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BALAN A.¹

INCOME INEQUALITY AND ACCESS TO EDUCATION IN THE REPUBLIC OF MOLDOVA

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Problem statement. Income inequality is one of the key socio-economic problems of the Republic of Moldova, which directly affects citizens' access to quality education. Uneven income distribution leads to significant disparities in educational opportunities, especially among representatives of low-income groups and residents of rural regions. This situation threatens social mobility, exacerbates structural economic imbalances and limits the long-term development of the country's human capital. *The purpose of the study* is to analyze the relationship between the level of income of the population and the availability of educational services in the Republic of Moldova, identify the main barriers to quality education for different social groups and develop recommendations for reducing the negative impact of economic inequality on the education sector. *The object of the study* is the income distribution system and its impact on the availability of education in Moldova, as well as state regulation mechanisms aimed at overcoming educational inequality. *Research methods.* The research used methods of economic and statistical analysis, comparative analysis of educational and socio-economic indicators, correlation and regression analysis to determine the relationship between income level and access to education, as well as an expert survey on the impact of state policy on the educational sphere. *Research hypothesis.* Inequality in income of the population is one of the main reasons for unequal access to education in the Republic of Moldova. Increasing state funding for education, in particular through social support programs for low-income families, will help reduce the gap in educational opportunities between different segments of the population. *Presentation of the main materials.* Analysis of statistical data confirms significant disparities in the level of educational opportunities between the urban and rural population. Poverty significantly limits access to higher education, and also affects the quality of schooling. State education support programs have a certain positive effect, but do not completely solve the problem of social inequality. It was found that countries with similar economic conditions apply more effective mechanisms for supporting education through scholarship programs, financial assistance to students and investments in the development of educational infrastructure. *Originality and practical significance of the study.* The scientific novelty of the work lies in the comprehensive approach to assessing the impact of income inequality on access to education using quantitative and qualitative methods of analysis. The practical significance lies in the formulation of recommendations for improving state policy in the field of education in order to ensure equal access to educational institutions for all segments of the population. *Conclusions and prospects for further research.* The results of the study confirm the existence of a direct relationship between income level and access to quality education in the Republic of Moldova. The high level of economic inequality negatively affects the educational opportunities of low-income citizens. Further research should be aimed at assessing the effectiveness of specific policy measures aimed at reducing educational inequality, as well as at developing new mechanisms for financing education adapted to the economic realities of the country.

Keywords:

inequality, income, quality education, educational financing mechanisms, economic factors.

НЕРІВНІСТЬ ДОХОДІВ ТА ДОСТУП ДО ОСВІТИ В РЕСПУБЛІЦІ МОЛДОВА

Постановка проблеми. Нерівність у доходах населення є однією з ключових соціально-

¹ **Балан Альона**, д-р екон. наук, доцент, Академія економічних досліджень Молдови, Національний інститут економічних досліджень, Кишинів, Республіка Молдова.

Balan Aliona, Doctor of Economic Sciences, Associate Professor, Academy of Economic Studies of Moldova, National Institute for Economic Research, Chisinau, Republic of Moldova.

