

THE IMPACT OF INVESTMENTS IN INCLUSIVE EDUCATION ON LONG-TERM ECONOMIC GROWTH

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Abstract: *This paper analyzes the fundamental relationship between investments in inclusive education (IE) and long-term economic development, with a particular focus on the context of the Republic of Moldova. Grounded in human capital theory, the research demonstrates that inclusive education is not merely a moral obligation, but a strategic investment that maximizes individual potential and labor productivity. At a global level, international models (Scandinavian, North American, Dual) provide benchmarks for best practices, highlighting that the early integration of vulnerable groups significantly reduces future social costs. The analysis underscores a "circular interdependence": inclusive education enhances the quality of the workforce, stimulates innovation through diversity, and transforms social assistance beneficiaries into active taxpayers. In the Republic of Moldova, progress is visible through the consolidation of the legislative framework (2022-2027 Program) and the expansion of Resource Centers (CREI). Data indicates a positive correlation between specific funding and the increased school retention of children with special educational needs (SEN). However, the sustainability of the system is threatened by structural barriers: unadapted infrastructure, a shortage of specialists, and social stereotypes. The conclusions emphasize that the Republic of Moldova is at a turning point. To ensure sustainable economic growth, it is imperative to shift from mere classroom presence toward efficient resource management and digitalization. Ultimately, inclusive education is presented as the essential catalyst that can transform society from a system based on assistance into one grounded in empowerment and economic efficiency.*

Key words: *inclusive education, human capital, sustainable economic growth, strategic investment, school retention.*

JEL: I25, J24, O15

Introduction

In contemporary specialized literature, the relationship between investment in education and economic growth forms the core of human capital and endogenous development theories, which highlight the essential role of knowledge and skill development in the growth of modern economies. As a fundamental pillar of human capital formation, education takes on strategic importance, and its inclusive dimension is becoming increasingly relevant in today's societies.

Foreign direct investments are essential sources and primary factors driving a country's economic development. While the impact of these investments depends on economic, political, and social factors—and despite the common perception that foreign investment has a positive impact—there is still a lack of understanding regarding the orientation of investments within the inclusive education system.

In this context, investing in inclusive education represents not only a social and moral necessity but also an economic opportunity. Ensuring equitable access to education contributes to skill development, increased labor productivity, and the reduction of social inequalities—all of which are essential factors for a competitive and sustainable economy. Thus, inclusive education becomes a mechanism through which societies can harness the full extent of available human potential.

The relevance of this topic is particularly pronounced in the context of the Republic of Moldova, where challenges related to social inclusion, access to quality education, and the efficiency of public investment remain pressing. Analyzing the impact of inclusive education investments on economic

growth offers a complex perspective on how educational policies can influence long-term economic development. This research aims to contribute to the development of the conceptual and practical framework regarding the role of inclusive education in the modern economy, focusing on effective public policies and sustainability. In an era of globalization, the economic sustainability of the Republic of Moldova depends on the capitalization of underutilized human capital. The topic is of critical importance because:

- It aligns with the **Inclusive Education Development Program 2022-2027**.
- It addresses the "**circular interdependence**" between education, labor productivity, and the state's financial health.
- It analyzes the necessary transition from a social assistance model (resource consumer) to one of **economic empowerment** (resource generator).

The aim of this paper is to highlight the relationship between investment in inclusive education and sustainable economic growth by analyzing the mechanisms through which education contributes to human capital formation and the reduction of economic disparities. Additionally, the paper aims to identify best practices, analyze the current situation, and formulate recommendations for improving public policies in this field.

The choice of the topic is supported by the need to quantify the effectiveness of investments in the education of children with Special Educational Needs (SEN) and vulnerable groups. The primary motivation is to demonstrate that the "**cost of exclusion**" is much higher in the long run than the initial investment in inclusion. The study is driven by the desire to provide solutions for structural barriers in Moldova (unadapted infrastructure, shortage of specialists) through the lens of successful international models (Scandinavian, Dual, North American).

