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**Book of abstracts**

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**ECONOMIC GROWTH IN THE  
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**Scientific Coordinator:**

**GAGAUZ Olga, Habilitated doctor in sociology, Associate Professor**

**Scientific editing:**

**TIMUȘ Angela, PhD, Associate Professor**

**BUCIUCEANU-VRABIE Mariana, PhD, Associate Professor**

**VINOGRADOVA Natalia, PhD, Associate Professor**

**COLESNICOVA Tatiana, PhD, Associate Professor**

**POPA Viorica, PhD, Coordinating researcher**

**IANIOGLO Alina, PhD, Coordinating researcher**

**GRIGORAȘ Ecaterina PhD, Coordinating researcher**

**Technical redaction:**

**LUCAȘENCO Eugenia**

**IAȚISIN Tatiana**

**ȘOLDAN Elena**

**BORDIAN Elena**

**MIGUNOVA Elena**

**GORCEAG Silvia**

**SANDULESCU Alexandru**

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## PLENARY SESSION

### CIRCULAR ECONOMY AND RECOVERY OF PLASTIC WASTE THROUGH RECYCLING IN THE REPUBLIC OF MOLDOVA

**Rodica PERCIUN, Habilitated Doctor, Associate Professor,  
National Institute for Economic Research, Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0001-5767-6835>, [rodica21@gmail.com](mailto:rodica21@gmail.com)  
**DOI:** <https://doi.org/10.36004/nier.cecg.2023.17.1>

*In the Republic of Moldova, the situation in the field of waste management is similar to countries with an emerging economy because the generation of waste is influenced by numerous factors, such as: the types of economic activity, the difficult macro-financial situation, low incomes, consumer behavior, the degree of responsibility, the level of awareness of the problem of all actors involved in this process. Currently, we can see that the Republic of Moldova is increasingly affected by pollution, including due to plastic waste.*

*The study carried out outlined a synthesis picture on the use of plastic products and plastic packaging, as well as the perception of subjects vis-à-vis the current legislation in the field of waste and plastic products, and created the reflection of society on public policy challenges on plastic waste, which will be addressed in the near future in national circular economy legislation.*

*The purpose of this study was to empirically investigate the level of use of plastic products and the generation of plastic waste, as well as to determine the perception and behavior of the end consumer regarding the circular economy.*

*To achieve the proposed objectives, general scientific methods were applied: analysis, synthesis, history and logic, critical analysis of materials, clustering, but also analysis methods, such as survey, interview, statistical processing of empirical data and official data, graph method, indicators, comparison, grouping, etc. This paper was supported by the State Program 20.80009.0807.22 Development of the mechanism for the formation of the circular economy in the Republic of Moldova.*

**Keywords:** circular economy, recycling, waste management, plastic products

**JEL classification:** Q01, Q53, Q58

**UDC:** 338.45:628.4(478)

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### THE RECONFIGURATION OF THE WORLD ORDER AFTER TWO YEARS OF THE PANDEMIC AND OVER A YEAR OF WAR

**Simona MOAGAR POLADIAN, Habilitated Doctor,  
Director of the Institute for World Economy, Romanian Academy**  
<https://orcid.org/0000-0002-0930-1729>, [smpoladian1@gmail.com](mailto:smpoladian1@gmail.com)  
**DOI:** <https://doi.org/10.36004/nier.cecg.2023.17.2>

*The balance of power relations worldwide, ensured after Bretton Woods by the liberal order, can be considered ended. In its place, multipolarity can be glimpsed, which is currently not balanced. The important and rapid structural mutations that are taking place require specialists to analyze the material, human and territorial developments and implications.*

*In addition to energy crises, raw materials crises, high inflation, and debt growth, we are currently witnessing the North-South Split, a phenomenon that is actually both cause and effect. The headline is represented by the relations between the USA and China. We are witnessing an ever-increasing tension and distance between the US and China.*

*Starting from the commercial tensions between the two great powers of the world, bilateral relations have reached a turning point. There is only one opponent in front of China: the USA, and it is pursuing a policy of discrediting alliances and delegitimizing US relations in the Asia-Pacific region.*

*Another major change process we are currently witnessing is the attempt to isolate Russia through economic sanctions and political pressure. The formation of an Asian geo-political alliance, with the participation of Russia, China, Iran, India, Central Asia and the Caucasus, is the BRICS response. This alliance is based on the logic of regional commodity supply chains and the formation of new economic corridors.*

**Keywords:** structural mutations, multipolar world, alliances, crises

**JEL classification:** D74, G01, L16, O10, P49

**UDC:** 338.124.4+32



## ECONOMIC GROWTH IN CONDITIONS OF GLOBALIZATION: A FOCUS ON EU TRANSITION AND THE BALTICS

Anders PAALZOW, Professor and Rector,  
Stockholm School of Economics in Riga, Latvia

<https://orcid.org/0000-0002-5148-643X>, [Anders.paalzow@sseriga.edu](mailto:Anders.paalzow@sseriga.edu)

DOI: <https://doi.org/10.36004/nier.cecg.2023.17.3>

*The ongoing globalization process poses challenges and opportunities for economic growth, particularly for countries undergoing transitions within the European Union (EU). This study delves into the lessons learned from economic development experienced by the Baltic states, amidst this global transformation. Latvia, Estonia and Lithuania, post-Soviet states, has witnessed rapid integration into global markets beginning in the 1990s and continuing post-EU accession, leveraging its competitive labor market and strategic location connecting East and West. Its transition narrative offers insights into the resilience and adaptability of emerging economies in the face of global economic shifts. The different outcomes in the three Baltic countries highlight not only the significance of regional cooperation, policy flexibility, and forward-thinking economic planning in harnessing the benefits of globalization while mitigating its challenges but also the importance of innovation and transparency in all aspects of policy making and business development. Policies and narratives of institutional reform as part of the EU and NATO accession processes too highlight opportunities for challenges as well as opportunities.*

**Keywords:** economic growth, globalization, policy, regional cooperation, innovation

**JEL classification:** F43, F60, F69, F68, O35

**UDC:** 338.1(4)

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## MIGRATION AND DEMOGRAPHIC CHANGE: BALTIC EXPERIENCES

Kata FREDHEIM, Associate Professor,  
Stockholm School of Economics in Riga, Latvia

<https://orcid.org/0000-0001-9507-427X>, [Kata.Fredheim@sseriga.edu](mailto:Kata.Fredheim@sseriga.edu)

DOI: <https://doi.org/10.36004/nier.cecg.2023.17.4>

*Migration and demographic alterations have challenged the dynamics to the Baltic states, particularly within the lens of pre and post- EU transition periods. Before their European Union (EU) accession, the Baltics experienced an outflow of high-skilled migrants, drawn westward by prospects in education and elevated job opportunities, leading to a discernible "brain drain." Then, accession coincided with the economic crisis and after EU accession, this pattern shifted dramatically. A surge in both low and high-skilled migrants was observed, the scale of which eclipsed pre-EU numbers. It was not only the young, an intriguing trend emerged with the older Baltic demographic, or 'senior migration,' journeying abroad, driven by the need for more income, and recognition in the labour force and society. This escalation brought about intricate challenges: from the emptying of the countryside, aging and shrinking population, and growing diaspora. Concurrently, the Baltics grappled with dwindling birthrates, intensifying the urgency for nuanced public policies to mitigate an impending demographic crunch. A pivotal dimension of this migration narrative is the phenomenon of return migration. Some Baltic expatriates, enriched by global experiences, began reorienting homeward. What we observe is that all Baltic countries implemented policy changes to increase the birthrate and attract return migrants, but their position on attracting migrants from elsewhere differed remarkably. In this presentation, we offer insight into the Baltic migration saga, from brain drain concerns to demographic shifts. It accentuates the indispensable role of informed public policies, which while addressing immediate migratory challenges, also strategically navigate the long-term demographic transformations, safeguarding the region's future prosperity.*

**Keywords:** migration, brain drain, Baltic experience, EU accession, public policies, demographic changes

**JEL classification:** J10, J18, O15

**UDC:** 314.15(474)



## INTERGENERATIONAL REDISTRIBUTION IN AN AGEING SOCIETY

**Olga GAGAUZ, Habilitated Doctor, Associate Professor,**  
**National Institute for Economic Research,**  
**Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0002-1175-1008>, [gagauz\\_olga@ince.md](mailto:gagauz_olga@ince.md)  
**Valeriu PROHNIȚCHI, PhD,**  
**National Institute for Economic Research,**  
**Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0003-1729-4650>, [prohnitchi@gmail.com](mailto:prohnitchi@gmail.com)  
**DOI:** <https://doi.org/10.36004/nier.cecg.2023.17.5>

*This study explores the critical issue of intergenerational redistribution within the context of an aging society, using data from National Transfer Accounts (NTA) for Moldova 2019-2021. As the population of Moldova continues to age rapidly, the allocation of resources among different age groups becomes increasingly pertinent. This research aims to understand how financial resources are distributed across generations and assesses the implications of these patterns for the overall well-being of society. The NTA framework provides a comprehensive and detailed analysis of economic flows between age groups, encompassing public and private transfers, labor income, and asset-based transfers. Our findings suggest that intergenerational transfers are not uniform across age groups and older people make a significant contribution to supporting younger generations through the allocation of private resources. We also identify the role of public policies and social safety nets in shaping these outcomes. Furthermore, we assess the potential consequences of these redistribution patterns on income inequality, poverty rates, and the overall economic stability in aging societies.*

*Understanding the dynamics of intergenerational redistribution is crucial for policymakers and stakeholders as they grapple with the challenges posed by aging populations. This study contributes valuable insights to the ongoing discourse on how to ensure fairness and sustainability in an aging society and emphasizes the importance of creating policies that foster intergenerational equity and support the well-being of individuals across all age groups. The study was carried out within the project 20.80009.0807.21 "Migration, demographic changes and stabilization policy", 2020-2023.*

**Key words:** national transfer accounts, intergenerational redistribution, demographic ageing, Moldova

**JEL classification:** D64, D69, E01, E20, E29

**UDC:** 314.1-053.88+316.334.3](478)

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## SOCIO-DEMOGRAPHIC DETERMINANTS OF MORTALITY IN THE REPUBLIC OF MOLDOVA

**Olga PENINA, PhD in medicine, Associate Professor**  
**Nicolae Testemitanu State University of Medicine and Pharmacy, Moldova**  
<https://orcid.org/0000-0002-3884-2751>, [olga.penina@usmf.md](mailto:olga.penina@usmf.md)  
**DOI:** <https://doi.org/10.36004/nier.cecg.2023.17.6>

*This study investigates the influence of socio-demographic determinants, specifically marital status and education level, on disparities in overall and cause-specific mortality in Moldova.*

*Based on the depersonalized death records databases, encompassing detailed ICD-10 cause of death data categorized by marital status and educational attainment, we analyzed mortality patterns for the population aged 30 and above during two periods around the 2004 and 2014 censuses. Absolute and relative differences in standardized death rates with 95% CI were computed. The reference groups were the married population and the population with higher education.*

*Our findings revealed significant disparities in all-cause and cause-specific mortality based on marital status and education level, affecting both men and women. Particularly vulnerable groups included divorced men, never-married women, and those with primary education or less. Conversely, being married and achieving higher education had a protective effect on mortality for both genders. In 2013-2014, the life expectancy gap at age 30 between divorced men or never-married women and their married counterparts exceeded 12 years. Similarly, the difference between individuals with higher education and those with only primary education or less amounted to more than ten years for men and nine years for women. Mortality disparities associated with marital status and education were most pronounced among young adults and diminished with age.*

*Targeted preventive measures aimed at reducing mortality among vulnerable subgroups are essential, focusing on risk factors associated with infectious diseases, respiratory illnesses, liver cirrhosis, and external causes of death.*

**Keywords:** life expectancy, cause of death, marital status, level of education, health disparities, Republic of Moldova

**JEL classification:** A14, A20, J10, J31

**UDC:** 314.14(478)

## SESSION I

# ENTREPRENEURIAL ECOSYSTEM, COMPETITIVENESS AND ECONOMIC RESILIENCE

## PROFITABILITY AND FINANCIAL STRUCTURE OF TOUR OPERATORS: AN INITIAL INTERNATIONAL COMPARISON

**Guido MIGLIACCIO, PhD, Associate Professor,  
University of Sannio, Italy**

<https://orcid.org/0000-0002-8882-7648>, [guido.migliaccio@unisannio.it](mailto:guido.migliaccio@unisannio.it)

**Maria CALVANESE, Dott., Independent Researcher, Italy**

[mariacalvanese1999@gmail.com](mailto:mariacalvanese1999@gmail.com)

**DOI:** <https://doi.org/10.36004/nier.cecg.I.2023.17.1>

***Actuality:** The pandemic had a devastating effect on tourism, even though it subsided during the summer months. The sector is economically important in many countries.*

***Purpose:** The research analyses the economic and financial dynamics of tour operators over the last decade in three European countries where tourism is widespread: Italy, France, and Spain.*

***Research Methods:** The financial statements of a sample of 4,044 tour operators (1043 Italian, 2340 French, 661 Spanish) for the ten years 2012-2021 were analysed, illustrating the average trend of Return on Equity (Roe) and Financial Leverage. The data were subjected to statistical processing. Anova and, where necessary, Tukey-Kramer methods were used for the comparison between countries.*

***Results:** Roe followed a similar trend in the three nations that were most affected by the pandemic. The financial situation was more erratic but equally similar.*

***Implications:** This study implements the modest economic literature on these companies. Quantitative research shows significant gains only in some periods and in some countries. Public policies should be attentive to the tourism-enhancing sector by building packages.*

**Keywords:** tourism, return on equity, financial leverage, Anova test, Tukey-Kramer test

**JEL classification:** E22, G32, L83, R10, R53, Z33

**UDC:** 338.486.6

## MILITARY-ECONOMIC CYCLES IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

**Vasylyna PODLIESNA, Habilitated Doctor in Economics,**

**Institute for Economics and Forecasting, National Academy of Sciences of Ukraine**

<https://orcid.org/0000-0002-8435-1013>, [podlesnw2019@gmail.com](mailto:podlesnw2019@gmail.com)

**DOI:** <https://doi.org/10.36004/nier.cecg.I.2023.17.2>

*The article reveals the essence of the concept of military-economic cycles: they should be understood as such a form of socio-economic cyclicality, which, both in historical retrospective and in modern conditions of the formation of an information-network society, is generated by the struggle for resources that provide social units or complex social organisms - the winners in the struggle for economic and military-political leadership - the opportunity to dominate in the long term and successfully develop for some time, while maintaining stability.*

*The cyclical nature of wars is clearly seen in the deployment of such global cycles of capitalism as the Kondratieff cycles, long cycles of world politics, and cycles of hegemony. Innovative military technologies are able to accelerate the deployment and make the militaristic component of those phases of long-term socio-economic cycles characterized by the outbreak of wars and increased instability, in particular, the upward waves of Kondratieff cycles, the "macro-resolution" phases of long cycles of world politics, the periods of thirty years of world wars in deployment cycles of hegemony. Wars are a way to resolve geopolitical contradictions, but they have a destructive effect on the natural environment, human development processes, and institutional environment, which hinders the advancement of mankind toward sustainable development, therefore, in modern conditions, it is necessary to develop and put into practice a global institutional consensus that obliges participants in geopolitical competition to interact in accordance with the law of techno-humanitarian balance, which will provide peaceful forms of resolving the contradictions of world development.*

**Keywords:** military-economic cycles, cyclical nature of wars, Kondratieff cycles, long cycles of world politics, cycles of hegemony, sustainable development

**JEL classification:** E32, F44, H56, Q01

**UDC:** 338.245

## PROFITABILITY AND FINANCIAL STRUCTURE OF BATHING ESTABLISHMENTS: AN INITIAL INTERNATIONAL COMPARISON

**Guido MIGLIACCIO, PhD, Associate Professor,  
University of Sannio, Italy**

<https://orcid.org/0000-0002-8882-7648>, [guido.migliaccio@unisannio.it](mailto:guido.migliaccio@unisannio.it)

**Miriam MENINNO, Dott., Independent Researcher, Italy**  
[miriammeninno@gmail.com](mailto:miriammeninno@gmail.com)

**DOI:** <https://doi.org/10.36004/nier.cecg.I.2023.17.3>

***Actuality:** The pandemic has had a devastating effect on tourism, although it has subsided during the summer months. The sector is economically important in many countries, where bathing is a major attraction.*

***Purpose:** The research analyses the economic and financial dynamics of bathing establishments over the last decade in three European nations where bathing tourism is widespread: Italy, Spain, and Portugal.*

***Research Methods:** The financial statements of a sample of 5,382 bathing establishments, mainly Italian, for the decade 2012-2021 were analysed, illustrating the average trend in Profit Margin and Financial Leverage. The data were subjected to statistical processing. The ANOVA and Tukey-Kramer methods were used for cross-country comparisons.*

***Results:** The companies analysed are all small in the number of employees. They have an uneven profit margin, especially in the Iberian nations. Spain was most affected by the pandemic. There are no significant differences between the different geographical areas concerning profitability, which has a more constant trend in Italy. The financial situation is unstable over the decade considered, as the leverage values, expressed in percentage terms, show excessive indebtedness. There are evident significant differences between the countries examined, with Spain being the area most different.*

***Implications:** This study implements the modest economic literature on these companies. Quantitative research highlights the high profits that justify proliferation. Public policies should be attentive to the sector that implements the national GDP. The Italian situation, where establishments are more widespread than in the other two countries, can be a useful reference for all countries that want to exploit their coasts for tourism.*

**Keywords:** bathing establishments, profit margin, financial leverage, Anova test, Tukey-Kramer test

**JEL classification:** L83, N30, R10, Z33

**UDC:** 338.46

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## ECONOMIC RESILIENCE AND MACROECONOMIC IMBALANCES: THE IMPACT OF STRUCTURAL POLICY

**Katsiaryna RAZHKOUSKAYA, PhD in Economics,  
Assistant Professor, Belarusian State Economic University, Republic of Belarus**

<https://orcid.org/0000-0002-0089-2331>, [E.Rozhkovskaya@mail.ru](mailto:E.Rozhkovskaya@mail.ru)

**DOI:** <https://doi.org/10.36004/nier.cecg.I.2023.17.4>

*Currently, global transformation processes are intensifying, causing increased uncertainty and volatility in economic dynamics. Under these conditions, there is an increasing need to raise economic resilience, which is a condition for maintaining stable growth dynamics, and is considered the ability of the economic system to absorb shocks and quickly adapt to changes in external and internal conditions. The most important condition for ensuring economic resilience is maintaining macroeconomic balance and counteracting the growth of excessive imbalances.*

*The purpose of this research is to identify factors and mechanisms for the formation of macroeconomic imbalances, establish their relationship with economic resilience, and determine general approaches to economic policy for the adjustment of imbalances. The methods used in this research are analysis, synthesis, comparison, and generalization.*

*Some of the conclusions that emerged from the research are as follows. Macroeconomic imbalances manifest themselves not only in the disruption of foreign economic equilibrium, but also in a slowdown in economic growth, internal recession, increased inflation, and a decrease in the global competitiveness of the economy. In most economies, external and internal imbalances are stable, and chronic, and attempts to combat them can lead to their transformation, but do not eliminate them. Constant macroeconomic imbalances are caused by inertial factors: the specifics of the development model of the national economy, structural disproportions, and the fight against which regular macroeconomic policy (monetary, fiscal) is ineffective. An effective tool for adjusting macroeconomic and structural imbalances is structural policy. It has been established that the influence of structural policy on macroeconomic balance and resilience is realized through the following channels: increasing the efficiency and competitiveness of production, raising mobility of production factors and reallocation of resources; and improvement of self-regulation mechanisms of the economic system.*

**Keywords:** economic resilience, economic growth, structural imbalances, structural disproportions, structural policy

**JEL classification:** D50, E61, O40

**UDC:** 338.2

## METHODOLOGICAL PROBLEMS OF ASSESSING THE EFFECTIVENESS OF PUBLIC ADMINISTRATION OF SOCIO-ECONOMIC DEVELOPMENT

**Tatyana BUKHOVETS, PhD in Economics,**  
**Belarusian State Economic University, Republic of Belarus**  
<https://orcid.org/0000-0001-6200-9439>, [tvbuhovets@mail.ru](mailto:tvbuhovets@mail.ru)  
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*The study identifies the difficulties that can arise when conducting an assessment of the effectiveness of public administration at the national and local levels. It defines the purpose of such an assessment, establishes the fundamental requirements and principles. The advantages and disadvantages of various methods of assessing the effectiveness of public administration are considered, the necessity of their consistent application and competent combination is substantiated. It emphasizes the importance of the correct selection of quantitative evaluation indicators with the mandatory establishment of requirements for qualitative parameters of their achievement, as well as monitoring of possible consequences and adjustment if necessary.*

**Keywords:** effectiveness, public administration, methodological problems, requirements and principles, methods of assessing, national and local levels, Government, local authorities

**JEL classification:** A11, E61, H11, O10, P27, P35, R11, R58

**UDC:** 338.242.4

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## THE NEED TO DIVERSIFY EXPORTS OF THE REPUBLIC OF MOLDOVA IN THE CONTEXT OF INTERNATIONAL TRADE FRAGMENTATION

**Boris CHISTRUGA, Habilitated Doctor, Univ. Professor,**  
**Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0001-7312-9946>, [bchistruga@ase.md](mailto:bchistruga@ase.md)  
**DOI:** <https://doi.org/10.36004/nier.cecg.I.2023.17.6>

*The economy of the Republic of Moldova, despite facing various challenges in recent times, is making significant efforts to increase export potential, simultaneously creating a more competitive and productive economy. This objective is of significant magnitude, one that Moldova has not encountered previously, not only in terms of quantity and quality but also considering external factors. We refer primarily to the process of deglobalization, which has affected the entire global economic system and is fundamentally changing the rules of the worldwide market. The fragmentation and regionalization of international trade call for new approaches to the trade policies of all countries, especially for small economies like Moldova. This article aims to identify the determinants of export diversification, focusing on competitiveness and productivity, in the new conditions dictated by deglobalization and the regionalization of international transactions. The risks and opportunities that arise in international trade require a new approach regarding the orientation and performance of exports. Export orientation lies at the core of Moldova's economic development model, with its degree of openness being around 85-90%. However, the country's export performance is limited, primarily concentrated in low-value-added sectors such as textiles, clothing, and agricultural products. To improve export performance, it is essential to focus on investments in various areas, including infrastructure, transportation, and energy.*

**Keywords:** exports, export diversification, fragmentation of international trade, Republic of Moldova

**JEL classification:** F12, F49, Q27

**UDC:** 339.564(478)

## LEASING BENEFITS IN GLOBAL ECONOMY

**Mariano MELCHIONDA, Dr., Independent Researcher, Italy**

<https://orcid.org/0000-0002-8430-1251>, [mariano.melchionda15@gmail.com](mailto:mariano.melchionda15@gmail.com)

**DOI:** <https://doi.org/10.36004/nier.cecg.I.2023.17.7>

*Leasing may be considered the most important legal institution that was rarely encountered before World War II and has more recently exploded on a worldwide basis, with everything from autos to farm equipment to airplanes being leased. This chapter examines the tax, financial, and management benefits of leasing and its main sectors application according to the new standard IFRS 16 of the International Accounting Standard Boards (IASB).*

*Tax benefits are one of the main reasons the lessee performs a leasing operation, especially thanks to accelerated depreciation.*

*The financial advantages are those that guarantee a constant income to leasing companies over time established by the contracts.*

*Management benefits, on the other hand, ensure a faster investigation phase than other forms of financing. It also examines the role that leasing plays in these sectors:*

- *Instrumental, distinguishing between operational and financial instrumental leasing;*
- *Mobile cars where we distinguish passenger cars from commercial or industrial vehicles;*
- *Naval and railway, with a strong incidence in the airline sector, by the most recent companies that operate with giants that have been present for longer on the market;*
- *Real estate, distinguishing between built and to be built;*
- *Commodities 4.0 high-tech and innovative, that have stimulated companies to revive the economy by investing in new technology assets to continue to compete.*

**Keywords:** *leasing benefits, accounting, airlines, IFRS 16*

**JEL classification:** *F10, G32, M41, L93*

**UDC:** *339.187.62*

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## THE CONCEPT OF POTENTIAL COMPETITION IN THE CONTEXT OF THE DIGITAL ECONOMY DRIVEN BY INNOVATION

**Victoria COCIUG, PhD, Associate Professor, Academy of Economic Studies of Moldova,**

<https://orcid.org/0000-0001-8114-4644>, [v\\_cociug@ase.md](mailto:v_cociug@ase.md)

**Carolina PARCALAB, PhD Student, Moldova State University**

<https://orcid.org/0000-0003-0432-6633>, [cparcalab@aci.md](mailto:cparcalab@aci.md)

**DOI:** <https://doi.org/10.36004/nier.cecg.I.2023.17.8>

**Topicality.** *The potential competition represents an important factor to be considered when performing competition analysis. There is an increasing interest in this concept, in the context of digital market development and the emergence of new digital business models. Potential competition remains subject to significant uncertainty and requires similar attention as actual competition.*

**Purpose.** *This paper analyzes the concept of potential competition and how it may impact the competition analyses on contestable markets, with the aim of providing guidance for the development and improvement of the concept in the Republic of Moldova.*

**Methodology.** *The research methodology involved studying the works of both foreign and domestic researchers, as well as reports from international institutions like the European Commission. Additionally, databases from organizations such as OECD on competition are analyzed. Various methods, including analysis, synthesis, abstraction, concretization, and structural and dynamic comparisons, were employed to identify the framework of the potential competition based on the experiences of other countries in addressing competition issues.*

**Results.** *The paper examines the definition and main characteristics of potential competition provided by academics and studies performed by competition authorities, with an emphasis on features of potential competition in digital markets. The paper underlines the importance of considering the experiences of the EU in this field, particularly in the context of the reevaluation of EU competition policy under the influence of digitalization.*

**Keywords:** *potential competition, digital markets, innovation, contestable markets*

**JEL classification:** *D40, D41, L40, O32*

**UDC:** *339:004.378.5+339.137.2*



# THE MAIN TRENDS IN THE BUSINESS DEMOGRAPHY IN THE REPUBLIC OF MOLDOVA

Alexandra NOVAC, PhD, Associate Professor,  
National Institute for Economic Research, Academy of Economic Studies of Moldova  
<https://orcid.org/0000-0002-4158-4917>, [alecsandra\\_novac@yahoo.com](mailto:alecsandra_novac@yahoo.com)  
DOI: <https://doi.org/10.36004/nier.cecg.I.2023.17.9>

*Business demography allows the performance of businesses in the economy to be measured. Understanding the processes and dynamics underlying the creation, survival, and death of businesses can provide important insight into business behavior, and the mechanisms for generating new jobs and ensuring better economic development at national and regional levels. The analysis of the enterprises' birth and death events provides the necessary information on the challenges faced by enterprises and implicitly represents a basis for entrepreneurship development. The purpose of the undertaken research is to analyze the available indicators of the enterprises' demography in the Republic of Moldova for the period 2016-2020 at the national and regional levels. Research techniques are based on secondary data analysis, comparison, grouping, chain indices, dynamic series, and figures. The results indicate a negative dynamic of the population of enterprises in recent years, with an average death rate of enterprises, which exceeds the birth enterprises rate.*

**Keywords:** business demography, enterprises birth rate, enterprises death rate, business survival rate, churn rate, active businesses

**JEL classification:** L21, L26, M13, M20

**UDC:** 311.42(478)

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## ENTREPRENEURIAL FINANCING IN THE REPUBLIC OF MOLDOVA: OPINION OF ENTREPRENEURS

Alina IANIOGLO, PhD in Economics,  
National Institute for Economic Research, Academy of Economic Studies of Moldova  
<https://orcid.org/0000-0003-2845-471X>, [alina.ianoglo@gmail.com](mailto:alina.ianoglo@gmail.com)  
DOI: <https://doi.org/10.36004/nier.cecg.I.2023.17.10>

*Access to financial resources is perceived as a crucial component of entrepreneurship. Due to insufficient equity capital, enterprises need to access external sources. Therefore, it is important to determine the accessibility and difficulties experienced by entrepreneurs in accessing sources of finance. The article aims to analyze the contribution of the financing component to the development of the entrepreneurial ecosystem in the Republic of Moldova. For this purpose, the following research methods were used: analysis of statistical data and a questionnaire-based survey of entrepreneurs, conducted in 2022. Indicators characterized both the ease of access to different financial sources and the level of requirements regarding the guarantees requested by financial institutions when accessing a loan. The data shows that entrepreneurs evaluated the highest access to loans from non-bank and bank financial institutions. Nevertheless, the analysis of the questionnaire data reveals negative evaluations of the indicators regarding the level of requirements on guarantees. Thus, high requirements on guarantees for loans cause difficulties in accessing financing for local enterprises. Despite the measures taken, a number of entrepreneurs noticed difficulties in accessing financing within state programs. The biggest difficulties enterprises face in accessing venture capital. The emergence of new financing sources has substantially increased the financing options available to businesses. At the same time, access to electronic platforms for attracting financing (crowdfunding, cryptocurrencies, etc.) is not sufficiently developed in the entrepreneurial ecosystem of the Republic of Moldova and requires special attention.*

**Keywords:** finance, enterprise, entrepreneurial ecosystem, guarantees, loans, crowdfunding, venture capital

**JEL classification:** G20, G24, L26, O16

**UDC:** 336.648(478)

## DIGITALIZATION OF ENTREPRENEURSHIP CAPACITY BUILDING FOR RURAL AREAS OF THE REPUBLIC OF MOLDOVA

Anatolie BABIN,

Academy of Economic Studies of Moldova

<https://orcid.org/0000-0002-7253-0890>, [anatolii.babin@ase.md](mailto:anatolii.babin@ase.md)

Ion COVALENCO,

Academy of Economic Studies of Moldova

<https://orcid.org/0000-0001-9294-3273>, [covalenco@ase.md](mailto:covalenco@ase.md)

Sergiu TUTUNARU, PhD, Associate Professor,

Academy of Economic Studies of Moldova

<https://orcid.org/0000-0001-7394-6081>, [tutunaru@ase.md](mailto:tutunaru@ase.md)

DOI: <https://doi.org/10.36004/nier.cecg.I.2023.17.11>

*Rural areas are in greater need than ever to improve their quality of life through digital skills and competence.*

*Purpose of the study: to explore European practices and approaches to entrepreneurship education based on digital skills and competencies that contribute to building entrepreneurial capacity in rural areas.*

*Methodology: bibliographic study of the Living Lab approach, based on electronic interaction university - business, and university - public administration, result-oriented, allowing simulation of entrepreneurial situations in learning environments that contribute to the improvement of digital skills in the development of entrepreneurship. Research from European experience shows that this model of a cyber-physical system of electronic interaction between government agencies, farms, secondary school students, and universities, forming areas of smart infrastructure, can effectively influence the strengthening of the political and educational participation of civil society organizations and business in the decision-making process. Interdisciplinary research is needed to collaboratively track and measure the outcomes of digital entrepreneurship skills training using the Living Lab approach, organizations, and students after completion of projects and programs.*

*Research results: for the effective implementation of the “European Village” program in the regions of the Republic of Moldova, it is proposed to use the effects of European and international influence on the development of local communities, such as: identifying the added value of using digital solutions and dividing them into target audiences: local administrations, technology providers and citizens; creating visual materials and infographics to help visualize complex technical characteristics of solutions and services. Targeted learning groups will be able to access new open educational resources (OER), massive open online courses (MOOCs), and other digital tools being developed by the EU Joint Research Centre.*

