

# The Impact of Education on Economic Development in a Social State, the Case of Georgia

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**Abstract.** Beginning in the 19th century, the opinions, arguments and works of individual scholars and scientific schools began to significantly influence the development and implementation of economic policy in many countries. Since the 1930s, this influence has intensified, with scientific achievements in economics playing an increasingly important role in development. As a result, the study of the relationship between the economy and the sectors that determine its dynamism and success has become particularly relevant. One such sector is education, which in this context is considered not merely as a system, but as a fundamental human right, the degree of its realization, and its impact on the growth of economic potential. An important aspect of this analysis is determining the overall level of education within society and its impact on economic development. Attention should be paid not only to guaranteeing citizens' right to education and enhancing their personal potential, but also to ensuring inclusive national development and creating conditions for the effective use of the human potential that is formed through education. The issue is complex and multifaceted. The article examines key aspects of the relationship between a country's level of education, the protection of the right to education, and economic development. In addition, the problem is analyzed from the perspective of the "social state," a principle reinforced by the Constitution of Georgia, and recommendations are proposed for the further improvement of relevant state policies. © 2026 Bull. Natl. Acad. Sci. Georg.

**Keywords:** right to education, economic growth

## Introduction

The constitutional recognition of education as a fundamental human right highlights its special importance in a democratic state (Magers, 2019). Education is an integral part of social life, enabling individuals to develop their abilities and skills and achieve self-development, while benefiting both national and international society. Like academic

freedom, the right to education is a subjective right of the individual, significantly impacting not only free personal development, but also the success of society as a whole. Its role is indeterminate for personal and social development and is an area of special public interest. Education strengthens society and ensures a dignified human existence in all regards (Sharma and Monteiro, 2016).

This constitutional right imposes a direct positive obligation on the state. Financing education cannot be viewed as a privilege or discretionary allowance; rather, it is essential for the development of a democratic society. Beyond its subjective importance for individuals, education carries an objective value for the country overall. Therefore, a social state is responsible for ensuring the right to education by providing the necessary conditions, such as infrastructure, programs and quality control, and by offering financial support to enable all social strata to access appropriate education (Phirtskhalashvili, et al, 2023).

The education system is a fundamental part of the social system and a core element of a democratic, legal and social state. Its creation is a legitimate goal at the highest level. The constitutional right to education is widely recognized as one of the basic social rights of individuals and a cornerstone value of civilized society. This underscores the importance of accessibility to education as both a social phenomenon and a factor determining economic development, especially for developing countries like Georgia. Despite repeated discussion at the policy level, no new model for improving accessibility has yet been proposed. As a result, social approaches are either poorly addressed, or are neglected across all levels of education – preschool, general, vocational, and higher. This situation restricts access to education for a significant part of the population, and undermines the idea of a social state, one of the pillars of which is inclusiveness in economic development.

**The Interrelation between education and the economy.** In Europe, in the 1800s, improvements in the quality of education contributed to a rapid rise in living standards. In contrast, relatively uneducated societies experienced little progress. Based on the successes achieved over the past two hundred years since, European states have become increasingly prominent in world politics and economics, despite various obstacles.

There are three main reasons why it is important to understand the connection between education and economic growth (Gvatzdze, 2013):

1. **Public:** Education promotes the development of knowledge and enables society to benefit from scientific advancements, while also contributing to further innovation. This requires an appropriate scale and a supportive environment;
2. **State:** Differences in innovation and labor productivity indicators across countries, largely reflect the level of education and knowledge base of their populations;
3. **Personal:** Education can be seen as an investment decision, with returns measured in terms of higher real income, improved well-being, or other personal gains.

We will also argue that education has an important international dimension (Sheppard, 2022). It should be viewed as a global good, accessible to all, regardless of race, religion, or place of residence. This raises the question as to what extent the governments of individual countries guarantee the right to education and ensure access for their citizens. Individuals, in turn, use education to foster personal development, enhance organizational performance, and contribute to the overall advancement of the state.

