

THE REPUBLIC OF AZERBAIJAN

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ABSTRACT

of the dissertation submitted for the degree of Doctor of Philosophy

EVALUATION AND INCREASING WAYS OF THE ECONOMIC EFFICIENCY OF PUBLIC SOCIAL EXPENDITURES IN THE REPUBLIC OF AZERBAIJAN

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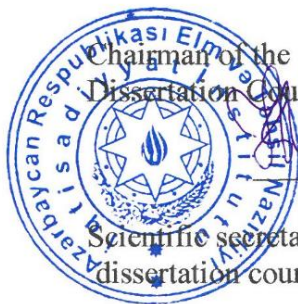
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GENERAL CHARACTERISTICS OF THE WORK

Relevance and degree of development of the topic. In modern times, solving social problems in the world is increasingly the focus of international organizations and governments. Serving the human factor, the main driving force of the economy is at the heart of governments' social policies. Meeting the needs of the population and improving their well-being plays an important role in the socio-economic development of countries. For this purpose, it has been observed that in recent years, social expenditures from the state budget have increased in most countries. Increasing social expenditures is largely driven by globalization and demographic trends. It is not considered right to try reducing these expenditures when the demand for them is increasing. This is also considered a threat to social security.

Ensuring social security depends on the state of well-being, fair redistribution of income, strengthening of social protection, accessibility of quality education and health services, and etc. In order to improve the quality of education and healthcare services and strengthen social protection, governments are increasing funds allocated to these areas, implementing various programs, and conducting fundamental reforms. The accessibility of quality education and healthcare services to all citizens, regardless of gender, social status, political position, or place of residence, should be at the center of public policy. Ensuring accessibility can further accelerate economic development.

It should be noted that to achieve long-term economic growth, it is important not only to increase social expenditures, but also to improve its economic efficiency. Because studies prove that a nominal increase in social expenditures does not necessarily mean that it is directly related to economic development. In order to ensure socio-economic development, it is necessary to increase the efficiency of these expenditures. Currently, increasing the economic efficiency of social expenditures is one of the main challenges in some countries.

In recent years, as in a number of countries, various socially oriented projects and programs have been implemented in Azerbaijan

to ensure sustainable development and improve the standard of living and quality of life of citizens. Improving welfare in Azerbaijan is considered a priority of the state's social policy and is implemented primarily by the state budget. The expenditures allocated by the state to these areas not only occupy a significant place in the budget, but are also considered an essential condition for the implementation of social policy. However, how to use these expenditures and ensure their economic efficiency should be one of the priorities of the government's socio-economic policy in the modern era. In this regard, assessing the economic efficiency of social expenditures (education, healthcare, social protection and social security) in our country and identifying ways to increase them is of particular relevance.

Both Azerbaijani and foreign scientists and experts have paid special attention to research on assessing and increasing the economic efficiency of public social expenditures.

Level of study of the problem.

The Azerbaijani scientists such as Sh.M.Muradov, N.M.Muzaffarli (Imanov), G.C.Imanov, T.N.Aliyev, A.A.Alakbarov, A.G.Alirzayev, R.K.Isgandarov, R.T.Hasanov, F.P.Rahmanov, R.S.Abdullayeva, E.Y.Mammadov, Y.A.Mammadov, E.A.Ibrahimov, C.B.Guliyev, A.N.Muradov, P.S.Hasanov, H.A.Huseynov, R.A.Huseynov, Z.T.Valiyev, and foreign scientists such as Mandl U., Dierx A., Ilzkovitz F., Kraan D.J., Malinska J., Manning N., Matthews E., Afonso A., Alegre J.G., Balaguer-Coll M.T., Prior D., Gimenez V.M., Prior D., Lonti Z., Woods M., Aubyn M.S., Schuknecht L., Tanzi V., Dutu R., Sicari P., Herrera S., Pang. G, Esanov A., Wang E.C., Alvi E., Rault C., Furceri D., and others conducted the study regarding the assessment of the economic efficiency of public social expenditures.

Purpose and objectives of the research. The purpose of the dissertation is to assess the economic efficiency of public social expenditures in the Republic of Azerbaijan and determine ways to increase it. To achieve the set goals, the following tasks are planned:

1. Researching the theoretical aspects of public social expenditures;

2. Analysis of the current situation of public social expenditures in Azerbaijan and comparison with a number of developed and developing countries;

3. Assessment of the impact of public social expenditures on socio-economic development in Azerbaijan;

4. Identifying economic, demographic and institutional factors affecting the effectiveness of public social expenditures;

5. Researching prospective directions for using progressive world experience in identifying ways to increase the economic efficiency of public social expenditures;

6. Determining ways to ensure social development in Azerbaijan.

Research object. The object of the study is the expenditures allocated from the state budget for healthcare, education, social protection and social security in the Republic of Azerbaijan.

Research subject. The subject of the research work is the study of theoretical, methodological and practical issues of economic events and processes related to the assessment and increase of the economic efficiency of public social expenditures.

Research methods. Logical generalization, survey, comparative and systematic analysis, analytical-statistical analysis, correlation and regression, and ARDL mathematical modelling methods are used within the research.

Key arguments presented.

1. In terms of their impact on socio-economic development, social expenditures are divided into two groups: indirect and direct.

2. The effectiveness of social expenditures is influenced by economic, demographic, and institutional factors.

3. There is a positive relationship between per capita health expenditures and life expectancy at birth.

4. There is a positive relationship between aggregate per capita education expenditures and PISA assessment results.

5. In Azerbaijan, the increase in social protection and social security expenditures, as well as healthcare expenditures, reduces the GDP growth rate, while education expenditures increases it.

6. In Azerbaijan, there is a positive relationship between social protection and social security, education expenditures and poverty, and a negative relationship between health spending and poverty.

7. The economic efficiency of public social expenditures in Azerbaijan is low.

Scientific novelty of the research.