ORCID ID: <https://orcid.org/0000-0003-0094-7272>

e-mail: balan.a@ase.md



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економічних проблем Республіки Молдова, що безпосередньо впливає на доступ громадян до якісної освіти. Нерівномірний розподіл доходів призводить до значних диспропорцій у можливостях здобуття освіти, особливо серед представників малозабезпечених верств населення та жителів сільських регіонів. Така ситуація загрожує соціальній мобільності, посилює структурні економічні дисбаланси та обмежує довгостроковий розвиток людського капіталу країни. *Мета дослідження* – проаналізувати взаємозв'язок між рівнем доходів населення та доступністю освітніх послуг у Республіці Молдова, визначити основні бар'єри на шляху до якісної освіти для різних соціальних груп та розробити рекомендації щодо зменшення негативного впливу економічної нерівності на освітню сферу. *Об'єктом дослідження* є система розподілу доходів та її вплив на доступність освіти в Молдові, а також механізми державного регулювання, спрямовані на подолання освітньої нерівності. *Методи дослідження*. У процесі дослідження використано методи економіко-статистичного аналізу, компаративний аналіз освітніх і соціально-економічних показників, кореляційно-регресійний аналіз для визначення взаємозв'язку між рівнем доходів та доступом до освіти, а також експертне опитування щодо впливу державної політики на освітню сферу. *Гіпотеза дослідження*. Нерівність у доходах населення є однією з основних причин нерівного доступу до освіти в Республіці Молдова. Збільшення державного фінансування освіти, зокрема через програми соціальної підтримки малозабезпечених сімей, сприятиме зменшенню розриву в освітніх можливостях між різними верствами населення. *Виклад основних матеріалів*. Аналіз статистичних даних підтверджує значні диспропорції у рівні освітніх можливостей між міським та сільським населенням. Бідність значно обмежує доступ до вищої освіти, а також впливає на якість шкільної підготовки. Державні програми підтримки освіти мають певний позитивний ефект, але не повністю вирішують проблему соціальної нерівності. Виявлено, що країни з аналогічними економічними умовами застосовують ефективніші механізми підтримки освіти через стипендіальні програми, фінансову допомогу студентам та інвестиції у розвиток освітньої інфраструктури. *Оригінальність і практична значущість дослідження*. Наукова новизна роботи полягає у комплексному підході до оцінювання впливу нерівності доходів на доступ до освіти із застосуванням кількісних і якісних методів аналізу. Практична значущість полягає у формуванні рекомендацій щодо вдосконалення державної політики у сфері освіти з метою забезпечення рівного доступу до навчальних закладів для всіх верств населення. *Висновки та перспективи подальших досліджень*. Результати дослідження підтверджують існування прямого зв'язку між рівнем доходів і доступом до якісної освіти в Республіці Молдова. Високий рівень економічної нерівності негативно впливає на освітні можливості малозабезпечених громадян. Подальші дослідження мають бути спрямовані на оцінку ефективності конкретних політичних заходів, спрямованих на зниження освітньої нерівності, а також на розробку нових механізмів фінансування освіти, адаптованих до економічних реалій країни.

Ключові слова:

нерівність, дохід, якісна освіта, механізми фінансування освіти, економічні фактори.

Formulation of the problem. Income inequality is one of the greatest economic and social challenges facing the Republic of Moldova in the current context. Economic disparities between different social groups create barriers to access to education, an essential factor for individuals' personal and professional development. Although primary and secondary education is theoretically free, more and more families are forced to invest resources in private tutoring and additional courses, and access to higher education increasingly depends on household financial resources. In this context, income inequality becomes a major obstacle to social mobility, keeping segments of the population in a state of social and economic exclusion.

In the Republic of Moldova, the Gini coefficient has experienced fluctuations in recent years. Recent data indicate a growing trend in economic inequality, a phenomenon amplified

by factors such as accelerated inflation and the economic impact of the COVID-19 pandemic. These inequalities have direct effects on access to education, especially in rural areas and among the poorest citizens. Additionally, wage disparities between economic sectors and regions deepen these differences, negatively impacting the educational opportunities of younger generations.

Analysis of recent research and publications. In this research, various scientific methods were applied, including literature analysis, the comparative method, and scientific abstraction, which allowed for a proper understanding and deepening of the studied phenomenon. Another important tool used was the inductive method, through which generalizations were made based on concrete examples, thus contributing to the formulation of relevant conclusions regarding the investigated topic.

The informational support for the research consists of various sources, including national and international scientific publications, statistical data provided by the National Bureau of Statistics (NBS), the Ministry of Education and Research of the Republic of Moldova, information from the World Bank and the United Nations Development Programme (UNDP), as well as other relevant resources in the field of study.

The purpose of the article is to analyze the relationship between the level of income of the population and the availability of educational services in the Republic of Moldova, identify the main barriers to quality education for different so-cial groups and develop recommendations for reducing the negative impact of economic inequality on the education sector.

Presentation of the main material. A key indicator used to measure income inequality is the Gini coefficient. It ranges from 0 to 1, where 0 represents a perfectly equitable distribution of income, and 1 indicates extreme inequality. Globally, the values of this coefficient have var-

ied significantly in recent years, reflecting economic disparities between regions of the world. In 2023, some of the lowest values were recorded in European countries such as Slovenia and Slovakia, which had Gini coefficients below 0.3, indicating a relatively equitable distribution of income. In contrast, countries such as South Africa and Namibia had values exceeding 0.5, signaling deep economic inequalities [6].

