the concept of human capital in the economy. Modernity is now required of everyone.

Frankly, before we entered a new era of reforms, the vice of "solving" any urgent issue on paper without going down to the bottom and studying the real situation had taken root. The documents developed and the decisions made were superficially prepared based on a general approach, not based on the conditions of the mahalla, district or region, as a result, the problems that torment the people remained without finding solutions. It is worth saying that the results of the changes over the past five to six years are reflected in our lives today. Previously, representatives of ministries, departments, and khokimiyats would come to ordinary residents, to their mahalla, to their homes and say, "What problem do you have, what help do you need from us?" This has never happened before. It was inconceivable. Every investment made in

supporting civil society ensures people's creativity and obedience to the law. An atmosphere of optimism is created in society, a constructive and rational worldview is formed. The quality of life improves.

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