1. A new classification of social expenditures has been proposed by the author;

2. Economic, demographic and institutional factors affecting the effectiveness of social spending have been identified;

3. For the first time, the impact of social protection and social security, health and education expenditures on GDP growth rate and poverty in Azerbaijan has been econometrically assessed.

4. Despite the increase in public social expenditures in Azerbaijan, the effectiveness of these expenditures has been determined to be low.

5. A relationship between per capita health expenditure and life expectancy at birth has been identified in 12 countries (some developing countries and neighbouring countries), including Azerbaijan..

6. A correlation has been established between aggregate per capita education expenditure and PISA assessment results in OECD countries.

7. Proposals and recommendations have been made to increase the economic efficiency of public social expenditures in Azerbaijan.

Theoretical and practical significance of the study. Research can be used to increase the efficiency of public social expenditures and improve the quality of the education and healthcare systems.

Testing and implementation. Speeches were made at conferences held in Azerbaijan, Turkey, Serbia, and Russia regarding the results of the research work. They include “The impact of social expenditures on economic growth in Azerbaijan (2006-2017)” (Azerbaijan-2018), “The role of education in social and economic development” (Azerbaijan-2019), “Explanation of the concept of social expenditures and assessment of the current situation in Azerbaijan” (Russia-2022),

“Ensuring social development in Azerbaijan within the framework of sustainable development goals” (Azerbaijan-2023), “The role of social entrepreneurship in reducing poverty in Azerbaijan” (Türkiye -2023), “The assessment of the role of social innovations in improving welfare in Azerbaijan” (Serbia-2024).

12 scientific works have been published on the topic of the dissertation. 4 of the articles and theses were published in foreign journals, 8 in prestigious journals recommended by the HAC.

Name of the organization where the dissertation work was performed. Institute of Economics, Ministry of Science and Education of the Republic of Azerbaijan

Volume of the dissertation work. Chapter I of the dissertation consists of 51782 characters, Chapter II consists of 58790 characters, Chapter III consists of 79439 characters, conclusions and suggestions consist of 6220 characters, and the dissertation consists of 204992 characters in total.

MAIN CONTENT OF THE RESEARCH

The introductory part of the dissertation work justifies the relevance of the topic, explains the state of study of the problem, the goals and objectives of the research, its object, theoretical and methodological foundations, information base, scientific novelty and practical significance of the research. Information is provided on the use of research results and suggestions.

The **first chapter**, entitled "**Theoretical and Methodological Aspects of Public Social Expenditures**", provides theoretical perspectives on the concept of social expenditures, examines the historical development stages of the formation of the concept of "social state", classifies public social expenditures, and comparatively analyses the scientific approaches of various scholars regarding the assessment of the economic efficiency of public social expenditures. This chapter explains the essence of the concepts of "social state" and "social expenditures", and presents the classification of public social

expenditures suggested by various scholars. A new classification of social expenditures has been proposed, and the effects of social spending on the economy and general welfare have been examined.

The classification of social expenditures is important for understanding the nature and impact of social expenditures. The following are the most important classifications of public social expenditures developed by various economists:

1. Benefit criteria:

The classification of general expenditures adopted in the 19th century is based on the principle of benefit. This classification was developed by John and Plehn (¹). They divided social expenditures into 4 groups. The reason why this classification is not fully accepted is that all social expenditures are intended for public interests. It is very difficult to distinguish between whether social expenditures provide private or public benefits. The satisfaction provided by private benefits can lead to the creation of public benefits. For example, expenditures on the poor population immediately result in public benefits such as preventing crime, ensuring a general sense of justice, and etc.

F.S. Nicholson provided another scientific classification of social expenditures.

2. Income criteria:

F.S. Nicholson classified social expenditures according to its revenue-generating characteristics in exchange for services provided by the government. This classification has also been criticized for being imprecise. It fails to distinguish between several expenditure items. For example, social protection and anti-poverty expenditures fall into the first category, but these expenditures also indirectly contribute to revenue generation.

3. Functional criteria:

Another classification of government spending was made by H.C. Adams (²). Functional classification is based on the classification of various functions performed by government agencies and is

¹ Plehn, C. C. (1897). Introduction to Public Finance. New York: Macmillan.

² Adams, H. C. (1899). The Science of Finance: An Investigation of Public Expenditures and Public Revenues. New York: Henry Holt and Company

classified according to the 3 main functions of government (protective, commercial and developmental). This classification also has its own disadvantages. There is no clear distinction between the natures of the expenditures.

It should be noted that each classification has its own disadvantages. However, during recent years, the scope of state activity is changing dynamically. Thus, it is very difficult to determine a systematic classification of social expenditures.

In Azerbaijan, public social expenditures refer to expenditures allocated from the budget for social purposes. According to the unified budget classification, budget expenditures are grouped into four types: functional, economic, administrative, and program classification ⁽³⁾. In this study, while classifying public social expenditures, health, education, social protection, and social security expenditures were examined and their economic efficiency was evaluated.

In our opinion, when distinguishing social expenditures within public expenditures, it is first of all necessary to take into account the impact of these expenditures on socio-economic development as the main factor. It is known that all expenditures must have a purpose. If the state directs financial resources to any area, it is expected to have a special significance for the country as a whole and for the citizens of that country. It is from this aspect that we have included the expenditures on health, education, social protection and social security in the composition of the public social expenditures which result in the improvement of socio-economic development indicators. As we know, the main indicators characterizing the socio-economic development of the country are the GDP growth rate, poverty rate, income inequality, literacy level of the population, unemployment level and etc. In our opinion, from this point of view, social expenditures should be considered such expenditures that, as a result of the efficient use of those expenditures, the socio-economic development of the country is ensured, the indicators we have listed improve, and the welfare of the population increases.

³ Z.Valiyev, Management of state (public) finance -2023.

