© 2026 Arabian International Conference on Science,Technology and Innovation. All rights reserved.

WAYS TO DIVERSIFY FUNDING SOURCES FOR HUMAN CAPITAL DEVELOPMENT IN UZBEKISTAN

Turayeva Malika Xikmatovna
Samarkand State Technical University

ABSTRACT. This paper examines the economic significance and priority directions for diversifying funding sources for human capital development in Uzbekistan. It highlights the roles of the state budget, private investments, public-private partnership mechanisms, and funds from international financial institutions in the formation of human capital. Furthermore, scientific and practical proposals have been developed regarding the expansion of funding sources, the efficient use of investment resources, and the enhancement of the effectiveness of funds allocated to human capital.

Keywords: human capital, financing mechanism, investments, diversification, state budget, private sector, public-private partnership, education, healthcare, economic efficiency.

ANNOTATSIYA. Mazkur tezisda O‘zbekistonda inson kapitalini rivojlantirishni moliyalashtirish manbalarini diversifikatsiya qilishning iqtisodiy ahamiyati va ustuvor yo‘nalishlari tadqiq etilgan. Inson kapitalini shakllantirishda davlat budjeti, xususiy investitsiyalar, davlat-xususiy sheriklik mexanizmlari hamda xalqaro moliya institutlari mablag‘larining o‘rni yoritilgan. Shuningdek, moliyalashtirish manbalarini kengaytirish, investitsiya resurslaridan samarali foydalanish va inson kapitaliga yo‘naltirilgan mablag‘larning natijadorligini oshirish yuzasidan ilmiy-amaliy takliflar ishlab chiqilgan.

Kalit so‘zlar: inson kapitali, moliyalashtirish mexanizmi, investitsiyalar, diversifikatsiya, davlat budjeti, xususiy sektor, davlat-xususiy sheriklik, ta’lim, sog‘liqni saqlash, iqtisodiy samaradorlik.

INTRODUCTION

In the global economy, knowledge, professional skills, innovative potential, and labor productivity are becoming key drivers of economic growth. Under these conditions, investments aimed at developing human capital play a crucial role in enhancing a country's long-term economic competitiveness.

Human capital is an economic resource that encompasses an individual's knowledge, skills, professional experience, and health, as well as their capacity to create economic value through labor. Its development not only expands an individual's income-earning potential but also boosts society's overall productive capacity and innovative activity.

In Uzbekistan, the development of human capital is regarded as a priority area of state socio-economic policy. Notably, the "Uzbekistan – 2030" Strategy—approved by Decree No. PF-158 dated September 11, 2023—outlines goals for developing the education system, enhancing the capacity of teaching staff, broadly engaging the private sector in educational services, and improving educational infrastructure [1]. Lex.uz

At the same time, the growing need for financial resources to develop human capital necessitates the improvement of existing financing mechanisms. In particular, reducing the high level of reliance on the state budget for financing, establishing alternative investment sources, and enhancing the efficiency of financial resource utilization are considered pressing issues.

The objective of this study is to examine opportunities for diversifying financing sources for human capital development in Uzbekistan and to formulate proposals aimed at increasing their economic efficiency.

© 2026 Arabian International Conference on Science,Technology and Innovation. All rights reserved.

MAIN PART

Financing human capital is, from an economic perspective, a long-term investment process. This is because the economic outcomes of funds allocated to education, healthcare, vocational training, and scientific activities often manifest only after a certain period of time.

The effectiveness of the human capital development financing system is determined not merely by the volume of allocated funds, but also by their distribution, targeted expenditure, and the socio-economic results achieved. From this perspective, diversifying funding sources is a key economic mechanism for expanding investment in human capital.

Diversifying funding sources entails generating the financial resources dedicated to human capital development from multiple independent or interconnected sources, ensuring an optimal balance among them, and mitigating financial risks.

This process offers opportunities to utilize—alongside the state budget—private investments, corporate funds, resources from international financial institutions, grants, and public-private partnership mechanisms.

Table 1

Sources of financing for human capital development and their economic characteristics

Sources of financing	Financing areas	Expected economic results
State budget	Education, healthcare, vocational training	Expansion of access to social services
Private investments	Non-state educational institutions, medical services, vocational training centers	Increasing competition and improving service quality
Public-Private Partnership	Developing education and healthcare infrastructure	Distributing the burden of public expenditure and attracting investment
International financial institutions	Quality of education, healthcare, and institutional reforms	Expansion of financial and technical resources
Funds of enterprises and organizations	Staff retraining and professional development	Increase in labor productivity and professional potential
Grants and earmarked funds	Scientific research, innovations, and support for talented youth	Development of scientific potential and innovative activity

Source: Systematized by the author based on economic approaches.