**Keywords:** digital competence, capacity building, digital transformation, lifelong learning

**JEL classification:** D83, L26, O18

**UDC:** 334.73:004(478)

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## ANALYSIS OF THE COMPETITIVENESS OF THE EUROPEAN UNION IN THE CURRENT GLOBAL GEOPOLITICAL AND GEOECONOMIC CONTEXT

Corneliu-George IACOB, University of Economic Studies,  
Doctoral School, Romania

<https://orcid.org/0009-0009-7466-4612>, [iacobcorneliu2022@gmail.com](mailto:iacobcorneliu2022@gmail.com)

DOI: <https://doi.org/10.36004/nier.cecg.I.2023.17.12>

*In the analysis of the contemporary international environment, geoeconomics and geopolitics have a key role in understanding the trends recorded at the level of the world economy in terms of the dynamics of power centers and current reconfigurations, as well as in understanding the behavior of relevant actors in the geopolitical field. In a multipolar world, the European Union represents a pole of power that, through its actions, can significantly influence the balance of power. The various scenarios of the evolution of the world economy under the influence of a number of risk factors influence, to varying degrees, the competitiveness of the European Union. Competitiveness and productivity have been at the heart of European Union policy for decades. Faced with successive recent crises, the European Union has adopted common and coordinated response measures. The launch on June 20, 2023 of the European Strategy for Economic Security represents a concrete form of response of the European Union to the current instability present in global supply chains and, at the same time, represents a strategic repositioning for the future. The paper aims to analyze the developments in terms of the competitiveness of the European Union and, at the same time, to understand how the European Union's approach to economic security will shape future relations in terms of geopolitics and geoeconomics at the international and regional level. The research methodology uses the logical analysis method, the systemic method, the comparative method, the historical method, and the situation analysis used in geopolitical theory.*

**Keywords:** competitiveness, European Union, geopolitics, geo-economy, European strategy for economic security

**JEL classification:** F15, F17, F50

**UDC:** 339.923:061.1UEJ:339.137.2



## WHAT SKILLS DO MARKETERS NEED IN THE CONDITIONS OF ECONOMY DIGITALIZATION? EXPECTATIONS OF ENTREPRENEURS

Valerii GGAUZ, PhD Student,

Academy of Economic Studies of Moldova

<https://orcid.org/0000-0003-3011-2081>, [gagauzvf@gmail.com](mailto:gagauzvf@gmail.com)

DOI: <https://doi.org/10.36004/nier.cecg.I.2023.17.13>

*Rapid digital changes, the digitalization of entrepreneurship and marketing, present new challenges to marketers, demanding updated skills and strategies. With the growth of online commerce, entrepreneurs are now competing in the digital space, making professional skills in digital marketing crucial for their success.*

*Based on a sociological study conducted by the author in May-June 2023 among Moldovan entrepreneurs, this research examines the perceptions and expectations of entrepreneurs regarding marketing. It analyzes the in-demand marketing services and the difficulties they encounter when implementing digital marketing.*

*The research results confirm that entrepreneurs' expectations regarding digital marketing are diverse and depend on their business goals, industry, target audience, and other factors. Business representatives assign a wide range of activities to marketers, including continuous monitoring of supply and demand changes, customer interactions and analytics, product and service promotion, understanding and optimizing websites for search engines, creating high-quality content, competitor analysis, and more.*

*The primary expectations of entrepreneurs are to attract new customers and increase sales volume as entrepreneurs prioritize the expansion of their customer base and increasing revenue, which are key indicators of success for most companies. Large enterprises are more focused on brand recognition, market share expansion, and the introduction of new products and services. Meanwhile, small and medium-sized business owners aim to enhance their company's image and increase profitability.*

*The study also identifies the challenges that entrepreneurs face in digitalizing their marketing activities. This underscores the complexity of adapting to new digital requirements and the need to acquire new knowledge and approaches. Small and medium-sized business owners, often acting as the marketers of their companies due to limited resources, themselves require knowledge in the field of digital marketing.*

*Based on the findings, the author concludes that there is a need for a broader application of innovative teaching methods in the training and retraining of marketing professionals.*

**Keywords:** digitalization, marketing, requirements for a specialist

**JEL classification:** M31, M53, I25

**UDC:** 339:004.738.5

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## ANALYZING FACTORS INFLUENCING MOLDOVAN AGRICULTURAL YIELDS

Andrei PASLARI, PhD Student,

Academy of Economic Studies of Moldova

<https://orcid.org/0000-0001-9426-4231>, [andrei.paslari@gmail.com](mailto:andrei.paslari@gmail.com)

DOI: <https://doi.org/10.36004/nier.cecg.I.2023.17.14>

*Moldova, an Eastern European country, heavily relies on agriculture, with crop yields serving as a crucial economic performance indicator. This article conducts a comprehensive analysis of Moldova's agricultural landscape over a 20-year period. The primary objective of this research is to identify and analyze the key determinants influencing crop yields, including pesticide usage, credit accessibility for agriculture, price indices, and climatic variables such as precipitation and temperature.*

*Methodologically, our study first centers on data collection from diverse reputable sources, including Moldovan government reports, agricultural statistics databases, and meteorological records, to establish a comprehensive and reliable dataset. We harmonized various datasets, performed data consistency checks, and applied logarithmic transformations to address non-linearity and heteroscedasticity.*

*Using statistical software R, we conducted multiple linear regression analyses. To ascertain the reliability of our model, we ran diagnostic tests including assessing the goodness of fit through metrics like R-squared and adjusted R-squared. Additionally, we examined critical assumptions such as the normality of residuals and homoscedasticity.*

*Notably, effective pest management practices are found to have a positive impact on crop yields, underlining their significance in enhancing agricultural productivity. Surprisingly, fluctuations in prices and credit accessibility do not wield significant influence over crop yields. Furthermore, the research underscores the importance of optimal temperature conditions, with a strong positive correlation observed between crop yields and mean monthly temperature averages.*

*The research emphasizes the need for further exploration of complex yield-influencing mechanisms in Moldova's agricultural sector, aiding informed decision-making and strategic planning for sustainability.*

**Keywords:** Moldovan agriculture, regression analysis, factors influencing yields

**JEL classification:** C51, C52, Q12

**UDC:** 338.432(478)

## SESSION II

# THE RURAL ECONOMY AND INCREASING THE RESILIENCE OF THE SECTOR FOOD

## THE INTEGRATED WEB PORTAL 'LACUCINACAMPANA.IT' FOR RURAL DEVELOPMENT: AN EVOLVING PROJECT

**Guido MIGLIACCIO, PhD, Associate Professor of Business Administration and Accounting, Italy**

<https://orcid.org/0000-0002-8882-7648>, [guido.migliaccio@unisannio.it](mailto:guido.migliaccio@unisannio.it)

**Carmine LAUSI, Eng., Independent Researcher, Italy**

<https://orcid.org/0009-0003-7235-4270>, [nlausi@tiscali.it](mailto:nlausi@tiscali.it)

**Mariano BALDI, Eng., Independent Researcher, Italy**

<https://orcid.org/0009-0000-8491-7622>, [marianobaldi@outlook.it](mailto:marianobaldi@outlook.it)

**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.1>

*Rural areas in Italy account for more than 90% of the national land area: in many of them, which are mainly dedicated to agriculture, poor socio-economic development is causing depopulation phenomena, so new means must be sought to develop the agri-food sector.*

*The study highlights the role of ICT in the development of rural areas, describing, in particular, the functions of an innovative web portal that promotes typical food and “food & wine” tourism.*

*Case study. We describe the design of the new web portal 'lacucinacampana.it', relating to a southern Italian region (Campania), which is, however, exportable to any area wishing to promote agri-food products.*

*The portal intends to offer in an integrated manner all contents related to typical food from Campania: food products with their suppliers, local dishes with the restaurateurs that offer them, associated places with their tourist attractions, itineraries, food and wine experiences. All content is available in 11 languages to expand the online market and facilitate foreign tourists in Italy. The portal promotes the sale of typical food products and wine and food tourism, which are fundamental levers for the development of rural areas.*

*This study complements the modest literature on portals used for agricultural development. It can act as a driver for further developments in ICT technologies for agricultural development.*

*The research highlights significant potential for gains for the suppliers registered for the portal, which should be brought to the attention of public policy and trade associations.*

**Keywords:** portal, food, rural, tourism

**JEL classification:** I13, O18, Q17, Z32

**UDC:** 332(450-22)

## BRAND EFFECTIVENESS ON THE EXAMPLE OF A UNIVERSITY

**Jan POLCYN, Habilitated Doctor,  
Stanislaw Staszic State University  
of Applied Sciences in Pila, Poland**

<https://orcid.org/0000-0001-7847-2743>, Jan.Polcyn@ans.pila.pl

**Andreea CIPRIANA MUNTEAN, Professor, PhD,  
“1 December 1918” University Alba Iulia, Romania**  
andreea.muntean@uab.ro

**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.2>

*The designation of the university's brand is a very important element of the university's marketing strategy. The consequence of designating the brand should certainly be actions leading to the improvement of the university's brand and a properly targeted advertising campaign. The effect of these activities is to have greater interest in studies in a specific field of study at a specific university.*

*The motivation mentioned above contributed to defining the purpose of the analysis as an indication of an analytical tool supporting the building of the university's brand value. The implementation of the adopted goal should provide a tool supporting undertaking activities aimed at creating the university's brand by leaders managing education at the level of universities. As a research hypothesis, the assumption was made that it is possible to determine the university's brand by using a synthetic measure of the university's brand value.*

*The main contribution of this article to science is the indication of variables that have not previously been used to determine the university's brand and which occur in IT systems related to the functioning of universities, so they can be used to support a more objective determination of the university's brand value.*

*The analytical method used and the analyses carried out on its basis showed that synthetic measures can support the creation of a university brand. However, the very construction of a synthetic measure of the university's brand value that reflects reality requires the introduction of additional variables from IT systems and variables resulting from properly constructed surveys in the field of determining the university's brand value.*

**Keywords:** university's brand, synthetic measure, TOPSIS-CRITIC

**JEL classification:** B41, I21, M31

**UDC:** 347.772

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## RECENT CHANGES IN THE REGIONAL AGRI-FOOD TRADE – AN OVERVIEW

**Camelia GAVRILESCU, PhD, Senior Researcher, 2-nd degree,  
Institute of Agricultural Economics, Romanian Academy, Bucharest, Romania**

<https://orcid.org/0000-0003-1538-7642>, cami\_gavrilescu@yahoo.com

**Dinu GAVRILESCU, Professor, Member of Academy of Agricultural and  
Forestry Sciences “Gheorghe Ionescu-Șișești”, Bucharest, Romania**

dinu\_gavrilescu@yahoo.com

**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.3>

*Modifications in the geo-political context, climate changes and lately the consequences of COVID-19 pandemic impacted notably the economies of European countries in recent years. These combined factors resulted in significant changes in agri-food production and trade among EU Member States, as well as between EU and non-EU countries in the region. Successive EU enlargements, Russian trade bans, the enforcement of the DCFTA-s (Deep and Comprehensive Free Trade Agreements) between the EU and Republic of Moldova, Ukraine and Georgia, the war in Ukraine had important effects on the trade flows. The present paper investigates these changes in the agri-food products exchanges in terms of value, volume, structure and geographical directions of the trade flows. The available data by groups of products in Eurostat, Faostat and UN Comtrade databases are used, and the analysis aims to identify changes in the product groups competitiveness based on trade balances surpluses or deficits by country, while taking into account the evolution of the global markets.*

**Keywords:** agri-food trade, EU, non-EU countries, DCFTA, trade balances

**JEL classification:** F14, Q02, Q13, Q17

**UDC:** 338.439.5(4)

## ENSURING FOOD SECURITY OF THE STATE: WHO IS RESPONSIBLE FOR WHAT?

**Tudor BAJURA, Habilitated Doctor, Professor,**  
**National Institute for Economic Research, Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0003-0126-8386>, [bajuraiefs@rambler.ru](mailto:bajuraiefs@rambler.ru)  
**Svetlana GANDACOVA, Scientific Researcher,**  
**National Institute for Economic Research, Academy of Economic Studies of Moldova**  
**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.4>

*Along with other forms of security (for example – military, epidemiological, cyber security, etc.) the food security of the country's population constitutes an area of major importance regarding the successful activity of state governing bodies. Obviously, this level of importance becomes much higher under the conditions of the simultaneous appearance and operation of several risk phenomena, some of which are reflected in the given article. According to the analysis carried out, in the considerable number of publications on the subject addressed, there are practically no attempts to classify and systematize the responsibilities of the governors regarding combating (at least – contracting) risk phenomena, especially (as already mentioned), in cases of their simultaneous appearance and operation. As a consequence, a large part of problems remains not only intact, but also undetected, turning the negative consequences of their action into difficulty or even impossibility to solve.*

*The scientifically argued identification and classification of the different hierarchical levels of governmental powers, aimed at ensuring the indisputable food security of the country under the simultaneous influence of different risk groups, constitutes the main purpose of this research.*

*The methodological basis of the research is the general theory of management, including general and strategic management, the evaluation of business and investment projects, economic grouping, the formation of dynamic chains, comparison, etc. The statistical data of the NBS of the Republic of Moldova, the results of the scientific research of the scientists, the monographic analysis, the informative materials, reflected on the specialized pages (special software) and others, were used as informational support.*

*Three hierarchical levels of responsibility of the governing bodies (and civil society) of responsibility for ensuring the food security of the country were identified, consecutively, appropriate tools and economic mechanisms were established to measure, and later – to evaluate the practical results of their activity.*

*The paper has been developed within the project "Development of new economic instruments for assessing and stimulating the competitiveness of agriculture of the Republic of Moldova for the years 2020 - 2023" (code - 20.80009.0807.16)*

**Keywords:** food security, risks, risk phenomena, combating risks, consumption basket, food products, nutritional value, energy value etc.

**JEL classification:** L66, Q02, Q14, Q18, R52

**UDC:** 338.439.02

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## MEDITATION ON THE USE OF LANDS INTENDED FOR AGRICULTURE IN THE REPUBLIC OF MOLDOVA

**Ion CERTAN, PhD in Economy,**  
**Center for the Study of the Quality of Agricultural and Food Products, USAMV, Romania**  
<https://orcid.org/0000-0003-0475-2042>, [ion.certan@qlab.usamv.ro](mailto:ion.certan@qlab.usamv.ro)  
**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.5>

*The decision of the Parliament of the Republic of Moldova of July 25, 1990, qualified "...the transition to the market economy as a model of economy...". The development of the economy essentially depends on agriculture, which for all countries was, is and will be the support of human existence and, therefore, constitutes the strongest balancing factor in harmonizing the development of the state. It is no coincidence that one of the first normative acts adopted on February 15, 1991, by the Parliament of the Republic of Moldova was the Concept of agrarian reform and the socio-economic development of the village. The development of agriculture is influenced by the available resources, primarily by the natural potential which, participates with the "force of its laws and its "goodness's", substance (s), energy (e) and information (i), goods in a natural state, "manufactured" by the physical, chemical, and biological movement of matter". It is no coincidence that the Concept mentions that "the main link of the agrarian reform is the reform of land relations", aimed at "the demonopolization of state ownership of land and, as a result, the recognition of land as a commodity, the affirmation in practice of different types of ownership in agriculture" In this article, the authors present a study on the evolution of agricultural lands and come up with some proposals aimed at using them more rationally.*

**Keywords:** economy, agriculture, land fund, structure, reforms, efficiency

**JEL classification:** Q10, Q15

**UDC:** 332.21(478)

## IS ROMANIA PREPARED FOR THE NATIONAL BIOECONOMY STRATEGY?

**Dan-Marius VOICILAȘ, PhD, Associate Professor-Senior Researcher,  
Romanian Academy-Institute of Agricultural Economics, Romania**

<https://orcid.org/0000-0003-3411-8958>, [dmvoici@yahoo.com](mailto:dmvoici@yahoo.com)

**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.6>

*The term "bioeconomy" is a new concept mainly used after 2000, when it was introduced into literature and policy by Christian Patermann. The purpose of the paper is to present the level of development of the bioeconomy in Romania considering the opportunities offered by the concept and the challenges that may arise during the process, in the current difficult international context, such as climate change, Covid-19 pandemic, war in Ukraine, etc.*

*The official documents of the EC and other European institutions with attributions in the field, national documents from Romania, but also results and documents of the BIOEAST Initiative and the BIOEASTsUP Project were used. To achieve the proposed objectives, a review of the specialized literature, a text analysis of the studies and documents in this field were carried out.*

*The study highlights the main characteristics, opportunities, and challenges of the country, in a regional and EU context. The results of the analysis show the benefits of changes in national strategies. There are important factors that can be decisive to solving all the problems we face today. Therefore, the opportunity to develop a bioeconomy strategy in accordance with EU regulations should not be lost, so that it is approved and operational during the 2021-2027 programming period, and EU funds for this purpose can be accessed. The National Bioeconomy Strategy for Romania is in the first stage of development.*

**Keywords:** Bioeconomy, Romania, Strategy, Opportunity, Challenge, International context

**JEL classification:** Q18, Q57, Q58

**UDC:** 338.45:606(498)

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## EXAMPLES OF ASSESSING TYPES OF REPRODUCTION AGRICULTURAL PRODUCTS IN ATU GAGAUZIA

**Dumitru PARMACLI, Habilitated Doctor Professor,  
Comrat State University, Moldova**

<https://orcid.org/0000-0003-2002-6104>, [parmad741@mail.ru](mailto:parmad741@mail.ru)

**Tatiana DUDOGLO, PhD, Associate Professor,  
Comrat State University, Moldova**

<https://orcid.org/0000-0003-0015-9057>, [dudoglo\\_tatiana@mail.ru](mailto:dudoglo_tatiana@mail.ru)

**Ludmila TODORIC, PhD, Associate Professor,  
Comrat State University, Moldova**

<https://orcid.org/0000-0002-3492-1890>, [todorich24@mail.ru](mailto:todorich24@mail.ru)

**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.7>

*The production of fruits and grapes are traditional branches of agricultural production for ATU Gagauzia. That is why it is important to investigate the type of reproduction of the products of these crops. A characteristic feature of the reproduction of products in agriculture is that weather and climatic conditions have a direct impact on the results of the production activities of the enterprise and its efficiency. In crop production, an important condition for ensuring high production efficiency is to obtain high yields of products, i.e. fuller use of the potential of land productivity and the biological potential of plants. However, the indicators of output per unit area do not directly characterize the state of the level of management on earth. Quite in demand, both in theoretical and practical aspects, is the development of a methodology for assessing the economic independence of commodity producers capable of both simple and extended reproduction, and which would be available for practical use by specialists of agricultural enterprises and at the same time would reflect modern approaches to assessing the effectiveness of the level land management*

**Key words:** intensive and extensive reproduction, cultivation area, yield, gross harvest, fruits, grapes

**JEL classification:** O13, O40, P47, Q12

**UDC:** 338.439(478-29)



## AGRICULTURAL DEVELOPMENT UNDER A CHANGING CLIMATE IN UKRAINE: TRENDS AND CHALLENGES

**Kateryna PROKOPENKO, PhD in Economics, Leading Researcher,  
Institute for Economics and Forecasting, NAS of Ukraine**  
<https://orcid.org/0000-0003-1456-4432>, [k\\_prokopenko@ukr.net](mailto:k_prokopenko@ukr.net)  
**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.8>

*The last century was characterized by noticeable climatic changes. The whole world, including Ukraine has been significantly impacted. Such changes are characterized by increased average annual temperature on the planet surface, increased level of the water in the oceans, increased number of natural disasters and cataclysms, such as desertification, landslides, hurricanes, etc. Furthermore, the climate change coincides with the period of increasing food shortages in the world.*

*The aim of the article is to study the dependence of agricultural efficiency on the changes in agri-climatic conditions of production in the long term and the impact of these changes on the cultivation of agricultural crops and their productivity. Research methods are general scientific and special, qualitative and quantitative, theoretical and empirical, comparative analysis.*

*Agriculture is the sector of the Ukrainian economy that is the most vulnerable to fluctuations and climate changes. Given its inertial nature and the dependence on weather conditions, it is essential to make timely and adequate decisions regarding the problems caused by climate changes. Taken the expected increase of the air temperature in the Northern Hemisphere, Ukraine's food security will largely depend on the efficient adaptation to upcoming climate changes.*

*The consequences and risks of the climate change for the food production vary from region to region, however the negative impact of climate trends outweighs the positive one. Thus, the research of the impact of climate change on the efficiency of agri-food production is crucial for the development of policies that would help to adapt to the consequences of these changes.*

**Keywords:** agricultural development, climate changes, efficiency

**JEL classification:** O13, Q18, Q20, Q54

**UDC:** 338.432:632.931.2(477)

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## METHODOLOGICAL FEATURES OF DYNAMICS ANALYSIS SUNFLOWER PRODUCTION

**Dumitru PARMACLI, Habilitated Doctor Professor,  
Comrat State University, Moldova**

<https://orcid.org/0000-0003-2002-6104>, [parmad741@mail.ru](mailto:parmad741@mail.ru)

**Tatiana DUDOGLO, PhD, Associate Professor,  
Comrat State University, Moldova**

<https://orcid.org/0000-0003-0015-9057>, [dudoglo\\_tatiana@mail.ru](mailto:dudoglo_tatiana@mail.ru)

**Ludmila TODORICI, PhD, Associate Professor,  
Comrat State University, Moldova**

<https://orcid.org/0000-0002-3492-1890>, [todorich24@mail.ru](mailto:todorich24@mail.ru)

**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.9>

*It is emphasized that sunflower production in the ATU Gagauzia of the Republic of Moldova is the most promising industry. In terms of sown area, this crop is preceded only by winter wheat. The purpose of the study is to propose a methodology for assessing the state of the dynamics of sunflower production, confirming its features on specific examples from practice. In the course of the study, economic-statistical and graphical methods were used. The gross sunflower harvest in the autonomy increased from 15,076 tons in 2000 to 87,986 tons in 2021, or more than 5.8 times. As the trend equation for the study period shows, on average per year, the yield of seeds per hectare of crops increased by 0.518 c/ha and reached 24.6 c/ha by 2021. The gross harvest of sunflower increased annually by 2704 tons and amounted to 35.7 thousand tons by the end of the period. Calculations show that the yield variation coefficient reached 29.4%, and the gross harvest is even higher - 47.5%. This means that crop cultivation is concentrated in areas of unstable agriculture. In view of the high profitability, only in 2007 the yield of sunflower seeds per hectare of sowing falls below the critical level and approximately one year out of 5-6 reaches a favorable value. The methodology is presented and the forecast values for 2022 of yield and gross harvest are calculated. It is noted that the presented methodology for analyzing the dynamics of sunflower production indicators is quite simple to use and therefore can be successfully used both for educational purposes and by practitioners.*

**Keywords:** sunflower, yield, gross harvest, trend, growth rate, forecast

**JEL classification:** O49, Q10, Q56, R11

**UDC:** 338.43:633.854.78(478)

# LIVING, NOT LEAVING THE VILLAGE: PLACE ATTACHMENT AND RURAL LIVELIHOODS IN THE REPUBLIC OF MOLDOVA

**Daniela ANA, Leibniz Institute of Agricultural Development in Transition Economies (IAMO), Germany**  
<https://orcid.org/0000-0002-2969-3248>, [ana@iamo.de](mailto:ana@iamo.de)  
**Antje JANTSCH, Leibniz Institute of Agricultural Development in Transition Economies (IAMO), Germany**  
<https://orcid.org/0000-0002-6792-0747>, [jantsch@iamo.de](mailto:jantsch@iamo.de)  
**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.10>

*The Republic of Moldova has been drastically affected by depopulation, especially in rural areas. Nevertheless, in regions with a winegrowing tradition and emerging rural tourism, a large part of the active labour force is motivated to stay and not migrate. In order to gain insights into how some rural areas can withstand potentially detrimental population dynamics, this paper explores the interaction of rural residents with the local environment, and their acquirement of a sense of place and rootedness in a Moldovan winegrowing region. Drawing on ethnographic methods, this paper analyses data collected through participant observation and narrative interviews during one year of fieldwork carried out predominantly in one village in southeastern Moldova. The ethnographic perspective provides a holistic understanding of the existing narratives and individual circumstances that support staying in this rural area through the lens of place attachment. In particular, we analyse the interplay between local identities, place-making, and population dynamics. Results show that the presence of a long tradition in both industrial and artisanal wine production plays an important role in the interlocutors' attachment to this place. Nevertheless, other aspects such as owning or building a house, family cohesion, owning land, or appreciating the landscape and rural lifestyle are at least as important in their decision to stay. The presence of a recognized 'taste of place' expressed in wine and other local foods is an embodied, sensory experience of place that accompanies the cluster of socio-economic and ecological dimensions of place attachment.*

**Keywords:** Moldova, staying, place attachment, well-being, winemaking region  
**JEL classification:** I31, Q18, Z13  
**UDC:** 330.59(478-22)

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# THE RELATIONSHIPS BETWEEN SUSTAINABLE RURAL DEVELOPMENT AND AGRO-TOURISM: EXAMPLES FROM TÜRKİYE

**Bekir, EŞİTTİ, PhD Associate Professor, Çanakkale Onsekiz Mart University, Türkiye**  
<https://orcid.org/0000-0002-5240-9233>, [bekiresitti@comu.edu.tr](mailto:bekiresitti@comu.edu.tr)  
**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.11>

*Sustainable rural development aims to provide an economically, socially and environmentally sustainable development in rural areas and agritourism aims to evaluate the tourism potential of agricultural rural areas to make economic gains for the local people through tourism activities. Agricultural tourism integrates agricultural activities with tourism in rural areas and enables tourists to communicate with locals and experience agriculture-themed experiences. Tourism activities such as the sale of locally produced agricultural products that tourists are interested in, the organization of agricultural tours to show the production stages and accommodation revitalize the rural economy. This supports sustainable rural development. The culture, lifestyle, customs and traditions of the local people living in the countryside are introduced to the tourists and their cultural exchange takes place during agricultural tourism. In this way, interest in products that symbolize culture arises and economic benefits emerge. Agritourism, in particular, supports organic agriculture without the use of pesticides, operates in accordance with environmental sustainability principles such as sustainable agricultural practices and nature protection. This ensures the protection of natural resources in rural areas without harming the environment. In short, rural areas can become touristic attractions thanks to agricultural tourism. With the development of agricultural activities and other services in agricultural regions where tourists show great interest, new job opportunities arise, that is, economic, social and infrastructural development can be realized. From this point of view, it can be said that there is a reciprocal relationship between the understanding of sustainable rural development and agricultural tourism. Agritourism, while solving the economic, social and environmental problems in rural areas, also ensures that agriculture continues in a sustainable way. This contributes to the economy of the locals and sustainable development in rural areas. In this study, examples of sustainable rural development and agricultural tourism practices in Turkey are also discussed.*

**Keywords:** Agro-Tourism, Local People, Rural Development, Social Protection, Sustainability  
**JEL classification:** Q01, R0, Z30, Z32  
**UDC:** 338.486 (560)



## COMPARATIVE STUDY ON THE TREND OF EVOLUTION OF LABOUR RESOURCES IN AGRICULTURE IN ROMANIA AND THE REPUBLIC OF MOLDOVA

**Ana URSU, PhD, Researcher. gr. sch. II,  
Institute for Agricultural Economy and Rural Development  
Bucharest, Romania**

<https://orcid.org/0000-0003-1822-9690>, [ursu.ana@iceadr.ro](mailto:ursu.ana@iceadr.ro)

**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.12>

*The population in rural areas is mostly concentrated in agriculture as employees, employers, self-employed, unpaid family workers, etc. The study aims to present some indicators on labour resources in agriculture in relation to demographic and social indicators of Romania and Moldova. In order to highlight the trends of labour resources in agriculture, the indicators on rural population, total employed population, population working in agriculture, labour force structure, employment, investments in agriculture, household income, etc. are evaluated. The research methods are based on quantitative and qualitative analysis of statistical data, as well as analysis of phenomena characterizing the activity in agriculture. The results show that the population employed in agriculture in Romania, in the period 2014-2022, decreased on average by 12.2%/year, while in Moldova, for the same reference period, the population employed in agriculture decreased on average by 1.8%/year. In Romania, one person employed in agriculture produces agricultural goods and services for 12.5 inhabitants, and in Moldova one person employed in agriculture produces agricultural goods and services for 14.4 inhabitants.*

**Keywords:** labour force, labour resource's structure, education, investments, agriculture, income, rural

**JEL classification:** J1, J21, J24, J43, N3, N5, O1

**UDC:** 331.101.262:631(498+478)

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## THE IMPLICATIONS OF CLIMATE CHANGE ON THE DEVELOPMENT OF CROP PRODUCTION IN THE REPUBLIC OF MOLDOVA

**Liliana CIMPOIEȘ, PhD,  
Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0003-3709-9406>, [lcimpoies@ase.md](mailto:lcimpoies@ase.md)

**Maria GRUBLEAC, PhD student,  
Academy of Economic Studies of Moldova**

<https://orcid.org/0009-0000-2530-4922>, [grubleac.maria@ase.md](mailto:grubleac.maria@ase.md)

**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.13>

*The agricultural sector is particularly vulnerable to the impacts of climate change due to its direct dependence on temperature and precipitation. In the Republic of Moldova in recent years, agriculture, especially crop production, has been affected by climate change, especially droughts (once every 3-10 years). According to the State Hydrometeorological Service, the 2007 drought was one of the most severe in the country's history, affecting more than 80 percent of the area, with losses of more than \$1 billion. And the drought of 2020 caused a 27.1 percent drop in global agricultural output and the loss of about 20 percent of jobs. The purpose of this paper is to analyze the current state of crop production in the Republic of Moldova under the impact of climate change.*

*The research is based on the analysis of data provided by the National Bureau of Statistics and the State Hydrometeorological Service. The analyzed data include indicators such as the volume of global agricultural output, the harvest and productivity of some main agricultural crops, and the analysis of the influence of temperature, precipitation on these indicators.*

*It is important to continue monitoring and adapting to climate change in the agricultural sector by implementing sustainable agricultural practices, developing climate-resistant varieties and using advanced technologies. This can ensure greater resilience and productivity to climate threats in the development of Moldova's agricultural sector.*

**Keywords:** agriculture, crop production, climate change, sustainability

**JEL classification:** Q10, Q18, Q54

**UDC:** 338.432:632.931.2 (478)

## THE IMPORT OF MEAT AND EDIBLE MEAT OFFALS OF THE REPUBLIC OF MOLDOVA

**Aurelia LITVIN, Habilitated Doctor, Profesor,  
Technical University of Moldova**

<https://orcid.org/0000-0003-3756-0856>, aurelia.litvin@em.utm.md

**Elena ȘCERBACOV, Associate Professor, PhD,  
Technical University of Moldova**

<https://orcid.org/0000-0003-2588-356X>, elenascerbacov@yahoo.com

**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.14>

*The livestock of pigs has decreased significantly in farms specialized in raising pigs in the country, the cause being the coronavirus pandemic. Demand also fell for all pork products requested by both restaurants and picnics. Another cause that contributed to the reduction of the cattle herd was the increase in the price of fodder, as well as energy resources. Domestic meat production does not provide what is needed for processing factories. As a result, pork is imported because supplies are constant, the price is lower than for domestic production, and the quality is good. The Covid-19 pandemic caused an increase in meat processing expenses, as it was necessary to divide the workforce into shifts. The increase in expenses was also caused by the fact that hygiene products and special equipment were purchased for employees, but also for the repeated testing of employees.*

