

RESEARCH ARTICLE

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Investment in Education as a Factor of Economic Growth of the Country

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Abstract

Education is the main resource for the sustainable development of countries and regions and belongs to one of the main fields of activity, where the main resource is human capital. Relevance. The topic of the article is relevant since the development of the education system is the basis of the socio-economic development of states and a vital factor reflecting the economic and social well-being of the population of countries and regions. The purpose of the research topic is to reflect the importance and necessity of investing in investments in education as the main factor in the economic development of the country. To achieve this goal, the following tasks are set: justification of the need to invest in education; disclosure of the prospects for investing in education. Methods. During the research, various techniques and methods were used, the main of which are economic and statistical: deduction and induction, analysis and synthesis, statistical analysis. The empirical basis of the study was the data of the Eurasian Economic Union, the Department of Statistics of the Republic of Kazakhstan for 2017-2021, scientific publications of economists dealing with the problems of attracting investment in the development of human capital. Results. Based on the conducted research, the results of the study are considered, the main of which are changes in investment directions in education by attracting investments in both formal and additional vocational education, as well as development prospects

Keywords: Education, Investments, Human Capital, Innovative Technologies, Qualified Personnel, Level of Education, Labor Market, Gross Domestic Product

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1. INTRODUCTION

In the conditions of the market economy, various markets are being formed, such as the real estate market, the securities market, the human capital market, etc. The formation of a civilized and competitive human capital market is impossible without investments, which can be invested both at the expense of own and attracted funds, the use of which is directed to education

Education is one of the main institutional mechanisms for the production, accumulation and development of human capital, directly produces products and participates in the financial and economic activities of countries and regions. Investments are needed in order to improve the quality of education. It contributes to an increase in the social effect: reducing the number of unemployed people, reducing poverty, increasing literacy among the population, improving the level and quality of life of the population, increasing people's incomes, etc. (Altunina et al., 2019).

In the modern world, to improve the quality of life of the population, as well as to obtain material benefits in the future, there is a highly paid job, for which it is necessary to have a high-quality education.

Throughout life, a person goes through several stages of education: preschool, primary, secondary, secondary vocational, higher, and postgraduate education

To determine the effectiveness of investing in education, it is necessary to properly evaluate investments, which is a rather complicated procedure since this area of investment is specific and requires a long time. Nevertheless, an increase in the volume and effectiveness of investments in the future is reflected in increasing the competitiveness of enterprises, and the economic growth of countries and regions no matter how long the investment evaluation process is (Anisimova, 2021).

In modern conditions of innovative development, human capital plays an important role in ensuring the sustainable economic growth of countries. People with high-quality education, experience, professional skills and values, life attitudes, and purpose are valuable resources in ensuring economic growth. For the constant qualitative growth of human capital, investments are necessary as an investment in a person to develop their productive forces.

The basis of the study is to determine the essence of investment in education, as well as to determine the share of education spending that affects the economic growth of countries and regions.

Currently, there is a growing trend in demand for educational services, which indicates that the prestige and value of education, especially higher education, is increasing. However, despite this, there are some problems in the market of educational services, the main of which are: an insufficiently high level of efficiency of human capital, the lack of demand for specialists in certain areas in the labor market, the discrepancy between supply and demand, etc. (Yerimpasheva et al. 2021).

The main problem is that investments in education do not always give the expected economic effect, and therefore this problem is relevant.

When investing, it is necessary to consider the demand for a particular specialty, after receiving which a graduate can get a job and return the amounts of funds that were invested in them.

A highly qualified specialist with all the necessary qualities should receive a decent salary for his work, although in practice this is far from the case and this is the main problem. Based on the conducted research, it can be noted that in practice there is an underestimation of the cost of labor performed and an underestimation of human capital as one of the components of the national wealth of countries (Nikulina, 2021.).

To obtain deeper professional development, it is necessary that the employee invests his own funds as an investment to get a promotion, get a decent salary, etc., which in the future will give a positive economic effect.

Currently, many people want to get an education at the expense of investments as state grants, parents' tuition fees, but not everyone is ready to invest their own investments in order to gain additional professional competencies and knowledge, to find a higher-paying and prestigious job (Pishnyak et al., 2020)

2. LITERATURE REVIEW

The works of many foreign and domestic economic scientists are devoted to attracting investments in countries' economic development.

One of the founders of classical economics, the English economist D. Ricardo studied the problems of investment, capital and profit. Based on the results of the conducted research, the author highlighted the author's view on the concepts of capital, as well as free capital, the essence of which is identical to investments. In his research, D. Ricardo noted that the capitalist mode of production is the main one for creating wealth, and the author also developed a methodology for analyzing rent, profit and wages (Ricardo, 2001).