When classifying social expenditures, we have taken into account the direct or indirect effects of these expenditures on socio-economic development. For example, as targeted social aids, unemployment benefits, and benefits for large families reduce poverty and income inequality by improving the well-being of these groups in the short term, we have included these expenditures in the group of **direct** social expenditures. Since education and health expenditures are investments in human capital and their impact on socio-economic development can be seen after a certain period of time, we have considered these expenditures as **indirect** expenditures.

In the **second chapter**, entitled "**Assessment of the Economic Efficiency of Public Social Expenditures in Azerbaijan**", the current situation of public health, education, social protection and social security expenditures in our republic is analysed in comparison with a number of developed and developing countries, the impact of public social expenditures on GDP growth and poverty has been econometrically assessed, and economic, institutional and demographic factors affecting efficiency have been identified.

In recent years, as in many countries, various socially oriented projects and programs have been implemented in Azerbaijan to ensure continuous and sustainable development, significantly accelerate socio-economic development, and improve the standard of living and quality of life of citizens.

The social needs of the population are mainly financed by the state budget. The expenditures allocated by the government to social areas have a significant share in the budget and are also considered an important condition for the implementation of social policy. In this regard, it is important to analyse the expenditures on social security, health, and education. The following graph reflects the public social expenditures (Figure 1).

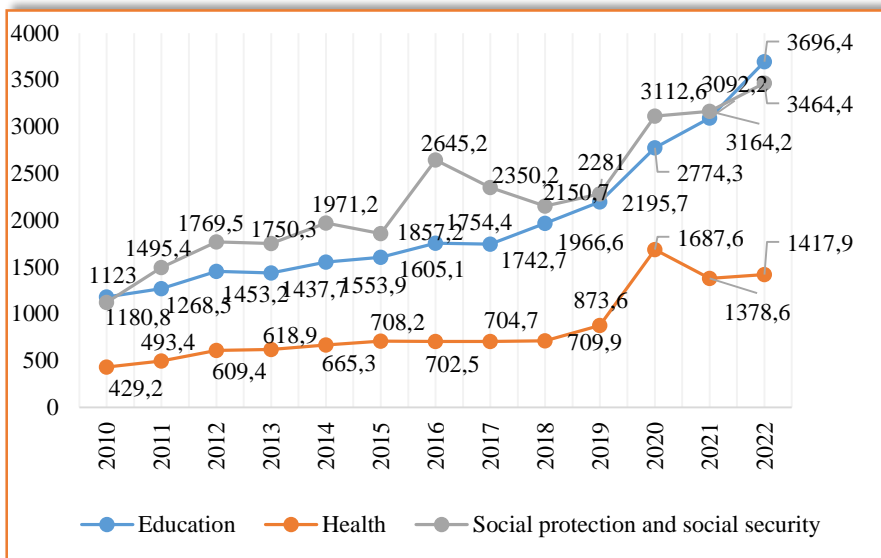


Figure 1. Expenditures on education, healthcare, social protection and social security allocated from the state budget in the Republic of Azerbaijan, mln. manats, 2010-2022 years.

Source: Compiled by the author based on the data from <https://www.stat.gov.az/source/finance/>.

As can be seen from the graph, healthcare, education, social protection, and social security expenditures increased approximately 3 times in 2022 compared to 2010. We can see that both healthcare, social protection, and social security expenditures increased more sharply in 2020 compared to 2019 due to the COVID-19 pandemic.

In addition, in order to see how the real picture of the social expenditures allocated by the government to education, healthcare, social protection and social security has changed, it is appropriate to evaluate them using relative indicators, that is, taking into account their ratio to GDP. The graph below shows the ratio of public social expenditures to GDP (Figure 2)

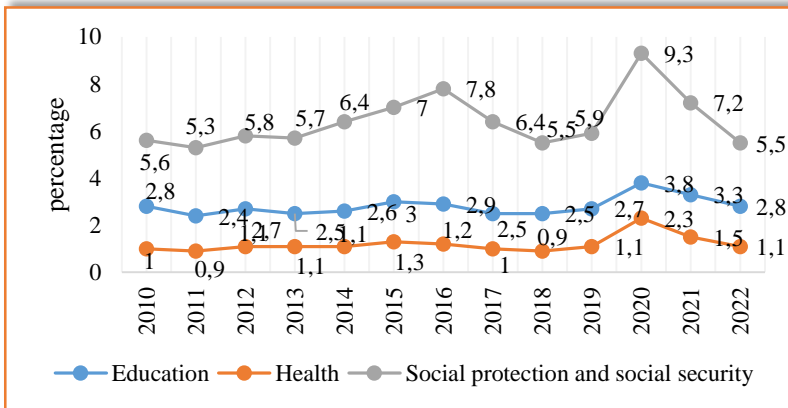


Figure 2. Ratio of public social expenditures to GDP in the Republic of Azerbaijan, %, 2010-2022 years

Source: Compiled by the author based on the data from <https://www.stat.gov.az/source/finance/>.

As can be seen from Figure 2, during the years 2010-2022, increases and decreases were observed in the ratio of funds allocated from the state budget to these areas to GDP. In 2022, all three indicators are almost the same as in 2010. This can be explained by the fact that social expenditures are increasing at the same rate as GDP.

Ensuring economic growth is one of the main tasks of the state aimed at implementing the socio-economic development of the country. As in all socio-economic processes, the main issue in studying and quantifying dependence in this case is determining and assessing the direction of dependence. This study analysed the relationship between public social expenditures, GDP, and poverty rate in Azerbaijan to determine how public expenditures on education, healthcare, social protection, and social security affects economic growth. First, the stationarity of the variables was checked using the Extended Dickey-Fuller and Philips-Perron Unit Root Tests. Then, the dependence between the variables was determined through ARDL analysis. The collected data are annual frequency data covering the years 1995-2022.

In order to determine the direction and strength of the relationship between the variables included in the analysis, correlation coefficients were calculated between them and the results are presented in the table below (Table 1).