*Imported meat is mostly frozen. This is stored for a long period of time to later be sold at high prices when there is a shortage of raw material on the domestic market. In 2021, compared to 2011, beef was imported more than 4 times, beef – 2,5 times, and poultry - 2 times. The Republic of Moldova imports meat from such countries as: Ukraine, Germany, Russia, Poland, Romania, Hungary.*

*Unfortunately, domestic beef is exported, and Moldovans consume imported meat. Moldovans prefer to eat pork.*

**Keywords:** meat, import, fodder, livestock sector

**JEL classification:** Q10, Q13, Q17, Q18

**UDC:** 338.439.5:339.562(478)

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## METHODOLOGICAL AND SCIENTIFIC CONTRIBUTION TO THE DEVELOPMENT OF THE PIGMEAT SECTOR BASED ON STANDARD DEVELOPMENT PROJECTS

**Grigore BALTAG, PhD, Associate Professor,  
National Institute for Economic Research, Moldova**

<https://orcid.org/0000-0002-7220-8922>, gbaltag@yahoo.com

**Alexandru OSOIANU, PhD student,  
Technical University of Moldova**

**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.15>

*Starting a business requires a complex and thoughtful approach to everyone who wants business involvement. The deep attitude towards all elements of the business must be recognized by their importance to each founder. The business to be initiated cannot be achieved by a general approach, or based on the current pace of evolution and so on. A business at the stage of knowledge, must be studied through its subtleties, specific technologies, links and stages of operation so that the investor is initiated and self-trained in the best way. In order to be capitalized, the business idea is transformed into a business through a plan developed by the investor, which establishes the investment stages, financing, employment processes and other elements, so that at the beginning of the technological process the stages of investment, construction, acquisition and technical arrangements are solved and prepared. Only good training from a theoretical point of view can ensure the success of an entrepreneur in developing the identified business.*

*The investment project comes to the aid of all those interested in starting businesses in rural areas and is intended for the livestock branch. The project is dedicated to raising pigs for meat with the provision of good practices and environmental friendliness. In this investment project are described the basic peculiarities of the pig business, the technological elements of ensuring the technological process, the development factors and the economic results pursued. Through this project, investors and businessmen who want to start agricultural businesses can assess their economic capabilities and draw inspiration from factological content.*

*The paper has been developed within the project "Development of new economic instruments for assessing and stimulating the competitiveness of agriculture of the Republic of Moldova for the years 2020 - 2023" (code - 20.80009.0807.16)*

**Keywords:** analysis; investment project; rural environment; technological process

**JEL classification:** Q1, L1, O13, P33

**UDC :** 631.15:636.4

## FINANCIAL MANAGEMENT OF AGRICULTURAL HIGHER EDUCATION IN THE REPUBLIC OF MOLDOVA

Liliana CIMPOIEȘ, PhD,

Academy of Economic Studies of Moldova

<https://orcid.org/0000-0003-3709-9406>, [lcimpoies@ase.md](mailto:lcimpoies@ase.md)

Olga SÂRBU, PhD,

Technical University of Moldova

<https://orcid.org/0000-0001-6333-0101>, [olga.sirbu@tem.utm.md](mailto:olga.sirbu@tem.utm.md)

DOI: <https://doi.org/10.36004/nier.cecg.II.2023.17.16>

*The educational system plays a pivotal role in fostering sustainable development and cultivating a knowledge-based society. A primary goal of the higher education system is to equip individuals with the skills and competencies essential for success in the workforce and the pursuit of a fulfilling professional trajectory.*

*Moldova faces substantial obstacles in the field of agricultural education and research, related to aging teaching and research workforce, a diminishing enrollment in agricultural programs, and a disinterest in science and education among its youth. Consequently, these challenges collectively contribute to a shortage of skilled agricultural labor.*

*This paper aims to assess the current economic and financial state of Moldova's agricultural higher education system by examining data collected from the State Agrarian University of Moldova. The analysis will center on various economic and financial management indicators, such as income, expenditure, revenue, and profit. The analyzed data are from 2017 to 2021.*

*Most of the funding for the agricultural higher education institution came from budget sources, accounting for approximately 73% of the total revenue. These budgetary resources were allocated for educational services, primarily covering undergraduate education. Income from research and innovation projects, while relatively modest compared to other sources, showed opportunities for growth through grants and donations from different organizations. Among expenses, personnel costs register the largest share. Increasing revenues and reducing expenses are fundamental strategies for enhancing the efficiency and sustainability of any organization, including agronomic higher education institutions and enterprises. Diversification of income sources, research and innovations, efficient resource utilization are some revenues increases sources. Expenses reduction is possible through cost control, energy and resource efficiency, maintenance and asset management, budget planning, personnel management etc.*

**Keywords:** agricultural higher education, management, agricultural education-research system

**JEL classification:** I20, M10, M11, Q54

**UDC:** 378.663.014.543(478)

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## AGRICULTURAL RESILIENCE IN UKRAINE UNDER THE CONDITIONS OF CLIMATE CHANGE

Olena SHUBRAVSKA, Doctor of Economics, Professor,

Head of the Department, Institute for Economics and Forecasting,

National Academy of Science of Ukraine

<https://orcid.org/0000-0003-2588-356X>, [shubravska@gmail.com](mailto:shubravska@gmail.com)

DOI: <https://doi.org/10.36004/nier.cecg.II.2023.17.17>

*Obviously, the main destabilizing role in the development of Ukrainian agriculture is played now by full-scale military operations unleashed by Russia. At the same time, climate changes, which are growing, also has a significant impact on the resilience of national agricultural production. All this can create significant threats to food security.*

*The purpose of the article is to characterize the main risks of climate resilience of agricultural production and to determine the key directions of its adaptation to climate change. Research methods are monographic, statistical, comparative analysis.*

*The climate resilience of agriculture is based on the concept of sustainable development. The resilience is affected by: natural shocks (droughts, floods, pest invasions, the spread of diseases) and other disasters (wars, pandemics), the quality and availability of natural and other resources of agricultural production, human capital and its quality, adaptation strategies, agricultural policy, globalization, etc. These influence factors also determine the corresponding risks. The climate resilience of agricultural production is ensured by its greening, climate neutrality and effective resistibility to the negative impact of climate change. The strategy of adaptive transformation of the Ukrainian agriculture should substantiate: expedient directions for the diversification of crops; the most acceptable ratio of crop, livestock and biofuel segments; priority areas of necessary changes and mechanisms for their implementation; main resilience indicators and their thresholds.*

*Circular farming systems are recognized as the most stable. In Ukraine, despite the hostilities, the desire of farmers to reduce the amount of waste, resource conservation and energy self-sufficiency is increasing. Primarily, this is due to the production of "green energy" at biogas complexes. Thus, in 2023, 5 biomethane plants are expected to open. More than 10 companies plan to build 31 more biomethane plants soon with a capacity of 225 million m<sup>3</sup>/year.*

**Keywords:** agricultural production, climate resilience risks, circular farming

**JEL classification:** Q10, Q01, Q54

**UDC:** 338.432:632.931.2 (477)

# ECOLOGICAL AGRICULTURE THE MOST STRATEGIC BRANCH FOR THE SUSTAINABLE DEVELOPMENT OF THE AGRICULTURE OF THE REPUBLIC OF MOLDOVA

Liliana CIMPOIEȘ, PhD,

Academy of Economic Studies of Moldova

<https://orcid.org/0000-0003-3709-9406>, [lcimpoies@ase.md](mailto:lcimpoies@ase.md)

Diana COȘALÎC, PhD student,

Academy of Economic Studies from Moldova

<https://orcid.org/0000-0002-3303-2119>, [cosalic.diana@ase.md](mailto:cosalic.diana@ase.md)

DOI: <https://doi.org/10.36004/nier.cecg.II.2023.17.18>

*Among the trends in the development of the sustainable agriculture, the field of "ecological agriculture" has a priority role, because the European Union policies also place an increased emphasis on the development of the ecological agriculture. Thus, EU member countries have approved, as a priority objective, the increase of the agricultural areas in the ecological system up to 25% of the total cultivated areas, by the end of 2030. Unfortunately, Republic of Moldova didn't align such an objective, however, the concept of developing the ecological agriculture came out in the early 90s when The Professor Boris Boincean – the promoter of agricultural science, developed the sustainable agriculture in the Republic of Moldova. This branch is a very promising one, for an impressive number of enterprises in the Republic of Moldova, due to the effects of the climate changes, lower production cost, in comparison to the conventional agriculture and the rapidly global growing demand for organic products. The Ecological products also have a positive impact over the employment process, therefore, it has a very low impact on the environment, and it encourages:*

- *responsible use of the energy and natural resources;*
- *preservation of biodiversity;*
- *preservation of the ecological balances;*
- *increasing soil fertility;*
- *maintaining water quality.*

*As producers and processors from the Republic of Moldova seek to capitalize these opportunities, the Government is making considerable efforts to create favorable conditions for the development of this sector.*

**Keywords:** agriculture, organic farming, farms, operators, subsidies

**JEL classification:** Q18, Q28, Q57

**UDC:** 338.43+631.95](478)

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## DEVELOPMENT OF BIOENERGY IN THE CONDITIONS OF CLIMATE CHANGE IN UKRAINE

Lyudmila UDOVA, PhD in Economics, Senior Researcher,

Institute for Economics and Forecasting, National Academy of Science of Ukraine

<https://orcid.org/0000-0002-8216-0379>, [u\\_lyudmila@ukr.net](mailto:u_lyudmila@ukr.net)

DOI: <https://doi.org/10.36004/nier.cecg.II.2023.17.19>

*Bioenergy is a branch of the energy sector that involves the use of biomass as a fuel. Today, bioenergy confidently takes the place of the leader of the world's renewable energy, playing a significant role in replacing fossil fuels and reducing greenhouse gas emissions, which is especially relevant in the context of global warming and climate change.*

*The purpose of the study is to characterize the peculiarities of the development of bioenergy in the conditions of climate change in Ukraine. Research methods are monographic, statistical, graphical and tabular, methods of comparative analysis. The development of bioenergy does not involve deforestation, environmental degradation or loss of biodiversity. Among the most promising types of biomass in Ukraine, agricultural residues (straw of grain crops and rapeseed, by-products of corn production, sunflower) and energy plants (willow, poplar, miscanthus), which constitute agrobiomass, are distinguished. Agrobiomass is a large underutilized resource that can help achieve European energy and climate goals, while also contributing to the development of rural areas.*

*Ukraine has a significant potential for agricultural residues and energy plants, the implementation of which can significantly reduce the consumption of fossil fuels and increase the country's energy security. Although the share of agrobiomass in the total energy potential of Ukraine's biomass is 75-80%, its practical use (except for sunflower husks) remains insufficient. At the same time, the rather limited energy potential of wood biomass is realized almost completely. It is necessary to change the structure of the use of biomass potential in Ukraine, giving preference to agricultural residues and energy plants, which corresponds to the trends laid down in the European Green Course. Therefore, bioenergy is one of the strategic directions of development of the sector of renewable energy sources in Ukraine as well.*

**Keywords:** bioenergy, climate change, agricultural sector

**JEL classification:** Q28, Q42, Q48, Q54

**UDC:** 620.92:338.43(477)

## THE MULTIFUNCTIONAL ROLE OF PROTECTIVE FOREST STRIPS AROUND AND INSIDE AGRICULTURAL FIELDS

Olesea COJOCARU, PhD, Associate Professor,  
Technical University of Moldova

<https://orcid.org/0000-0001-5546-269X>, [olesea.cojocaru@am.utm.md](mailto:olesea.cojocaru@am.utm.md),

Rodica BOSTAN, master's student,  
Technical University of Moldova

[rodica.bostan@am.utm.md](mailto:rodica.bostan@am.utm.md)

DOI: <https://doi.org/10.36004/nier.cecg.II.2023.17.20>

*The experience of international research demonstrates the high efficiency of protective forest strips around arable land (Current et al., 1995; Hillbrand et al., 2017). However, in our country, the problem of the economic substantiation of the effectiveness of these measures prevents their development and the reason is the low attractiveness for the owners of the agricultural lands that are prone to the erosion process, despite their major importance. To save such an agro-ecosystem, provision should be made for the establishment of protective forest strips on arable land. The purpose of the study is to analyze the effectiveness of protective forest strips in the rehabilitation of arable land, as an effective stimulus in sustainable development, environmental security in the agricultural sector and the reduction of agricultural land degradation. For sloping arable land, the study shows that the parameters of the properties of the agroecosystems protected by the forest strips, regulate the dynamic values of soil water reserves and maintain its quality. The action of main indicators of the effectiveness of anti-erosion measures depend on the area, the slope of the arable land, the danger of erosion, and the characteristics of the investigated soil.*

**Keywords:** agroforestry systems, agricultural crops, Copăceni commune, economic effectiveness, key polygon, soil moisture and physico-chemical properties

**JEL classification:** O13, P32, Q16, Q23, Q24, Q57

**UDC:** 631.4+630\*266] (478)

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## SUSTAINABLE AGRICULTURE MODELS IN THE AGRIBUSINESS SECTOR: HINTS ON LIVESTOCK SUPPLY CHAIN

Anna BACCO, Independent Researcher,

chair of European Union Law, University of Salerno, Italy

<https://orcid.org/0009-0008-5154-1962>, [annabac@hotmail.it](mailto:annabac@hotmail.it)

DOI: <https://doi.org/10.36004/nier.cecg.II.2023.17.21>

*The paper analyzes International and European documents related to Sustainable Agriculture. Among others:*

- *The FAO International Treaty on Genetic Resources for Food and Agriculture.*
- *The proceedings of the Rio +20 Conference (20-22 June 2012);*
- *The 2030 Agenda for Sustainable Development with 17 SDGs is to be achieved by 2030 by the United Nations General Assembly. In it, Goal 2, ending hunger, achieving food security, improving nutrition, and promoting sustainable agriculture, deserves attention;*
- *The Marrakech Conference (2016) of the United Nations on Climate Change (COP22);*
- *The "New Strategic Agenda for the five years 2019 -2024."*
- *The Common Agricultural Policy (CAP) 2023-2027.*

*Also mentions the National Strategy for Sustainable Development and the Reports of the Italian Alliance for Sustainable Development.*

*Examples of sustainable agriculture are highlighted in the livestock agribusiness sector in Campania, Italy, in which several companies are showing a growing willingness toward productive modernization aimed at achieving economic, social, and environmental development with a focus on Sustainable Development.*

*In this area, the case of a buffalo farm that ensures sustainable food production systems and applies resilient agricultural practices that increase productivity and strengthen resilience to climate change is presented. Several technological innovations are taken over on the same farm, such as a buffalo milking plant, Vms (Voluntary milking systems) that enables animal welfare, is a plant for producing green energy from processing waste.*

**Keywords:** sustainable agriculture innovation, sustainability, environmental protection

**JEL classification:** P48, Q01, Q10, Q55, Q57

**UDC:** 338.436.33



## ANALYSIS OF CLIMATE VULNERABILITIES FACED BY THE AGRICULTURAL SECTOR

**Gabriela Dalila STOICA, Research Assistant,  
Institute for Agricultural Economy and Rural Development,  
Bucharest, Romania**

<https://orcid.org/0000-0002-2534-0357>, [stoica.gabriela@iceadr.ro](mailto:stoica.gabriela@iceadr.ro)

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*Over time, there has been considerable interest in climate change, both from policymakers and academia. The emergence of climate change is one of the biggest threats to the agricultural sector, and the effects of climate change are irreversible. Through the high number of articles and scientific publications published on this topic, the increased interest and concerns of the academic environment in determining and understanding the climate vulnerabilities currently faced by the agricultural sector are demonstrated. In this sense, the study presents a review of the specialized literature published on the topic of climate vulnerabilities, and based on them, a bibliometric analysis of the selected articles is presented, in order to highlight the publication trends and the impact they have on future studies. After querying the Web of Science database, 1,126 publications on climate vulnerabilities emerged between 1993 and 2023. The results show that the topic has been addressed by academics from all over the world, but in particular, most publications come from the USA (31.4%) and Australia (10.8%). The research fields in which the respective publications are found are environmental and ecological sciences, meteorology and atmospheric sciences, biodiversity conservation, water resources, etc.*

**Keywords:** agricultural sector, climatic vulnerabilities, climatic change

**JEL classification:** Q10; Q54

**UDC:** 338.432:632.931.2

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## STRATEGIC DIRECTIONS FOR THE DEVELOPMENT OF MOLDOVAN AGRICULTURE IN THE CONTEXT OF EU CAP

**Eugenia LUCASENCO, Scientific Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0002-5032-7963>, [eugenia\\_lucasenco@yahoo.com](mailto:eugenia_lucasenco@yahoo.com)

**Alexandru CEBAN, Scientific Researcher,  
The National Institute for Economic Research, Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0002-3300-4054>, [ceban\\_alexander@yahoo.com](mailto:ceban_alexander@yahoo.com)

**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.23>

*The EU CAP represents a legal framework of major importance for ensuring the development and modernization of agriculture in EU member countries, ensuring their food security, especially against the background of persistent crises, but at the same time also for achieving the objectives of the European Green Deal. Having obtained the status of EU candidate country, Republic of Moldova will have to adjust its agricultural policy in order to align it to the CAP objectives. Therefore, the aim of the paper is to analyze the current PAC objectives in view of the actions that the Republic of Moldova has to undertake and to argue the necessity of adjustment of national agricultural policy to the EU requirements. The research methods are based on comparative methods, analysis and synthesis, elaboration of conclusions, etc. The PAC objectives announced by the EU, once implemented in the Republic of Moldova, will contribute to the development and modernization of the country's agricultural sector, taking into account a number of aspects related to the environment, social welfare, competitiveness, development of rural areas, etc.*

*The paper has been developed within the State Program "Development of new economic instruments for assessing and stimulating the competitiveness of agriculture of the Republic of Moldova for the years 2020 - 2023" (code - 20.80009.0807.16), financed from the state budget of the Republic of Moldova through the National Agency for Research and Development.*

**Keywords:** agriculture, Republic of Moldova, European Union, Common Agricultural Policy

**JEL classification:** Q10, Q18

**UDC :** 338.43(478)

## GRAPE MARKETS DIVERSIFICATION TRENDS

**Tatiana IAȚIȘIN, Scientific Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies Moldova**

<https://orcid.org/0000-0002-8339-795X>, [tatianaiatisinr@yahoo.com](mailto:tatianaiatisinr@yahoo.com)

**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.24>

*One of the strategic sectors of the Republic of Moldova is agriculture, and viticulture being one of the main branches. Viticulture and the processing industry in the sector contribute to the country's budget with about 25-35% of the accumulations. Annually, a positive trend is registered regarding the production of grapes and the average yield per ha. The Republic of Moldova registers a high potential in terms of grape export, about 60-70 thousand tons of table grapes are exported annually. About 66% of the grapes are exported to the traditional market, 28% are traded in the EU and 9% – on other markets. For the diversification of export markets, both producers and exporters must take measures on the quality of grapes, sorting, correct storage of grapes, correct diversification of packaging and the implementation of international standards.*

*The purpose of this paper is to present the market analysis of table grapes and the market diversification trends. The research was carried out based on the data of the National Bureau of Statistics, the reports of the authorities, using the analysis, synthesis, tabular and graphic methods.*

*The paper has been developed within the State Program "Development of new economic instruments for assessing and stimulating the competitiveness of agriculture of the Republic of Moldova for the years 2020 - 2023" (code - 20.80009.0807.16), financed from the state budget of the Republic of Moldova through the National Agency for Research and Development.*

**Keywords:** viticulture, grape, which table grapes, export

**JEL classification:** Q10, Q12, Q17

**UDC:** 338.439.5:634.8(478)

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## DEVELOPMENT OF SOUR CHERRY PRODUCTION IN THE REPUBLIC OF MOLDOVA

**Alexandru CEBAN, Scientific Researcher,  
National Institute for Economic Research, Academy of Economic Studies Moldova**

<https://orcid.org/0000-0002-3300-4054>, [ceban\\_alexander@yahoo.com](mailto:ceban_alexander@yahoo.com)

**Eugenia LUCASENCO, Scientific Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0002-5032-7963>, [eugenia\\_lucasenco@yahoo.com](mailto:eugenia_lucasenco@yahoo.com)

**DOI:** <https://doi.org/10.36004/nier.cecg.II.2023.17.25>

*Sour cherries represent one of the most important Moldovan fruits grown in the Republic of Moldova, with a great potential for modernization and further development of production. There is noticed a slow growth in terms of surface, as well as production and average yield per hectare for sour cherries. At the same time, exports account for about 19% of the total production. Compared to world exports, sour cherry production in the Republic of Moldova possesses a very high Revealed Comparative Advantage index. Therefore, the purpose of this paper is to carry out an analysis of sour cherry production in the Republic of Moldova, to analyze the current situation, development trends as well as the degree of international competitiveness for the given product with respect to the world trade. Thus, the research methods selected and used for the given article refer to the analytical, descriptive, comparative method, as well as through the Revealed Comparative Advantage indicator. Although the demand for sour cherries is increasing there are some existing issues in the field that need to be addressed in order to have a successful horticultural business. At the same time, the paper presents a specific argumentation for the existence of a development potential of this sub-sector in order to persuade farmers to get engaged in this specific activity.*

*The paper has been developed within the State Program "Development of new economic instruments for assessing and stimulating the competitiveness of agriculture of the Republic of Moldova for the years 2020 - 2023" (code - 20.80009.0807.16), financed from the state budget of the Republic of Moldova through the National Agency for Research and Development.*

**Keywords:** sour cherries, production, trade, Revealed Comparative Advantage, Moldova

**JEL classification:** Q10, Q17, Q1

**UDC:** 338.439.5 :334.232(478)



## THE IMPORTANCE OF DIVERSIFYING THE AGRICULTURE OF THE REPUBLIC OF MOLDOVA IN THE CURRENT GEOPOLITICAL CONDITIONS

**Viorel TURETCHI, Scientific Researcher,  
National Institute of Economic Research,  
Academy of Economic Studies of Moldova**  
Tur\_etchiv@gmail.com

DOI: <https://doi.org/10.36004/nier.cecg.II.2023.17.26>

*Economic, political and social crises, as well as frequent natural disasters, have a significant impact on agricultural entrepreneurial activity. The chronic lack of financial and labour resources, the modernization and slow implementation of innovative production technologies, as well as the low level of professional training of specialists in the respective field have significantly limited the range of agricultural crops grown in our country. As a result, cereal crops of the first and second groups are grown on two-thirds of the total arable area, technical crops - about a third, and vegetables and other oil crops occupy tiny areas.*

*The given structure guarantees annually the obtaining of quantities of grain that exceed two to three times what is needed to provide for the population of our country. Therefore, this grain surplus is exported to foreign markets as a raw material, the realization price being very low. At the same time, in the context of the war in Ukraine, the international market is oversaturated with grain production of Ukrainian origin, transited through the territory of our country and sold at low prices. Consequently, domestic farmers found themselves unable to produce even at the respective prices.*

*The given situation perfectly reflects the vulnerability of the narrow specialization of the domestic agricultural sector, the lack of a genuine value chain, the inability to maintain a high level of production, emphasizing, at the same time, the need to diversify the national agricultural sector.*

*The paper has been developed within the State Program "Development of new economic instruments for assessing and stimulating the competitiveness of agriculture of the Republic of Moldova for the years 2020 - 2023" (code - 20.80009.0807.16), financed from the state budget of the Republic of Moldova through the National Agency for Research and Development.*

**Keywords :** agriculture, specialization, diversification, technologies, production

**JEL classification:** Q13, Q15, Q16, R10

**UDC:** 338.43

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## STRATEGIC IMPORTANCE OF SUNFLOWER CULTIVATION FOR THE REPUBLIC OF MOLDOVA

**Alexandru OSOIANU, PhD student,  
Technical University of Moldova**  
osoianu.alexandru@mail.ru

DOI: <https://doi.org/10.36004/nier.cecg.II.2023.17.27>

*The essential factor in enhancing the economic potential of a country lies in international trade and the exchange of goods with the global community. The magnitude of this potential is typically revealed through the export and import of goods, both of which exert economic and social impacts on the economy of the Republic of Moldova. This study aims to provide an analysis of a product with one of the most significant impacts on the volume of exports and imports in the Republic of Moldova and worldwide – sunflower. Currently, the sunflower seed market holds exceptional importance for farmers and intermediary traders, as a portion of their income is derived from the sale of sunflower seeds. Additionally, it is crucial for consumers who utilize sunflower oil and other products derived from this crop. This study presents a series of analyses related to the international and global trade of sunflower seeds, as well as the by-products obtained through seed processing.*

**Keywords:** analysis, export, import, sunflower, income, region

**JEL classification:** Q1, P33

**UDC:** 338.439.5:633.854.78(478)

## SESSION III

# CIRCULAR ECONOMY, DIGITIZATION AND FINANCE

### INTERACTION OF MONETARY AND FISCAL POLICIES IN A SMALL OPEN ECONOMY

**Viorica LOPOTENCO, Habilitated Doctor,  
Associate Professor of Investment and Banking,  
Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0003-1296-1995>, [lopotenco.viorica@ase.md](mailto:lopotenco.viorica@ase.md)

**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.1>

*The consequences of the COVID-19 pandemic, intensified by Russia's aggression in Ukraine, determined that in both developed and emerging countries, the monetary and fiscal authorities could not ensure efficiency in achieving the objectives of financial policies.*

*This study aims to identify the determinants of monetary and fiscal policies in a small open economy, in the example of the Republic of Moldova, which must not only ensure the stability of the financial system but also correspond to the trends of the "new normal," through the interconnection with innovation, which it drives the expansion of private digital currencies and FinTech.*

*Both qualitative (phenomenological analysis) and quantitative (inferential statistics) methods were used in the research process. At the same time, the case study research strategy was applied (within determining the particularities of the interaction between fiscal and monetary policies in a small open economy, in the example of the Republic of Moldova).*

*In the Republic of Moldova, the coordination mechanism of fiscal and monetary policy instruments differs by its specificity from countries with developed economies. The assessment of the short-term effects of fiscal and monetary policy instruments on macroeconomic indicators indicates that they are very approximate and, in many situations, contradictory. At the same time, the monetary policy in the Republic of Moldova has several notable characteristics, particularly a qualitative dependence on external economic factors and external economic shocks.*

*Bibliographic sources that research the relationship between fiscal and monetary policies in the context of the significant changes in the world economy were used for this study. A deeper analysis requires the application of more complex econometric methods to determine the impact of the relationship between monetary policy and fiscal policy on several macroeconomic variables. At the same time, we note the usefulness of the study results for the authorities of the Republic of Moldova.*

**Keywords:** *monetary policy, fiscal policy, instruments of monetary and fiscal policies, money supply*

**JEL classification:** *E52, E62, F64*

**UDC:** *336.02*

# NEW EUROPEAN AND INTERNATIONAL TAXATION PROSPETIVES. THE CASE OF THE ITALIAN'S WEB TAXATION. TOWARDS THE TAXATION OF THE DATA ECONOMY AND GLOBAL MINIMUM TAX

**Filippo Luigi GIAMBRONE, Adjunct Professor,  
Researcher of tip A in taxes law,  
University of Sannio, Benevento, Italy**

<https://orcid.org/0000-0003-0986-4641>, [filippo.giambrone@unisannio.it](mailto:filippo.giambrone@unisannio.it)

**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.2>

*The age of the internet and digital commerce has brought about complexities in taxation, particularly concerning multinational digital corporations. International discussions have sought ways to ensure fair taxation of these entities, but consensus has been challenging to reach. The paper aims to understand Italy's digital taxation measures, its alignment (or conflict) with EU directives, and the global efforts towards taxing digital multinational enterprises.*

*In its document analysis, the research meticulously scrutinized Italy's taxation laws, giving particular emphasis to Article 17-bis and the Budget Law of 2018. Through comparative analysis, the research delved deep into EU directives, notably the Directive Proposal COM (2018) and the Directive 2006/112/EC, with the intent of discerning the harmony or disparities with the prevailing Italian statutes. Using historical analysis, the research charted the trajectory of international dialogues on digital taxation, commencing with the G7 in Bari in 2017, progressing to the G20 in Buenos Aires in 2018, and encapsulating subsequent summits. Turning to policy analysis, the research methodically probed into the nuances of the "Next Generation EU" recovery plan alongside the OECD's avant-garde two-pillar model. Finally, within its quantitative analysis, the research embarked on an exploration of the conceivable repercussions of the proposed thresholds for both revenue and profit rates. In its appraisal of Italy's Web Tax, the research reveals that the nation's digital tax harmonizes with VAT in spirit. However, it predominantly emphasizes B2B digital transactions, thus deviating from the recurrent mechanism that defines conventional VAT. As for the vision of the European Union, the research underscores the EU's ambition, channelled through Directive Proposal COM (2018), to institute a cohesive VAT transaction system for cross-border B2B merchandise. Notably, Italy's digital taxation approach doesn't seamlessly dovetail with this vision. With respect to the global consensus, the research elucidates that subsequent to the ravages of the COVID-19 pandemic, international discourse has exhibited a marked tilt toward the inception of a global minimum tax. Such a tax is envisioned to guarantee the equitable taxation of digital multinationals, uninfluenced by their geographical operational outposts. Delving into challenges, the research posits that the actualization of universal taxation standards is not without its hurdles. Nuanced challenges like revenue thresholds imply that a mere handful of corporations may come under its ambit. The intricate task of adapting to ever-shifting digital landscapes and the formidable challenge of reigning in the dark web further complicate the equation. Gazing into the future trajectory, the research intimates that contemporary accords hint at the prospective dissolution of individualized digital service taxes by the horizon of 2023. This is seen as a stepping stone toward a global minimum tax paradigm. Anticipations include the evolution of domestic directives, the fortification of bilateral agreements, and the emergence of a cohesive multilateral instrument. Yet, the stance of certain EU member nations remains enshrouded in uncertainty. In conclusion, while the digital age has brought about unmatched growth and opportunities, it has also surfaced complexities in its taxation. Italy's efforts, in sync with global moves, underscore the growing need for a comprehensive and fair digital taxation framework. However, the path to uniformity and consensus remains intricate and will require coordinated international collaboration.*

**Keywords:** *web taxation, data economy, digital service tax, global minimum tax*

**JEL classification:** *H30, Q53, Q56, Q58*

**UDC:** *336.221(450)*

## CIRCULAR ECONOMY IN PRACTICE: KEY ACTORS IN SUSTAINABLE TRANSFORMATION

**Rodica PERCIUN, Habilitated Doctor, Associate Professor,**  
**National Institute of Economic Research, Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0001-5767-6835>, [rodica21@gmail.com](mailto:rodica21@gmail.com)

**Larisa ŞAVGA, Habilitated Doctor,**  
**Trade Co-operative University of Moldova**  
<https://orcid.org/0000-0002-9691-7475>, [savga.larisa@chisinau.edu.md](mailto:savga.larisa@chisinau.edu.md)

**Victoria IORDACHI, PhD, Associate Researcher,**  
**National Institute of Economic Research, Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0002-9176-3729>, [timush\\_v@yahoo.co.uk](mailto:timush_v@yahoo.co.uk)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.3>