In the Republic of Moldova, the dynamics of the Gini coefficient has experienced fluctuating developments over the last decade. Initially, a decrease was observed, suggesting a temporary reduction in inequality. However, since 2018, the coefficient has been steadily rising, reaching 0.3356 in 2023. This trend reflects a worsening of income disparities, explainable by the effects of the COVID-19 pandemic on vulnerable households and by the accelerated inflation of recent years, particularly the increase in the cost of living, which has disproportionately affected households in the lower quintiles.

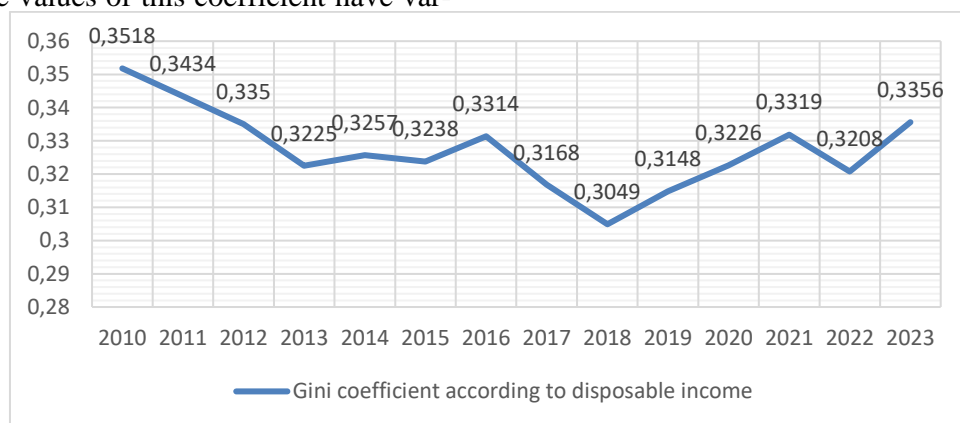


Figure 1 – Dynamics of the Gini coefficient for disposable income in the Republic of Moldova from 2010 to 2023

Source: elaborated by the author based on NBS data [1]

At the same time, recent data shows that the income of the wealthiest 10% of the population exceeds that of the poorest 10% by 9.2 times. This gap is also visible within income quintiles, where the fifth quintile (the wealthiest 20%) earns more than five times the income of the first quintile (the poorest 20%) [1].

Income inequalities in the Republic of Moldova are further exacerbated by wage disparities between sectors and regional differences. In 2023, the average salary in the agricultural sector, at 7,952 lei, represented only 65.1% of the national average salary. In contrast, salaries in the information and communication sector were 2.7 times higher than the national average, indicating a concentration of income in high value-

added sectors. In sectors with the highest salaries, such as information technology and financial activities, the differences between the lowest and highest incomes exceed a ratio of 4:1.

Regionally, economic disparities are even more pronounced. In 2021, Chisinau contributed 60.4% to the national GDP, while the North and South regions contributed only 15.3% and 7%, respectively. These disparities reflect not only economic concentration in the capital but also the lack of economic and development opportunities in rural areas, which are frequently affected by forced migration in search of better living conditions.

Income inequality in the Republic of Moldova is determined, on one hand, by disparities in disposable income and the lack of quality





jobs, especially in rural areas, and on the other hand, by the low efficiency of the redistribution mechanisms within the fiscal and social protection systems.

Income inequality influences access to education in the Republic of Moldova. Although primary and secondary public education is theoretically free, families increasingly allocate resources for tutoring and supplementary courses in an attempt to compensate for the decline in the quality of education. Meanwhile, access to higher education is becoming more dependent on household financial resources. In the 2023-2024 academic year, approximately 70% of students were enrolled on a fee-paying basis, with a continuous increase in the costs of higher education, creating an increasing financial burden for families [4]. These expenses are largely borne by households in the upper quintile of the population, thus reinforcing existing economic inequalities. In this context, higher education risks becoming more of a commodity than a universal right, limiting access for individuals from low-income households to educational opportunities for their personal and professional development.

Inequality in access to education has profound effects on the labor market, contributing to the reinforcement of socio-economic disparities. A low level of education increases the risk of employment in the informal sector, where wages are lower and social protection is almost nonexistent [5]. Additionally, access to jobs varies significantly depending on the region of residence, with the unemployment rate being much higher in rural areas, where economic opportunities are more limited. In these areas, unemployment and

informal work are much more frequent. Furthermore, discrimination based on gender and disability represents significant barriers that limit equitable access to the labor market. Regional and urban-rural disparities are also evident in terms of access to education. In the municipality of Chisinau and other urban centers, the quality of education is much higher due to better infrastructure, more abundant resources, and better-trained teaching staff. In contrast, schools in rural areas face a lack of adequate infrastructure, modern teaching materials, and well-trained educators. These deficiencies perpetuate educational and economic inequalities between urban and rural areas, creating a vicious cycle of marginalization [2].