Table 1. Correlation Matrix

Variables	GDP	SPE	HE	EE
GDP	1			
SPE	-0.4302**	1		
HE	-0.5216***	0.4321	1	
EE	-0.0936	0.2164	0.2832	1

***, ** and * indicate that the correlation coefficient is significant at the 1%, 5% and 10% significance levels, respectively.

According to the information given in Table 1 there is a negative relationship between GDP and SPE, HE and EE. While there is a negative and statistically significant relationship between GDP and SPE-HE, there is no statistically significant relationship between GDP and EE.

After determining the existence of a long-run relationship between the variables, in order to study the long-run impact of the SPE, HE and HE variables on GDP, the long-run equations were estimated using the FMOLS method and the results are given in the table below (Table 2).

Table 2. Long-run coefficients from the extended ARDL model

<i>Variables</i>	<i>FMOLS</i>
Constant	32.912**
SMX	-8.6823**
SX	-11.331*
TX	4.3060

***, **, and * indicate the significance of the coefficients at the 1%, 5%, and 10% significance levels, respectively.

According to Table 2, a one-unit increase in the SPE variable will lead to an average decrease in GDP of 8.68 units. A one-unit increase in the HE variable will reduce GDP by 11.33 units. A one-unit increase in the EE variable, unlike the SPE and HE variables,

increases GDP by 4.30 units on average, but is statistically insignificant.

The results of the econometric analysis show that social security and health expenditures have a negative impact on GDP growth in Azerbaijan, and this impact is statistically significant. On the other hand, although education expenditure has a positive impact on GDP growth, this impact is not statistically significant. In addition, it is an important finding that there is no bidirectional causal relationship between social security, health and education spending and GDP growth. We can interpret these results from an economic perspective as follows.

Negative impact of social security and healthcare expenditures: The negative impact of social security and health expenditures on GDP growth means that these expenditures potentially limit economic growth rather than support it. This is a result of social security and health expenditures being inefficiently used, not planned effectively, or not directed at activities that directly impact economic growth. In order to reduce the negative impact of social security and health expenditures on GDP growth, these expenditures need to be managed more efficiently and effectively.

Positive but insignificant effect of education expenditures: The positive but statistically insignificant nature of education expenditures suggests that the long-term growth effects of education in the economy have not yet fully emerged or that existing expenditures is not being used efficiently. Factors such as the quality of educational expenditures, compliance with labor market requirements, and the efficiency of human capital play an important role here.

This study also analysed the impact of education, health, social protection and social security expenditures on poverty rate. The collected data are annual frequency data covering the years 2001-2022.

In order to determine the direction and strength of the relationship between the variables included in the analysis, correlation

coefficients were calculated between them and the results are presented in the table below (Table 3).

Table 3. Correlation Matrix

	PR	SPE	HE	EE
PR	1			
SPE	-0.2643	1		
HE	-0.5149**	0.6406***	1	
EE	0.5189**	0.3481	0.3429	1

***, **, and * indicate the significance of the coefficients at the 1%, 5%, and 10% significance levels, respectively.

According to the results presented in Table 3, although there is a negative relationship between PR and SPE, this relationship is not statistically significant. There is a moderate negative relationship between PR and SPE, and a moderate positive relationship between PR and EE. Both coefficients are statistically significant. Based on the results obtained here, it can be said that the variables SPE and HE reduce poverty, while EE increases poverty.

Table 4. Long-run coefficients of the extended ARDL model

<i>Variables</i>	<i>DLS</i>
Constant	-13.79
SPE	6.745**
HE	-64.31***
EE	26.23***

***, **, and * indicate the significance of the coefficients at the 1%, 5%, and 10% significance levels, respectively.

In order to study the long-term impact of SPE, HE, and EE variables on poverty, a long-run equation was estimated using the Dynamic Least Squares method. The results obtained are given in Table 4. According to the results given in Table 4, when the ratio of the SPE variable to GDP increases by 1%, the poverty rate will increase by 6.75% on average. When the ratio of the EE variable to GDP increases by 1%, the poverty rate will increase by 26.23% on average. When the ratio of the HE variable to GDP increases by 1%, the poverty rate will decrease by 64.31% on average.

Social protection expenditure has increased poverty: The study found that social security expenditure increases poverty in the long run. This finding suggests that the social security system is not

effective in combating poverty or that these expenditures are not spent in a targeted manner. The main reasons are that social benefits do not reach those who really need them or are inadequately distributed.

Education expenditure has increased poverty: The fact that education expenditure increases poverty is an unexpected result and raises questions about the effectiveness of education expenditures. This suggests that although education expenditure is expected to have a positive impact on poverty, it is not being used effectively enough or that there are structural problems in the education system. This may be explained by the low quality of education or the mismatch between education and the demands of the labor market.

Health expenditure has reduced poverty: The poverty-reducing impact of health expenditure shows that increasing access to health services and improving the health system can directly affect the social situation of the population. An effective health system improves people's well-being and quality of life by preventing diseases and reducing treatment costs.

As we have noted, the quantitative increase in health, education, and social protection and social security expenditures does not always have a unidirectional effect on improving the situation in these areas. In addition to the nominal increase in expenditures, it is also important to determine for what purposes and to what extent they are used efficiently. There are many approaches to explaining why social expenditures have increased in industrialized countries. These approaches suggest that there are a number of external factors that affect efficiency. The determinants include political-institutional factors such as globalization, government ideology, electoral motives, corruption, etc., demographic factors such as population aging, as well as economic factors such as unemployment, per capita income, etc. Thus, various factors can affect the efficiency of expenditures in two directions, positively and negatively. Budget deficits and trade globalization are negatively associated with social expenditures, while aging and unemployment are positively associated with social expenditures.

The **third chapter**, entitled "**Directions for Increasing the Efficiency of Public Social Expenditures in Azerbaijan**", identifies

the possibilities of applying progressive world experience in increasing the efficiency of public social expenditures in our country and shows ways to ensure social development in our republic.