*This article explores the essential contribution of different actors in promoting and implementing the circular economy, a sustainable economic model that aims to minimize waste and maximize resources. The article provides a comprehensive insight into how the circular economy is being put into practice and underlines the importance of involving all actors in this sustainable transformation. By looking at the roles and collaborations between governments, companies, non-governmental organizations and citizens, this article provides a detailed insight into how the circular economy comes to life in practice. It emphasizes the contribution of key actors such as governments, who can enact policies and laws favorable to the circular economy, and companies, who can develop innovative products and processes. The article also highlights the active involvement of non-governmental organizations in educating and raising public awareness of the benefits of the circular economy and how citizens can contribute through responsible consumption practices. Through case studies and concrete examples, the article illustrates how these key players are working together to create a more sustainable supply chain and economic environment. In conclusion, it is emphasized that the collaboration between these actors is essential for achieving a successful transition to the circular economy and for building a greener and more sustainable future.*

*This paper was supported by the State Program 20.80009.0807.22 Development of the mechanism for the formation of the circular economy in the Republic of Moldova.*

**Keywords:** circular economy, sustainable transformation, key actors, intersectoral collaboration, environmentally friendly policies, responsible consumption, waste management, public awareness

**JEL classification:** Q01, Q53, Q58

**UDC:** 338

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## ON THE USE OF TIME SERIES MODELS FOR THE MONITORING AND FORECASTING OF BUDGET REVENUES: THE CASE OF MOLDOVA

**Apostolos PAPAPHILIPPOU, PhD,**  
**Four Assist Development Consulting Limited, Greece**  
<https://orcid.org/0000-0002-2193-4035>, [papaphilippou@4assist.eu](mailto:papaphilippou@4assist.eu)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.4>

*The study discusses the use and limitations of time series models as additional instruments for monitoring and forecasting total budget revenues. Following an analysis of the properties and estimation of time series models, the paper presents the data set to be used for the estimation exercise, as well as analyse the data's stationarity and the correlogram of the stationary series to be modelled. The data sample includes the quarterly evolution of total budget revenues in Moldova from the first quarter of 2016 to the first quarter of 2023. The paper includes the econometric estimates of the preferred time series model, as well as out-of-sample forecasts of the quarterly evolution of budget revenues from the second quarter of 2023 to the fourth quarter of 2024. The preferred model's annual forecast of budget revenues for 2023 is slightly more optimistic than the Ministry of Finance's estimate for 2023 contained in the recently approved Medium Term Budget Framework document and is very close to the projection of the International Monetary Fund contained in its latest country report for Moldova. The paper concludes by summarising the uses and limitations of time series models for monitoring and forecasting the evolution of budget revenues and suggesting areas for further work.*

**Keywords:** Time Series Econometrics, Auto-Regressive Integrated Moving Average Models, Budget Revenues, Moldova

**JEL classification:** C01, C22, H62, H68, L62

**UDC:** 336.14:330.43(478)

## HUMAN RIGHTS-BASED BUDGETING: SOLUTION TO CONSOLIDATE ECONOMIC, SOCIAL AND CULTURAL RIGHTS

Angela SECRIERU, Habilitated Doctor, Professor,  
Academy of Economic Studies of Moldova

<https://orcid.org/0000-0002-5782-8840>, [angelasecrieru@yahoo.com](mailto:angelasecrieru@yahoo.com)

Iulian SECRIERU, PhD student,

Academy of Economic Studies of Moldova

<https://orcid.org/0009-0007-7429-0417>, [iu\\_secrieru@yahoo.com](mailto:iu_secrieru@yahoo.com)

DOI: <https://doi.org/10.36004/nier.cecg.III.2023.17.5>

*Holding governments accountable for respecting and protecting economic, social, and cultural rights is a significant challenge. The paper addresses the issue of the participatory budget process, mandatory and based on human rights, highlighting its perspectives on the case of the Republic of Moldova. The authors test and validate the hypothesis according to which the efficiency of public spending through the lens of human rights issues and their budgeting represents one of the most potent mechanisms for strengthening human rights.*

*The budget process is approached through the lens of the following human rights standards: ensuring the satisfaction of the "minimum essential level" for each right, the progressive achievement of the full realization of human rights, and non-retrogression in exercising human rights. The following topics are reflected in the work: the essence of the budget based on human rights; the relevance of human rights principles to the budget process; monitoring of human rights principles within the budget process. The research carried out by the author has an interdisciplinary character, discussing aspects connected to public finance, law, and statistics.*

*Systems research methods and models were applied to study the issue of human rights in correlation with the budget process. For this purpose, a combination of methods is used - analysis and synthesis, deduction and induction, correlation analysis, factor analysis, dynamic analysis, expert analysis, etc.*

*The general conclusion formulated by the authors is that governments must respect and protect human rights throughout the budget process in all budget decisions, legislation, policies, and practices.*

**Keywords:** *participatory budgets, the national public budget, public expenditures, human rights, budgetary principles, budgetary process*

**JEL classification:** *H50, H60, K38*

**UDC:** *336.143(478)*

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## TAX HAVENS. ECONOMIC EFFECTS ON THE GLOBAL ECONOMY

Nicoleta MIHĂILĂ, PhD,

Centre for Financial and Monetary Research "Victor Slăvescu", Romania

<https://orcid.org/0009-0009-4791-8656>, [nicoleta.mihaila@icfm.ro](mailto:nicoleta.mihaila@icfm.ro)

DOI: <https://doi.org/10.36004/nier.cecg.III.2023.17.6>

*The purpose of our paper is to highlight the main negative economic implications of the existence of tax havens, namely the increase in harmful tax competition, the erosion of the tax base and implicitly the reduction of tax revenues; all these negatively affect the economic development of a country, negatively affecting direct investments, or effects on the structure of tax revenues. However, it should be mentioned that in addition to the negative ones, there are also positive effects/implications on the economy, respectively, they can contribute to the reduction of taxes in other jurisdictions, or even the economic development of tax havens. The methodology used is descriptive and empirical, by calling on various bibliographic sources, with a preponderance of foreign specialized literature, as well as a quantitative methodology, for the processing and analysis of data taken from international databases.*

**Keywords:** *tax haven, tax competition, tax revenues, erosion of the tax base, investments*

**JEL classification:** *F23, F63, H26*

**UDC:** *336.227.5*

# THE IMPACT OF ARTIFICIAL INTELLIGENCE ON STRATEGIC FINANCE MANAGEMENT SUCCESS

**Ercan ÖZEN, PhD in Economics,**  
**Uşak University, Faculty of Applied Science, Türkiye**  
<https://orcid.org/0000-0002-7774-5153>, [ercan.ozen@usak.edu.tr](mailto:ercan.ozen@usak.edu.tr)  
**Mesut ATASEVER, PhD, Associate Professor,**  
**University of Uşak, Faculty of Applied Science, Türkiye**  
<https://orcid.org/0000-0002-7189-7551>, [mesut.atasever@usak.edu.tr](mailto:mesut.atasever@usak.edu.tr)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.7>

*The main aim of this article is to examine the impact and importance of artificial intelligence on strategic finance management and to provide a perspective on how businesses can use it in their financial decision-making processes. Today, businesses tend to adopt a more data-oriented and rational approach in their financial decisions in order to maintain their competitive advantage and ensure sustainable growth in rapidly changing market conditions. Artificial intelligence has had a great impact in the finance industry and has helped financial managers make more effective and accurate decisions in strategic finance management.*

*Strategic finance management aims to achieve long-term goals by using the resources of companies effectively. The integration of artificial intelligence into financial decision-making processes improves the strategic planning and risk management processes of financial managers by providing faster and more accurate data analytics.*

*This article will be a compilation of important sources and research in the literature, and the impact and applications of artificial intelligence in the field of strategic finance management will be emphasized. In addition, its effects on the performance and competitiveness of companies will be examined and the advantages and challenges of artificial intelligence in financial decision-making processes will be discussed.*

*The use of artificial intelligence in the field of financial management is increasing day by day. The contribution of this technology to the strategic financial management of enterprises is supported by the growth and success stories observed in many sectors. The ability of artificial intelligence to analyze and forecast financial data has allowed the acceleration of financial decision-making processes and the adoption of more data-driven strategies. For this reason, experts and researchers in the financial sector are interested in understanding the impact of artificial intelligence on strategic finance management success and determining its future potential.*

**Keywords:** artificial intelligence, strategic finance management, data analytics, risk management, portfolio management

**JEL classification:** C53, G17, G32

**UDC:** 005.915:004.8

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## FINTECHS AND INNOVATIVE FINANCIAL INSTRUMENTS IN THE CONTEXT OF THE DIGITAL AGE

**Otilia MANTA, PhD, Professor,**  
**“Victor Slăvescu” Centre for Financial and Monetary Research,**  
**Montana Economy Center “CE -MONT”, Romanian Academy, American University, Romania**  
<https://orcid.org/0000-0002-9411-7925>, [otilia.manta@icfm.ro](mailto:otilia.manta@icfm.ro) or [otilia.manta@rgic.ro](mailto:otilia.manta@rgic.ro)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.8>

*We are currently witnessing a reshaping of the financial system, as a result of the challenges and influencing factors generated by the digital era and the multi-crises of recent years, the extent of FinTechs (financial technology) being carefully evaluated and which include new innovative technologies aimed directly at optimizing financial processes and the automation of classic services for both corporate clients and physical personal financial services consumers. The digitization of financial institutions has determined that the attention on FinTechs is increasing, which is why with this paper we propose to contribute to the field of "digital finance" by identifying and presenting bibliometric analyses of the specialized scientific literature related to the topic Fintech. Our analysis is based on the metadata identified both in databases and in certain works from specialized journals, the data processing being through the VOSviewer and Biblioshiny software. The subject of Fintech is analysed both within the present paper, as a result of the fact that for the academic environment itself there is an interest in redefining financial models in the context of the digital age, but also a permanent involvement of us as researchers in future research works.*

**Keywords:** finance, innovation, bibliometric analysis, sustainability

**JEL classification:** G00, O30, Q56

**UDC:** 001.895:336



# DIRECTIONS FOR DEVELOPMENT OF THE INSURANCE SECTOR IN THE REPUBLIC OF MOLDOVA

**Angela TIMUS, PhD, Associate Professor,**  
**National Institute of Economic Research, Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0002-2556-3198>, [ince.timush@gmail.com](mailto:ince.timush@gmail.com)  
**Olga TIMOFEI, PhD, Associate Professor,**  
**University of European Studies of Moldova**  
<https://orcid.org/0000-0002-2201-9496>, [o\\_timofei@yahoo.com](mailto:o_timofei@yahoo.com)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.9>

*The present study aims to analyze the insurance market situation globally and in the Republic of Moldova, with a focus on the trends in the country's insurance sector. The methodology employed involves a detailed investigation of national legislation and the application of international regulatory practices in the insurance field, accompanied by an analysis of the effects reflected in the core indicators of the sector. The empirical analysis is based on data derived from reports and statistics pertaining to the domestic insurance market. The obtained results reveal that the lack of appropriate culture and behavior among customers in the insurance domain represents a major hindrance for the population of the Republic of Moldova in accessing insurance service. This situation is primarily due to the inadequate promotion of insurance products, limited awareness regarding their utility and importance, and a low financial literacy. Additionally, constraints in the domestic insurance market encompass several aspects, such as the absence of efficient financial instruments for placing insurance reserves, underdeveloped market and the lack of a developed capital market, frequent changes in the legal and regulatory framework, low capitalization levels of insurance companies, restrictions on competition in certain sectors, and imperfect legal and organizational support for state insurance supervision. Based on these findings, it is recommended to implement a set of measures to stimulate the development of the insurance sector in the Republic of Moldova. These measures include the implementation of an incentives system that would encourage voluntary and life insurance uptake, promoting life insurance packages that offer savings options as an alternative to pension funds, revising the current model of medical insurance to strengthen the function of healthcare services quality control, developing online sales services as the primary means of marketing, ensuring the reliability and sustainability of the insurance system, improving the corporate governance of insurance companies through increased transparency, and enhancing the regulatory framework to enable the digital development of the insurance sector. The stability and resilience of the insurance sector are essential for the economy, and the implementation of the mentioned measures will contribute to the sustainability of businesses and the well-being of the population, as well as the overall development of the insurance sector.*

**Keywords:** Insurance, Insurance Companies, Financial Literacy, Economic Development  
**JEL classification:** F63, G22, G53  
**UDC:** 364(478)

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## SUSTAINABLE CONSTRUCTION WASTE MANAGEMENT - CHALLENGES AND OPPORTUNITIES IN PROMOTING THE CIRCULAR ECONOMY

**Victoria IORDACHI, PhD, Associate Researcher,**  
**National Institute of Economic Research, Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0002-9176-3729>, [timush\\_v@yahoo.co.uk](mailto:timush_v@yahoo.co.uk)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.10>

*The sustainable management of construction waste represents a major challenge in promoting the circular economy. Construction is responsible for a significant amount of waste, and its proper management is essential to minimize environmental impact and create an efficient circular system. This article examines the challenges and opportunities associated with the sustainable management of construction waste. Challenges include the diversity and complexity of materials used in construction, as well as the need to develop adequate infrastructures for waste collection, sorting and recycling. However, there are also many opportunities in promoting the sustainable management of construction waste. The circular economy offers the opportunity to turn waste into valuable resources through recycling, reuse and reuse. To fully exploit these opportunities, collaboration between the public and private sectors is required, as well as the development of coherent policies and regulations for the management of construction waste. In conclusion, the sustainable management of construction waste represents both a challenge and an opportunity in promoting the circular economy. By adopting effective strategies and policies, implementing innovative technologies and involving all stakeholders, we can help reduce the impact of construction waste on the environment and build a more sustainable future. This paper was supported by the State Program 20.80009.0807.22 Development of the mechanism for the formation of the circular economy in the Republic of Moldova.*

**Keywords:** circular economy, waste management, construction waste management, sustainable construction, recycling, reuse, environment  
**JEL classification:** Q01, Q53, Q56  
**UDC:** 338.45:628.4



## PRACTICAL STUDY REGARDING INTERNAL AUDIT PREPARATION

**Mariana Rodica ȚÎRLEA, PhD, Associate Professor,  
„Dimitrie Cantemir” Christian University, Bucharest, Romania**  
<https://orcid.org/0000-0002-0665-5839>, [rodicatrilea1@yahoo.ro](mailto:rodicatrilea1@yahoo.ro)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.11>

*The internal audit represents an annual and multi-annual planned activity of the audited company that takes place through specific actions and activities based on risk analysis. According to national regulations, the internal audit activity is mandatory or optional, performed only by financial auditors. The internal audit is carried out gradually in four stages: 1. preparation of the internal audit activity, 2. intervention of the auditor on site, 3. reporting of the results, 4. follow-up of the auditor's recommendations. Approaching the internal audit in an objective, methodical and systematic manner, based on the concrete conditions aimed at human capital resources, material and financial resources and company culture ensures the added value contribution of the internal audit that is associated with insurance, consulting or advice in the areas of governance, risk management and control of the audited company.*

**Keywords:** Internal audit, assurance, control, governance, management, stages, internal audit report, internal auditor's recommendation

**JEL classification:** G31, M42, M48, M54

**UDC:** 657.6

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## ACCOUNTING AND SOCIAL AUDITING IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

**Svetlana MIHĂILĂ, PhD, Associate Professor  
of Department of Accounting, Audit and Economic Analysis,  
Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0001-5289-8885>, [svetlana.mihaila@ase.md](mailto:svetlana.mihaila@ase.md)  
**Galina BĂDICU, PhD, Associate Professor  
of Department of Accounting, Audit and Economic Analysis,  
Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0002-9429-3654>, [badicu.galina@ase.md](mailto:badicu.galina@ase.md)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.12>

*Actuality. The evolution of accounting, conditioned by the dynamics of economic, social and environmental events specific to globalization, requires its adaptation through social programmes and evaluation procedures in the allocation of resources towards better welfare and social inclusion. Thus, social accounting is the means by which attempts are made to express the effects of social programmes in some kind of quantitative terms. And in this context, it is certain that there are no specific standards or rules to follow, and entities usually get a lot of flexibility when it comes to implementing social audits.*

*Purpose. In the course of the work, we aim to find out if social accounting can be considered an opportunity for sustainable development, through which entities try to face social and environmental problems. In this context, the scientific approach will address the conceptual framework and objectives of social accounting, characteristics, principles and techniques, advantages and limits of social accounting. Therefore, in order to maintain a delicate balance between social initiatives, social audits exert a strong influence on the impact of the corporate image of entities.*

*Methodology. In order to achieve the purpose of the research, through an exhaustive examination, the analytical method and the webographic analysis were used to assess the scientific performance in the field of research. By means of qualitative research referring to the literature, given the complexity and the need to deepen the dimension of social accounting and auditing. The qualitative method involved the analysis of the research topics present in the published works, which are found in Web of Science, Scopus and EBSCO databases.*

*Results. The results of the scientific approach are characterized by the identification and better understanding of the concept of social accounting and social auditing in the context of sustainable development, identification of their characteristics and particularities; outlining and classification of principles and techniques; definition and clarification in an evolutionary and argumentative approach of the concept of social accounting and social auditing.*

**Keywords:** social accounting, social auditing, sustainable development

**JEL classification:** M40, M41

**UDC:** 657

## UNCONVENTIONAL MONETARY POLICIES ADOPTED DURING THE PANDEMIC CRISIS: THE RESPONSE OF THE EUROPEAN CENTRAL BANK

**Dorina CLICHICI, PhD,**  
**Institute for World Economy, Romanian Academy, Bucharest, Romania**  
<https://orcid.org/0000-0002-8337-6489>, [dorina.clichici@iem.ro](mailto:dorina.clichici@iem.ro)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.13>

*The global pandemic event that took place in 2020 had major negative repercussions on the economies of the world. Aiming to stabilize financial markets and cushion the contraction of the real economy, the central banks' response was swift and unprecedented. They initiated a series of non-conventional monetary measures, aimed at ensuring favorable financing conditions, providing liquidity and new credit facilities to the financial system, ensuring the smooth functioning of the financial market and providing liquidity in foreign exchange. The purpose of the article is to analyse the particularities of the use of unconventional instruments by developed and emerging economies during the pandemic. Also, considering the major role of the ECB for the financial system of the euro area, of the European Union, but also for the world financial system, our article analyses the set of instruments used by the European monetary authority in the context of the pandemic event. This article is based on broader research developed by the author as part of the 2022 Institute for World Economy study - Unconventional Approaches of Central Banks in the Pandemic Crisis. The financial and economic implications in the states of Central and Eastern Europe - Coordinator Dr. Habil. Mihai Nițoi.*

**Keywords:** COVID-19 pandemic, central banks, unconventional monetary policy, ECB, European Union  
**JEL classification:** E50, E52, E58  
**UDC:** 336.02(4)

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## ACTUAL GLOBAL TRENDS THE OF SHARING ECONOMY

**Ivan LUCHIAN, PhD in Economics,**  
**Moldova State University**  
<https://orcid.org/0000-0002-8683-7228>, [luchian\\_ivan@mail.ru](mailto:luchian_ivan@mail.ru)  
**Traian DONCEV, Founder/CEO,**  
**Most Organic, Moldova**  
[tdoncev@gmail.com](mailto:tdoncev@gmail.com)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.14>

*The collaborative economy is a socio-economic model based on the concept of the joint use of physical and human resources, which provides for the creation, production, distribution, trade and consumption of goods and services by individuals and organizations, jointly. It is known by a wide variety of names: access economy, crowd-based capitalism, collaborative economy, community-based economy, gig economy, peer economy, peer-to-peer economy, platform economy, renting economy and on-demand economy. The purpose of this article is to highlight the global trends in the field of sharing economy. In order to perfect this publication, the opinions of experts in the field addressed from different countries were examined. Sharing economy has a number of positive aspects, as well as certain shortcomings. During the economic and ecological crisis, the development of the sharing economy presents itself as one of the effective solutions. The global sharing economy market in the year 2022 was about 150 billion USD. The forecast is to reach USD 335 billion in 2025 and USD 794 billion by 2028. Today we can talk about the following areas of the sharing economy: collaborative consumption, open knowledge, joint production, joint financing. The development of the sharing economy is linked to the digitization process. The implementation of the sharing economy in the Republic of Moldova can have beneficial effects, but it requires legislative, administrative, economic and educational efforts.*

**Keywords:** sharing economy; fields of application; development directions  
**JEL classification:** O15, Q01, Q56  
**UDC:** 338(100)

## CIRCULAR ECONOMY – THE NEW WAY OF SUSTAINABLE DEVELOPMENT

Parvin VERDIEVA, PhD in Economic Sciences,  
Baku University of Eurasia, Azerbaijan

<https://orcid.org/0000-0002-1721-2654>, [v.pervin@yahoo.com](mailto:v.pervin@yahoo.com)

DOI: <https://doi.org/10.36004/nier.cecg.III.2023.17.15>

*The problem that has existed since the first day of society is limited resources and infinite needs. It is precisely on this problem that economic science is based. The number of people is constantly growing, so the needs and requests are also growing. In such conditions, how do programs effectively use limited resources, what programs make productive translations? In the modern era, when a society of acute consumer tension was formed, developing countries already prefer development models focused on resource conservation when drafting economic development strategies. This is due to the fact that existing resources must be used so as not to deprive future generations of the opportunity to use them.*

*The increase in intensity of consumption of resources and the increase in ecological problems led to the necessity of developing alternative concepts of economic development. We already see that many countries are moving to the concept of "circular economy" when developing their policy of permanent development. What is the "circular economy"? The traditional development model, known as "linear economy", is based on the concept of production, production, consumption and emissions. "Circular economy", on the contrary, represents a new concept that promotes the efficient use of resources, minimization of emissions and support for the use of renewable energy sources. The main goal of the circular economy is to create a sustainable system that can preserve the economic value and usefulness of resources, materials and goods for a long time. In this article, the main characteristics of the circular economy model are considered, which can provide new opportunities for future generations, ensuring a balance between ecological, social and economic factors. The perspectives of applying this model in the countries of the Turkic world, which forms the basis of the development strategy of many countries, are also being explored.*

**Keywords:** circular economy, linear economy, minimal waste, sustainable development, countries of the Turkic world

**JEL classification:** Q01, Q53, Q58

**UDC:** 338

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## DIRECTIONS TAKEN BY THE EUROPEAN UNION AND THE REPUBLIC OF MOLDOVA IN FUEL SUPPLY AS RESULT OF UKRAINE WAR

Stela CIOBU, PhD, Associate Professor,  
Academy Economic Studies of Moldova

<https://orcid.org/0000-0002-2542-0955>, [stela.ciobu@gmail.com](mailto:stela.ciobu@gmail.com), [ciobu.stela@ase.md](mailto:ciobu.stela@ase.md)

Ana BALAN, master graduate,

Academy Economic Studies of Moldova

<https://orcid.org/0000-0002-6796-1434>, [anabalanursu@gmail.com](mailto:anabalanursu@gmail.com)

DOI: <https://doi.org/10.36004/nier.cecg.III.2023.17.16>

*The consequences of the war in Ukraine have a negative impact on the economies of many countries. A survey by the UN development program says that in just three months, 71 million people have reached the poverty line, which shows a much faster increase than during the pandemic.*

*It is evident that the fuel prices, which have been increasing more and more, have influenced the increase in the prices of food and maintenance products. The ever-increasing growth of oil consumption and the economic crisis as a consequence of the war in Ukraine have pushed the price of Brent oil above \$100/barrel, a record price recorded in recent years.*

*We understand the challenges governments around the world now face to make quick decisions while ensuring those decisions position their countries' economies for a better future.*

*Experts in the field say that the world must find solutions in the use of renewable sources to replace fossil fuels. This implies fair access for everyone to renewable energy technology, but without implemented policies that encourage domestic and foreign investments in renewable energy, of course and with subsidies from the state, we will not be able to achieve the desired goal.*

**Keywords:** oil, oil producing/consuming companies, oil market, OPEC, Brent, WTI, Hydrocarbons, Barrel, Regulatory framework, Sanctions, oil price, gasoline, diesel

**JEL classification:** F01, F13, F15, F18, F23, F51, G13

**UDC:** 338.45:665.6(477)

## SOME DIRECTIONS OF ACTION IN EXTERNAL DEBT MANAGEMENT MEANT TO MINIMIZE THE RISKS OF A DEBT CRISIS IN ROMANIA

Camelia MILEA, PhD in Economics, Scientific Researcher III  
Centre for Financial and Monetary Research of the Romanian Academy "Victor Slăvescu", Romania  
<https://orcid.org/0000-0002-6810-2164>, [camelia.milea@icfm.ro](mailto:camelia.milea@icfm.ro)  
DOI: <https://doi.org/10.36004/nier.cecg.III.2023.17.17>

*Considering the almost continuous increase in Romania's external debt after 2006, as well as the discontinuous rise in the share of short-term external debt in the total external debt starting from 2010, the author aims to highlight the most important risks that can affect the external debt, as well as some measures aimed at minimizing the risks of a debt crisis in Romania. In the article, it is shown that price fluctuation (namely, exchange rate and interest rate) is the most important risk for external debt management. Next, there are presented the factors influencing the price risk, and the ability to pay the external debt service. Also, there are suggested some measures meant to improve the evolution of these factors, as well as some directions of action to minimize the risks of a debt crisis in Romania. They include supporting the growth of exports with elevated added value and a high degree of processing, reducing the share of short-term external debt in the total external debt, correlating the currencies in which exports are sold and of foreign exchange reserves with the currencies in which external debt is contracted, tempering the rate of growth of the external debt, especially of the short-term debt. The methodology used consists of comparative and descriptive analyses, empirical analysis, drawing of conclusions and literature review. The article is based on the research project "Romania's external indebtedness in current and perspective conditions", elaborated in CFMR "Victor Slăvescu" in 2022, under the coordination of Camelia Milea, Ph.D.*

**Keywords:** foreign debt, risk, crisis, debt management, fluctuations, interest rate, foreign currency, economic growth  
**JEL classification:** F31, F34, H63  
**UDC:** 339.72.053.1(498)

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## INVESTMENT, INNOVATION, QUALITY – THE KEY TO THE SUCCESS OF BAKERY COMPANIES OR THE RISK FOR THE HEALTH OF FUTURE GENERATIONS

Daniela DASCALIUC, PhD in Economics, Associate Professor,  
University of European Studies of Moldova  
<https://orcid.org/0000-0002-6056-4743>, [danieladascaliuc@gmail.com](mailto:danieladascaliuc@gmail.com)  
DOI: <https://doi.org/10.36004/nier.cecg.III.2023.17.18>

*Investments in bakery enterprises represent a pressing necessity, especially those in the small and medium categories. It leads to the provision of basic food products for the country's population, including the socially vulnerable, as well as ensuring the entity's economic viability. On the other hand, the investments directly involve the innovations associated with production of machinery and equipment, the innovations in the technological process and the recipe of the bakery products. It must ensure in the end the quality of the products and the safety of the population's health. Innovations in the field of public food do not always assume high quality of the finished product, a fact that multiplies the risk of the population getting sick and of rejuvenating cancer and allergies. In order to reduce these negative consequences on the health of the population and the birth of healthier generations, it is proposed to involve public authorities and governing institutions in tightening the control of food safety and reducing to the maximum the additives and preservatives in the production of essential food products, with regard to bread products. The main objective proposed in the research is the development of the mechanism for supervising innovations in the field of baking in the Republic of Moldova. The scientific methods used are: analysis and synthesis, induction and deduction, history and logic. The obtained results will reflect the degree of security of the quality of the bakery products and the economic efficiency of the bakery enterprises.*

**Keywords:** Investment, innovation, quality, food safety security  
**JEL Classification:** E22 I38 L66 M21 O33  
**UDC:** 338.45:664.6

## THE TRANSITION TOWARDS A SUSTAINABLE ECONOMY

**Chițiga GEORGIANA, PhD, Scientific Researcher,**  
**“Victor Slăvescu” Centre for Financial and Monetary Research, Romanian Academy**  
<https://orcid.org/0009-0006-8439-5231>, [georgiana\\_chitiga@yahoo.com](mailto:georgiana_chitiga@yahoo.com)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.19>

*The paper aims to analyze the need to transform the global economy into an economy with low CO<sub>2</sub> emissions, a "decarbonized" economy, an economy with low climate risk, finally becoming a sustainable economy. The transformation of the economy will extend over a long time horizon and, as a result of the limits and resistance factors of the current economic system, it will not take place quickly, essential transformations being necessary in all areas of activity, but also in the way of thinking, the lifestyle, education, health and political organization. The recent global economic crisis, the registration of the continuous and irreversible damage to the environment, with negative effects, including on human subjects, have demonstrated the capacity and reduced reaction limits of the economic system to the environmental instabilities. Analysis performed proves that treating and studying the governance of sustainable development is particularly complex. Determining the choice of appropriate public policies is all the more obvious as the sectoral dimension used in public administration mainly needs to be changed, giving way to integrated and horizontally coordinated approaches. Also, the increase in the degree of globalization and integration entails a vertical integration of public policies that will have to include converging objectives of sustainable development. There is a need for a policy focused on a functional productive industry, with jobs in Europe, a policy beneficial for European society; the products, their applications, but also the employees, represent the foundation of a prosperous European society, energy efficient, with low carbon emissions.*

**Keywords:** sustainable development, low-carbon economy, public policies, targets, measures, solutions

**JEL classification:** O10, Q01, Q56

**UDC:** 338

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## THEORETICAL AND PRACTICAL STUDY ON THE BANK LOAN CONTRACT

**Mariana Rodica ȚÎRLEA, PhD, Associate Professor,**  
**„Dimitrie Cantemir” Christian University, Bucharest, Romania**  
<https://orcid.org/0000-0002-0665-5839>, [rodicatilea10@yahoo.ro](mailto:rodicatilea10@yahoo.ro)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.20>

*The bank lending contract is the document that establishes the obligations and rights between the parties to the contract and contains information related to: the parties to the respective contract, the bank and the client of the bank who can be a natural person or a legal entity, the object of the contract, the use of the credit, drawing the credit, the period of granting the loan, the interest on the granted loan, bank commissions, the repayment of the bank loan specifying the number of instalments, the maturity of the instalments and the amounts due at maturity, the guarantee of the loan, special clauses, final provisions. This information is considered mandatory information. The credit contract, according to art. 10 of Directive 2008/148/CE, must be drawn up on paper or another durable medium, drawn up in one copy for each part of the contract, whose data and information presentation content must be concise and clear. In Romania, O.U.G. no. 50/2010, regulates the technique of concluding the contract, specifies the limits for the accessories of the loan and the mandatory information of the loan repayment schedule. Credit represents contractual trust because the balance between the contracting parties for the contracted amounts depends on the form and content of the contract.*

**Keywords:** Bank, credit, bank credit agreement, credit accessories, contracted amounts, the balance of the bank loan agreement, bank loan repayment, loan guarantee

**JEL classification:** E59, Q01, Q56

**UDC:** 336.77



# ANALYSIS OF THE ENERGY SECTOR THROUGH THE PRISM OF CIRCULARITY INDICATORS

**Cristina UNGUR, PhD,**  
**National Institute for Economic Research,**  
**Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0002-6319-2359>, [cristinaungur@ymail.com](mailto:cristinaungur@ymail.com)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.21>

*The undoubtable need to implement circular production models requires a correct evaluation of the reliability and results of this implementation. For this, measurable, comparable and relevant indicators are needed that would take into account the multitude of aspects involved in the process. The purpose of this study was to identify and measure the circularity indicators of the energy sector in the Republic of Moldova and to compare these indicators with the average level of the European Union. To achieve the research objectives, the method of grouping indicators under technical, economic, social and environmental aspects was used. At the same time, the statistical data of international organizations (AIEA, OECD, AEE) regarding energy indicators at the global level were used. The research demonstrated that in the Republic of Moldova, the energy sector requires efficiency and a wide implementation of renewable technologies. These objectives can be achieved through investments, effective support mechanisms from the state, promotion of energy consumption reduction and demand management. This study was developed within the State Program 20.80009.0807.22 Development of the mechanism of formation of the circular economy in the Republic of Moldova.*