A particularly vulnerable group that is severely affected is people with disabilities, who face barriers in accessing vocational and higher education. The lack of accessible infrastructure, adapted teaching materials, and personalized pedagogical support contributes to their marginalization. As a result, educational inequality exacerbates the social and economic exclusion of people with disabilities, limiting their opportunities for labor market integration.

Inequitable access to education directly contributes to the perpetuation of income inequality in the Republic of Moldova. Higher education plays a important role in determining individual incomes, leading to economic polarization between different social categories. Thus, individuals with higher education are much more likely to secure well-paid jobs, while those with a lower level of education are often stuck in poorly paid jobs.

Table 1 – Education expenditures by income quintiles (as a percentage of total income)

Year	Quintile 1 (20% poorest)	Quintile 2	Quintile 3	Quintile 4	Quintile 5 (20% richest)
2019	0.9%	0.8%	1.0%	0.7%	1.5%
2021	0.8%	0.7%	0.9%	1.0%	1.2%
2023	0.8%	0.7%	0.9%	1.4%	1.5%

Source: elaborated by the author based on NBS data [1]

Table 1 presents relevant data on education expenditures as a percentage of total household income, segmented by income quintiles in the Republic of Moldova for the period 2019-2023. Analyzing this data, several significant trends emerge that reflect economic inequalities in access to education.

First, a marked inequality is observed in the allocation of educational expenditures between income quintiles. Households in the 5th quintile (the richest 20%) consistently allocate a larger percentage of their income to education compared to

households in the lower quintiles. For example, in 2023, education expenditures account for 1.5% of total household income in the 5th quintile, while in the 1st quintile (the poorest 20%), this percentage is only 0.8%.

Secondly, trends over time show a slight decrease in educational expenditures in the lower quintiles, especially in the 1st quintile, where the percentage allocated decreased from 0.9% in 2019 to 0.8% in 2023. In contrast, expenditures in the 4th and 5th quintiles have increased, indicating a greater capacity for investment in education due to

higher incomes. Thus, the data highlights the existence of economic inequalities in access to education, and these discrepancies have remained or even increased during the 2019-2023 period. The observed disparities underline the need for public policies that reduce the differences between income categories and ensure more equitable access to education for all segments of the population.

Inequality in education is a key factor in perpetuating a vicious cycle of poverty and social exclusion, directly affecting the economic future of younger generations. In a world increasingly driven by knowledge, skills, and innovation, ensuring equitable access to education becomes essential for the sustainable development of the Republic of Moldova [3].

Although the government has adopted various measures to combat income inequality and improve access to education, such as increasing the minimum wage, raising public sector salaries, and boosting pensions and social benefits, the impact of these measures remains limited. This is largely due to the inefficiency of the educational system and persistent regional inequalities.

Economic and social inequality are interdependent phenomena that influence and amplify each other, having a detrimental effect on social cohesion and the economic stability of the country. These economic disparities fragment society, fueling social tensions and resentment, which contributes to increasing polarization between different segments of the population. Persistent inequalities reduce trust in public institutions and affect the long-term stability of the national economy.

To combat these inequalities and support equitable economic development, the Republic of Moldova must adopt more effective and sustainable public policies. Reducing income inequality and regional disparities can significantly contribute to more equitable and sustainable economic development. Investments in education and vocational training represent a central solution, as quality education is not only key to reducing social inequalities but also a determining factor in long-term economic growth.

Conclusion and prospects for further research. Income inequality has a significant impact on equitable access to education in the Republic of Moldova, serving as a determining factor in per-

petuating social and economic disparities. In this context, policy measures aimed at reducing inequalities are essential for ensuring sustainable economic development and improving the quality of life for citizens. Investments in education, combined with effective social protection measures, will contribute to the development of a more skilled and adaptable human capital, thereby laying the foundation for a sustainable and equitable economy in the long term. These measures will reduce existing disparities and help create an environment conducive to economic development, fostering a more equitable, prosperous, and resilient society in the face of future challenges.

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