The English economist J. M. Keynes in his work "The general theory of employment, interest and money" on the basis of his research, noted that an increase in employment leads to an increase in national income and, as a consequence, consumption increases. According to the author, along with the income growth, people desire to increase the accumulation of funds and reduce spending. In his work, J.M. Keynes argued that the main function in determining the amount of employment is played by the total amount of investment (Keynes, 2002).

Kazakhstani authors Aubakirova G.M., Mazhitova S.K., Isatayeva F.M., Tomashinova A.E. in their work reflected the problems and main ways of improving investment policy in Kazakhstan. The authors revealed the relevance of the topic under study and noted that in order to ensure sustainable economic growth, it is necessary to develop and improve investment policy while paying special attention to industrial policy, the purpose of which is to develop the technical equipment of production and technological processes.

In the work, special attention was paid by the authors to the issues of increasing the investment attractiveness of Kazakhstan, which requires the implementation of a set of interrelated measures (Aubakirova et al., 2021).

Kazakh authors Nurmukhanova G.Zh., Nurtayeva D.K. in their research reveal the main systemic imperatives of the integration of education, science and business. In the

work, the authors noted that in order to form an effective, innovative economy, it is necessary to modernize education, during which new innovative structures should be created in the form of techno parks, business centers, innovation centers, expert communities, etc. The article analyzes such indicators as the share of education expenditures, the share of science expenditures, and the share of innovative products in the total gross output. Special attention is paid to the issues of attracting investments in education as the main factor of the country's economic development (Nurmukhanova et al., 2020).

Even though the problems of attracting investment in education are reflected in the works of many economic scientists, this issue is relevant and still unresolved. In particular, the authors of the article reflect the issues of attracting investment both in formal traditional education, but also additional professional education, which has been gaining popularity and is in demand in recent years (Atakhanov, 2018.).

3. METHODOLOGY

During the research, various methods and methods were used, which include the following: deduction and induction, analysis and synthesis, economic and statistical analysis, and grouping.

Many scientists have been engaged in the development of education and their investment. They considered the solution to this problem in various aspects. However, at the same time, methodological approaches to solving problems have yet to be sufficiently disclosed to date. In particular, the economic efficiency of investments in education for individual regions, and for various subjects of education, has not been sufficiently determined.

Preliminary work is being done to study the labor market, in which the correspondence of demand and supply of professional personnel from the educational organization should be studied (Kuandyk et al., 2022).

The level of education is one of the leading indicators reflecting the human capital development index, which reflects the level of human development at various levels: high, medium, and low. The human capital indicator reflects the problems that arise when accumulating and using human capital resource in countries.

In practice, various methods of calculating the level of human capital are used. However, the most effective method is determining individual benefits from education, which can be calculated by determining an average employee's salary for the most productive period of life. On average, this indicator is 20-25 years old. Based on the conducted research, it can be noted that the most productive period for a person's creative activity is from 35 to 45 years, although each case has its peculiarities and nuances (Ermakov et al., 2015).

To determine the effectiveness of investment in education, you can apply the method of a causal relationship between the amount of time spent on training and the result of the economic activity of a particular entity.

The main indicator is the return on investment, which is defined as the difference between the income received during the period of active work and the cost of training and the division of the resulting indicator by the cost of training.

It is necessary to apply the grouping method when determining the quality of human capital. This is when indicators are grouped according to various criteria, for example, education level, regional characteristics, industry characteristics, etc.

To improve the quality of education, each person can attract individual investors who will be interested in investing in a particular person and from whom there will be a return (Pitukhin et al., 2017).

4. FINDINGS AND DISCUSSION

One of the indicators characterizing the level of education is the expenditure on education, which occupies a certain share in the structure of the gross domestic product (GDP). Education expenditures as a percentage of GDP show how the authorities of various countries support the development of education and what place the education sector occupies in the overall structure of countries' expenditures.

Figure 1 shows the expenditure on education in individual countries as a percentage of GDP (Gross Domestic Product) for 2021.