Investment in education (as in human resources) is sometimes compared to investment in fixed capital. However, recent world crises have slowed growth in real capital investment, and there are limits after which further rapid expansion of real capital becomes ineffective. Accordingly, the need to promote technological development, which determines the effectiveness of investments and economic growth, is becoming increasingly important.

Technological progress is fueled by the implementation of scientific and technological innovations across all sectors, including business, such as robotics, computers, nanotechnologies, software solutions, and artificial intelligence. Modern achievements in technology and engineering are largely determined by the openness of the economies of

individual countries, the presence and accessibility of complete and objective information regarding economic development, social background and other important indicators, the presence of innovation-oriented human resources and their proper management at both the state and company level, and the diversity, flexibility and accessibility of the education system.

This list is, of course, incomplete. However, it is enough to prove that a high level of education determines the progress of a state in many ways and should be considered as one of the factors in gaining a competitive comparative advantage. This is especially true for the economy of a country with scarce and exhaustible resources.

All points mentioned above are equally important. However, for now, we will focus only on the development and accessibility of the education system, the impact of which on economic growth has many interesting aspects.

In modern economies, the employment structure is changing, with the share of mental labor in production increasing, while the demand for low-skilled labor is declining. As such, the issue of finding additional sources of economic growth and internal reserves for the country is becoming ever more important. One of the most significant sources is the level of education of the population. Studies show that education produces indirect effects in the form of externalities, which can have both monetary and non-monetary expressions.

Non-monetary externalities of education can manifest in various ways, such as higher social tolerance, increased participation in democratization, and greater solidarity. Research indicates a clear connection between citizens' access to education and their participation in public life on socially important issues.

The impact of education also varies by level: investment in secondary education stimulates economic development more effectively than universal primary education alone (IIASA: 2008). Furthermore, a combination of comprehensive secondary

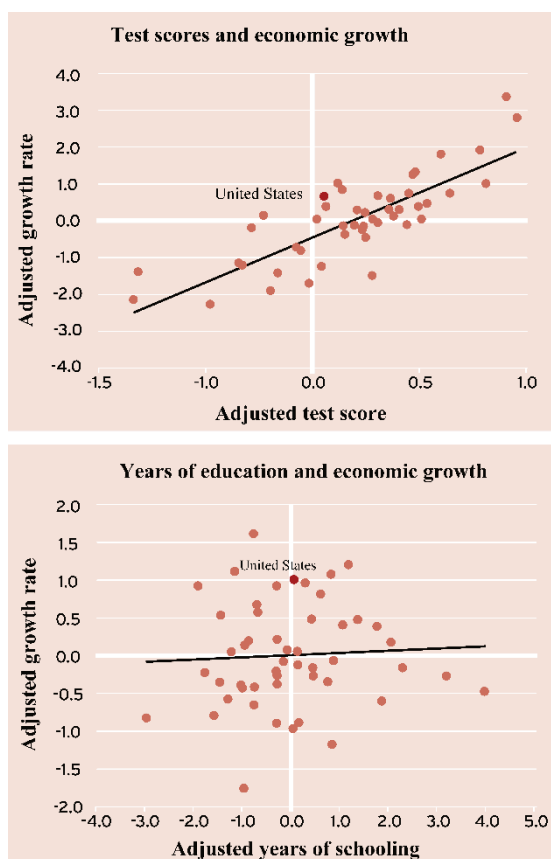
education and universal primary education allows poor countries to build the human capital necessary to lift a large part of their populations out of poverty. The social and cultural benefits of higher education are not limited to contributing to the improvement of social conditions, and they have a direct economic impact.

The social role of higher education, and its contribution to economic growth, are closely linked to technological progress, the expansion of labor and capital resources, and the improvement of their quality. Consequently, increasing attention has been given to human capital as a primary driver of economic growth. The concept of investing in worker qualifications as a form of capital was first proposed by classical economists such as W. Petty, A. Smith and D. Ricardo, and later developed into the modern "human capital theory". According to this theory, investments in education and health create human capital. Unlike physical capital, human capital is inseparable from the individual, and investments in it increase a person's potential, capabilities, and, ultimately, labor productivity. Thus, investments in education are increasingly seen as investments in the quality of human capital, rather than its quantity.