Proposed Objectives:

- To analyze the impact of investments in inclusive education on the formation of a resilient and diversified human capital.
- To evaluate international best practice methods and their applicability within the inclusive system of the Republic of Moldova.
- To identify the direct correlation between per-student funding and the increase in school retention rates.
- To analyze the barriers in the management of human and financial inclusive services that limit the return on public investments.

The research methodology is based on the analysis of specialized literature, comparative studies, and the interpretation of relevant statistical data, providing an interdisciplinary approach to the investigated topic. Current research is grounded in fundamental theories—both classical (Adam Smith) and modern economic theories (James Heckman)—which demonstrate the high return on human capital investments. International models show that early integration reduces unemployment and the pressure on social assistance budgets. At the national level, the Republic of Moldova has moved beyond the experimental stage and is gradually aligning with EU standards through the creation of Resource Centers (CREI) and Psycho-pedagogical Assistance Services (SAP); however, despite legislative progress, practical implementation is hindered by social stereotypes and inefficient management of local resources.

Core Content

The concept of **Inclusive Education** is a continuous process of transformation within the educational system, as it responds to the needs of all students. According to UNESCO, inclusive education represents a process of eliminating learning barriers, ensuring the participation of young people regardless of their ethnic origin, language, abilities, or socio-economic status. Its fundamental principles are:

- Equity: providing reliable and differentiated support.
- Adaptability: tailoring the system to individual needs.

- Diversity: celebrating what makes each individual unique [16].

An inclusive economy is one that creates opportunities and benefits equitably. Therefore, we can consider that the pillars of an inclusive economy reduce income disparities and increase social cohesion, specifically by leveraging underutilized human capital.

The interdependence between inclusive education and economic development consists of two concepts linked in a circular causality. They act as a catalyst for long-term economic growth by:

- Increasing productivity.
- Reducing social costs: a higher employment rate among vulnerable groups alleviates pressure on social assistance budgets.
- Innovation through diverse economic environments: driven by the human capital formula, which can be represented through investment in education and healthcare.

The **interdependence between inclusive education and economic development** represents two concepts linked by circular causality. They act as a catalyst for long-term economic growth by increasing productivity and reducing social costs; a higher participation rate among vulnerable groups alleviates the pressure on social assistance budgets. Furthermore, it fosters innovation through diverse economic environments via the human capital formula, which can be represented as the result of investment in education and healthcare.

$$V_{CU} = \int_0^T e^{-rt} \cdot f(E_i, S_i) dt \tag{1}$$

E_i represents the level of inclusive education, and S_i represents the state of health.

The role of education in a country's economic development is critically important and unanimously accepted. We can affirm that education plays a dual role: on one hand, by providing the labor force required by the economy, and on the other hand, through research results that contribute to the development and implementation of new technologies. The link between education and economic growth has been a central concern for great economists since Adam Smith, who studied the relationship between investment in education and the wealth of nations. Today, we can state that there is a solid theoretical framework regarding the connection between the educational system and a country's economic growth. [17]

An international model for the development of inclusive education is Romania. The situation there has improved over the last 30 years with the support of UNICEF. In partnership with central, county, and local authorities, as well as NGOs, UNICEF Romania has developed and implemented a solution that utilizes existing local resources as efficiently as possible and creates stronger links between families, schools, and communities. [16]

The legal framework of the **Republic of Moldova** complies with international standards. The concept regarding the development of inclusive education, approved and reflected in policy documents, serves as a general framework for the inclusion of all children at high risk of exclusion; it is based on the principle of "education for all," aiming to capitalize on the learning potential of every child. Thus, the principle of inclusive education is not a separate entity; rather, inclusion constitutes an approach for the entire educational system. [10]

The objective of the **Quality Inclusive Education Package** is for all children to start school at the appropriate age, to learn to their full potential, and to be prepared for life. To this end, a school-family-community partnership has been created to support children.

Inclusive education is not limited to the integration of children with disabilities; it also aims to eliminate barriers to participation for everyone at risk of exclusion. According to the UNESCO

definition, it is a process of addressing and responding to the diversity of needs of all learners by increasing participation in learning, cultures, and communities. [15]

Economic inclusion is a system that creates opportunities for the population and distributes them equitably. The key pillars on which economic inclusion is based are: the removal of barriers for marginalized groups, the development of lifelong skills, and the involvement of citizens in economic decision-making. While classic economic growth is measured by **GDP**, economic inclusion emphasizes improving the quality of life for those at the "base of the pyramid."