**Keywords:** circular economy, energy, sustainable energy indicators, renewable energy

**JEL classification:** Q20, Q42, Q50

**UDC:** 338.45:620.9

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## A BIBLIOMETRIC ANALYSIS OF THE POSTGRADUATE DISSERTATIONS IN THE FIELD OF TOURISM ON DIGITALIZATION AND FINANCE (2010-2022)

**Buket, BULUK EŞİTTİ, PhD, Associate Professor,**  
**Çanakkale Onsekiz Mart University, Turkey**  
<https://orcid.org/0000-0001-5646-6166>, [bulukbuket@comu.edu.tr](mailto:bulukbuket@comu.edu.tr)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.22>

*Digitalization, which changes the way of doing business in the tourism sector, is important in terms of being aware and not falling behind in transformation. In the studies, it is seen that Turkey is interested in the tools used to change the functioning of the tourism sector. However, due to the difficulty of allocating financial resources to digitalization investments and the lack of necessary talent and human resources for digitalization, it is noteworthy that investments in technologies for web sites, mobile applications and business processes take precedence over technologies developing within the scope of digitalization in Turkey. In this study, it is aimed to examine the postgraduate dissertations, which cover digitalization and finance, completed in Turkey in the field of tourism between 2010-2022 and published in the Council of Higher Education database, within the framework of parameters such as “type of the dissertation”, “release year of the dissertation”, “university of the dissertation”, “number of pages of the dissertation” and “subject of the dissertation”. Within the scope of this study, in which bibliometric analysis, one of the qualitative research methods, is used, 19 open access dissertations (16 master’s and 3 doctoral) were examined. The study was limited to the parameters mentioned above due to various limitations. Similar studies in the future can be expanded with parameters such as “institute of released dissertation”, “department of released dissertation”, “title of the advisor”, “language of the dissertation” and “key words of the dissertation”. It is thought that the results of the study will contribute to the literature and can be a reference for future studies. It is also thought that the contribution to the future related literature can be increased by adding articles, books/book chapters and conference papers in addition to postgraduate dissertations.*

**Keywords:** bibliometric analysis, digitalization, finance, postgraduate dissertation, tourism

**JEL classification:** M00, Y40, Z33

**UDC:** 338.48(100)

## FINANCIAL RISKS IN THE FIELD OF BUDGETARY AND FISCAL RELATIONS: DOCTRINAL - METHODOLOGICAL ASPECTS AND TYPES

Nadejda BOTNARI, PhD, Associate Professor,  
Academy of Economic Studies of Moldova

<https://orcid.org/0000-0002-5464-7243>, botnari.n@ase.md

Mariana PRUTEANU,

Academy of Economic Studies of Moldova

<https://orcid.org/0009-0003-6039-7329>, mariana.pruteanu.md@gmail.com

DOI: <https://doi.org/10.36004/nier.cecg.III.2023.17.23>

*The author, analyzing the institutional and doctrinal aspects of the budgetary - fiscal sector as one of the central areas of the financial component of the national economy, which constitutes both a source of financial risks - the risks of the financial security of the state, as well as the area of manifestation of internal and external risks, aims to formulate the methodological content of the concept of financial risks in the field of budgetary and fiscal relations, as well as to examine the diversity of types and forms of their appearance and manifestation.*

*The methodological basis of the study is the general methods of scientific research (analysis, synthesis, induction, deduction) as well as the specific methods of scientific knowledge (division and decomposition of results, grouping, comparison according to a predetermined level and special comparisons).*

*As a result of the study, we can define the financial risks in the field of budgetary and fiscal relations as an economic-financial category that expresses the probability of the appearance of factors (events, acts, etc.) that can determine the deviation of the actual values of the budgetary and fiscal indicators from the planned ones, as well as the non-execution or improper execution of the budget and fiscal procedures established in the budget process.*

*The article highlights the criteria for classifying the risks in the field of budgetary and fiscal relations and determines them according to the essential characteristics of this field (the risks of the budgetary-fiscal system and the risks of the budgetary process), the legal nature of the relations within this field (risks of property relations and risks of administrative and managerial relations), the legal form of the relations within this field (the risks of payment obligations and the risks of fiscal obligations), the form of manifestation (quantitative, measured in monetary units, and qualitative, expressed in the violation of budget procedures), the degree of complexity (explicit, implicit).*

**Keywords:** financial field, budgetar-fiscal field, budgetary system, financial risks, financial security, financial stability

**JEL classification:** H30, H60, H20

**UDC:** 336:330.131.7

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## IMPACT AND VULNERABILITIES OF CLIMATE CHANGE IN THE REPUBLIC OF MOLDOVA

Viorica POPA, PhD, Coordinator Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova

<https://orcid.org/0000-0001-6739-4399>, violin\_s@yahoo.com

DOI: <https://doi.org/10.36004/nier.cecg.III.2023.17.24>

*Climate change has become a threat to sustainable development for all developing countries, and measures to mitigate and adapt to this phenomenon must become a priority in national policies. Therefore, the Republic of Moldova is directly affected by Climate Change, being more vulnerable to adverse effects. As a result, Climate Change presents a serious danger for the achievement of the Millennium Development Goals, which the Republic of Moldova has assumed. At the same time, Climate Change can generate opportunities for the transformation of the economy, providing greater sustainability and thus paving the way to reducing poverty and achieving the Millennium Development Goals. Excessive consumption of natural resources of the growth generation emissions of greenhouse gases, causing in the last century the warming of the Earth and the disruption, finally, of the global climate system. These problems put the scientific community in front of the dilemma of finding the compromise between economic development and its effects on climate change. Finding this compromise will mean the sustainable development of mankind. Studies show that the impact of global warming is directly proportional to the standard of living of the population, and it affects the inhabitants of poor countries the most, which, in fact, have polluted the least. The problem of Climate Change can only be solved with synergistic efforts of all the states of the world, that is why the Framework Convention of the United Nations Organization on Climate Change (CONUSC) was created. This study was developed within the State Program 20.80009.0807.22 "Development of the mechanism for formation of the circular economy in the Republic of Moldova" funded from the state budget through the National Agency for Research and Development of the Republic of Moldova.*

**Keywords:** climate change, sustainable development, vulnerable, economic development

**JEL classification:** Q01, Q53, Q54

**UDC:** 338:504(478)

## EXAMINING CANADA'S ROLE IN CRITICAL MINERALS GLOBAL COMPETITION: A CASE STUDY ON NICKEL AND RARE EARTH ELEMENTS

Daniel BULIN, PhD, Scientific Researcher II,  
Institute for World Economy, Romanian Academy, Romania  
<https://orcid.org/0000-0001-6649-0784>, [daniel.bulin@yahoo.com](mailto:daniel.bulin@yahoo.com)  
DOI: <https://doi.org/10.36004/nier.cecg.III.2023.17.25>

*With the significant increase in global demand for critical metals, including nickel and rare earths, competition in the market for these resources has become increasingly intense. Canada, a country rich in natural resources, plays a crucial role in this global competition and has a well-defined critical minerals strategy. This article proposes an analysis of Canada's strategy and its role in global competition, focusing on two critical minerals: nickel and rare earths. The research methodology is based on two case studies that follow several key aspects: the benefits of the critical resource, Canada's production and resources, and at the global level, trade exchanges, existing projects, market risks, and production chains. The study shows that Canada plays an important role in the global competition for critical metals - nickel and rare earths - primarily through the prism of its resources and recently launched national strategy. The critical minerals strategy aims to strengthen this position and carefully manage market risks, despite significant challenges such as price volatility, China's position and related dependencies.*

**Keywords:** global competition, strategy, resources, critical minerals  
**JEL classification:** N 51, Q26, Q34  
**UDC:** 339.137.2:669.85/.86(71)

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## ANALYSIS OF THE TOURISM SECTOR THROUGH THE PRISM OF CIRCULARITY INDICATORS

Corina GRIBINCEA, PhD, Senior Coordinator Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova  
<https://orcid.org/0000-0003-2571-5849>, [corina.gribincea@gmail.com](mailto:corina.gribincea@gmail.com)  
DOI: <https://doi.org/10.36004/nier.cecg.III.2023.17.26>

*For the tourism sector, circularity is a strategic approach, especially from the point of view of minimizing environmental impact, including waste, pollution, CO2 emissions, given the potential of a circular economy to decouple economic growth from resource use. Integrating circularity and further increasing resource efficiency in the tourism value chain represents an opportunity for the tourism sector to embrace a sustainable and resilient path. The extensive and transversal value chain of tourism offers many opportunities for a longer, better and more circular use of the materials and products used to provide the services, creating value and partnerships and bringing waste as close to zero as possible. Within the scope of this study, the description and analysis of the experiences of circularity will be presented, the updated synthesis of the transition situation to the principles of circularity and the presentation of some cases from Trebujeni - Pensiunea Vila Roz and from Chisinau - Radisson Blu Leograd Hotel will be presented. Within the present paper, circularity isn't a priority for the Moldovan service producer, but also for the tourist himself, because the tourist is the one who decides how to travel, what to do at the destination, how to use the infrastructures. But the manufacturer can influence the customer's behavior so that he behaves in a more circular way. On the other hand, the large number of service producers in the tourism industry (transportation, catering, accommodation, excursions, etc.) induces the need for cooperation between actors to create a global offer of circular tourism based on the principles of the circular economy. The main barrier in the application of the principles of circularity in tourism is the lack of awareness and the lack of interest of consumers in applying this concept in practice. This paper is written within the state project 20.80009.0807.22. Developing the mechanism for the circular economy creation in the Republic of Moldova.*

**Keywords:** circular economy, tourism sector, indicators of circularity  
**JEL classification:** Q 53, Q58, Z30  
**UDC:** 338.48

## THE ROLE OF DIGITALIZATION IN ACCELERATING THE TRANSITION TOWARDS A CIRCULAR ECONOMY

**Gabriela PICIU, PhD, Senior Researcher,**  
**Financial and Monetary Research Center „Victor Slăvescu”, Bucharest, Romania**  
<https://orcid.org/0000-0001-9343-6871>, [gabriela\\_piciu@yahoo.com](mailto:gabriela_piciu@yahoo.com)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.27>

*In this article, it is shown that the lack of a proper digitization in the economy leads to the disruption of the transformation of the value chains, the change of the structure and the functioning of the markets, components necessary for the implementation of the circular model. Good digitization facilitates, through its technologies, the transition to the circular economy through the collection, management and processing of data, the creation of platforms, all of which influence consumer behavior and the way relationships are developed, maintained and advanced, thus increasing value retention and mitigating some of the externalities environmental. The article also analyzes the main economic sectors and sub-sectors in which circular economy measures can be implemented with the help of digitization, which support policies not only by identifying the focal points that can bring the most benefits, but also by reporting them to the broader perspectives of pledged contributions such as Nationally Determined Contributions (NDCs) and other benchmarks such as national carbon budgets.*

**Keywords:** digitalization, transition, circular economy, polluting economic sectors, benefits

**JEL classification:** P48, Q01, Q53

**UDC:** 338:004

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## SPARKLING TREASURES. UNVEILING THE FACETS OF THE DIAMOND TRADE

**Mariya Zdravkova YANEVA, PhD Researcher,**  
**Bulgaria**  
[cezara.rb@gmail.com](mailto:cezara.rb@gmail.com)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.28>

*The value of this noble metal is enduring on both national and international levels. The diamond industry is within the purview of economic agents, and their investment interest on the stock markets is continuous and lasting. Diamonds are precious metals with a transparent and sparkling appearance, exceptionally beautiful, captivating the minds and dreams of people from ancient times to the present day. They are natural treasures extracted from the depths of the Earth and formed over centuries. In society, these noble crystals symbolize power, wealth, and influence. In this context, the subject of the current scientific research is diamonds as a type of noble metal. The aim of the scientific study is to analyze relevant aspects related to the global diamond trade.*

**Keywords:** diamond trade, economic, mining, precious metals

**JEL classification:** G10, G15

**UDC:** 338.45:622.371

# THE POTENTIAL AND ISSUES FOR THE INTEGRATION OF THE CIRCULAR ECONOMY IN ORGANIC FARMING SYSTEMS IN THE REPUBLIC OF MOLDOVA

Sergiu ȚIRIGAN, PhD Student,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova  
<https://orcid.org/0000-0002-3139-4634>, [sergiu.tirigan@gmail.com](mailto:sergiu.tirigan@gmail.com)  
DOI: <https://doi.org/10.36004/nier.cecg.III.2023.17.29>

*A circular model closes the value-chain loop and lessens waste by reusing, recycling and repurposing materials and byproducts from every stage of a product's lifecycle. In the Republic of Moldova, agricultural farms tend to operate in a linear model, producing and distributing crops in ways that are not yet sustainable. Applied agricultural production models are affected by a dependence on imported chemical fertilizers and pesticides, coupled with the erosion of natural resources, environmental degradation, economic inefficiency and market access issues. The integrated organic farming system had the potential to support farmers in addressing faced issues and facilitate the transition to organic agriculture, minimizing or excluding the loss of productivity coupled with the increase of revenue and environmental preservation. Adoption of the reprocessing and reuse of agricultural residues is closely related to the extension of the application of organic agriculture and the efficiency of engaged producers. Even if a limited number of farmers have ensured converting from conventional to organic farming, some of them succeeded in applying integrated organic farming systems, having the potential to be an example and learning plot for the expansion of new production models and practices. The study examines the context of the Republic of Moldova, development trends and challenges and emphasizes the benefits of the extension of the application of the integrated organic farming approaches, considering the experience of the agricultural producers. This study was developed within the State Program 20.80009.0807.22 "Development of the mechanism for formation of the circular economy in the Republic of Moldova" funded from the state budget through the National Agency for Research and Development of the Republic of Moldova.*

**Keywords:** industrial symbiosis, circular economy, sustainability

**JEL classification:** Q01, Q42, Q53

**UDC:** 338+631.95](478)

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## RECOVERY OF FLOWS AND IMPACT ON THE BUDGET IN THE REPUBLIC OF MOLDOVA: A DETAILED ANALYSIS

Victoria IORDACHI, PhD, Associate Researcher,  
National Institute of Economic Research,  
Academy of Economic Studies of Moldova  
<https://orcid.org/0000-0002-9176-3729>, [timush\\_v@yahoo.co.uk](mailto:timush_v@yahoo.co.uk)  
Pavel CALPAJIU, PhD Student,  
Moldova State University  
<https://orcid.org/0009-0004-1436-0733>, [calpajupavel@yahoo.com](mailto:calpajupavel@yahoo.com)  
DOI: <https://doi.org/10.36004/nier.cecg.III.2023.17.30>

*The recovery of financial flows and the impact on the budget are crucial aspects for the economic development and stability of the Republic of Moldova. In this article, we will explore this issue in detail, analyzing the key factors that influence financial flows and how they are reflected in the national budget. The connection between financial flows and the national budget is fundamental. Fiscal revenues, fees and taxes collected from these flows are an important source of government funding. It is therefore essential to understand how changes in these flows can affect the government's ability to finance public projects and support essential public spending such as education, health and infrastructure. By exploring the relationships between these flows and the national budget, the research reveals the sources of income generated by the flows and how they shape public spending and government projects. Comprehensive analysis of current trends and short- and long-term projections provides insight into how economic, legislative and political changes may influence financial flows. In addition, government measures and policies adopted to encourage positive financial flows are examined, along with relevant case studies to illustrate successful strategies. In conclusion, the article emphasizes the importance of the efficient management of financial flows for the sustainable growth of the national budget and for the economic development of the Republic of Moldova. With a deep analysis of the factors involved and the policies applied, we can help ensure a more stable and prosperous economic future for this country. It is essential that all stakeholders work together to achieve this goal and build a better future for the Republic of Moldova.*

**Keywords:** illicit financial flows, national budget, public expenditures, public revenues, government policy, dark economy

**JEL classification:** G28, H26, H61

**UDC:** 336.14(478)



## THE PROCESS OF RECOVERY OF RENEWABLE ENERGY SOURCES IN THE REPUBLIC OF MOLDOVA

**Viorica POPA, PhD, Coordinator Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0001-6739-4399>, [violin\\_s@yahoo.com](mailto:violin_s@yahoo.com)

**Nicolae POPA, Scientific Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0001-8081-3498>, [nicolae-popa@rambler.ru](mailto:nicolae-popa@rambler.ru)

**Oleg FILIMON, PhD Student,**

**University of Political and Economic Studies "C. Stere", Moldova**

<https://orcid.org/0000-0002-5171-2986>, [oleg.filimon@gmail.com](mailto:oleg.filimon@gmail.com)

**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.31>

*Renewable energy sources are one of the most challenging ways in which almost half of the target set and agreed in the Paris Agreement on climate change can be achieved, with the aim of reducing resource consumption, optimizing costs and ensuring a more sustainable future. bright and more energy-safe. The Republic of Moldova faces numerous energy challenges, including dependence on energy imports and a growing demand for energy to fuel economic growth. Imported fossil fuels already account for over two-thirds of primary energy supplies, making the country vulnerable to rising fuel costs and the risks of supply disruptions. On the other hand, the Republic of Moldova has a major renewable energy potential, which, until now, has remained almost unexploited. With the increasing cost competitiveness of renewable energy policymakers have increasingly recognized renewable energy as an important means to address these energy challenges and achieve a sustainable future. The objective of the study is to analyze the process of valorization of renewable energy sources in the Republic of Moldova as well as the intelligent solutions adapted to the conditions of the national economy. The hypothesis is formulated starting from the results presented in the literature analysis section and consists in the fact that one of the basic rules of the energy efficiency transition is the exploitation of renewable energy sources in new resources for other industries. This study was developed within the State Program 20.80009.0807.22 "Development of the mechanism for formation of the circular economy in the Republic of Moldova" funded from the state budget through the National Agency for Research and Development of the Republic of Moldova.*

**Keywords:** energy resources, renewable energy, energy consumption, energy efficiency

**JEL classification:** Q40, Q47, Q50

**UDC:** 620.92(478)

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## CARBON DIOXIDE EMISSIONS AND CLIMATE CHANGE

**Cătălin DRĂGOI, Scientific Researcher,  
Financial and Monetary Research Center „Victor Slăvescu”, Romania**

[hipercub@gmail.com](mailto:hipercub@gmail.com)

**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.32>

*In recent decades, climate change has emerged as a great threat to the entire planet. The governments of different countries, different organizations for the protection of the environment, research institutes and universities are involved in different ways in understanding and finding methods to counteract and minimize the effects of these changes that unfold on the environment but also on the economy and the population at a global level and also at the level of geographical areas or countries in different forms. Global warming is due to the greenhouse effect created by different types of gases that are found naturally in the atmosphere - but also generated by human activities, among which the most incriminated is carbon dioxide, because its supposed contribution to the increase in temperature it is significant. At the level of the European Union, we have a climate change law that establishes mandatory objectives for the reduction of greenhouse gas emissions, with as methods of achieving these objectives a varied range of concrete measures to reduce emissions, to save energy, to capture carbon dioxide, to switch to "green", non-polluting energies. The costs for reducing carbon dioxide emissions in the atmosphere at the level of the European Union, and other countries are huge, they create an additional burden on the budgets of these countries and the effects are currently uncertain. The paper aims to identify the existing correlation between the increase in the percentage of atmospheric carbon dioxide depending on the different sources that generate it and the increase in the average global temperature, and implicitly the extreme manifestations of the weather.*

**Keywords:** Climate; Global Warming, carbon dioxide, emissions

**JEL classification;** Q 50; Q 51; Q 54

**UDC:** 504.7

## STATISTICAL MODELING: STRUCTURAL AND NON-STRUCTURAL MODELS

**Olga PANIȘ, PhD Student,**  
**Academy of Economic Studies of Moldova**  
<https://orcid.org/0009-0005-8208-7553>, [olgapanisstudy@gmail.com](mailto:olgapanisstudy@gmail.com)  
**Irina IALAI, Scientific Researcher,**  
**Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0001-6974-6845>,  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.33>

*In the present paper, the author proposed basic concepts about statistical macroeconomic modelling. The main attention is paid to a retrospective analysis of the development of economic theory and its influence on the process of development of macroeconomic modelling. In addition to this, were proposed the main characteristics of structural and non-structural modelling, namely the disadvantages and advantages of models, as well as the limits of their application in practice.*

*In the present paper, the foundational concepts of statistical macroeconomic modelling are examined, emphasizing the reciprocal influence between the development of economic theory and macroeconomic modelling. A retrospective analysis forms the core of the research, aimed at deepening the understanding of the synergies between theoretical underpinnings and their practical manifestations in modelling.*

*The paper includes a categorical segregation of the discourse into structural and non-structural modelling, allowing for an in-depth exploration of each model's inherent characteristics, advantages, disadvantages, and limitations within practical applications. Through this stratified approach, the paper enabled the detailed examination of the optimal conditions requisite for the efficacious application of each model, emphasising their distinctive scopes and constraints.*

*The synthesis of the research outcomes offers a cohesive overview of the varied macroeconomic models, exploring the nuanced differences and connections between structural and non-structural frameworks. The insights derived are aimed at enhancing academic discourse by providing enriched perspectives on the applicability and relevance of different modelling approaches and enhancing proficiency in the application of varied modelling techniques in the realm of economic research. This concise yet comprehensive exposition aims to contribute to the ongoing academic conversations surrounding macroeconomic modelling by promoting a refined, more nuanced understanding and fostering informed discussions on the diverse modelling techniques and their empirical applications.*

**Keywords:** statistical macroeconomic modelling, structural and non-structural

**JEL classification:** C10, C44, E66

**UDC:** 519.862.2

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## CALCULATION MODELS OF NET RISK PREMIUMS FOR RCA INSURANCE CONTRACTS

**Adriana NĂSTASE (DUMITRACHE), PhD Student,**  
**Romanian Academy, Doctoral Department: Economic, Social and Legal Sciences**  
[nstsadriana@yahoo.com](mailto:nstsadriana@yahoo.com)  
**DOI:** <https://doi.org/10.36004/nier.cecg.III.2023.17.34>

*Starting from the fundamental role of insurance, that of providing protection by the insurer to the person interested in concluding an insurance contract (the insured) in exchange for the insurance premium (insurance price), advanced mathematical models have been developed for the appropriate determination of the insurance price.*

*In Romania, RCA insurance is one of the most regulated insurances due to the importance it occupies from the point of view of the volume of gross premiums subscribed. In the total of gross premiums written in Romania, both general and life insurance, RCA insurance holds on average in the period 2014-2022 approximately 47.5%, hence the motivation for this research topic in order to establish the most appropriate premium for the insured RCA portfolio.*

*In the case of non-life insurance, the estimation of the pure insurance premium is carried out with the help of generalized linear models (GLM). The segmentation of the insured portfolio into homogeneous risk classes is more than necessary for choosing the optimal explanatory variables, which reproduce the behavior of the response variable as accurately as possible.*

**Keywords:** insurance, generalized linear model, distribution

**JEL classification:** G22, G52, I13, J65

**UDC:** 330.4:364

# THE DYNAMICS OF THE EVOLUTION OF DIGITAL EDUCATION IN MILITARY PRE-UNIVERSITY EDUCATION. CASE STUDY NATIONAL MILITARY COLLEGES IN ROMANIA

Ionut CAPTARI, PhD Student,  
Romanian Academy/ School of Advanced Studies of the Romanian Academy (Scosaar),  
Quality Of Life Research Institute  
<https://orcid.org/0009-0007-2514-5969>, [ionut\\_captari@yahoo.com](mailto:ionut_captari@yahoo.com)  
DOI: <https://doi.org/10.36004/nier.cecg.III.2023.17.35>

*This article examines the evolution of digital education in military pre-university learning environments, how it is regulated, implemented, and measured, how decision-making actors are involved in the process, and how the whole system will benefit from it. Also, comments from various relevant actors such as students, professors, and specialists involved in military pre-university education in Romania will be compared, with the goal of emphasizing the effectiveness of students staying up to speed with current technological developments and being taught in this manner. Considering this presentation as part of an on-going PhD thesis, this article will only briefly present the current status regarding digital transformation of education in military high schools, the approach methodology, conclusions, and future activities to be further researched.*

**Keywords:** digital education, digital transformation strategy, digital learning, military high schools, digital student profile  
**JEL classification:** I21, I25, I29  
**UDC:** 377.1:355]:004(498)

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## BIBLIOMETRIC ANALYSIS BETWEEN GLOBALIZATION, INFORMATION TECHNOLOGY AND ECONOMIC GROWTH

Alina IONAȘCU, PhD Student,  
Doctoral School of Economics and Business Administration,  
West University of Timisoara, Faculty of Economics and Business Administration, Timisoara, Romania  
[alina.ionascu98@e-uvv.ro](mailto:alina.ionascu98@e-uvv.ro)  
DOI: <https://doi.org/10.36004/nier.cecg.III.2023.17.36>

*In the contemporary epoch, globalization, spurred by rapid advancements in information technology (IT), is conjectured to be a significant driver of economic growth. This research embarks on unravelling the nuanced interrelations among globalization, IT, and economic growth through a bibliometric analysis of extant scientific literature. Employing VOSviewer for the bibliometric scrutiny, an exhaustive sample of scholarly articles from Scopus was meticulously examined. The principal objective was to ascertain the thematic nucleus within this academic ambit. The findings accentuate that trade and financial globalization, technological innovations, and economic development are the cardinal themes. Particularly, the analysis sheds light on the convoluted relationships of economic growth intertwined with trade globalization and IT. However, an important observation made is that the dividends of global trade are not equitably distributed across countries globally. As a consequence, while numerous sectors flourish owing to digitization, others wrestle with structural metamorphoses. This inequity, amalgamated with technological progressions like automation and digital transformation, foments escalating sentiments of scepticism, protectionism, and reticence towards globalization among certain scholarly factions, notwithstanding other experts extolling the myriad benefits of the globalization trajectory. The research method's meticulous bibliometric approach, utilizing VOSviewer, has enabled a holistic understanding of the prevalent discourse, thereby providing a robust foundation for future inquiries into this multifaceted interplay.*

**Keywords:** Bibliometric analysis, globalization, information technology, economic growth, digitization  
**JEL classification:** F60, O33, O47  
**UDC:** 338(100)+338.1+004

## SECTION IV

# SOCIAL PROTECTION OF THE POPULATION IN THE CONTEXT OF CURRENT CHALLENGES

### ASSESSMENT OF NATURAL TOURISM RESOURCES

*Plamen Marinov LAKOV, PhD, Professor,  
Head of the Department "Regional Development, Agribusiness and Tourism",  
University of Agribusiness and Rural Development, Bulgaria  
plakov@uard.bg  
DOI: <https://doi.org/10.36004/nier.cecg.IV.2023.17.1>*

*The topic is related to the assessment of the tourist potential of a protected area. It is up-to-date and an important part of the activities related to supporting the development of tourism. The aim is to present a model for the research, evaluation and analysis of the tourism potential.*

*Complex indicators were used, developed on the basis of the proposed by Krasimir Levkov and Ivanka Shopova, a system for evaluating the tourist potential of our protected territories by the ball evaluation method. In the implementation of the study, literary sources, materials from the Internet, surveys conducted in the field, observations, results of previous studies, developments of the author, etc. were used.*

**Keywords:** *tourist potential, tourism, tourist resources, protected areas*

**JEL classification:** *L83, Z31, Z32*

**UDC:** *338.483*

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### NEW APPROACHES TOWARDS RURAL POPULATION'S QUALITY OF LIFE

*Anatolii ROJCO, PhD in Economics, Associate Professor, Coordinating Scientific Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova  
<https://orcid.org/0000-0003-2089-696X>, rojco@mail.ru  
Ecaterina HEGHEA, PhD student, Scientific Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova  
<https://orcid.org/0000-0002-7677-8295>, adimi\_86@mail.ru  
DOI: <https://doi.org/10.36004/nier.cecg.IV.2023.17.3>*

*The relevance of the topic is due to the fact that the problem of the quality of life occupies an important place in the documents that determine the medium and long-term prospects for the development of the Republic of Moldova. The adopted National Development Strategy „European Moldova-2030” sets strategic goals arising from the modern concept of quality of life. In this context, the problem of the quality of life of rural residents, whose number makes up more than half of the total population, and whose level and conditions of life are significantly inferior to the national average, is of particular importance. The purpose of the study is to assess the quality of life of the rural population and, on this basis, to identify the most acute problems in this area. The following research methods were used: analysis and synthesis, monographic, statistical, comparison, analogues, etc. The information base of the study is the data from the household budget survey conducted by the National Bureau of Statistics, as well as materials from domestic and international organizations. Results of the study - the assessment of the quality of life of the rural population of the Republic of Moldova was carried out according to the following parameters: disposable income, consumer spending, absolute poverty, demographic situation, food consumption, access to quality education, health status, living comfort, self-assessment of their standard of living. The most acute problems of the quality of life of the rural population of the Republic of Moldova have been identified. This paper was elaborated and financed within the Scientific Project for the period 2020-2023, registered in the State Register of Science and Innovation Projects of the Republic of Moldova with the code 20.80009.0807.29 State Program Project "Improving the mechanisms for applying innovative tools oriented towards the sustainable growth of the welfare of the population of the Republic of Moldova".*

**Keywords:** *quality of life, rural population, households, consumer price index, poverty risk, food affordability, educational and medical services*

**JEL classification:** *I00, I31, I32*

**UDC:** *330.59(478-22)*

## GLOBAL POVERTY PROBLEM AND ITS ELIMINATION AS A CONTRIBUTION TO SUSTAINABLE DEVELOPMENT

*Jala Bayram DADASHOVA, Doctor of Philosophy in Economics,  
Professor of the “Economics” Department,  
National Aviation Academy, Baku, Azerbaijan*  
<https://orcid.org/0009-0002-9361-1777>, [j.ala@inbox.ru](mailto:j.ala@inbox.ru)  
**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.4>

*As we know, the main goal facing countries in the world today is to achieve sustainable development. It was adopted by the UN as one of the main goals of Sustainable Development by 2030, and we can even say that it is the first goal of “Ending poverty and all its forms in every part of the world”. Of course, the reduction of poverty is fully related to the improvement of the standard of living of the country. It is in the article that the main directions of the standard of living in the world, the problem of poverty are investigated and directions for its elimination are indicated. Also, the article shows the strategic measures implemented to reduce poverty and improve living standards in the Republic of Azerbaijan.*

**Keywords:** *poverty, unemployment, human development index, sustainable development, the standard of living*  
**JEL classification:** *I31, I32, F63, O15, Q01, Q56*  
**UDC:** *364.662*

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## CONCEPTUAL FRAMEWORK FOR SOCIAL RESILIENCE OF THE UKRAINIAN (POST)WAR ECONOMY

*Tatyana BURLAY, Doctor habilitation of Economics, Leading Researcher,  
Department of Economic Theory,  
Institute for Economics and Forecasting,  
National Academy of Sciences of Ukraine*  
<https://orcid.org/0000-0003-4530-9151>, [btv2008@ukr.net](mailto:btv2008@ukr.net)  
**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.5>