A very interesting study was conducted in the USA, examining the rate of economic growth compared with the number of years spent in education and academic performance (see Figure). The diagram shows that there is a high correlation between the development of higher education in a country and the rates of economic growth. However, the key to economic growth is how much students study (the quality), not how long they stay in school.

Today, "human capital" is considered one of the most important components of a country's "national wealth". According to World Bank experts, experimental monetary assessments of national wealth elements show that "human capital dominates the structure of national wealth, accounting for approximately 60% of its final assessment. Based on this, the final conclusion was made that the main

factor of reproduction is not the creation of material wealth, but the accumulation of knowledge and skills” (World Bank, 2018).



Source: Hanushek, E.A., Jamison, D.T., Jamison, E.A., and Woessmann, L., 2008: 67.

**Fig.** The relationship between economic growth, years spent in education, and the quality of knowledge.

Global experience demonstrates that several factors have a decisive impact on the rates of economic growth. These include the level of worker training at all levels, the diversity of qualifications, the pace and scale of development in priority areas of science and technology, and the progressivity of scientific and industrial labor resources. Education plays a crucial role in this process, particularly through scientific research and development (R&D), increasingly referred to in the public sector as “Research and Innovation” (R&I). This focus emphasizes not only development, but also creativity and innovation (Owen et al., 2012).

Higher education systems are particularly important for training researchers, contributing to the emergence of a new generation of knowledge and innovations. Ultimately, this has an impact on the growth of labor productivity. Numerous studies have confirmed that education, especially higher education, determines a country’s ability to master innovations and adapt to them.

**Human capital in the service of the development of the social state.** Since the last quarter of the 20th century, the structure of the economies of Western countries has undergone significant changes due to the increasing role of industries based on human capital. The globalization of the world economy increasingly emphasizes innovation, ideas, skills and knowledge as the primary drivers of competitiveness. Maintaining and developing this knowledge base requires a highly educated labor force with strong professional training, which, in turn, is inextricably linked to the growth of investments in education and the workforce. At the same time, improving the level of education and training must be accompanied by changes in social and environmental conditions so as to ensure that as many people as possible have the opportunity to realize their own potential.

Creating such opportunities is easier in socially inclusive states, where, when assessing the possibilities for professional growth and qualification improvement of labor resources in the field of science and education, the following features are taken into account:

1. Investments in education not only affect the development of creative abilities, professionalism, and the growth of the social status of each individual, but also affect the reproduction of the intellectual and spiritual potential of society as a whole;
2. Related investment costs, while made at a single point in time, are repaid over several cycles of the production process, until the moment when it again becomes necessary to retrain workers, based on the evolving requirements of inno-

vative renewal. It should also be considered that more qualified workers create more value over the same period;

3. The duration of investment returns should align with the “moral depreciation” of professional knowledge in relevant scientific and technological fields. If this period is too short, production costs increase; if it is too long, the professional growth of workers is delayed;
4. The modern education and training process implies the need for a constantly updated system of knowledge acquisition, ensuring that the workforce maintains and reproduces a high level of qualification over time.

Throughout the 21st century, the world has made significant progress in combating illiteracy. In 1960, 36% of the world's population lacked even basic education. By 2000, this figure had fallen to 25%, despite the fact that the world's population had almost doubled during the same period, increasing from 3.0 billion to 6.0 billion.

However, the situation in developing and poor countries was incomparably worse. To address this, the UN declared the Literacy Decade in 2002. By 2012, despite substantial efforts and some successes, 775 million people were still considered illiterate, 85% of whom lived in just 41 countries. During this period, the UN set a goal to increase the literacy rate to 50% by 2015, a target that was largely achieved (UN, 2012).