One interdependence between economic development and inclusive education is the quality of school inclusion and the financial health of the state. This involves reducing social costs by training individuals to become active taxpayers and increasing productivity. Another method for implementing inclusive economic growth in our country would be following international models that approach the issue through different strategies:

- The Scandinavian Model (Finland, Sweden)- total integration where the school is the only option, with massive resources allocated for support and multidisciplinary teams within the institutions.
- The North American Model (Canada, USA)- guarantees the right to inclusion in the "least restrictive environment."
- The Dual Model (Germany)- emphasizes the transition toward vocational training and apprenticeships, linking education directly to the labor market.
- The Transition Model (Eastern Europe)- the shift from large residential institutions (orphanages) to CREI (Resource Centers for Inclusive Education) within community institutions.

The analysis of theoretical foundations and international models highlights that inclusive education is not merely a moral desideratum, but a pillar of the modern economy. However, translating these principles into daily reality depends critically on the mechanisms through which society chooses to distribute its resources. Moving from a conceptual vision to social impact requires a rigorous examination of the pragmatic side: investment. It is necessary to analyze the financial structure and national strategies that allow for the transformation of theoretical paradigms into infrastructure, human resources, and sustainable support services.

In the Republic of Moldova, the strategic framework is aligned with European objectives, emphasizing total integration. The **Program for the Development of Inclusive Education (2022-2027)** is the primary document outlining action directions, establishing clear indicators for accessibility and service quality. [4]

Despite progress, the management of inclusive services in national practice faces issues that require deeper analysis:

- Financial Resource Management -funding mechanisms are often implemented inefficiently, creating a gap between real needs and curricular adaptation or necessary equipment.
- Human Resource Management- currently, there is a significant shortage of qualified and accessible teaching staff, leading to the burnout of existing personnel and a decline in quality.
- Infrastructure Management- most institutions lack adapted infrastructure (access ramps, specialized restrooms for persons with disabilities, classroom accessibility) and efficient investment management at the local level.

These management challenges emphasize the need to improve, adopt, and adapt both local and international best practices. International practices, particularly from European Union countries, offer valuable models for optimizing the management of inclusive education. As the Republic of Moldova aligns itself with EU standards, it is essential to understand the following aspects: **needs-based funding** dedicated to individual requirements; **professional development** through mandatory training and mentoring; and an **impact assessment system** using progress indicators and economic methods. Strategic management of these services is the key to transforming the socio-economic potential of inclusive education in our country.

The evolution of education, along with the concepts and principles regarding its continuous development, has had a winding history, with specific trends emerging in different periods. The last decades in the history of education have been strongly marked by the promotion of **Inclusive Education (IE)** as a vital foundation for ensuring equal opportunities for all children. The concept of IE emerged as a response to traditional, obsolete approaches where certain categories of children were excluded from mainstream schools due to disabilities, learning difficulties, family vulnerability, or other reasons, and placed in residential boarding-type institutions. Global research provides sufficient evidence of the harmful effects of institutionalization on child development. Thus, it is found that the most vulnerable category of children are those with disabilities, who are more prone to various forms of neglect, abuse, and violence. [15]

According to the works of **James Heckman**, economic inclusion yields long-term economic returns. Investing in inclusive education impacts long-term growth by maximizing each individual's potential and improving problem-solving capacities. Graduates of inclusive programs have higher employment rates and, consequently, higher tax contributions, having a positive effect on **human capital**. As they adapt their skills to societal needs, human capital becomes more resilient and diversified. Such success has been seen in countries like **Estonia and Canada**, where early integration has led to a drastic decrease in unemployment among persons with disabilities. [5]

Analyzing the situation in our country, we observe a significant evolution from the creation of Resource Centers to the current integration in schools; however, directed budgets have influenced the school retention of children with **Special Educational Needs (SEN)** over the last five years. The barriers facing child integration include parental resistance, building infrastructure, and a shortage of specialists.