Health: Healthcare costs constitute a significant portion of public social expenditures. The regular development of new medical technologies, the aging of the population in some countries, and the need to respond to pandemics such as COVID-19 and the crises it causes are all factors that will inevitably lead to further increases in healthcare costs in the future.

The graph below shows a comparison of total health expenditure and government health expenditure to GDP in a number of countries. (Figure 3).

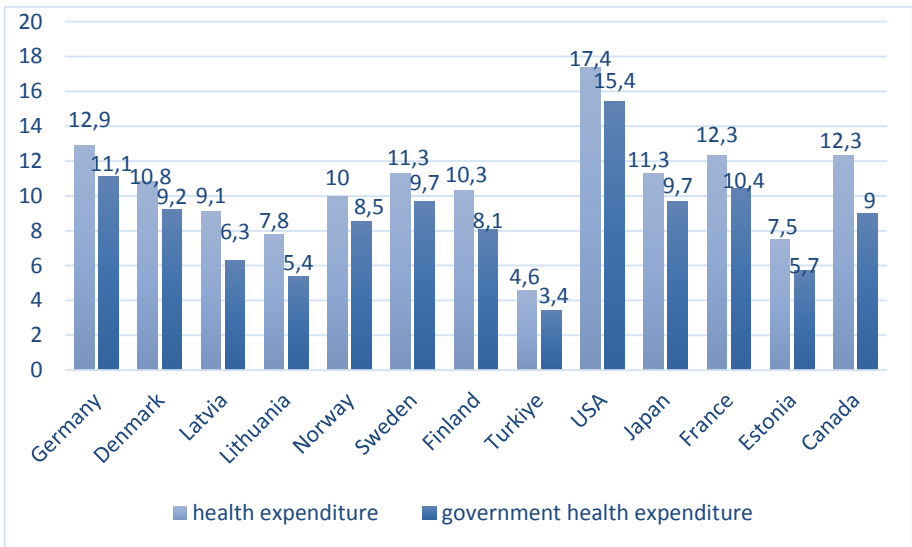


Figure 3. Health expenditure and the ratio of government health expenditure to GDP in some OECD countries, %, 2022 year

Source: Prepared by the author based on the information from <https://www.macrotrends.net/countries/WLD/world/healthcare-spending> and <https://data.oecd.org/healthres/health-spending.htm>.

As can be seen from the graph, in countries with well-developed healthcare systems such as the USA, Germany, Norway, Sweden, and

Finland, the main part of total healthcare expenditures is taken by public healthcare expenditure. It should be noted that for each country, making the public healthcare system more attractive than private health insurance for those who can afford it is a significant achievement. This is characteristic of Germany. Benefiting from the experience of the German healthcare system can affect the efficiency of the health insurance system in our country and the improvement of health indicators.

Analyses show that as per capita health expenditure increases, life expectancy at birth also increases, or vice versa. (Figure 4).

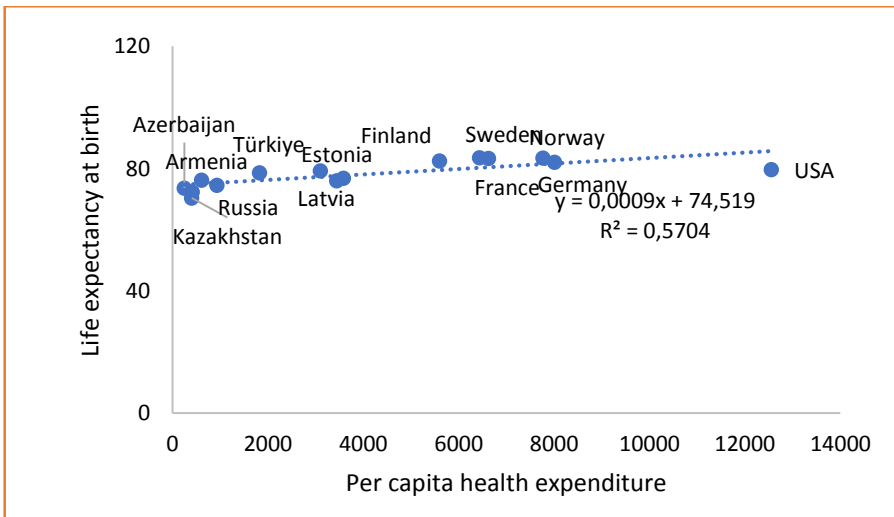


Figure 4. Correlation between per capita health expenditure and life expectancy at birth (2021)

Source: Prepared by the author based on the information from <https://data.oecd.org/healthres/health-spending.htm> and <https://population.un.org/wpp/>.

As can be seen from Figure 4, there is a positive relationship between per capita health expenditure and life expectancy at birth ($r=0.755$).

Education: Public expenditure on education (from primary to higher education) averages 10% of total public expenditure across OECD countries, ranging between approximately 6-16%. The bulk of

public expenditure is distributed between primary and secondary education, which is associated with higher enrolment rates at those levels of education and the dominance of private funding sources at the higher education level. Even in countries where public expenditure on education increased in nominal terms in 2019-2020, it generally fell compared to other public expenditure. The share of public expenditure on education in the budget fell to 6.5% on average across OECD countries in these years. This is due to the COVID-19 pandemic, which forced governments to spend a significant portion of their budgets to support their economies ⁽⁴⁾.

The graph below illustrates the comparative ratio of total education expenditure and public education expenditure to GDP. (Figure 5).