Today, global literacy rates are generally high, but significant differences remain between countries. Developed nations typically have adult literacy rates of 96% or higher, while less developed countries average around 65%. The lowest literacy rates are found in South and West Asia and sub-Saharan Africa – regions that also include the world's poorest countries (World Population Review, 2023).

Another important trend in education is the changing preferences of young people. The quantitative and qualitative growth of educational institutions, along with the increasing role of non-formal or vocational education, has created

opportunities for acquiring marketable skills in a shorter period of time. As a result, fewer young people are pursuing university studies. Today, there are 4 million fewer college students than there were 10 years ago. Among students who graduated from high school in 2016, 70% continued their studies in college. In 2020, this number decreased to 63%, and this trend continues (SCRIPPS, 2024). This decline in university enrollment may have long-term consequences for economic development.

It is often argued that education has the greatest impact on economic growth in countries where the population is largely illiterate. In such contexts, education can truly serve as the “engine” of economic growth. The same cannot be said, however, for already “educated” countries. One reason is that excessive time and effort are devoted to learning people who might otherwise become “idea creators” often spend their energy acquiring knowledge rather than producing innovations.

In today's rapidly changing and dynamic world, the increasing number of educated individuals exposes a critical problem: many university graduates may find that the professions they trained for are no longer in demand. As a result, without transforming and adapting the education system to current and future market needs, a significant portion of time, money, and effort is wasted. This challenge is not confined to developing or less developed countries, but also poses a major concern for leading industrialized nations.

**Key findings.** Numerous studies confirm the direct relationship between investment in education and economic growth, and public spending on higher education plays an important role in this. The higher the level of education in a country, the better its economy develops, the lower the unemployment rate, and the higher the life expectancy. In addition, a well-educated population has a positive impact on other areas of society, for example, on the quality of public governance. However, education is not an “absolute weapon” that can solve all economic problems.

Despite education-driven gains in global wealth, inequality remains stark globally, revealing that prosperity continues to mask a deeply unequal and unjust world. According to the OECD, high-income countries have 52 times more wealth per capita than low-income countries. Over the past two decades, more than 20 countries have experienced a decline or stagnation in per capita wealth. A similar situation has arisen in several large low-income, as well as in several high-income countries that have been significantly affected by crises. This means that critical assets for generating future income may be depleted.

The impact of the increasing literacy rate, as noted above, is most pronounced in low-income countries, where wealth has almost doubled over the past century faster than the global average of 66%. In developing countries, a 1% increase in the education index tends to lead to an 8% increase in economic growth, and this is statistically significant at the 1% level (Bah, 2023). These calculations do not include high-income countries. At the same time, high population growth rates in many low-income countries have led to relatively low growth rates in per capita wealth. This is particularly true in sub-Saharan Africa, where per capita wealth has remained unchanged since 1995.

## Conclusions

The discussion developed in the paper can be summarized in the following conclusions:

First of all, it should be noted that the higher the average number of years an individual spends in education, the faster the economy tends to grow. However, years of schooling alone are insufficient for a complete analysis, particularly at the international level. Far more important are the quality of theoretical knowledge acquired, the skills developed, and the attitudes formed, which must ultimately translate into economic development. Education and its quality influence economic growth in much the same way as international financial aid, the protection of property rights, and a country's

openness to international trade. Numerous arguments support this view. However, based on the article, the following key points stand out:

- a) Education can be regarded as a factor of production that significantly affects labor productivity;
- b) Education determines the high efficiency of investments in physical capital, especially in new technologies, which in turn contributes to economic growth;
- c) Investments aimed at improving the quality of human capital are a prerequisite for the development of all sectors of the economy;
- d) The returns from the education system cannot be complete or future-oriented unless access to education is maximally guaranteed for all social groups and strata of society.

At the modern stage, investments in human capital are becoming increasingly significant, accounting for approximately two-thirds of global wealth – the largest share of wealth. Studies indicate that human capital constitutes about 70% of wealth in high-income countries, compared to only 40% in low-income countries. Human capital is measured as the present value of future income for the workforce, taking into account education, skills and experience (Milanovic, 2013).