Inclusive education is an economic catalyst. In Moldova, progress is visible, but sustainability depends on the continuity of investment. Although the national context faces social and structural barriers, we can confirm the necessity of a strategic vision regarding allocated resources. Thus, the transition from Resource Centers toward full integration in schools should not be viewed merely as a budgetary expense, but as a critical stage in strengthening the national economy.

The efficiency of the aforementioned investments and their direct impact on the school retention of children with SEN represent, in fact, the foundation for the impact of investment on long-term economic growth. This demonstrates how educational efforts transform over time into concrete economic benefits by increasing productivity and labor market participation. The correlation between education and labor productivity maximizes each individual's potential, regardless of their abilities. In the modern economy, productivity is closely linked to cognitive and socio-emotional skills. Early investments in an inclusive economy prevent the phenomenon of marginalization, which would otherwise generate high social costs in the future.

While the economic arguments presented demonstrate the strategic value of inclusion at both global and national levels, the Republic of Moldova depends directly on budget management at the local level. Currently, the inclusive system in the Republic of Moldova is moving beyond the experimental stage, becoming a structural component of general education through the expansion of **Resource Centers for Inclusive Education (CREI)** in all institutions with beneficiaries. This is supported by the implementation of the **Program for the Development of Inclusive Education 2022-2027** and the monitoring of children's progress by the **Psychopedagogical Assistance Service (SAP)**.

Budgetary analyses demonstrate a direct correlation between per-pupil funding, inclusion coefficients, and the reduction of dropout rates among students with SEN. Following this progress, a practical reality emerges that may limit long-term economic impact: the lack of adapted infrastructure, a deficit of specialists, social stereotypes, and the migration of trained specialists to other sectors. As a development perspective, the future of inclusion in the Republic of Moldova requires a classroom presence through digitalization, expenditure optimization, and rigorous monitoring of results, ensuring the efficient use of public funds.

Here is the professional English translation of your conclusion, ensuring academic coherence and the correct use of economic and educational terminology.

Conclusions

In conclusion, it is important to emphasize that **inclusive education** is not merely an act of social justice, but also a high-yield economic investment. Investing in the education of children with Special Educational Needs (SEN) and those from vulnerable groups transforms potential social assistance recipients into active taxpayers, thereby increasing labor productivity and economic resilience. The Republic of Moldova has taken significant steps by establishing **Resource Centers for Inclusive Education (CREI)** and aligning its legislation with EU standards. However, economic efficiency remains hindered by infrastructural barriers and a shortage of specialists. It has been demonstrated that the "cost of exclusion" far outweighs the investment required for inclusion. Cost-benefit analyses indicate that retaining students within the school system through tailored support reduces the long-term budgetary burden.

Based on this analysis, we have identified a clear economic return—a strategic investment capable of transforming potential welfare beneficiaries into active contributors, reducing the long-term fiscal burden through:

- **Early investment**, which maximizes individual potential and boosts labor productivity.
- **Institutional progress** in the Republic of Moldova, which has consolidated the legal framework, correlated specific funding, and increased the school retention rate of students with SEN.
- **The validation of international models** (Dual, Scandinavian), which confirms that economic success expands in direct proportion to the degree of integration of vulnerable groups.

While this research provides clarity, certain **limitations** must be highlighted:

- The absence of long-term longitudinal studies tracking the professional trajectory of students through to their full integration into the labor market.
- The difficulty of reflecting social cohesion within standard economic indicators (e.g., GDP).
- The concentration of resources in urban areas and the resulting isolation of rural communities.

These limitations underscore the need for a more nuanced approach, moving from analytical constraints to operational challenges. The gap between theory and practice is tested by structural and social hurdles that may limit the estimated long-term economic impact. To further the research and deepen the subject, the following future directions are proposed: the **digitalization of inclusion, continuous teacher training, and fiscal sustainability**.

In conclusion, the Republic of Moldova is at a turning point. If investments in inclusive education are maintained and optimized, the country will succeed not only in upholding human rights but also in substantially fortifying its economic foundation. The transition from a system of assistance to one of **empowerment** represents the most reliable path toward sustainable economic growth and a truly prosperous society.

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