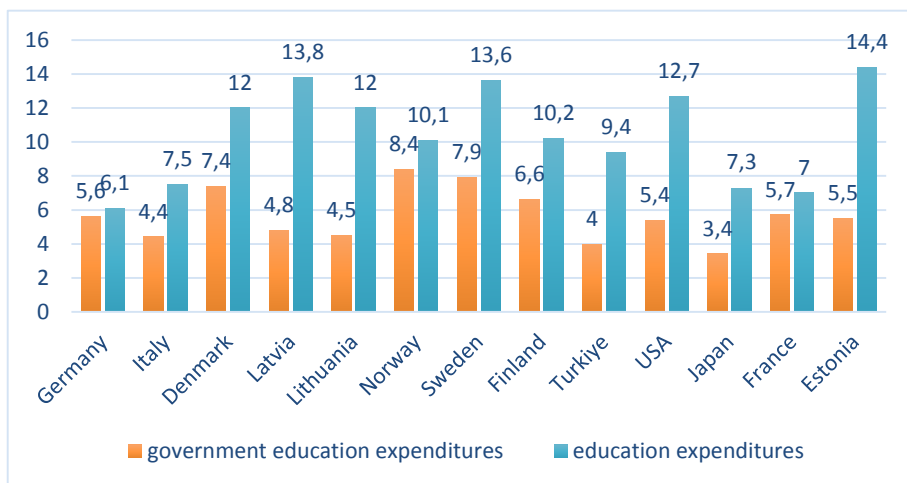


Figure 5. Education expenditures and the ratio of public education expenditures to GDP in some OECD countries, %, 2022

Source: Prepared by the author based on the information from <https://data.worldbank.org/indicator/>

As can be seen from the graph, in countries such as France, Germany, Norway, and Finland, the public expenditures on education

⁴ Health at a Glance 2019: OECD indicators [Electronic resource] URL: <https://www.oecdilibrary.org/sites/e88a7402en/index.html?itemId=/content/component/e88a7402-en>

has a larger share than private expenditures. In Germany, the financial reporting of education occupies an important place in the state's financial statements and creates an opportunity to control the efficiency of budget expenditures and the transparency of reports. In Finland, the almost complete absence of a private education system, the sufficiently high quality of education in state educational institutions, the state financing of all levels of education, and ensuring access to quality education for the entire population, regardless of their region of residence and gender, are very important factors. On the other hand, regular evaluations in educational institutions and the mandatory publication of their results help increasing the efficiency of education. It would be useful to apply this progressive practice in Azerbaijan as well.

It is worth noting that every three years, the OECD's Programme for International Student Assessment (PISA) assesses the performance of 15-year-old students in reading, mathematics and science. To determine the relationship between total education expenditure per capita and PISA scores, let's look at the graph below (Figure 6).

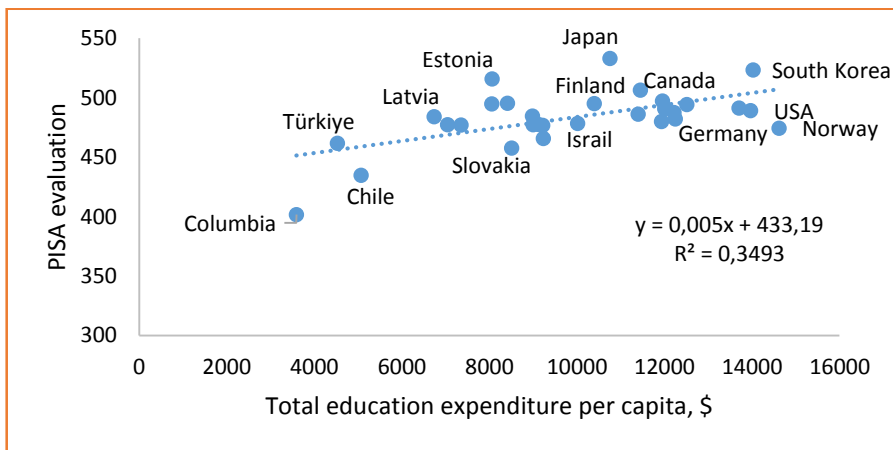


Figure 6. Correlation between total education expenditure per capita and PISA scores

Source: Prepared by the author based on the information from Education at a Glance 2023: OECD indicators

The graph above shows that there is a positive relationship between total per capita education expenditure and PISA scores. The relationship shows that as expenditure increases, student performance increases.

Social protection and social security: There are two different approaches to social protection and social security in the world (social and liberal). The following graph clearly shows the difference between the liberal and social models (Figure 7).

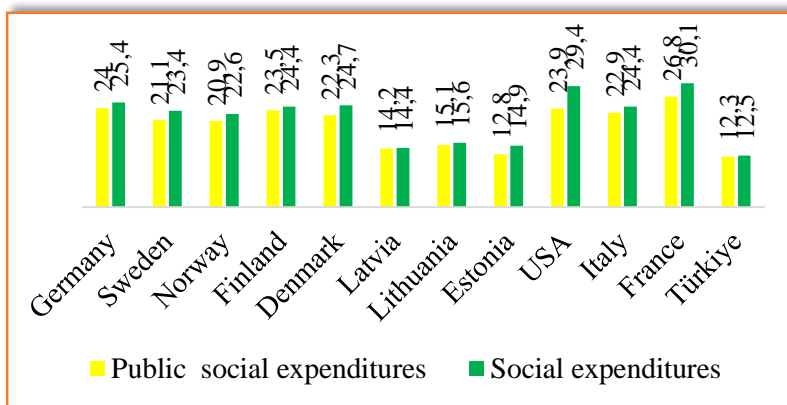


Figure 7. The ratio of total social expenditure and public social expenditure to GDP in some OECD countries, %, 2022

Source: Prepared by the author based on the information from https://www.oecd-ilibrary.org/social-issues-migration health/socialspending/indicator/english_7497563b-en

Figure 7 shows that in countries such as Germany, Finland, and Latvia, the public expenditures on social protection and social security have a higher share in total social expenditures. This is related to the economic models of the countries. Although the United States is a liberal country, an analysis of the social protection and social security system shows that this system can be considered progressive due to the reduction of poverty among both children and the elderly, and ensuring pensions to almost 100% of the elderly. Here, in addition to state pension provision, the presence of private occupational and

individual pension provision also reduces the social burden of the state and further improves the well-being of pensioners. In Azerbaijan, the formation of non-state pension provision can also have a positive impact on improving the social situation of pensioners.