The data in the table indicate that each financing source performs a specific economic function in the development of human capital.

While the state budget serves to ensure public access to essential social services, private investments enable the creation of a competitive environment in the services market and the attraction of additional financial resources.

Public-private partnership mechanisms, in turn, facilitate the expansion of investment in human capital by combining the financial, organizational, and managerial capabilities of the state and business entities.

The initial draft of the "Uzbekistan – 2030" Strategy envisages increasing the number of non-state general secondary education institutions to 1,000, allocating concessional loans totaling 1 trillion

© 2026 Arabian International Conference on Science,Technology and Innovation. All rights reserved.

soums to support their operations, and implementing projects to expand educational infrastructure using funds from public-private partnerships and international financial institutions [1]. These figures represent strategic goals and cannot be interpreted as results already achieved in practice. Lex.uz

These areas highlight the need to align state resources with private sector capabilities in financing human capital.

However, merely increasing financing sources does not guarantee the expected economic impact. To achieve this, it is essential to ensure the targeted allocation of mobilized funds, the effectiveness of investment projects, and the establishment of an efficient monitoring system for the use of financial resources.

Within the scope of the research, it is considered appropriate to evaluate the effectiveness of human capital development financing across the following three key areas.

The first area is the adequacy of financial resources. This involves assessing the extent to which funds allocated for human capital development meet existing needs, as well as evaluating their stability and the composition of financing sources.

The second area is the economic effectiveness of financing. This area analyzes the changes in the quality of education, professional skills, employment, and labor productivity resulting from investments.

The third area is the social effectiveness of financing. This takes into account the population's access to quality education and healthcare services, regional disparities, and issues of social equity. To assess the level of diversification of funding sources, the following indicator is proposed:

$$D=1-\sum_{i=1}^{n}w_i^2$$

Where:

D — the level of diversification of funding sources;

w_i — the share of the i-th source in total funding;

n — the number of funding sources.

This indicator is based on the inverse of the Herfindahl–Hirschman concentration index. An increase in its value indicates reduced reliance on a single funding source and a more balanced distribution of resources across various sources.

However, this indicator does not directly reflect the economic efficiency of the funding. Therefore, it is advisable to use it in conjunction with indicators such as the quality of education, employment, labor productivity, and other outcome metrics.

As an original approach, it is proposed to improve the mechanism for financing human capital development based on three interconnected components.

The first is a mechanism for expanding financial sources, based on the coordination of the state budget, the private sector, and international financial resources. The second is a result-oriented financing mechanism, which entails considering not only the volume of expenditures but also the quality of education, vocational training, and employment outcomes when allocating funds.

The third is a monitoring and evaluation mechanism that enables the regular analysis of the economic and social outcomes of investments in human capital.

The integration of these mechanisms can serve to enhance the efficiency of financial resource utilization and establish sustainable financial foundations for human capital development.

CONCLUSION

Diversifying the sources of funding for human capital development is crucial for ensuring Uzbekistan's long-term economic progress. The sustainability of the financing system is closely linked to the prudent use of diverse investment sources, the assurance of their mutual alignment, and the effective allocation of available resources to priority areas.

The research substantiates the importance of developing investment partnerships between the public and private sectors, utilizing resources from international financial institutions for targeted

© 2026 Arabian International Conference on Science,Technology and Innovation. All rights reserved.

purposes, and incentivizing enterprise investments in workforce skills development to improve the human capital financing system.

Furthermore, when evaluating financing effectiveness, it is essential to move beyond merely considering the volume of funds and instead establish a system of indicators that reflect economic and social outcomes. This requires a comprehensive assessment of the diversification of financing sources, investment performance, and access to social services.

In the author's view, a promising direction for improving human capital development financing mechanisms is the integration of a diversified financing system with results-oriented budgeting and performance monitoring.

This approach can serve to expand investments in human capital while simultaneously increasing the economic return on allocated funds, improving the quality of labor resources, and strengthening the country's competitive economic potential.

REFERENCES

1. O‘zbekiston Respublikasi Prezidentining 2023-yil 11-sentabrdagi PF-158-son Farmoni. “O‘zbekiston — 2030” strategiyasi to‘g‘risida. Rasmiy hujjat
2. Becker G. S. Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education. University of Chicago Press, 1993.
3. Schultz T. W. Investment in Human Capital. The American Economic Review. 1961. Vol. 51, No. 1. P. 1–17.
4. Mincer J. Schooling, Experience, and Earnings. National Bureau of Economic Research, 1974.
5. OECD. Education at a Glance 2025: OECD Indicators. OECD Publishing, 2025.
6. World Bank. World Development Report 2018: Learning to Realize Education’s Promise. Washington, DC: World Bank, 2018.