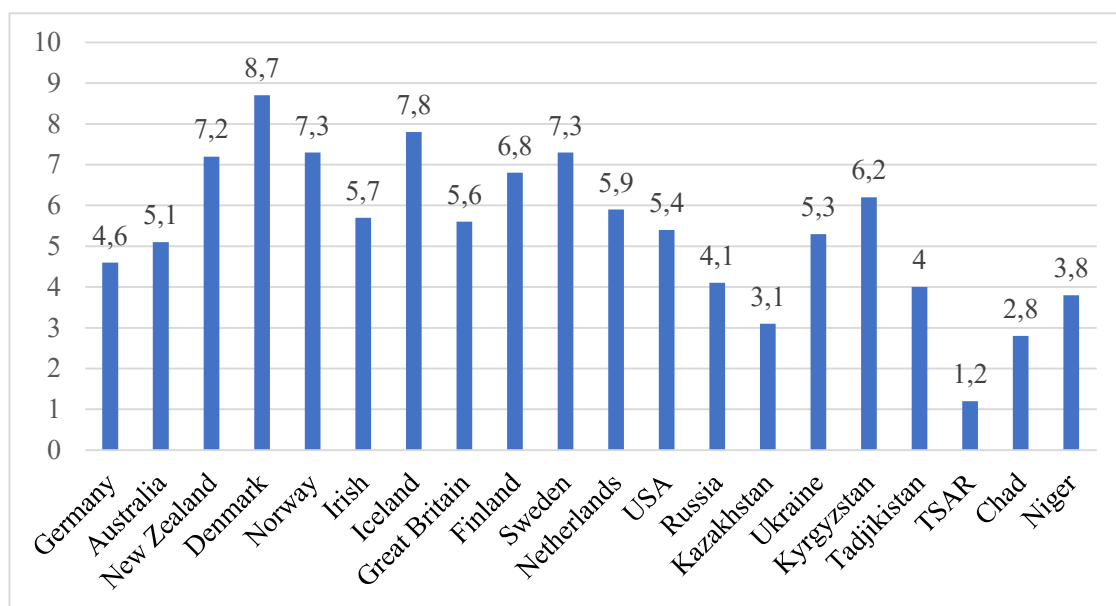


FIGURE 1. Spending on education in the countries of the world as a percentage of GDP in 2021

Note: Compiled by the authors based on references (Gumanitarnyi portal, 2019)

According to the data in Figure 1, we see that the top five countries in the ranking of education spending included such countries as:

1. Germany with an index of 0.946, the share of expenditures is 4.6% of total GDP.
2. Australia with an index of 0.923, the share of expenditures is 5.1% of the total GDP.
3. New Zealand – 0.923, the share of education costs is 7.2%.
4. Denmark – 0.92, the share of education costs is 8.7%.

5. Norway - 0.919, the share of education spending is 7.3% of the total GDP

The expenses for education in the CIS countries were as follows:

34. Russia – 0.832, the share of expenditures – 4.1%.

39. Kazakhstan -0,817, the share of expenditures -3.1%.

47. Ukraine -0.797, the share of expenditures – 5.3%.

The countries of the African continent are in the bottom positions in terms of education spending as:

186. Central African Republic - 0.353 points, the share of expenditures is 1.2%.

196. Chad – 0.288 points, the share of expenditures amounted to 2.8% of the total GDP.

198. Niger — 0.247 points, the share of expenditures amounted to 3.8% of the total GDP (Gumanitarnyi portal, 2019).

Many developed countries pay great attention to education, since the future belongs to young people, and in order for them to be competitive in the labor market, it is necessary to create all conditions for quality education, in particular, funds are allocated from the budget.

Domestic and foreign investments are attracted for the development of various sectors of the economy. The share of domestic and foreign investments fluctuates in the direction of increase and decrease, which is influenced by various objective and subjective factors.

Table 1 shows the structure of investments in fixed assets by various types of economic activity, including education in the Republic of Kazakhstan for 2017-2021.

TABLE 1. Structure of investments in fixed assets by type of economic activity in Kazakhstan (as a percentage of the total)

Indicates	2017	2018	2019	2020	2021	Off 2021 from			
						2017	2018	2019	2020
Investments in fixed assets	100	100	100	100	100	3223	2319	2023	420
including agriculture, forestry and fisheries	4,0	3,3	3,9	4,6	5,9	1,9	2,6	2,0	1,3
mining industry	33,8	44,1	54	32,2	28,3	-5,5	-15,8	-25,7	-3,9
electricity supply, gas	10,9	11,1	8,1	8,8	11,7	0,8	0,6	3,6	2,9
supply construction	1,1	1,0	1,0	1,0	1,2	0,1	0,2	0,2	0,2
wholesale and retail trade	2,4	2,0	1,9	1,6	1,9	-0,5	-0,1	-	0,3
transport and warehousing	14,4	13,0	9,7	10,7	10,7	-3,7	-2,3	1,0	-
education	2,9	1,8	1,7	2,4	2,2	-0,7	0,4	0,5	-0,2

Note: compiled by the authors based on references Eurasian Economic Commission (2021).