*The Russian military invasion in February 2022 led to extremely negative demographic, macroeconomic and social consequences for Ukraine, including local humanitarian disasters. As of September 2023, according to UNCHR data, 6.2 million refugees from Ukraine were recorded globally, and more than 5.1 million Ukrainians became internally displaced persons. The urgent need to overcome these consequences, as well as for the effective Ukraine’s post-war recovery, determines the actuality of in-depth research on the social resilience of its national economy. The purpose of our research is to form a conceptual framework for the social resilience of the Ukrainian economy in the war and post-war periods. Achieving this goal involves the use of research methods of analysis, comparative studies, processing of statistical and econometric data, as well as sociological surveys. The results of the study showed that the social resilience of Ukraine’s national economy is formed in the contour of social reproduction and should be based on the blocks of (i) employment and labour potential; (ii) solvent consumer demand; (iii) social security, including health and education systems. Other research results, along with the post-war recovery aspect, social resilience has an important instrumental value for Ukraine in terms of European integration and state governance. In 2020, the European Commission identified the resilience concept as “a new compass for EU policy”. Adaptive borrowing of the relevant modern approaches of the European Union is an important task for Ukraine, which in June 2022 acquired the official status of a Candidate Country for EU membership. The article presents the results of the research carried out within the Project “Formation of the foundations of nationally rooted stability and security of the economic development of Ukraine in the conditions of the hybrid “peace–war” system” (state registration No. 0123U100965).*

**Keywords:** *Russian-Ukrainian war, social crisis, stress resistance, postwar recovery*  
**JEL classification:** *F52, H56, J21, P36*  
**UDC:** *331.5.024.5+364.2/.3](477)*



## ASPECTS REGARDING COLLABORATION BETWEEN SOCIAL WORKERS AND FOSTER FAMILIES IN HUNEDOARA COUNTY

*Clara-Mihaela LOBONȚ, master student,  
West University of Timișoara, Romania  
clara.lobont99@e-uvvt.ro*

*Loredana-Marcela TRANCA, PhD, Lecturer,  
West University of Timișoara, Romania  
<https://orcid.org/0000-0003-4560-0571>, [loredana.tranca@e-uvvt.ro](mailto:loredana.tranca@e-uvvt.ro)  
DOI: <https://doi.org/10.36004/nier.cecg.IV.2023.17.6>*

*The aspects presented in this study reflect the way in which social workers from a public institution (Hunedoara County) and foster families from the same county, relate, the activities carried out jointly, the difficulties encountered in the collaboration between them and the opinions regarding the improvement of the collaboration between the social workers and the foster families.*

*The study used a descriptive research design, based on the individual interview method, conducted among six social workers and 11 foster mothers. The data collection was carried out face-to-face and in online format, applying the research tool the semi-structured interview guide, between March and May 2023, after expressing the agreement to participate in the study. The results highlight that in the view of the participants, open communication, understanding, moral support, mutual respect, willingness to intervene and empathy are key factors in the effectiveness of the interaction between social workers and foster mothers with beneficial results for children with placement as special protection measures. Quarterly monitoring through home visits is the main activity carried out jointly by social workers and foster mothers. During the collaboration between the social worker and the foster family, certain difficulties may arise, such as not accepting the other's opinion in relation to aspects related to the care and education of children, lack of seriousness, ignoring phone calls or non-compliance with duties and obligations in relation to the job description. The implementation of joint courses, giving importance to the wishes of the foster family and psycho-social counselling are aspects that help to improve the collaboration between the social worker and the foster family.*

**Keywords:** social worker, foster family, placement, collaboration, Hunedoara County, Romania

**JEL classification:** I31, J13, J81

**UDC:** 364.6(498)

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## COVID AND THE SOCIAL PROTECTION OF THE ELDERLY IN ROMANIA

*Gianina CHIRUGU, PhD, University Lecturer,  
Ovidius University of Constanța, Romania*

<https://orcid.org/0009-0006-2836-4254>, [geanina.chirugu@365.univ-ovidius.ro](mailto:geanina.chirugu@365.univ-ovidius.ro)

*Doru Claudiu DAMEAN, PhD, Associate Professor,  
Ovidius University of Constanța, Romania*

<https://orcid.org/0009-0002-1777-5980>, [dameanclaudiu@yahoo.com](mailto:dameanclaudiu@yahoo.com)

DOI: <https://doi.org/10.36004/nier.cecg.IV.2023.17.7>

*The COVID19 pandemic has had chain effects on older people, this pandemic being a socially experienced disease, on several layers, from the structural exterior imposed by social isolation to the inner psychological isolation. In addition to the general health and hygiene measures imposed by the pandemic, there have been specific care measures, especially for people with reduced mobility or even for patients confined to bed. The reduction in funding for private social service providers has led to a reduction in the number of beneficiaries, limiting their access to the care they need. Thus, the objective of this paper is to highlight the main forms of social protection for the elderly, but also the vulnerabilities of the elderly manifested during the pandemic caused by the COVID-19 virus. A number of good practice models for supporting older people during the pandemic are also presented. During periods of social isolation, there have been some ways to help religious seniors use their faith to ease their anxiety during this COVID-19 pandemic, such as spending time praying, listening to religious services, or caring for neighbours. Meeting their emotional needs/physical needs – there is no better way to reduce anxiety and social isolation than by extending a helping hand to other people in need.*

**Keywords:** social protection, pandemic, elderly, philanthropy, vulnerability

**JEL classification:** I38, J14

**UDC:** 364.3(498)

## ASPECTS REGARDING THE INTERACTION OF PARENTS OF CHILDREN WITH AUTISM SPECTRUM DISORDERS WITH MEMBERS OF THE SUPPORT NETWORK

*Cristina Amelia PREDEȘEL, 3<sup>rd</sup> year student,  
West University of Timișoara, Romania  
cristina.micu80@e-uvt.ro*

*Loredana-Marcela TRANCĂ, PhD, Lecturer,  
West University of Timișoara, Romania  
<https://orcid.org/0000-0003-4560-0571>, [loredana.tranca@e-uvt.ro](mailto:loredana.tranca@e-uvt.ro)  
DOI: <https://doi.org/10.36004/nier.cecg.IV.2023.17.8>*

*The impact of a child's diagnosis of autism spectrum disorder (ASD) on a family, analyzed by Begum and Mamin (2019), shows that caring for a child with ASD and household activities increase parental stress, social relationships, career is also negatively affected, the rate of divorces is higher, the relationship between siblings and financial status are altered. The present work proposes a qualitative study that describes the types of interaction that parents who have a child with ASD have with nuclear and extended family members, with friends and other acquaintances, with work colleagues and with employees of the institutions with which they intersect on during the diagnosis, recovery and integration of the child. The research is of a qualitative type, using the interview as a research method and the semi-structured individual interview guide as a research tool. The participants in the study were 10 parents who have at least one child with ASD and who interacted with the recovery services in Timiș County.*

*The results of the research show that the parents of children with ASD have made the child's recovery a priority, causing a change in their concerns and implicitly in the way they relate. Relationships between family members changed, the parent's attention and time focused on the child with ASD at the expense of other relationships, the evolution of relationships with extended family members was influenced differently by the type of relationship they had before the diagnosis. The interviews revealed that there is no formal support provided by state institutions regarding the recovery process, but there is a private network that meets this need. A good collaboration was found with the representatives of social services from the town halls and from the General Directorate of Social Assistance and Child Protection Timiș, as well as with the educational institution that the child with ASD currently attends. The impact of the recovery process of a child with ASD is reflected in the sphere of all the relationships that the parent has with the life partner, with other children, with the close people, and keeping the job is possible if there is support from the workplace and formal or informal support.*

**Keywords:** *children with autism, parents, support, social relations*

**JEL classification:** *I18, I31, J13*

**UDC:** *364.6*

## THE CHALLENGES OF THE LABOUR MARKETS IN THE CONTEXT OF THE GREEN ECONOMY IN EUROPEAN UNION

*Alina Ligia DUMITRESCU, PhD, Scientific Researcher,  
Institute for World Economy, Romania*

<https://orcid.org/0009-0000-3983-2582>, [alinaligia@gmail.com](mailto:alinaligia@gmail.com)

**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.9>

*In the actual context of the cohesion policy, the specific challenges of the European Union are to strengthen the economic, social, and territorial cohesion based on the Union's political priorities according to the green and digital transition. The presentation analysis of the challenges and opportunities of the labour market in the conditions of the transition to the climate-neutral economy. The research methodology is based on the research of specialized literature in the field about green transition and the comparative analysis of the data on green jobs from International Renewable Energy Agency, International Labour Organisation and Eurostat. The results are that the implementation of the green economy is a multilevel process. In addition to the industrial restructuring, the implementation process includes the reform of the university curriculum and professional training systems, active employment strategies, and effective regional social protection networking.*

**Keywords:** European Union, cohesion policy, employment, social protection, green economy, qualifications

**JEL classification:** J2, J24, J48, Q2, Q52

**UDC:** 331.5+338.242

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## PERSPECTIVE DIRECTIONS OF THE POPULATION'S ACCESS TO HEALTHCARE SERVICES

*Tatiana GUTIUM, PhD, Associate Professor,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova*

<https://orcid.org/0000-0002-8884-3269>, [gutium.tatiana1@gmail.com](mailto:gutium.tatiana1@gmail.com)

**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.10>

*The availability of medical assistance for citizens of the Republic of Moldova is the object of research in this article. The main task of the study is to identify the inequality in the accessibility of medical care caused by the existing social differences among Moldovan citizens. Medical services became less accessible for the population, especially for rural residents. The number of localities without hospitals, polyclinics, or dental practices is increasing. The introduction of paid medical services led to the outflow of experienced doctors from state hospitals and polyclinics to private medical facilities. The decrease in the standard of living and rising average prices by approximately 30% in 2022 has led to an increase in the number of citizens who cannot afford paid medical services. Thus, there is a fixed tendency to reduce the population's access to medical care and high-quality medical services in the Republic of Moldova. This survey has been developed within the framework of the Scientific Project for the period 2020-2023, registered in the State Register of Projects in the field of Science and Innovation of the Republic of Moldova with the code 20.80009.0807.29 Proiect Program de Stat "Perfecționarea mecanismelor de aplicare a instrumentelor inovatoare orientate spre creșterea durabilă a bunăstării populației Republicii Moldova" / Project State Program "Improving the mechanisms for applying innovative instruments aimed at sustainably increasing the welfare of the population of the Republic of Moldova".*

**Keywords:** access to health services, quality of healthcare services, inequality, accessibility in rural and urban areas, standard of living, population well-being

**JEL classification:** I11, I12

**UDC:** 614.2(478)

## THE IMPACT OF CRISES ON IN-WORK POVERTY

**Angela TIMUȘ, PhD, Associate Professor,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0002-2556-3198>, [ince.timush@gmail.com](mailto:ince.timush@gmail.com)

**Tatiana GUTIU, PhD, Associate Professor,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0002-8884-3269>, [gutium.tatiana1@gmail.com](mailto:gutium.tatiana1@gmail.com)

**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.11>

Poverty continues to be one of the characteristics of any society. The income gap between the poorest and wealthiest people and countries has widened. This gap is so large that international reports no longer compare the income of the richest 10% of the global population with the revenue of the poorest 10% to hide the veritable situation. An international report published in 2022 compares the income of the wealthiest 10% of the global population with that of the poorest 50%, so every second inhabitant of the planet is classified as one of the poorest people, and comparing the income level of 10% of the population to 50% of the global inhabitants does not give a real-world situation about poverty. Naturally, 50% of the population is not unemployed, so employment does not guarantee an individual escape from poverty. Therefore, the subject of the study is the workers' risk of poverty. The purpose of the study is to assess poverty among working people in the Republic of Moldova. This paper has been elaborated within the framework of the Scientific Project for the period 2020-2023, registered in the State Register of Projects in the field of Science and Innovation of the Republic of Moldova with the code 20.80009.0807.29 Project State Program "Improving the mechanisms for applying innovative instruments aimed at sustainably increasing the welfare of the population of the Republic of Moldova".

**Keywords:** poverty, workers' risk of poverty, low pay rate, living wage, net monthly average wage

**JEL classification:** I32, J30, E64

**UDC:** 364.662+330.59](478)

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## THE IMPACT OF INCOME INEQUALITY ON ACCESS TO SOCIAL SERVICES

**Aliona BALAN, PhD, Associate Professor,  
Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0003-0094-7272>, [balan.a@ase.md](mailto:balan.a@ase.md)

**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.12>

Income inequality is a global problem, and its effects are deeply felt in many countries, including the Republic of Moldova. Income inequality not only affects individuals' quality of life, but also limits their access to essential services such as health care, education and social assistance.

In this article, we will research the impact of income inequality on access to social services in the Republic of Moldova and propose measures to solve this problem. These include economic and social reforms, investment in social infrastructure and the development of social protection programs. This paper has been elaborated within the framework of the Scientific Project for the period 2020-2023, registered in the State Register of projects in the field of Science and Innovation of the Republic of Moldova with the code 20.80009.0807.29 Project State Program "Improving the mechanisms for applying innovative instruments aimed at sustainably increasing the welfare of the population of the Republic of Moldova".

**Keywords:** income inequality, access to social services, social infrastructure, social protection, economic reforms, Moldova

**JEL classification:** D63, I30, P41

**UDC:** 330.564.2+364.6](478)

# REGIONAL INNOVATIVE SCHEMES OF THE EDUCATIONAL CAPACITY BUILDING FOR THE SMART SPECIALIZATION IN THE HUMAN SETTLEMENTS IN THE REPUBLIC OF MOLDOVA

**Sergiu TUTUNARU, PhD, Associate Professor,**  
**Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0001-7394-6081>, tutunaru@ase.md

**Anatolie BABIN, Institutional Researcher,**

**MBA, Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0002-7253-0890>, anatolii.babin@ase.md

**Ion COVALENCO, Researcher,**

**Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0001-9294-3273>, covalenco@ase.md

**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.13>

*Preparing the Moldovan population to successfully master the benefits of the digital economy is of great importance for our republic today. This is also due to the fact that Moldova is a candidate country for accession to the European Union. As part of its support to the enlargement of the EU and its neighbors, the European Commission's JRC is carrying out smart specialization activities to identify their competitive advantages, opportunities and needs. Enhanced innovation strategies based on the smart specialization approach have the potential to drive technological renewal and broader innovation, providing the basis for creating unique competitive advantages for localities in the EU enlargement regions and neighboring countries. In order to develop awareness-raising activities, training events and mapping of the economic, scientific and innovation potential already existing in the target regions of the Republic of Moldova, this article summarizes the best practices of the European Higher and Specialized Education Area. In order to design educational programs, it is necessary to discuss with representatives of business, academia and public authorities the potential competitive advantages of rural communities and small towns in the development regions. The Education Framework for Innovation for Urban and Rural Resilience can bring together regional universities and innovation centers in the EU and candidate countries to expand entrepreneurial ecosystems and help students, entrepreneurs and civil servants to find solutions to specific urban and rural problems. Within the framework of accelerating the digital transformation of the development regions of the Republic of Moldova, examples of educational and awareness-raising activities are the Digital Innovation Factory based on the EIT model and the EIT Digital Entrepreneurial Academy. The first model of the EIT will support pan-European teams of entrepreneurs in the launch or further development of digital technology projects and products. The second model is EIT Digital, which consists of three schools: a master's program, a professional school and a summer school, which together form the EIT Digital Entrepreneurial Academy. In order to participate in these initiatives, it is necessary to have an appropriate innovative educational infrastructure in the regions and groups of localities of the Republic of Moldova, which implies the realization of innovative educational activities. This infrastructure and human resources are usually provided by regional universities accredited by the European Association of Universities. Such innovative support, embedded in the European ecosystem, can be provided by the IT4BA Innovation Centre at the Academy of Economic Studies of Moldova (AESM) with the adaptation of activities planned jointly with the JRC EU Commission. AESM already has an innovative educational ecosystem that brings together 8 resident companies, teachers, researchers and ICT students. Together with university innovation centers, Moldovan business innovation cluster initiatives will be able to integrate into pan-European teams of education, research and business organizations in the focus of EIT Digital. Consequently, having an organization with an innovation infrastructure and human resources (experts) creates unique innovation opportunities based on the potential of the AESM educational ecosystem.*

**Keywords:** capacity building, innovative schemes, smart specialization

**JEL classification:** I25, R58

**UDC:** 001.895(478)



## DEFICIT OR END OF EXPERTISE<sup>1</sup> IN PUBLIC SOCIAL PROGRAMS DESIGN AND EVALUATION?

**Daniel ARPINTE, Researcher,**  
**Research Institute for Quality of Life, Romania**  
<https://orcid.org/0000-0002-7305-8065>, [arpinte@gmail.com](mailto:arpinte@gmail.com)  
**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.14>

*The paper is based on the observation of an unequal practice in Romania on how are designed and evaluated the public social programs aiming at supporting social disadvantaged groups, which implies a negative impact on the relevance and the efficiency of these programs. Although the evaluation culture was intensively promoted during Romania pre-accession to the EU, particularly during 2001 – 2006 (Toderas & Iacob, 2020), the evaluation practice shows a significant decline in the area of public social programs, except those funded by external grants. Whether the ex-ante assessments are still done (although their quality largely vary due to the availability of the funds needed to conduct these evaluations), the ongoing or impact evaluations funded by the public authorities are almost inexistent. Most of the current public social programs (e.g. the supply of monetary benefits based on means-testing, the nutritional programs for schoolchildren, the public social assistance services) have not ever been evaluated or their evaluations were inconsistent or focused only on specific aspects. Two study cases will illustrate this process, respectively the minimum guaranteed income and the nutritional program for schoolchildren, both previously documented. The analysis will identify how the legislative process has impacted the running of these programs, and will look on the available assessments and studies related to these programs in order to identify the patterns of the assessments which feed the major decisions related to the social programs.*

**Keywords:** program evaluation, impact, evaluation culture  
**JEL classification:** I30, I38  
**UDC:** 364.012(498)

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## HUMAN CAPITAL USE AND JOB EVOLUTION IN THE TRANSITION TO A NEW SOCIOECONOMIC REALITY

**Larisa HUK, PhD in Economics, Senior Researcher,**  
**Institute for Economics and Forecasting,**  
**National Academy of Sciences of Ukraine**  
<https://orcid.org/0000-0002-0143-077X>, [l\\_guk@ukr.net](mailto:l_guk@ukr.net)  
**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.15>

*The importance of the topic. Crisis periods of economic development are characterised by stagnation, growing inequality, social instability and loss of human capital. Improving the living standards of the population and protecting it from possible risks arising from instability in the financial and economic or socio-political situation is an urgent task of public policy for the government. The priorities of short-term and long-term transformation of the labour market are analyzed to determine the direction of effective development. The article discusses the evolution of jobs and employment conditions in the new socioeconomic reality.*

*New risks are on the agenda today. One of the most important challenges has been the reduction of employment or its transformation. Opening up new ideas and expanding employment opportunities are relevant levers in the adaptation strategies of employers and employees. Strategic imperatives for the development of all labour market actors in conditions of instability should include the issue of choosing the optimal models of human capital. In these conditions, the issues related to the need to respond flexibly to turbulence of both social and economic nature become particularly relevant.*

*Purpose. To outline the strategic directions of selecting models of human capital use in the conditions of labour market crisis in the transition to a new socio-economic reality.*

*Research methods: system analysis, factor and comparative analysis, structural and functional analysis, method of statistical groupings, hierarchy analysis, expert evaluations and other methods.*

*Results. Measures that can be taken by public authorities for a more effective use of human capital in the formation of socioeconomic policy in the crisis of instability are proposed.*

**Keywords:** human capital, flexible employment models, competitiveness, labour market regulation, digitalisation of the economy  
**JEL classification:** J18, J21, J41, J50, J63  
**UDC:** 331.5.024.5

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<sup>1</sup> In the meaning given by Tom Nichols in his book „The death of expertise” which is understood as self-sufficiency and systematic rejection of expertise.

## SOCIAL PROTECTION IN CASE OF UNEMPLOYMENT: MODERN WORLD PRACTICES

**Tatiana PEREHUDOVA, PhD in Economics,  
Senior Researcher, Associate Professor,  
Institute for Economics and Forecasting,  
National Academy of Sciences of Ukraine**  
<https://orcid.org/0000-0002-3093-6104>, [ptv\\_tat@ukr.net](mailto:ptv_tat@ukr.net)  
**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.16>

*The publication is dedicated to considering the features of social policy and mechanisms of social protection in the event of unemployment in the developed countries of the world, which have undergone changes as a result of the slowdown in economic growth and the strengthening of the influence of institutional factors. The consequences of the liberalization of reforms in the labour market are studied, with the identification of priorities for the institutionalization of national social policy, especially in the case of unemployment. In connection with the extractive nature of the national labour market in Ukraine, inclusive development with an emphasis on the formation of an inclusive employment policy and social protection of the population is of particular importance. This approach corresponds to modern world concepts of economic development and is relevant in connection with the further search for ways to restore the economy and the social sphere after military operations. The author's approach to overcoming the problems of unemployment and informal employment consists in expanding the coverage of the population by social protection with the development of stimulating the exit from the state of the beneficiary, which consists in reducing the barriers of social and labour inclusion of women, single parents, young people, persons with disabilities, transition from informal employment to formal, increased dependence between employment and access to social benefits.*

**Keywords:** social policy, social protection, unemployment, institutional factors, reforms, labour market, employment policy, inclusive development

**JEL classification:** E24, J20, J64, J65

**UDC:** 364.34

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## APPLICATION OF GIS IN THE SOCIAL SPHERE

**Vlada COLESNICOVA, Student,  
Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0001-9916-212X>, [colesnicova.vlada@ase.md](mailto:colesnicova.vlada@ase.md)  
**Mădălina TONU, Student,  
Academy of Economic Studies of Moldova**  
[tonu.madalina@ase.md](mailto:tonu.madalina@ase.md)  
**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.17>

*Today, digital technologies are being actively penetrated into all spheres of human activity. At different stages of society's development, this period was associated first with computerization, then with informatization, and today with the digitalization of various areas of our lives, including health care and education. One of the most important tasks of the modern world is to maintain and improve human health, as well as to prevent epidemics and dangerous diseases. Geoinformation software allows to integrate, model and visualize heterogeneous spatial data, presenting them in a visual cartographic form, which significantly expands the range of solved tasks. Analyzing spatial information helps to plan actions in case of emerging dangerous disease explosions and rapid dissemination of infections. Geographic information systems are used for tasks related to improving the quality of health care, insurance, as well as for geospatial exploration and combating Ebola, the spread of COVID-19, etc. In education, GIS is used to perform local demographic analysis to identify the most convenient locations for educational facilities and schools in specific communities and selected areas of cities.*

**Keywords:** geographic information systems, domain of application, directions of development, social sphere, health care, education

**JEL classification:** D83, H50, H75, J61, I13, I15, I21, I25, L86, M15, R58

**UDC:** 364+614+37J:004

## THE EVOLUTION OF THEOMICRON VIRUS AND THE INFLUENZA VIRUS IN MOLDOVA

*Elvira NAVAL, PhD, Associate Professor,  
Vladimir Andrunachievici  
Institute of Mathematics and Computer Science, Moldova*  
<https://orcid.org/0000-0002-3814-8989>, [elvira.naval@math.md](mailto:elvira.naval@math.md)  
**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.18>

*New strain Omicron of the Coronavirus infection together with influenza is more contagious than only Omicron by itself. While numbers of lethal cases are less than earlier, life of the human is threatened, especially, in case of the children of an early age. Pontryagin Maximum Principle will be applied to the dynamic modeling of Omicron and Influenza in order to determine optimal solution aimed to minimize the number of infected population and control measures.*

**Keywords:** Omicron, Influenza, Pontryagin Maximum Principle, dynamic modeling, optimal solution

**JEL classification:** C61, C68, I10

**UDC:** 519.87:614

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## CHALLENGES TO ACCESS EDUCATIONAL INSTITUTIONS

*Tatiana COLESNICOVA, PhD in Economics,  
Associate Professor, Leading Scientific Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova*  
[https://orcid.org/0000-0001-9663-6991\\_ctania@gmail.com](https://orcid.org/0000-0001-9663-6991_ctania@gmail.com)  
*Mihail CIOBANU, PhD Student, Scientific Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova*  
[https://orcid.org/0000-0003-1193-6018\\_ciobanu.mihail.s@gmail.com](https://orcid.org/0000-0003-1193-6018_ciobanu.mihail.s@gmail.com)  
*Silvia SAVCENCO, Scientific Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova*  
[https://orcid.org/0000-0002-0058-4320\\_savcenco.silvia@mail.ru](https://orcid.org/0000-0002-0058-4320_savcenco.silvia@mail.ru)  
**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.19>

*The welfare is heavily influenced by the level of education attained by people. Accessibility may be observed at the country level and also it can be seen at the individual level. Therefore, the purpose of this paper is to evaluate some characteristics of educational institutions in the Republic of Moldova, mainly from the perspective of the beneficiary. As research methods were used the analysis, synthesis, induction and deduction. Used data sources are the statistical data of the National Bureau of Statistics of Moldova and the results of a survey elaborated by the authors. The study's findings reveal an overall drop in the number of institutions, teaching staff and students. However, respondents to the survey rated relatively highly, but not very highly, the teaching staff, the quality of hygienic-sanitary conditions, the quality of teaching, the technical-material basis, and the professional-pedagogical qualities of the staff, but they were less satisfied with the quality of the institution's food products and the living conditions in the dormitory. During the years of study, a significant proportion of respondents stated that they paid additional payments in addition to the contractual ones. This paper was elaborated and financed within the Scientific Project for the period 2020-2023, registered in the State Register of Science and Innovation Projects of the Republic of Moldova with the code 20.80009.0807.29 State Program Project "Improving the mechanisms for applying innovative tools oriented towards the sustainable growth of the welfare of the population of the Republic of Moldova".*

**Keywords:** education, institution, Moldova, infrastructure, evaluation, evolution

**JEL classification:** I21, H54

**UDC:** 37.062.5(478)

## DUAL EDUCATION APPROACH TO DIGITAL ICT SKILLS DEVELOPMENT

**Sergiu TUTUNARU, PhD, Associate Professor,**

**Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0001-7394-6081>, tutunaru@ase.md

**Ionelia DAȘCHEVICI, Student,**

**Academy of Economic Studies of Moldova**

<https://orcid.org/0009-0002-9977-1878>, dashevici.ionelia@ase.md

**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.20>

*This article explores the impact of a dual education approach on the enhancement of digital Information and Communication Technology (ICT) skills, with a specific focus on the domain of digital economics. It addresses the persistent disparity between the educational system and the evolving demands of the digital job market. To decrease this gap, the Academy of Economic Studies of Moldova has implemented a new form of education - dual higher education, with the goal of equipping young IT professionals with the modern digital skills necessary for today's dynamic workforce. This initiative recognizes the increasing significance of digital economic principles and endeavours to establish a meaningful connection between conventional education and the contemporary needs of the job market.*

*The practical approach of this idea is based on the education ecosystem created in 2014 in partnership with Innovative Incubator IT4BA and the ICT faculty of ASEM academy. As a result, in 2021-2022 academic year first group on Applied Informatics specialty Infa-223 was created within the dual system, was implemented thanks to the project Coopera Integrating Dual Higher Education In Moldova And Ukraine started in 2021.*

*This abstract encapsulates the core elements of the research:*

*Purpose: To present the impact of the dual higher education approach on the development of modern digital ICT skills within the context of digital economics.*

*Methods: Observation, Case Studies, Field Research, Analysis.*

*Results: Through the dual system approach, new collaborations with ICT partners have been established, and new curricula and fields based on corporate institutional programs have been introduced. This allows students to quickly adapt to the new digital economy labour market demands.*

*Conclusions: Practical implementation of the dual system within the Infa-223 academic group has proven to be a success, setting our students on a path to success in their future careers in the ICT field. Students who have participated in this program have not only gained theoretical knowledge but have also had the opportunity to apply it in practical settings. We look forward to continuing this journey of academic and professional development with our dedicated students.*

**Keywords:** dual education, digital ICT skills, digital economics, capacity building, technology, innovation

**JEL classification:** I21, J24, O33

**UDC:** 330.47

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## THE IMPACT OF DIGITAL SYSTEMS ON TELEWORK IN THE MEMBER STATES OF THE EUROPEAN UNION

**Elian Gabriel MILITARU, PhD Student,**

**University of Craiova, Doctoral School of Economic Sciences, Romania**

<https://orcid.org/0000-0003-1841-2559>, militarueligabriel@yahoo.com

**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.21>

*Teleworking is a concept that has emerged as a result of the development of information and communication technology and represents a new way of working that is becoming increasingly desirable and accessible to employees. Flexible working arrangements, both in terms of specific working hours and the location from which software is accessed to perform work tasks, are a modern approach to work organization and are transposed into European legislation.*

*In the Member States, those responsible for developing the legal framework and issuing legislative policies are addressing the impact of rapid changes in the way we work and the implications of these changes for our daily lives. The telework implementation program is also a very important pillar for Europe because of the challenges coming from the United States and East Asian countries. The challenges can be great because, in order to work remotely, workers are no longer limited by borders, language or economic context. The study aims to improve companies' perception of the benefits of human capital development through the integration of digital systems into the work organization.*

**Keywords:** human capital, digital systems, economic performance, employee motivation, management, teleworking

**JEL classification:** M41, M48, M52

**UDC:** 331.4:004

## LEGAL STRATEGIES AND POLICY RECOMMENDATIONS FOR CLOSING THE GENDER PAY GAP IN MOLDOVA

*Mariana ROBU, PhD in Economics,  
Academy of Economic Studies of Moldova*  
<https://orcid.org/0000-0001-8828-7998>, [mariana.robustu@mail.ru](mailto:mariana.robustu@mail.ru)  
**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.22>

*This paper aims to propose legal strategies and policy recommendations for closing the gender pay gap in Moldova. The gender pay gap remains a pressing issue in Moldova, with women consistently earning less than their male counterparts for equal work. The purpose of this study is to identify effective measures that can be implemented to address this disparity and promote gender equality in the workplace. To achieve this objective, a comprehensive review of existing literature, reports, and studies on the gender pay gap in Moldova was conducted. The research methods employed in this study included a combination of desk research and data analysis. The data collected was analyzed using gender analysis to identify common solutions and patterns related to the gender pay gap in Moldova. The most relevant results of this study indicate that several factors contribute to the gender pay gap, including occupational segregation, discrimination, and societal norms. Research findings suggest that a multi-faceted approach is required to address these issues effectively. The proposed legal strategies and policy recommendations include the implementation of pay transparency measures, strengthening anti-discrimination laws, promoting gender-balanced leadership, and providing support for women's career development and training opportunities. These findings and recommendations can serve as a valuable resource for policymakers, employers, and civil society organizations in Moldova to develop evidence-based strategies and policies aimed at closing the gender pay gap. By implementing these measures, Moldova can take significant steps towards achieving gender equality in the workplace and fostering a more inclusive and equitable society.*

**Keywords:** gender pay gap, legal strategies, policy recommendations, gender-balanced leadership, gender equality, pay transparency measures, anti-discrimination laws

**JEL classification:** G35, G38, J70

**UDC:** 331.2+349.232](478)

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## IMPROVING MANAGEMENT IN CUSTOMS SERVICES

*Mircea GUTIU, PhD Student, Scientific Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova*  
<https://orcid.org/0000-0001-6180-8650>, [gutium.mircea@rambler.ru](mailto:gutium.mircea@rambler.ru)  
**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.23>