One of the ways to reduce poverty in Azerbaijan and improve the social situation of low-income population groups is to provide targeted state social aid to low-income families. Although there are a number of shortcomings in the provision of targeted state social aid, the role of this mechanism in reducing poverty in the country is undeniable. The increase in the need criterion from year to year has led to an increase in both the amount of social aid provided and the number of individuals and families applying for and benefiting from this aid. In order to increase the effectiveness of targeted state social aid and ensure that low-income families benefit from these aids, as well as ensuring their economic activity, various measures should be taken to establish a certain link between the TSSA and employment. The aid is only enough to cover the family's minimal needs. Therefore, it is necessary to integrate the working-age members of the family receiving aid into the labor market. Although increasing the amount of aid from year to year is a positive development, studies show that this can lead to an increase in the "dependency" mentality among those receiving aid and their withdrawal from active labor. In this regard, it is very important to promote active employment among the working-age population. This also shows that the TSSA is not unconditional, but rather begins to take on a conditional character after a certain period, as is the case in a number of developing countries (South American countries). There are various ways to implement this:

1. Adaptation of working-age and qualified, educated members of families receiving TSSA to the labor market requirements by directing them to advanced training courses, trainings, and seminars;
2. To ensure the establishment of certain coordination relationships between public and private sector employers and these workers
3. Offering various discounts or privileges to private sector representatives to encourage them to employ this group of people;

4. Supporting the development of social entrepreneurship and self-employment;

5. Providing special loan privileges to this group of people.

The measures listed above will lead to a decrease in unemployment among TSSA recipients, lifting these families out of poverty, increasing formal employment in the country, developing sectors that make a positive contribution to the economy, such as agriculture, family businesses, and small businesses, and reducing the state's social burden in the long term. For this, it is important to reflect the listed issues in the legislative framework and to expand awareness-raising measures among the population.

One of the measures taken to improve the social well-being of low-income families is the implementation of the Self-Employment Program. Although the number of people involved in the Self-Employment Program has increased in our country in recent years, some shortcomings remain with the program. Thus, the specific weight of income from self-employment in the distribution of monthly per capita income in households by sources has decreased. This is a result of weak control over the implementation of self-employment programs, as well as the low efficiency of these programs. Ensuring targeting and strengthening control over the sustainability of activities play an important role in eliminating these problems and increasing the efficiency of expenditures allocated to the program.

Research shows that countries with higher public health expenditures and widespread compulsory health insurance systems also have higher health indicators. The high proportion of health expenditure among people's consumption expenditures leads to increase poverty among low-income individuals and a decline in health indicators due to the lack of timely examination and treatment of people because of costs.

Naturally, the rapid development of healthcare systems and medical technology around the world necessitates regular reforms and acceleration of improvements in our country, the implementation of more transparent and accountable, flexible management, more efficient use of resources, and the durability and sustainability of the measures implemented. Increasing the coverage of the compulsory

health insurance system, improving the quality of emergency and urgent medical care, improving the conditions of hospitals, polyclinics, and stations providing medical services in remote regions and rural areas, strengthening their material and technical base, in particular, the improvement of personnel working in the regions and the implementation of more effective incentive plans to attract highly qualified personnel to remote areas, ensuring that medicines essential to people's lives are accessible to everyone will boost the development of the healthcare system.

Improving quality at all levels of education is an important factor in improving the educational performance of pupils and students. In this regard, the importance of pre-school or early education should be particularly emphasized. The development of pre-school education plays an important role in ensuring that pupils have better educational opportunities in the coming years, in the formation of their psycho-emotional thinking, and in increasing their social skills. On the other hand, the involvement of children in early education is one of the factors affecting the increase in employment among parents, especially women. In this regard, it is of great importance that pre-school educational institutions are accessible to all children of this age in all parts of the country, and that their material and technical base and the training of key personnel are at a satisfactory level.

All the above-mentioned measures are aimed at ensuring socio-economic development in Azerbaijan. The conducted research once again shows that the implementation of these measures, achieving fundamental progress in the health and education sectors, and improving the well-being of the population play an important role not only in expanding the scale of financial resources allocated for this purpose, but also in increasing their efficiency. Measures taken to increase efficiency - reducing the shadow economy, increasing transparency and accountability of expenditures, minimizing informal employment, and ensuring sustainable employment through the development of the non-oil sector - should be accelerated and should be the main priorities of the state. Only in this case social expenditures can lead to an improvement in people's living conditions.

CONCLUSION

Increasing the well-being of the population in Azerbaijan, reducing poverty, improving the indicators characterizing the education and healthcare system, and ensuring social development in general are the priority directions of the state's socio-economic policy. To achieve the above, the government is implementing fundamental reforms and taking appropriate measures. It is very important to implement these reforms and effectively spend the funds allocated for social development. The research we conducted to assess the effectiveness of public social expenditures in our country provides the basis for obtaining the following results:

1. Social expenditures are classified into two types: direct and indirect. For example, targeted social aid, unemployment benefits, and benefits provided to families with children improve the well-being of some social groups in the short term, leading to a reduction in poverty and income inequality, so these expenditures belong to the group of direct social expenditures. Education and health expenditures are indirect expenditures, as they are investments in human capital and their impact on socio-economic development can be assessed after a certain period of time.

2. The volume of public social expenditures in any country and its efficient use characterizes the socio-economic system to which that country belongs.

3. Trying to reduce social expenditures in a situation where demand is increasing for this, is a threat to social security and undermines social stability.