According to the data analysis of Table 1, the share of investments invested in education compared to other sectors of the economy, for example, mining, electricity, and transport, is significantly less. In 2021, the share of investment in education was 2.9%

of the total investment structure for all types of economic activity. During subsequent periods it decreased and increased slightly. Compared to 2017, the share of investment in education in 2021 decreased by 0.7%, from 2018 and 2019 the increase was 0.4 and 0.5%, respectively; from 2020 the indicator decreased by 0.2% (Eurasian Economic Commission, 2021).

Education is one of the main sectors of the economy, reflecting development indicators. However, the share of investment from gross domestic product (GDP) in recent years in Kazakhstan has fluctuated between 0.3–0.5%, which is a low indicator.

In 2021, the amount of investment in education in Kazakhstan amounted to 293.6 billion tenge, while in 2020 the amount amounted to 301.6 billion tenge, i.e. compared to 2020, the indicator decreased by 2.7 percent.

If to analyze the share of investment by region, the largest share of investment in education in 2021 fell on the metropolis of Almaty, which amounted to 56.9 billion tenge, which is 19.4 percent of the investment volume of entities throughout Kazakhstan.

Also, a significant share of the investment fell on the Turkestan region, which in 2021 amounted to 36.8 billion tenge compared with 2020, and the indicator increased by 78.8%. Investments in education in Nur-Sultan in 2021 amounted to 35 billion tenge, compared to 2020, the indicator increased by 61.4%. The top three accounted for 43.9% of investments in the Republic of Kazakhstan.

The Turkestan region (36.8 billion tenge, plus 78.8% in value terms for the year) and the capital (35 billion tenge, plus 61.4%) were also in the top three. The top three regions accounted for 43.9% of the ROK.

The smallest amount of investment in education in 2021 fell on the Mangystau region, which amounted to 4.3 billion tenge, compared to 2020, the indicator decreased by 30.3%.

The most minor investment in the sector was observed in the Mangystau region: only 4.3 billion tenge, minus 30.3% for the year.

Both republican and local budgets allocated investments in education. Of the total investment in education, 59.5% of investments were provided by local budgets, which amounts to 174.6 billion tenge compared to 2020, which decreased by 18.7%.

At the expense of enterprises, the amount of investment in 2021 amounted to 53.4 billion tenge, compared with 2020, there was an increase of 9.7%., at the expense of the republican budget, the amount of investment amounted to 44.5 billion tenge. Investments were also attracted to education at the expense of non–bank borrowed funds - 10.6 billion tenge, bank loans - 10.5 billion tenge.

In the republican budget, the number of expenditures on education in 2021 amounted to 3.7 trillion tenge, compared with 2020, there was an increase of 17.2% (Bureau of National Statistics, 2022).

Many countries pay great attention to education. The future belongs to young people, and in order for them to be competitive in the labor market, it is necessary to create all conditions for high-quality education.

5. CONCLUSIONS

Based on the research, it can be said that the quality of human capital education affects

not only the level and scope of an individual's activity but also the level of sustainable economic development of countries and regions.

Education is one of the main sectors of the economy of countries since human capital is the central resource through which products are produced and high-quality services and work are provided. In the modern world, to improve the quality of life, and to obtain material benefits in the future, people need a well-paid job, for which it is necessary to have a high-quality education (Baktymbet et al., 2020).

Based on the conducted research, the following conclusions can be drawn:

- it is necessary to develop a mechanism for attracting investment in education as the main factor in the economic development of countries, in particular, the development of public and private partnerships between educational institutions and investors on mutually beneficial terms;

- attracting private companies for the inflow of investments, both in formal and informal continuing education, which in the future can receive educated and competitive specialists;

- bringing the share of investment in education and science to 5% of GDP, whereas in 2021 in Kazakhstan, it was 2.2%

- strengthening the position of online education as one of the necessary and attractive in the labor market, the main of which are mobile training, micro-training, and corporate education. For example, the largest educational companies such as EdTech, Pearson and Google, EdMarket and School of Education, etc. have now been created.

- investing in educational startups using artificial intelligence technologies;

- attracting investments for the development of additional professional education, which is so necessary for a rapidly changing environment, mainly it is on-the-job training through the use of modern technologies: coaching, mentoring, mentoring;

- modernization of educational programs with the involvement of both domestic and foreign partners who will promote further employment of graduates.

There is a relationship between the costs of education and the amount of income received by a particular person. However, it can be said that they can be attributed to investments. It is necessary to conduct a comprehensive analysis of expenses and income, which will take a long time. A unified methodology for calculating the economic efficiency of investment in education has not been fully developed, since there are various criteria and factors that need to be taken into account when making calculations.

Since this research topic is relevant and global for the sustainable development of the country's economy, the authors will continue to work in this direction.

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