*In the period of globalization and internationalization of economic relations, customs services are actively developed, in which regulation of a specific part of the customs service moves to the international level. The quality of services the customs authorities provide influences the time needed to complete customs formalities and reduces the financial risks and costs of all participants involved in foreign economic activity. The increasing foreign trade turnover requires improving the movement and processing mechanisms of goods and services across the customs border, necessitating the active implementation of new management practices. This paper has been elaborated within the framework of the Scientific Project for the period 2020-2023, registered in the State Register of projects in the field of Science and Innovation of the Republic of Moldova with the code 20.80009.0807.29 Proiect Program de Stat "Perfecționarea mecanismelor de aplicare instrumentelor inovatoare orientate spre creșterea durabilă a bunăstării populației Republicii Moldova" / Project State Program "Improving the mechanisms for applying innovative instruments aimed at sustainably increasing the welfare of the population of the Republic of Moldova".*

**Keywords:** customs service, management, innovation, international trade

**JEL classification:** K24, M15, O32, Q37

**UDC:** 339.54



## THE IMPORTANCE GIVEN BY ROMANIANS TO RESEARCH AND INNOVATION DOMAINS IN ORDER TO ENSURE FUTURE DEVELOPMENT

*Maria Livia ȘTEFĂNESCU, PhD, Researcher,  
Research Institute for the Quality of Life, Romanian Academy, Romania  
<https://orcid.org/0000-0001-8482-6050>, [livia.stefanescu@gmail.com](mailto:livia.stefanescu@gmail.com)  
DOI: <https://doi.org/10.36004/nier.cecg.IV.2023.17.24>*

*In this paper we will analyze to what extent Romanians are aware of the need to develop the research and innovation domains to promote progress in the coming years. The study is based on Romanians' answers to questions from a questionnaire attached to a Eurobarometer. Please note that the Eurobarometer used was completed in May 2021 and includes the opinions of 1050 adults from Romania. Basically, will be estimated the trends of Romanians' perceptions regarding the following aspects: SciSoc, NewTech, Areas, Explain. We specify below some details regarding the four mentioned fields of our study. So, SciSoc defines the variable attached to the answers to the question: Do you think that the overall influence of science and technology on society is: "very positive", "fairly positive", "fairly negative", "very negative"? The NewTech variable sets on a four-value scale the intensity of perception for the positive effect of new technologies on life orientation over the next 20 years. The following components of new technologies are considered: Solar energy, Wind energy, Information and communication technology, Brain and cognitive enhancement, Vaccines and combatting infectious diseases, Biotechnology and genetic engineering, Space exploration, Nanotechnology, Nuclear energy for energy production, Artificial Intelligence. The answer to the question "Who is the best qualified to explain the impact of scientific and technological developments on society?" is characterized by the variable Explain. There are 15 possible answers: Scientists working at a university or government-funded research organisation; Scientists working in an industrial or privately funded research organisation; Journalists; Politicians; Consumer organisations; Environmental protection associations; Industry and private companies; People active on online social networks and bloggers; Religious leaders or representatives; Romanian government; The military; General practitioners and specialist doctors; Writers and intellectuals; Family and friends; The European Union. Romanians' opinions may differ substantially in relation to the individual IC characteristics of the interviewees. In the present work we will focus only on the type of residence of the respondent to the questionnaire (rural area or village, small or middle sized town, large town). The defined TREND indicator is compatible with the stochastic ordering relationship between categorical ordinal variables of this study. The application of homogeneity statistical tests revealed perceptible differences of opinions between people belonging to different types of communities. Finally we mention that the initial Eurobarometer sample was weighted for processing taking into account the real proportions of the various socio-demographic categories in Romania, at the level of 2021.*

**Keywords:** *research and innovation, Romania, sample, questionnaire, perception, trend, statistical test, categorical ordinal variable*

**JEL classification:** *C4, C5, C8, O3, Q5*

**UDC:** *001.895(498)*

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## PROSPECTS FOR EUROPEAN INTEGRATION OF THE REPUBLIC OF MOLDOVA AND THE CONSTITUTIONAL COMPONENT

*Constantin GÎLCA, PhD in Economic Sciences, Lecturer,  
University of European Studies of Moldova  
<https://orcid.org/0000-0002-8079-3199>, [gilka.k@gmail.com](mailto:gilka.k@gmail.com)  
DOI: <https://doi.org/10.36004/nier.cecg.IV.2023.17.25>*

*The purpose of the research is to provide an analysis of trends and patterns of development of European countries, features of their functioning in the context of restructuring the economies of the CIS countries, to identify internal and external mechanisms of development of European countries and on this basis to formulate a model of economic, legislative and social development. The rule of law is the fulcrum of the European Union. Under EU law, laws are above national interests, including national leaders and politicians. The Republic of Moldova is currently negotiating an Association Agreement, which includes a Comprehensive Free Trade Agreement. Benefits of enlargement: increase in welfare for all EU member states; by 3 times more trade between old and new member states; by 5 times more between new member states; greater stability in Europe; a more important role for the EU on the world stage. It is necessary to overcome the tendency to divide society according to geopolitical criteria: East-West. Rule of law conditions in the region should be strengthened to support the ambitious measures to be taken by interested countries.*

**Keywords:** *economic integration, advantages, European Union, constitution, legislation*

**JEL classification:** *F02, F15, K15*

**UDC:** *339.92(4+478)*

## ARTIFICIAL INTELLIGENCE DEVELOPMENT: RISKS AND BENEFITS

*Elena HRISTEV, University Lecturer,  
Academy of Economic Studies of Moldova  
hristev.elena@ase.md*

*Andreea BORTĂ, Student,  
Academy of Economic Studies of Moldova  
borta.andreea@ase.md*

*Andreia-Nicoleta ȚURCAN, Student,  
Academy of Economic Studies of Moldova  
turcan.andreia\_nicoleta@ase.md*

**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.26>

*Current State of Affairs: The field of artificial intelligence (AI) has witnessed rapid advancements in recent years, with widespread applications in various sectors. As AI technology continues to evolve, it is crucial to assess the associated risks and benefits comprehensively. Research Objective: The primary goal of this study is to analyze the risks and benefits linked to the development of AI. We will delve into the multifaceted landscape of AI's impact on society, focusing on its potential advantages and challenges. This research aims to provide an up-to-date overview of the current state of AI. Research Methods: To achieve this objective, we will employ a mixed-methods research approach, including: 1. Literature Review: We will conduct an extensive review of academic and non-academic sources to gather insights into the latest AI developments, applications, and the associated risks and benefits. 2. Surveys and Interviews: Primary data will be gathered through surveys and interviews with AI experts, policymakers, and individuals affected by AI technologies. This qualitative data will provide real-world perspectives on the subject. 3. Quantitative Analysis: Quantitative methods will be used to analyze data related to AI adoption, economic impacts, and employment trends, allowing us to quantify the benefits and drawbacks of AI development.*

*Results: The research is ongoing, and we anticipate the following outcomes: 1. Current State of AI Development: A comprehensive overview of the present status of AI, including its applications across various sectors and its rapid growth. 2. Identified Risks: A detailed analysis of potential risks associated with AI, such as security concerns, ethical dilemmas, and societal implications. 3. Realized Benefits: An examination of the tangible benefits already derived from AI technology, including advancements in healthcare, enhanced industry efficiency, and improved quality of life. 4. Public Perceptions: Insights into how the general public perceives AI, its impact on their lives, and their concerns regarding its development.*

*Conclusion: This research endeavor seeks to provide a holistic understanding of the risks and benefits associated with AI development in today's context. It aims to offer valuable insights that can inform policymakers, industry leaders, and the general public as we navigate the dynamic landscape of artificial intelligence.*

**Keywords:** artificial intelligence, ai development, risks and benefits, current state, research methods, ethical dilemmas, public perception, quantitative analysis

**JEL classification:** D83, D87, L86

**UDC:** 004.8

## NEW PLATFORMS FOR FINANCIAL INCLUSION OF YOUTH AND IMMIGRANTS

*Andrei TIMUȘ, Scientific Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova*

<https://orcid.org/0000-0002-7010-6703>, [andrei.timush@gmail.com](mailto:andrei.timush@gmail.com)

**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.27>

*The concept of sustainable growth includes balanced development, from the point of view of the environment and society, for all stages and sectors of the economic activities, consistently and systemically country promotion at the regional and global level. Investing in young people entrepreneurs and encouraging migrants to invest in the country of origin is an objective included in public policies focused on sustainable development. In several countries, such an approach has proven its effectiveness, improving the economic situation among young people, offering them more opportunities for development and growth, increasing the rate of financial inclusion (1) and thereby implementing the objectives of sustainable development. The concept of financial inclusion – the population and companies having access to safe financial products and services, suitable for their needs, being provided in a rational and viable manner. Financial inclusion has a much broader meaning, which includes not only access to these services but also includes an aspect related to financial education, increasing the quality of life or developing the economy at a macroeconomic level.*

*Taking into account the empirical studies and the good parties in the paper, some relevant directions and proposals are presented to support startup businesses among young people and to encourage migrants to invest in their country of origin. The priorities proposed in the study - the development of new tools and platforms aimed to the well-being and sustainable growth of the of the population of the Republic of Moldova by increasing financial inclusion, reducing the rate of poor workers, increasing incomes among young people and integrating migrants into the business activities and increasing jobs. The basic concept of the study was developed at the municipal council of Chisinau and constitute a support for the development of the financing program for young people and migrants, implemented in the Chisinau city through the pilot municipal program "Startups for young people and migrants".*

*The paper was elaborated within the framework of State Project Program no. 20.80009.0807.29 "Improving the mechanisms for applying innovative instruments aimed at sustainably increasing the welfare of the population of the Republic of Moldova".*

**Keywords:** young, business, startups, local programs, migrants' investments

**JEL classification:** A14, A20, E22, E24, E66, G38, H19, H53

**UDC:** 334.722(478)

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## LINGUISTIC INTEGRATION IN ITALY: FRAMEWORK, POLICIES AND OUTCOMES

*Annalisa SIMONE, Specialist Translator,  
Università degli Studi del Sannio, Italy*

<https://orcid.org/0009-0000-6632-9157>, [annalisa.sim26@gmail.com](mailto:annalisa.sim26@gmail.com)

*Marion SANTORELLI, English Language Lecturer,  
Università degli Studi del Sannio, Italy*

<https://orcid.org/0009-0009-6826-986X>, [marionsantorelli@gmail.com](mailto:marionsantorelli@gmail.com)

**DOI:** <https://doi.org/10.36004/nier.cecg.IV.2023.17.28>

*This paper explores the role of the linguistic dimension within the process of the social integration of migrant populations in Italy. With increasing ethnic diversity as a result of recent decades of immigration in all Western European countries, the integration of ethnic minorities has become a major concern of national governments, policymakers, academics, and the individuals directly affected themselves. Indeed, the Council of Europe has been a pioneer in the field of language teaching and the project on the Linguistic Integration of Adult Migrants (LIAM) is part of its continuing work in this domain.*

*Linguistic integration, indeed, is a complex process and can occur in different forms and levels being highly contextual and connected to migrants' and host communities' expectations.*

*Starting from an overview of the main Italian policies for linguistic integration, this study highlights the linguistic resources that migrants need in order to successfully develop a sense of belonging and engagement in the host community.*

*This study aims to understand what shapes, affects or enables the linguistic integration of migrants in medium-sized towns and rural areas. It is vital to define what types of content should be taught on a priority basis in order to develop efficient language programmes to fulfil migrants' needs and expectations.*

**Keywords:** integration, minorities, linguistic integration, Italy, refugees, education

**JEL classification:** J60, L2, Z13

**UDC:** 314.15(450)

## SESSION V

### MIGRATION AND DEMOGRAPHIC CHANGE: CHALLENGES AND PUBLIC POLICIES

#### THE CONCEPTUAL FRAMEWORK OF THE DEMOGRAPHIC RESILIENCE POLICIES PROMOTION

**Olga GAGAUZ, Habilitated Doctor, Associate Professor**  
**National Institute for Economic Research, Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0002-1175-1008>, [gagauz\\_olga@ince.md](mailto:gagauz_olga@ince.md)  
**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.1>

*The article presents a conceptual framework for demographic resilience and sets out the necessary policies for its consolidation. In a constantly changing world, where factors such as population aging and migration can have a significant impact on societies, the development, and maintenance of demographic resilience become essential to ensure a sustainable and prosperous future for communities and nations. A demographically resilient state has the capacity to predict demographic changes, understand their impact, and design evidence-based policies that respect human rights.*

*Drawing on the theory of human capital and the goals of human development (SDGs), the article argues how demographic resilience can be achieved. It is emphasized that the inertia of demographic processes and structures requires the promotion of long-term policies. The measures taken can influence demographic indicators, but their effects become visible only in the long term, thus, the development and implementation of demographic policies require a strategic approach and consideration of long-term effects.*

*The interconnection between demographic resilience and economic resilience is demonstrated as the main components of sustainable development. To achieve long-term economic goals, it is essential to create policies and programs that promote a healthy, educated, and adaptable population that supports the requirements of a changing and competitive economy. Building on these, policies and programs that support family planning, gender equality, access to quality healthcare, and education can contribute to managing demographic changes in a balanced and sustainable manner.*

*This work contributes to a systemic approach to demographic changes and policies to mitigate their negative effects.*

*The article was elaborated within the State Program Project (2020-2023) 20.80009.0807.21 „Migration, demographic changes, and situation stabilization policies”.*

**Keywords:** *demographic resilience, systemic approach, demographic policies*

**JEL classification:** *J11, J14, J18*

**UDC:** *314.15*

## THE MACEDONIAN FAMILY THROUGH THE LENS OF THE 2021 CENSUS

**Makedonka RADULOVIC, PhD in History, Associate Professor,**

**Ss. Cyril and Methodius University of Skopje, Macedonia**

<https://orcid/0000-0002-3753-1521>, [radulovic@fzf.ukim.edu.mk](mailto:radulovic@fzf.ukim.edu.mk)

**Irena Avirovic BUNDALEVSKA, PhD in History, Associate Professor,**

**Ss. Cyril and Methodius University of Skopje, Macedonia**

<https://orcid/0000-0002-1609-000X>, [avirovic@fzf.ukim.edu.mk](mailto:avirovic@fzf.ukim.edu.mk)

**Angelka KESKINOVA, PhD in Special Education and Rehabilitation, Assistant Professor,**

**Ss. Cyril and Methodius University of Skopje, Macedonia**

<https://orcid/0000-0002-3698-0501>, [angelka@fzf.ukim.edu.mk](mailto:angelka@fzf.ukim.edu.mk)

**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.2>

*In recent decades, the landscape of families has undergone significant transformations in terms of their structure, size, and dynamics. Statistical data paints a clear picture of these changes, including shrinking family sizes due to a decline in marriages, an uptick in divorces, and a decreasing birth rate. Concurrently, the ongoing trends of migration and an aging population are altering the demographic composition. These shifts are equally evident within Macedonian society. The most recent population census, conducted after a two-decade gap (with the previous census in 2002), provides us with a comprehensive view of the demographic landscape in the Republic of North Macedonia and, more specifically, the evolution of the Macedonian family structure. This paper's objective is to dissect and compare the population, household, and family data collected during the 2021 and 2002 censuses. Through this analysis, we seek to elucidate the transformations within the Macedonian family over recent decades.*

*The study takes on a descriptive research methodology, allowing for the identification, analysis, and comparison of trends over the past two decades. Content analysis was employed as one of the techniques utilized in this research.*

*Results highlight shifts in the demographic composition of households and families due to factors such as migration and an aging population. We can realize shifts in Macedonian family structures. Families are getting smaller and more diverse. By comparing data from two points in time separated by two decades, the study identifies long-term trends in family structure and demographics that extend beyond the immediate changes observed.*

**Keywords:** family, demographic shifts, population census, birth rate, societal changes, fertility

**JEL classification:** J10, J12, J13

**UDC:** 314(497.7)



## INTENTION TO MIGRATE IN THE CASE OF MOLDAVIAN HEALTH STUDENTS: PRELIMINARY RESULTS

Elena BUNDUCHI, PhD in Economics, Lecturer,  
George Emil Palade University of Medicine, Pharmacy, Science, and Technology  
of Targu Mures, Romania

<https://orcid/0000-0002-6036-9091>, [elena.bunduchi@umfst.ro](mailto:elena.bunduchi@umfst.ro)

Valentina VASILE, Habilitated Doctor, Professor,  
Institute of National Economy, Romanian Academy

<https://orcid/0000-0002-2368-1377>, [valentinavasile2009@gmail.com](mailto:valentinavasile2009@gmail.com)

Razvan VASILE, PhD student,

National Institute for Economic Research, Romanian Academy

<https://orcid/0000-0002-0269-2886>, [vasile.razvan89@gmail.com](mailto:vasile.razvan89@gmail.com)

DOI: <https://doi.org/10.36004/nier.cdr.V.2023.17.3>

*The emigration of healthcare professionals from less developed countries is a significant and concerning phenomenon with detrimental consequences for the countries of origin. A thorough analysis of the healthcare labor market spanning the last two decades reveals an increasing trend of migration, not only among medical specialists but also among students and recent graduates. This research is dedicated to identifying the push-pull factors motivating medical students toward pursuing their education and careers abroad, using an econometric approach – logistic regression.*

*Young professionals, particularly, exhibit a strong inclination toward migration, whether it entails pursuing higher education or seeking employment opportunities in foreign countries. This inclination primarily stems from the poor working conditions and limited career prospects prevalent in their underdeveloped home countries, such as Moldova. Given this context, it becomes imperative for Moldovan authorities and healthcare institutions to take proactive measures in formulating strategies aimed at retaining medical professionals and improving working conditions within the healthcare sector.*

**Keywords:** labour migration, study migration, healthcare personnel, push-pull factors, Moldova

**JEL classification:** I11, J61, O31

**UDC:** 614.15+331.556.44](478)

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## LINKS BETWEEN THE EUROPEAN UNION SOME SOCIAL REFORM FEATURES AND SOCIAL INDICATORS FOR THE 2011-2021 PERIOD

Alina Georgeta AILINCA, PhD in Economics,  
"Victor Slăvescu" Cente for Financial and Monetary Research, Romania

<https://orcid/0000-0002-2086-8275>, [alinageorgetaailinca@gmail.com](mailto:alinageorgetaailinca@gmail.com)

DOI: <https://doi.org/10.36004/nier.cdr.V.2023.17.4>

*Although compared to many other parts of the world, the European Union is a prosperous region, with a relatively low level of social inequality, nevertheless a series of problems persist and often develop in times of crisis (e.g., the global crisis of 2008-2009, the sovereign debt crisis, the COVID-19 crisis). Under the influence of the south-eastern flank of EU27 countries, poverty, social inequity and even the participation of young people in the labor market or in education and training programs seem to suffer significantly from the COVID-19 pandemic. Thus, this study uses panel data from 2011 to 2021 and analyzes it using a regression approach to determine the influence of the characteristics of social policies at the level of EU27 countries on several problematic social indicators such as: At-risk-of-poverty rate by sex, Income quintile share ratio (S80/S20) by sex, young people neither in employment nor in education and training by sex (NEET). According to the findings of this research, the effect of the characteristics of social policies on the improvement of the above indicators is weak, and the influence comes more from the part of the social indicators on the characteristics of the social policies at the EU27 level.*

**Keywords:** social vulnerabilities, social reforms, European Union

**JEL classification:** E61, E66, O15

**UDC:** 316.422(4)

## EXPLORATION OF THE LINK BETWEEN RELIGIOSITY AND FERTILITY IN MOLDOVA BASED ON THE GENERATIONS AND GENDER SURVEY

**Claudiu IVAN, PhD in Sociology,**  
**Research Centre for Education and Life Chances, Romania**  
<https://orcid.org/0009-0006-3158-6456>, [claudiu.ivan@access.ro](mailto:claudiu.ivan@access.ro)  
**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.5>

*The paper analysed the religious phenomenon in relation to fertility using the Generations and Gender Survey database resulting from data collection in 2021 in the Republic of Moldova. It examined, using statistical regression, the relationship between the variable capturing the number of biological children the respondent has and the level of religiosity expressed in the survey, while controlling for the effects of other relevant variables.*

*The limited space available allowed for only opening analytical perspectives in this direction, advancing the premises of an analytical model that can be refined, with the promise of future development within a more laborious analysis, considering comparisons across multiple countries. The paper theoretically reviewed relevant literature, providing evidence regarding the relationship between religion and fertility, as well as a comprehensive explanatory framework for fertility. It is essential to integrate religion as a social phenomenon into a broader explanatory framework that highlights the social constellation determining fertility. The argument was made that there are conditioning factors, interaction effects, and mediations between religion, economic analysis of childbearing, educational attainment, domestic gender roles, the quality of relevant public childcare services, and anticipated family support. Together, these elements can describe the "fertility equation" resulting from the emergence of future generations.*

*The identified results partially confirm the hypotheses put forward (within the invoked limits), showing that the level of religiosity of individuals matters in the decision to procreate and plays an essential role in the fertility phenomenon. From this perspective, public policies aimed at demographic regulation of the population cannot ignore the effect of the religious factor.*

**Keywords:** demography, fertility, religiosity, GGS, Moldova

**JEL classification:** J10, J13, Z12

**UDC:** 314.12+2-45](478)

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## DISPLACED UKRAINIANS IN TRANSNISTRIA: CONDITIONS AND PROBLEMS OF ADAPTATION TO THE LOCAL CONTEXT

**Andrei CRIVENCO, PhD in Geography,**  
**Transnistrian State University named after T.G. Shevchenko**  
<https://orcid.org/0000-0002-3096-6979>, [crivenco@inbox.ru](mailto:crivenco@inbox.ru)  
**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.6>

*The Republic of Moldova, including the Transnistrian region, has become one stop on the massive flow of displaced Ukrainians to the west. Many of them decided to settle in the region. It is relevant to understand how displaced Ukrainians settle in the region and which problems they face. Among Ukrainian migrants in Transnistria, women predominate (about 85%). About 50% of refugees are between 30 and 50 years old. The presence of displaced Ukrainians in Transnistria has a certain impact on the demographic situation in the region, but statistical accounting of this impact remains a problem.*

*The adaptation of Ukrainian immigrants to Transnistria can be supported by a number of factors, including the region's proximity to Ukraine (especially from Odesa), a favorable cultural and linguistic environment, a simplified registration system, and the availability of educational services, including in the Ukrainian language. The adaptation of Ukrainian immigrants to Transnistria may face a number of factors that may pose obstacles to successful integration, including differences in traditions and customs between Ukraine and Transnistria (for example, the use of pro-Russian symbols in the region), limited social services available to resettles, low levels of payment labor and difficulty finding work. The current situation aggravates the issue of the effectiveness of the Transnistrian authorities' policy to attract and retain the population through measures to create jobs, provide affordable housing, and support families.*

**Keywords:** Transnistria, displaced Ukrainians, adaptation problems

**JEL classification:** J10, J11, J15

**UDC:** 314.151(478+477)

## SPATIAL POLARIZATION AND URBAN GHETTOIZATION OF THE ROMA POPULATION IN BULGARIA

**Dessislava POLEGANOVA, PhD Student,**  
**National Institute of Geophysics, Geodesy and Geography,**  
**Bulgarian Academy of Sciences**  
<https://orcid/0000-0001-8214-8700>, [dpoleganova@yahoo.com](mailto:dpoleganova@yahoo.com)  
**Desislava, VARADZHAKOVA, PhD, Associate Professor,**  
**National Institute of Geophysics, Geodesy and Geography,**  
**Bulgarian Academy of Sciences**  
<https://orcid/0000-0001-6072-464X>, [dvaradzhakova@gmail.com](mailto:dvaradzhakova@gmail.com)  
**Marina RAYKOVA, PhD student,**  
**National Institute of Geophysics, Geodesy and Geography,**  
**Bulgarian Academy of Sciences**  
<https://orcid/0000-0002-9114-8849>, [marinanikova@yahoo.com](mailto:marinanikova@yahoo.com)  
**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.7>

*The current urban development in Europe faces many complex problems, mainly related to the deepening of socio-economic inequalities, spatial polarization and ghettoization, the increasing share of marginalized populations and those at risk of poverty, and school segregation. These issues are particularly acute in countries with a heterogeneous ethnic structure, and the Roma population has emerged as the most vulnerable group within Europe, particularly in Bulgaria. Roma ethnical group constituted 4.4% of the total Bulgarian population in 2021 and shows a high territorial concentration in several well-delineated areas, namely North-Western, North-Eastern, Maritsa, Trans-Balkan, and Burgas regions. In addition, more than half of them live in cities and possess the most favorable demographic features and the highest migration mobility compared to other ethnic groups. So far, despite the long-standing efforts of the Bulgarian state for Roma's successful integration, there are continuous and unfavorable trends of deepening processes of social exclusion, intolerance manifestations, spatial segregation, poor housing conditions, and lack of employment. The paper explores the current spatial polarization and urban ghettoization of the Roma population in Bulgaria. The spatial segregation of Roma urban communities is a significant issue in Bulgaria, and efforts to address their integration through national and regional strategies have not yet yielded substantial improvements. The extensive knowledge of the Roma population's cultural and other inherent peculiarities and the involvement of Roma stakeholders in policy discussions and implementations are crucial for achieving sustainable change in Bulgarian society.*

**Keywords:** spatial segregation, ghetto, Roma population, Bulgaria

**JEL classification:** A14, P23, P25, P36, R23, Z10

**UDC:** 316.347(497.2)

## THE INTERVENTION OF COMMUNITY MULTIDISCIPLINARY TEAMS IN THE ASSISTANCE OF WOMEN - VICTIMS OF DOMESTIC VIOLENCE

**Diana CHEIANU-ANDREI, PhD in Sociology, Associate Professor,  
Moldova State University, "SocioPolis"**

<https://orcid.org/0000-0001-5637-821>, [dcheianu@yahoo.com](mailto:dcheianu@yahoo.com)

**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.8>

*Domestic violence exists in various societies, including in the Republic of Moldova. This constitutes a serious form of violation of human rights. At the same time, domestic violence has a strong gender character, based on the social relations of inequality between women and men. From 2007 until now, the Republic of Moldova has continuously improved its mechanisms to prevent and combat domestic violence and adopted normative acts to ensure a systemic approach for preventing and combating this phenomenon, but also to guarantee an effective response of specialized institutions in given cases. In order to prevent and combat domestic violence, but also to provide assistance to victims, the local public authorities establish a multidisciplinary team at the community level. This article, is analyzes the intervention of multidisciplinary teams in cases of domestic violence and assistance of women-victims of domestic violence, in 12 communities from the Cahul and Ungheni districts. The data were collected through the sociological survey in 12 communities, focus group discussions with members of multidisciplinary teams, and interviews with women victims of domestic violence in 2019 and 2023 (The Program Strengthened gender action in Cahul and Ungheni districts, 2020-2023 (EVA Project), financed by the European Union and implemented by UN Women Moldova, in partnership with UNICEF Moldova). The research results highlight changes in identification procedures, registration, case management, assistance, and referral of women-victims of violence, as well as in the work of multidisciplinary teams, including challenges and opportunities for improving the work of multidisciplinary teams.*

**Keywords:** domestic violence, gender-based violence, violence against women, community multidisciplinary teams, women victims of domestic violence, case management, assistance, referral

**JEL classification:** J12, J15, J50

**UDC:** 343.6-055.2

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## INFERTILITY AMONG COUPLES FROM A DEMOGRAPHIC POLICY PERSPECTIVE

**Inga CHISTRUGA-SINCHEVICI, PhD in Sociology,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0002-3241-9864>, [i\\_sinchevici@yahoo.com](mailto:i_sinchevici@yahoo.com)

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*Measures aimed at including medically assisted reproductive technologies in population and family policy have been a distinctive trend over the last two decades. The aim of the study is to assess the role of state policies in supporting infertile couples, based on an analysis of the legal framework with reference to reproductive health and the protection of the institution of the family.*

*According to data from the Generations and Gender Study, about 11% of couples of reproductive ages in the Republic of Moldova face the problem of the inability to conceive a child. The experience of infertility affects the couple through feelings of guilt and shame, situations of disapproval from others, and implications for family stability and well-being. Legislation states that people in the Republic of Moldova have the right to infertility treatment, including the use of medically assisted reproductive technologies, the most commonly used being in vitro fertilization. In reality, there are a number of obstacles for couples who wish to conceive a child using medically assisted reproductive technologies: the high cost of services (in vitro fertilization is currently carried out only privately); territorial inaccessibility due to the concentration of all medical institutions providing medically assisted reproductive services in Chisinau; religious resistance and other ethical issues. The article concludes with examples of European practices and recommendations for improving policies to support infertile couples in Moldova.*

*The article was elaborated within the State Program Project (2020-2023) 20.80009.0807.21 „Migration, demographic changes, and situation stabilization policies”.*

**Keywords:** infertility, child, family policy, demographic policy, medically assisted reproductive technologies

**JEL classification:** J10, J12, J13, J18

**UDC:** 314.113



## SUSTAINABILITY OF SOCIAL SYSTEMS IN THE CONTEXT OF POPULATION AGING

**Mariana BUCIUCEANU-VRABIE, PhD in Sociology, Associate Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0002-7743-7206>, [buciuceanuvrabie@gmail.com](mailto:buciuceanuvrabie@gmail.com)

**Galina SAVELIEVA, PhD in Economy, Associate Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0002-0691-7640>, [gts6@mail.ru](mailto:gts6@mail.ru)

**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.10>

*In the article, key aspects related to the accelerated aging of the population in the Republic of Moldova are addressed, highlighting the demographic, economic, and social issues the country faces. Based on statistical and empirical data, the challenges faced by the elderly population are highlighted: low standard of living, poverty, integration into the labor market, limited access and quality of health services, etc. The aging process affects rural areas and the female population more significantly. The aging coefficient is on the rise, reaching 23.8% nationally and 25.4% in rural areas. According to monitoring indicators, the potential and capacity to ensure active aging of the population remain low, just over 28% nationwide and 22% in rural areas. The population structure is increasingly characterized by a higher proportion of older age groups (65-69/70-74 years). This trend has significant implications for healthcare, pension, and social assistance systems, as well as for the labor force, jeopardizing the sustainability of social systems and the economic productivity of the country.*

*Mitigating these challenges is essential to continue developing and promoting active and healthy aging policies with a cross-sectoral and intersectoral approach, integrating aging into various areas of development, from the economy to education and health. Creating an environment conducive to all generations requires adaptation to demographic realities, addressing the new needs of the workforce, promoting social inclusion of older persons to leverage their experience and skills, and developing measures to support elderly care and reforms to ensure an equitable pension system. The article was elaborated within the State Program Project (2020-2023) 20.80009.0807.21 „Migration, demographic changes, and situation stabilization policies”.*

**Keywords:** population aging, pension system, socio-economic challenges, care policies

**JEL classification:** J11, J14, J18, H75

**UDC:** 314+364.61(478)

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## REGIONAL DIFFERENTIATION OF MORTALITY IN THE REPUBLIC OF BELARUS IN THE PRE-COVID PERIOD

**Olga MURASHKO, Scientific Researcher,  
Institute of Economics of the NAS of Belarus**

<https://orcid.org/0009-0005-0404-4443>, [olga-rebenok@mail.ru](mailto:olga-rebenok@mail.ru)

**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.11>

*Mortality and life expectancy are important indicators of public health. This article presents a regional analysis of mortality in the Republic of Belarus from 2000 to 2019. The study takes into account the breakdown of data by gender, age, and type of locality. The aim of the research is to identify the characteristics and factors influencing the population mortality in different regions of the country. To achieve this goal, data on population mortality in the regions of Belarus over time were used. The article provides an overview of the main causes of mortality, analyzing them in the context of gender, age, and type of locality.*