Considering this, we argue that the implementation of new education reforms in Georgia should focus on several key priorities:

- The state must ensure both the opportunity and accessibility of education, while simultaneously creating conditions for individuals to realize their personal potential;
- Legislators should prioritize redistributive policies across all levels of education, based on the idea of a social state and the goals of inclusive development;
- The government must ensure access to quality education for all social groups;
- Access to higher education should not come at the expense of teaching and learning quality, as is currently occurring in Georgia under funded educational programs.

From a cost-effectiveness perspective, state spending that increases access but compromises on quality may often amount to “money thrown down the drain,” producing little to no positive impact on the economy.

Finally, we would like to emphasize that the impact of education on state development is particularly crucial in developing countries, where systemic transformation processes are still ongoing. Only an educated society can fully recognize the necessity of change and appreciate the benefits it

brings, not just for individuals or specific groups, but for society and the state as a whole. With this perspective, we hope that attention to national wealth, enhanced through the protection of the right to education, ensuring its accessibility, and implementing a sound, results-oriented financing model, will become more pronounced, helping us to better balance our “asset portfolio” for long-term, sustainable, and inclusive economic growth and prosperity.

### *ეკონომიკა*

## განათლების გავლენა ეკონომიკურ განვითარებაზე სოციალურ სახელმწიფოში, საქართველოს მაგალითი

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XIX საუკუნიდან დაწყებული, ცალკეული მეცნიერებისა თუ მათი ჯგუფების მიერ გამოთქმული მოსაზრებები, არგუმენტები და ნაშრომები მნიშვნელოვან ზეგავლენას ახდენდნენ არაერთი ქვეყნის ეკონომიკური პოლიტიკის თეორიული საფუძვლების შემუშავებასა და რეალიზებაზე. 1930-იანი წლების შემდეგ, ეს ტენდენცია მზარდია და ეკონომიკაში მეცნიერული მიღწევები, სულ უფრო მნიშვნელოვან როლს ასრულებს მის განვითარებაში. შესაბამისად, აქტუალური ხდება ეკონომიკის კავშირისა და ურთიერთმიმართების კვლევა იმ დარგების მიმართ, რომლებიც განაპირობებს მის დინამიკურობასა და წარმატებას. ერთ-ერთი ასეთია განათლება, რომელსაც განვიხილავთ არა როგორც სისტემას, არამედ როგორც ადამიანის უფლებას, მისი რეალიზების მდგომარეობას სახელმწიფოში და ზეგავლენას ეკონომიკური პოტენციალის ამღვლევაზე. მნიშვნელოვანია მთლიანად საზოგადოების განსწავლულობის საერთო დონისა და ეკონომიკურ განვითარებაზე მისი ზეგავლენის განსაზღვრაც. სულ უფრო საყურადღებოა არამხოლოდ მოქალაქის განათლების უფლების გარანტირება და პიროვნული

პოტენციალის ზრდა, არამედ, სახელმწიფოებრივი განვითარების ინკლუზიურობა და შექმნილი პოტენციალის მაქსიმალური გამოყენების შესაძლებლობათა გაფართოებაც. პრობლემა მრავალწახნაგოვანი და წინააღმდეგობრივია. ნაშრომში შესწავლილი და გამოვლენილია ზოგიერთი ასპექტი, რომლებიც აღწერენ კავშირს ქვეყანაში განათლების დონეს, ხარისხს, განათლების უფლების დაცვასა და ეკონომიკურ განვითარებას შორის. ამასთან, პრობლემა განხილულია „სოციალური სახელმწიფოს“ (რაც განმტკიცებულია საქართველოს კონსტიტუციით) თვალთახედვით და შემუშავებულია რეკომენდაციები შესაბამისი სახელმწიფო პოლიტიკის შემდგომი სრულყოფის მიმართულებით.

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