4. The nominal increase in social spending does not necessarily mean that it is directly related to economic development;

5. The effectiveness of social spending is influenced by economic, institutional and demographic factors;

6. In Azerbaijan, increasing social protection and social security expenditures and healthcare expenditures reduce the GDP growth rate, while education expenditures have a positive impact on economic growth;

7. Countries with a high ratio of social spending to GDP also have a high HDI, and vice versa;

8. There is a positive relationship between total, even per capita health expenditures and life expectancy at birth;

9. There is a positive relationship between per capita education expenditure and PISA assessment results;

10. Despite the fact that the share of social expenditures in budget expenditures has been increasing year by year, the quality indicators of these areas are unsatisfactory due to the low efficiency of expenditures and are lower than number of developed and developing countries;

11. The state financing of the healthcare system in Azerbaijan is not satisfactory. Compared to developed countries with strong healthcare systems, the ratio of public healthcare expenditures to GDP in Azerbaijan is quite low. Although public healthcare expenditures has increased both nominally and as a percentage of GDP over the past 10 years, healthcare expenditures is still low;

12. The acceleration of the demographic aging process and the crises caused by the Covid-19 pandemic have increased the social burden of the state by increasing both healthcare and social protection and social security expenditures;

13. Although the ratio of public expenditures on education to GDP in Azerbaijan is low compared to developed countries, it is approximately the same as that of neighbouring developing countries. When comparing public expenditures on health and education, it is possible to see that the ratio of expenditures on education to GDP is higher than the ratio of expenditures on health to GDP;

14. In Azerbaijan, there is a positive relationship between social protection and social security, education expenditures and poverty, and a negative relationship between health expenditures and poverty.

SUGGESTIONS

We consider it appropriate to implement the following measures to increase the efficiency of public social expenditures in Azerbaijan:

1. In order to minimize potential negative impacts, public participation (participation of various interest groups, civil society institutions, etc.) should be ensured in both preparation and implementation of reforms, for more precise preparation;

2. Monitoring measures related to the implementation of strategies, development concepts, and state programs should be improved and main implementation constraints should be eliminated, public accountability on monitoring results should be increased, and control over expenditures should be strengthened;

3. Simplified and modern state/budget management should be used to ensure transparency;

4. Management and expenditures should be shifted from resource-oriented to result-oriented;

5. Effective use of public funds allocated for social protection and social security of the population should be implemented;

6. The level of coverage of low-income groups of the population with social benefits should be increased, and in addition to increasing the amount of TSSA provided in order to reduce poverty among low-income families and continuously improve their social situation, necessary training programs should be used to ensure the acquisition of professions and employment of relevant members of these families;

7. Social entrepreneurship should be developed and the effectiveness of self-employment measures should be increased;

8. In order to improve the indicators characterizing healthcare, the funds allocated by the state to this area should be increased, more attention should be paid to primary healthcare services, and healthcare infrastructure and staffing should be improved, especially in the regions;

9. To improve the indicators characterizing the education system, investment in human capital should be increased, along with improving material and technical equipment in the regions, the involvement of highly qualified personnel in the educational process should be accelerated, special importance should be given to pre-school education, and an applied and practice-oriented educational process should be developed.

In our opinion, the implementation of these measures will lead to increasing the economic efficiency of public social expenditures in our country, improving welfare, and ensuring social development.

The main content of the research is reflected in the following published scientific works of the author:

1. Tahmazli A.N. General trend of public social expenditures in Azerbaijan: Education, health and social protection expenditures in 2010-2020 // News of ANAS. Series of economics, - 2021, - p. 54-59.

2. Tahmazli A.N., Jumazade S.A. Socio-economic development and ways to ensure it // scientific-practical journal "Kooperasiya" - 2021, - p. 30-39.

3. Tahmazli A.N., Jumazade S.A. The relationship between public social expenditures and demographic processes in the Republic of Azerbaijan // "Economic growth and social welfare"- 2022, - p. 95-106.

4. Tahmazli A.N. The impact of social expenditure on economic growth in Azerbaijan // Экономика и предпринимательство - 2022, - p. 607-613.

5. Tahmazli A.N. Efficiency of public social expenditures in Azerbaijan and factors affecting it // Silkway - 2023, - №4, - p. 88-97.

6. Tahmazli A.N. Studying world experience in increasing the efficiency of public social expenditures: In the case of the USA and Finland // Economic reforms - 2023, - p. 41-54.

7. Tahmazli A.N. Explanation of the concept of social expenditure and assessment of the current situation in Azerbaijan // "Social Work Technologies in Various Spheres of Life" Documents of the VII International Scientific and Practical Conference, Russia, Makhachkala - 2022 - p. 98-103.

8. Tahmazli A.N. The impact of social spending on economic growth in Azerbaijan // Materials of the International Scientific and Practical Conference dedicated to the 60th anniversary of the Institute of Economics of ANAS "Economic growth and social welfare" -2018, - p. 726-730.

9. Tahmazli A.N. The role of education in social and economic development // Republican scientific conference

"Personality, society and state: modern approaches to mutual relations", MDU, - 2019, - p. 462-463.

10. Tahmazli A.N. Ensuring social development in Azerbaijan within the framework of sustainable development goals // Republican scientific conference "Modern problems and prospects of economic management" dedicated to the 100th anniversary of the birth of the great leader Haydar Aliyev, ASOIU, - 2023 - p. 457-460.

11. Abdullayeva R.S., Tahmazli A.N. The role of social entrepreneurship in reducing poverty in Azerbaijan // Scientific Conference of the Interdisciplinary World Congress of Urban Studies II: Disasters, Climate Crisis, Migration and Security. Cities and society in the context of disasters and migration, Transnational Press London, - 2024 – p. 371-383.

12. Abdullayeva R.S., Hashimli V.X., Tahmazli A.N. The assessment of the role of social innovations in improving welfare in Azerbaijan // New Paradigms in the economy cycle. XII traditional scientific conference on the subject: “New Paradigms in the economy: Connectivity, Innovation and Sustainability”, Serbia -2024.

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