*The results of the study have allowed us to identify key factors influencing the level of mortality, such as the age distribution of the population, the presence of comorbidities, and the accessibility of medical care. Based on the analysis conducted, the main trends in population mortality have been identified.*

*The results of the study help us understand which population groups are most vulnerable to the risk of mortality and which causes of mortality are most common in different regions of the country. The regional analysis of mortality in the pre-COVID period in the Republic of Belarus contributes significantly to the study of epidemiology and population health. The findings of this research can be used to develop measures and strategies to prevent mortality in similar situations in the future.*

**Keywords:** mortality, causes of mortality, life expectancy, regional analysis, Republic of Belarus, mortality trends

**JEL classification:** J10, J11, R59

**UDC:** 314.14(476)



## HISTORICAL AND SOCIOLOGICAL PERIODIZATION OF THE TRANSFORMATION OF THE BELARUSIAN FAMILY

**Anastacia BOBROVA, PhD in Economics, Associate Professor,  
Institute of Economics of the NAS of Belarus**

<https://orcid/0000-0001-5054-2156>, [nastassiabobrova@mail.ru](mailto:nastassiabobrova@mail.ru)

**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.12>

*Demographic security in the form of achieving a demographic optimum is jeopardized by the barriers that arise as a result of ongoing social and economic transformations. The transformation of the institution of the family, which is a natural process of social modernization caused by the reduction of social control over the demographic behavior of the population, the increase in the status of women in society and gender equality, as well as the liberalization of behavioral norms and values, plays a leading role among them.*

*The socio-demographic transformation of the family is interpreted from different positions, based on a variety of sociological, economic, and demographic theories. The modern concept of the family is increasingly moving away from the Soviet definition of "the unit of society". The aim of the article is to analyze the transformation of the Belarusian family through changes in its functions, type's structure, and values.*

*Over half a century, the Belarusian family has undergone fundamental changes: from patriarchal, multigenerational, large family to equal, egalitarian, nuclear, single-child family.*

*The article highlights the main stages of changes in the structure of the Belarusian family in connection with the trends of demographic development of the society. At different stages, the stability of the family institution was influenced by various social structures. Today, the role of state institutions, which allow the family to expand its functionality, has significantly increased. However, the weakening of the function of caring for offspring as a fundamental factor in preserving the institution of the family, as well as the decline in the population's need for children, is a cause for concern.*

**Keywords:** family structure, family transformation, marriage rate, divorce rate

**JEL classification:** J12, J13, J18

**UDC:** 314+316.356.2](476)

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## GENERATIVE STRATEGIES IN TIMES OF SHOCKS: UKRAINE'S EXPERIENCE

**Iryna KURYLO, PhD in Economics,  
Ptoukha Institute for Demography and Social Studies of NAS of Ukraine,  
CUNI (Czech Republic)**

<https://orcid/0000-0003-1379-7023>, [iryna.kurilo2017@gmail.com](mailto:iryna.kurilo2017@gmail.com)

**Svitlana AKSYONOVA, PhD in Economics,  
Ptoukha Institute for Demography and Social Studies of NAS of Ukraine**

<https://orcid/0000-0003-0516-9078>, [svitlana\\_aksyonova@yahoo.com](mailto:svitlana_aksyonova@yahoo.com)

**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.13>

*Russian full-scale invasion caused serious threats to generative activity in Ukraine. The concept of generative activity encompasses a set of actions and relationships aimed at childbearing and care about child/children, fulfilling the obligations of adults to contribute to the well-being of the younger generations through upbringing, teaching, socialization and also taking care of their safe environment. There are various strategies concerning childbearing in unsafe conditions of war in Ukraine, among them: postponing the birth of a child for better times, having a child to continue the family line, having a child after a previous postponement (due to fear of no having better chance later), having a child as a replacement for a lost child or pregnancy, etc. From the beginning of the full-scale war, there was an increase in women's responsibility for the safety and upbringing of children, and an increase in the prevalence of "intensive motherhood" as a generative strategy because many women lost direct support in raising and caring for children from men. The full-scale war forced many mothers to move abroad with children, and others – to move with children to safer areas within Ukraine, many husbands/ fathers are protecting their motherland on the frontline, and some woman and their children have already lost their husbands/fathers during this war. From the start of the full-scale invasion of the Russian Federation until now, more than 1.6 thousand children in Ukraine have been left without parental care due to the death of their parents (one or both of them).*

**Keywords:** generative activity, war, reproductive behavior, "intensive motherhood", parental care

**JEL classification:** I10, I3, H56

**UDC:** 314.04(477)

## CHILDREN WITHOUT PARENTAL CARE IN UKRAINE: CONSEQUENCES OF FULL-SCALE WAR

**Lyudmila SLYUSAR, PhD in Economics,**  
**Ptoukha Institute for Demography and Social Studies of the NAS of Ukraine**  
<https://orcid.org/0000-0002-1679-1674>, [slyusarL@ukr.net](mailto:slyusarL@ukr.net)  
**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.14>

*The spread of the phenomenon of social orphanhood, and neglect of some children is one of the acute socio-demographic problems of Ukraine in the last three decades. Orphans and children deprived of parental care are a special group of children whose number has increased in Ukraine since the mid-1990s, that is, during the period of maximum aggravation of the transformational crisis. The gradual improvement of the economic situation and society's attention to childhood problems, and the activation of social policy contributed to a gradual decrease in the number of children in this category. Family forms of keeping these children have become widespread - guardianship, foster families, family-type orphanages, etc. But in the conditions of a full-scale war, the positive trend towards a gradual decrease in the number of these children was interrupted, since many children suffered from the war: their parents died or were seriously injured, went missing, were forcibly deported, etc. This is one of the worst consequences of war. Creating comfortable living conditions and harmonious development of this group of children in the conditions of war is a difficult task that requires a scientific approach, improving legislation, and concentrating the efforts of relevant organizations. In the extreme conditions of the war, family forms of keeping children left without parental care due to the war are spreading: increasing cases of taking into families for guardianship/care and national adoption are continuing. The study is based on information from open sources, expert assessments, and data from the State Statistics Service.*

**Keywords:** children, war, orphans, children deprived of parental care, family  
**JEL classification:** J10, J13, H56  
**UDC:** 304+314](477)

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## EVIDENCE OF MALE FERTILITY CHARACTERISTICS IN MOLDOVA BASED ON THE GENERATIONS AND GENDER SURVEY

**Ecaterina GRIGORAȘ, PhD in sociology, Senior Scientific Researcher,**  
**National Institute for Economic Research, AESM, Moldova**  
<https://orcid.org/0000-0002-5607-5322>, [ecaterina.grigoras@ccd.ince.md](mailto:ecaterina.grigoras@ccd.ince.md), [egrigoras88@gmail.com](mailto:egrigoras88@gmail.com)  
**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.11>

*Demographic studies on fertility mainly focus on women's reproductive behavior. However, there have been no studies done on men's reproductive behavior in the Republic of Moldova. The study aims to highlight the characteristics of male fertility in the country based on the Generations and Gender study conducted in 2020 with over 10,000 respondents. This study offers a unique opportunity to compare the reproductive behavior of Moldovan men and women by analyzing their age of fertility, birth calendar, and parity patterns. By collecting separate fertility histories for men and women, the study can provide a detailed analysis of their age patterns, parity distributions, and birth transitions. The study is based on the hypothesis that men have a longer reproductive life span than women and start their reproductive period later. This can affect the number of children they can have during their reproductive life. The empirical basis of the study is the data collected from 3829 men aged between 15-79 years. The results show that the number of children men have varies significantly based on their level of education and environment of residence. Despite the typical age difference at the transition to parenthood, men and women share many common fertility patterns, contrary to what was hypothesized. The article was elaborated within the State Program Project (2020-2023) 20.80009.0807.21 „Migration, demographic changes, and situation stabilization policies”.*

**Keywords:** male demographic fertility, reproductive behavior, GGS, Moldova  
**JEL classification:** J13, J16, J18  
**UDC:** 612.633-055.1(478)

# FORCED MIGRATION, VOLUNTARY RETURN AND RESHAPED SAFETY OF UKRAINIAN POPULATION AFTER THE FULL-SCALE RUSSIAN INVASION

Iryna MAIDANIK, PhD in Sociology,  
Ptukha Institute of Demography and Social Research of the NAS of Ukraine,  
<https://orcid.org/0000-0003-0422-1364>, [sulamif3@gmail.com](mailto:sulamif3@gmail.com)  
DOI: <https://doi.org/10.36004/nier.cdr.V.2023.17.15>

*The full-scale Russian aggression has brought about a significant shift in Ukraine's migration landscape. A massive outflow through the western Ukrainian border began following the onset of the full-scale war. To comprehensively understand and effectively manage the scale and key characteristics of migration under these wartime conditions, this article aims to investigate the forced migration of Ukrainians abroad and their subsequent return. It seeks to uncover the primary drivers influencing the outflow and return movement after the full-scale invasion. The research employs a range of scientific methods, including scientific abstraction, analysis and synthesis, induction and deduction, as well as systemic and structural approaches, along with document analysis and statistical observations.*

*The number of Ukrainians who fled the country due to full-scale Russian aggression is a subject of varying estimates. There is an urgent need for clarification in this area. Relocation decisions were among the most crucial choices made by the Ukrainian population following the full-scale Russian invasion. The safety-related situation plays a pivotal role in shaping intentions to leave hazardous areas, but additional factors, such as financial and logistical considerations, also influence these decisions. The war has introduced a relativistic safety paradigm, and the end of the war does not necessarily equate to safety in the current perspective of Ukrainians. The constructed concept of safety has become apparent through regional security considerations, marking a shift from absolute safety standards toward relative ones.*

**Keywords:** population migration, forced migration, return, Ukraine, full-scale Russian invasion

**JEL classification:** F22, F51, F52

**UDC:** 314.15(477)

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## HUMAN MOBILITY AND LANGUAGE: TOWARDS NEW MULTILINGUAL APPROACHES WITH AI

Marion SANTORELLI, Lecturer, University of Sannio RCOST, Italy  
<https://orcid.org/0009-0009-6826-986X>, [marionsantorelli@gmail.com](mailto:marionsantorelli@gmail.com)  
Domenico CATULLO, Industry research scientist, cyber security and AI specialist, Italy  
<https://orcid.org/0009-0001-6606-6606>, [domenico@catullo.net](mailto:domenico@catullo.net)  
DOI: <https://doi.org/10.36004/nier.cdr.V.2023.17.16>

*This study investigates the relationships between language and human mobility in terms of investment, accessibility, and inclusion and how human-computer interactions, AI (Artificial Intelligence) speech translators might overcome language barrier in a multilingual perspective.*

*After a brief analysis of population dynamics, demographic change and migration based on European Union publications, the aim of this paper is to highlight the strong nexus between language and mobility and how it plays a key role in citizenship, educational policies, employment and social services.*

*The phenomenon of linguistic identity, together with the power relations of ELF (English as Lingua Franca), is observed by presenting poststructuralist perspectives on SLA (Second Language Acquisition). It emerges that power relations can be equal and unequal and can influence both positively and negatively users' identities, shape people's interactions, and, thus, place them in particular communities or statuses.*

*This 'communicative imperialism' can be inferred from the English Proficiency Index which places European countries in a high position, while countries in Eastern Europe, the Middle East, Africa, Latin America, and some Asian countries in the lowest ones. Non-native speakers have differing levels of command of the language, meaning that, for them, crucial details and nuances, as well as cultural references, might often be lost. This study explores the real-time multilingual interpretation, with the new emerging technologies, as a means to reduce language discrimination, and information loss, and increase the return on investment (ROI), enabling everyone to join in a conversation in their own language from anywhere around the world.*

**Keywords:** migration, linguistic identity, language inclusion, artificial intelligence, multilingual interpretation, machine translation system

**JEL classification:** C88, J15, J61, O30, Z13

**UDC:** 314.15+304

## THE CENSUS AS AN INFORMATION SOURCE IN PUBLIC POLICY-MAKING

Natalia BARGAN, PhD Student,  
Moldova State University, Moldova  
nataly.bargan@gmail.com

DOI: <https://doi.org/10.36004/nier.cdr.V.2023.17.17>

*Understanding the composition and evolution of the population is crucial for the development of effective public policies in a rapidly changing world. The need for reliable demographic and socioeconomic data persists to tackle modern societal challenges. The Population Census, amidst fast demographic change, is a vital source of statistical data that provides valuable information for governments, researchers and decision-makers.*

*The purpose of this article is to emphasize the importance of the population census as an essential factual basis for the development, implementation, and evaluation of public policies. It aims to explore the history of censuses, data collection processes and the transformation of data into useful tools for policy development. The article also intends to showcase how census data has influenced policy decisions in various areas.*

*The research methodology of this article is based on the analysis of official documents, previous research, and government reports related to the population census. It explores the complex data collection process, including peer review methods and data quality assurance. Moreover, the article presents concrete examples of how census data has been used to develop public policies.*

*The article highlights the critical role of census data in developing public policies in various areas, including the efficient distribution of resources. It emphasizes that the population census remains an essential tool for understanding and identifying practical solutions to demographic and social problems in our society, contributing to improving the lives of citizens and building a better future.*

**Keywords:** population census, public policies, demographic problems

**JEL classification:** J10, J18, P23

**UDC:** 314

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## STUDENTS' MOTIVATION TO ENGAGE IN VOLUNTEER ACTIVITIES TO SUPPORT UKRAINIAN REFUGEES

Maria-Elena BAIN,  
West University of Timișoara, Romania  
maria.bain01@e-uvt.ro

Loredana-Marcela TRANCA, PhD in Sociology, Lecturer,  
West University of Timișoara, Romania  
<https://orcid.org/0000-0003-4560-0571>, [loredana.tranca@e-uvt.ro](mailto:loredana.tranca@e-uvt.ro)  
DOI: <https://doi.org/10.36004/nier.cdr.V.2023.17.18>

*With the outbreak of the armed conflict between Russia and Ukraine, several public and private institutions from different countries had initiatives to support refugees, including through volunteers. A group of volunteers from the West University of Timisoara (WUT) mobilized to contribute to the support of refugees, together with specialists from some social services from the western area of Romania, during a period of crisis, when the migratory flow to the countries of Western Europe was intense.*

*The present research aimed to document the experiences of volunteers within the projects initiated by WUT to support refugees in Ukraine, aiming to identify the students' motivation to get involved in these projects and to identify their perception of the skills developed due to volunteering experiences. The research was based on a qualitative design, the research method being the interview. The research instrument used was the semi-structured individual interview guide, applied face-to-face between April and June 2023 to the 9 participants. Data analysis was done inductively based on codes and subcodes.*

*The results of the study showed that the students had various reasons that encouraged them to get involved in a volunteer project to support refugees, both of an intrinsic nature (e.g., the desire to help other people, developing skills in dealing with tasks under pressure in crisis situations), as well as extrinsic (e.g., the model of one's own parents, the messages transmitted in the mass media). The participants also developed their network of potential collaborators and learned about current legislation for refugees, their traditions, and their needs.*

**Keywords:** volunteering, volunteers, refugees, Ukraine, students, war

**JEL classification:** D16, F51, H56

**UDC:** 364-322



## SOCIO-ECONOMIC COSTS OF WORK-RELATED ACCIDENTS

**Valentina COTELNIC, Scientific Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova**  
vcotelnic@gmail.com

**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.19>

*The article's main focus is on the analysis of ensuring the application of labor legislation, safety, and health at work in the Republic of Moldova. The Constitution guarantees the right to work and the protection of work for every person in the country. The legislation developed in the field of health and labor protection ensures the preservation of the basic principles of European directives. The article's main objective is to evaluate the socioeconomic losses related to work accidents, which is a significant problem in the Republic of Moldova. The analysis reveals major problems that need to be solved by reforming the State Labor Inspectorate urgently. This would lead to an increase in the efficiency of labor inspections, both at the legislative and institutional level, by carrying out unannounced controls that will allow the direct application of sanctions for some cases of non-compliance with the legislation and point out possible solutions. Employers can prevent accidents at work by establishing a safety management system that includes risk assessment procedures.*

*The article was elaborated within the State Program Project (2020-2023) 20.80009.0807.21 „Migration, demographic changes, and situation stabilization policies”.*

**Keywords:** labor law, health, labor protection, accidents at the workplace, employer

**JEL classification:** I10, J28, J81, J88, K31

**UDC:** 331.45(478)

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## THE EXPERIENCE OF ROMANIANS EMIGRATING TO WESTERN EUROPEAN COUNTRIES

**Adina-Lavinia BOJESCU,**  
West University of Timisoara, Romania  
adina.bojescu02@e-uvt.ro

**Loredana-Marcela TRANCA, PhD in Sociology, Lecturer,**  
West University of Timisoara, Romania  
<https://orcid.org/0000-0003-4560-0571>, [loredana.tranca@e-uvt.ro](mailto:loredana.tranca@e-uvt.ro)

**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.20>

*Emigration has become an attractive option for Romanians in recent years, being based on various social, economic, or cultural reasons. This paper explores the experiences of people from two Romanian counties, who have emigrated to Western European countries in the last 10 years, seeking to identify the reasons why respondents emigrated and identify the difficulties they faced in the emigration process. The research method is qualitative, based on the interview, and the research instrument used is the semi-structured interview guide. The participants in the study were 12 people from Botoșani (Eastern Romania) and Timiș (Western Romania) counties. Data collection was carried out between April and June 2023, both face-to-face and online, through a video application, after participants expressed their agreement to participate by signing an informed consent. Data processing was carried out deductively, based on categories and subcategories. The results highlight the desire for change in the quality of life for the study participants and their family members, family reunification, and change in the social and cultural environment. The main adaptation difficulties highlighted by the study participants were mainly related to communicating in the language of the country to which they had emigrated, finding a job in accordance with their skills, and traveling in the community by public transport. For those who already had family members settled abroad, the adaptation was easier.*

**Keywords:** emigration, migration, Romanians, motivation, difficulties

**JEL classification:** F22, O15, R23

**UDC:** 314.15+304



## THE RELATIONSHIP BETWEEN THE AVERAGE MONTHLY NET WAGE AND PERMANENT EMIGRANTS IN ROMANIA

**Mihaela SAVU, PhD, Associate Professor,**  
**Constantin Brancoveanu University of Pitesti, Romania**  
<https://orcid/0000-0001-7034-1167>, [ioneci\\_mihaela@yahoo.com](mailto:ioneci_mihaela@yahoo.com)

**Delia TESELIOS, PhD, Associate Professor,**  
**Constantin Brancoveanu University of Pitesti, Romania**  
<https://orcid/0000-0002-8872-5705>, [bazeinfo10@gmail.com](mailto:bazeinfo10@gmail.com)

**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.21>

*The paper aims to present the relationship between the average monthly net wage and permanent emigrants at the level of our country for a period of 12 years. At the level of Romania, in the last 30 years, the trend of emigration has been observed, especially for obtaining higher incomes than those that could be earned in the country. In (the year) 2021, the top three countries chosen by permanent emigrants were Spain, Germany and Italy. They keep their place in the top three countries chosen for emigration in the last five years of the analyzed period. We consider that the presentation of the two indicators will allow us to observe the relationship between them, using one of the non-parametric methods for establishing the link between statistical variables, namely the Kendall coefficient. The analysis of the two indicators is carried out with the help of the rank method, a statistical method, which involves establishing the ranks (position) for the values of the two indicators for the entire analyzed period. The values recorded by the average monthly net salary and permanent emigrants are official data, provided by the National Institute of Statistics. The result obtained after calculating the Kendall coefficient demonstrates that there is a link between these indicators, it is direct and of medium intensity. This information allows us to conclude that the level of salary earnings in Romania is one of the decisive factors in making the decision to emigrate.*

*Keywords:* wage earnings, permanent emigrants, Kendall coefficient, romanian economy

*JEL classification:* F02, F22, E24

*UDC:* 331.2+314.15](498)

# EXPLORING REPRODUCTIVE HEALTH THROUGH THE LENS OF DEMOGRAPHICS AND PUBLIC POLICY

**Victoria CIUBOTARU, PhD Student,**  
**State University of Moldova,**  
**Mother and Child Institute, Moldova**  
<https://orcid.org/0009-0001-9262-0922>  
[victoria.ciubotaru@gmail.com](mailto:victoria.ciubotaru@gmail.com)

**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.22>

*In the Republic of Moldova, continuous efforts are being made to maintain and strengthen the sexual and reproductive health (SRH) of the population and to ensure access for all individuals, throughout their lives, to information, education, resources, services, and necessary support for the realization of sexual and reproductive rights, without discrimination, coercion, exploitation, or violence. In this regard, our research aims to present the dynamics of SRH indicators during the last five years, which corresponds to the implementation period of the National Program on Health and Sexual and Reproductive Rights for the years 2018-2022. We seek to explain the changes that have occurred as a result of the interventions carried out and implemented policies. We have adjusted the legislative and regulatory framework to facilitate increased access to quality services for the population while upholding the principles of equity and non-discrimination.*

*Ensuring access to quality services in the field of SRH also necessitates the presence of adapted infrastructure, including facilities that cater to the needs of people with disabilities, an appropriate environment for service provision, and the availability of the equipment and consumables necessary to ensure comprehensive medical documentation. The COVID-19 pandemic has necessitated the application of innovative approaches in the provision of SRH services and health education services at a distance, utilizing telemedicine and other technologies. This has ensured the availability and accessibility of SRH services during the crisis period when population mobility was restricted.*

*Additionally, a well-trained SSR service provider is essential, as it significantly influences the quality of services delivered. To address this, efforts have been made to train and strengthen the capacities of medical staff involved in providing quality SRH services. Special emphasis has been placed on adapting the university and post-graduate curriculum for the training of doctors and the training curriculum for the average medical staff. This includes the development of national and standardized clinical protocols, standards, and guidelines aligned with international requirements. Considerable efforts have been made to increase the population's access to services in all areas of SRH, which were deemed a priority at that time.*

**Keywords:** *sexual and reproductive health, policies, indicator dynamics*

**JEL classification:** *I10, I19, J26, C43*

**UDC:** *314.113*

## FOREIGNERS INTEGRATION POLICIES IN THE REPUBLIC OF MOLDOVA BETWEEN CHALLENGES AND NEEDS

**Olga POALELUNGI, Scientific Researcher,**  
**National Institute for Economic Research, Academy of Economic Sciences of Moldova**  
<https://orcid.org/0000-0001-5012-9505>, [olga.poalelungi@gmail.com](mailto:olga.poalelungi@gmail.com)  
**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.23>

*The article examines issues related to the integration of foreigners in the Republic of Moldova. Reforms, visa liberalization, and the conclusion of bilateral agreements on migration and/or social protection of migrants have made the country attractive for immigration not only from traditional CIS countries but also from Asia, Africa, and North America. As a result, greater attention needs to be paid to the cultural and socio-economic integration policies of immigrants in the Republic of Moldova. This article provides an overview of existing forms of immigrant integration (assimilation, multiculturalism, social and economic integration), analyzes the dynamics and key characteristics of immigration flows into the country over the last three decades, and offers a brief overview of national policies in this area. The article provides a brief overview of the situation of immigrants in the country and the level of their integration, addressing issues such as education and knowledge of the state language, immigrants' access to national education and healthcare systems, and their employment/economic activities. The effectiveness of the policies implemented is also discussed, including the conditions and opportunities for immigrants to obtain Moldovan citizenship, their relationship with the local population, and mechanisms to prevent discrimination based on ethnic or cultural characteristics. Additionally, the article examines the socio-economic and demographic conditions for the development of a national integration policy in the context of the implementation of European directives as part of the Association Agreement and the country's status as a candidate for EU membership. The analysis shows that despite the positive national policy being implemented, there is a need for modernizing existing approaches to the integration of foreigners. The article was conducted as part Project (2020-2023) 20.80009.0807.21 „Migration, demographic changes, and situation stabilization policies”.*

**Keywords:** policy of integration of foreigners, migrants, immigrants, MIPEX index

**JEL classification:** F15, F22, J18

**UDC:** 314.15+325.1](478)

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## EXPLORING THE IMPACT OF INTERNATIONAL AND INTERNAL MIGRATION ON REGIONAL POPULATION DISTRIBUTION

**Tatiana TABAC, PhD Student, Scientific Researcher,**  
**National Institute for Economic Research, Academy of Economic Studies of Moldova**  
<https://orcid.org/0000-0001-9526-6642>, [tania.tabac@gmail.com](mailto:tania.tabac@gmail.com)  
**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.24>

*This paper examines how internal and external migration bring about changes in the population structure of various regions in Moldova. In conjunction with the increasing international migration flows, there have also been shifts in the spatial distribution of the population across regions. While population migration from small urban centers to large urban centers and foreign countries has risen, we also observe the movement of rural populations to small and medium-sized cities. Using revised population data for Moldova and information on internal and international migration, we estimated net migration rates for each distinct region of Moldova, categorized by sex, age, and residence. The research findings reveal that the population of Moldova decreased by -274.2 thousand people, or -10%, between 2014 and 2021. International migration is more prevalent in the Central and Southern regions and among populations aged 0-19 and 20-59. Internal migration plays a crucial role in maintaining the population of the capital and other significant municipalities. The population in central districts experiences a smaller decline due to more intense internal migration, whereas the population in the South decreases because of both high internal and international migration. The study was conducted as part of the Project (2020-2023) 20.80009.0807.21 „Migration, demographic changes, and situation stabilization policies”.*

**Keywords:** internal migration, international migration, population changes, Moldova

**JEL classification:** F22, J11, O15, P23, R23

**UDC:** 314.15(478)

## THE IMPACT OF LABOUR MIGRATION ON EVOLUTION OF DEMOGRAPHIC PHENOMENA IN ROMANIA AT THE BEGINNING OF THE 21st CENTURY

Mariana BALAN, PhD, Professor,  
„Hyperion” University of Bucharest, Romania  
<https://orcid/0000-0003-4326-4826>, dr.mariana.balan@gmail.com  
Brindusa-Mihaela RADU, PhD, Associate Professor,  
Institute for Economic Forecasting, Romanian Academy  
<https://orcid/0009-0008-8843-5477>, bmradu@yahoo.com  
DOI: <https://doi.org/10.36004/nier.cdr.V.2023.17.25>

*The enlargement of the European Union and the liberalization of labor mobility will substantially increase the potential migration towards developed countries. This phenomenon will leave its mark both on the economic growth and on the demographic evolution. For Romania, another factor of population aging with the same effects in the medium and long term is the emigration of the female population has a fertile age. The increase in the proportion of the female population in the migrant population has become more remarkable at the beginning of the 21st century. Suppose that those 55% of women who migrate, at less than 2/3, will give birth to children abroad (1.53 being the average fertility rate in the period 2000-2021). We can estimate that Romania has lost more than 160 thousand persons during this period. **Purpose:** analysis of the impact of the structure and migratory flow dimensions on the demographic evolution of Romania both at national and regional levels. **Method:** The descriptive statistical analysis was used mainly for visualizing and synthesizing information deducted from data regarding the Romanian migration at the beginning of the 21st century. The factorial analysis was used in creating some indices to estimate the effects of migratory flows on the structure of the population in the short and medium term. **Results:** realizing a comparative analysis of the economic and social effects of migration on the structure and size of the population, both at the national level and at the level of the development regions of Romania.*

*Keywords:* demographic processes, labor force mobility, socio-economic impact, the structure of migratory flows  
*JEL classification:* F22, J11, J13, J21, J61, R23  
*UDC:* 314.04+331.556.4](498)

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## THE IMPACT OF RECENT CRISES ON INTERNATIONAL MIGRATION

Mariana BĂLAN, PhD, Professor,  
„Hyperion” University of Bucharest  
<https://orcid/0000-0003-4326-4826>, dr.mariana.balan@gmail.com  
Carmen UZLĂU, PhD, Associate Professor,  
„Hyperion” University of Bucharest  
<https://orcid/0000-0002-3033-9318>, carmen\_uzlau@yahoo.com  
DOI: <https://doi.org/10.36004/nier.cdr.V.2023.17.26>

***Actuality:** International migration is an integral part of the global economy. Growing disparities in development, the segmentation of labour markets, the global jobs crisis revolutions in transportation and telecommunications, are some of the factors that have generated, worldwide, an unprecedented number of migrants (in 2020: almost 300 million, of which 169 million are migrant workers and who remitted over 702 billion USD). The economic-financial crisis and Covid-19 pandemic had a significant impact on migration patterns and processes around the world. Globally, there was a reduction in migration flows, which also led to a slowdown in the growth rate of remittances. **Purpose:** Comparative analysis of the effects of the 2008-2009 financial crisis and the Covid-9 pandemic on the size and structure of international migrant flows in major regions of the world, at EU level and in Romania. **Method:** The descriptive statistical analysis was used mainly for visualising and synthesizing information deducted from data regarding the international migration. The classification analysis was used in defining a typology of the size and structure of migratory flows, and the factorial analysis was used in creating some indices to compare the effects of crises on the structure and size of migratory flows. **Results:** realising a comparative analysis of the economic and social effects of recent crises on the structure and size of migratory flows, both at the level of the large regions of the world, as well as at the EU and national level.*

***Keywords:** migration, great recession, health crisis, structure and size of migratory flows, impact*  
***JEL Classification:** F22, G01, K37, O15*  
***UDC:** 314.15+338.124.4*

## ANALYSIS AND TRANSFORMATION OF THE AGE STRUCTURE OF THE POPULATION IN THE REPUBLIC OF BELARUS: REGIONAL ASPECT

Ulyana KOT, PhD Student,

Institute of Economics of the NAS of Belarus

<https://orcid.org/0009-0005-4217-1283>, [ulyankot@gmail.com](mailto:ulyankot@gmail.com)

DOI: <https://doi.org/10.36004/nier.cdr.V.2023.17.27>

*In modern conditions of active aging of the population, it is especially important to study the age structure of the population. This article reflects regional characteristics of the age structure during the years of the census in the Republic of Belarus, in 1999, 2009, and 2019. The purpose of this study is to analyze the age structure of the population and the peculiarities of its transformation in the context of the regions of the Republic of Belarus by constructing sex and age pyramids.*

*Age-sex pyramids made it possible to visually display the age-sex structure of the regional population in dynamics and identify the nature of its changes. Based on them, we can conclude that the population in five-year age intervals has decreased, and the most voluminous part of the pyramid has shifted upward, to older age intervals. The transformation of the age structure of the population towards an increase in the proportion of elderly people represents a certain set of tasks. Such a demographic shift can have an impact on the pension system, the health care system, and social protection authorities. The study of this issue made it possible to identify problems and opportunities associated with various age groups of the population, as well as to understand the socio-economic consequences of demographic aging of the population in Belarus.*

*Information about the composition, dynamics, and problems related to the age structure can be used to develop and plan measures and strategies within the framework of demographic policy.*

**Keywords:** demographic development, age structure of the population, aging of the population, sex and age pyramids, regional development, Belarus

**JEL classification:** J11, J12, R10

**UDC:** 314.1(476)

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## POPULATION AGEING: A CHALLENGE FOR MODERNIZATION OF POLICIES IN THE REPUBLIC OF MOLDOVA

Galina SAVELIEVA, PhD in Economics, Associate Researcher,

National Institute for Economic Research,

Academy of Economic Studies of Moldova

<https://orcid.org/0000-0002-0691-7640>, [savelievagalina@rambler.ru](mailto:savelievagalina@rambler.ru), [gts6@mail.ru](mailto:gts6@mail.ru)

Svetlana ZAHAROV, PhD in Economics, Scientific Researcher,

National Institute for Economic Research,

Academy of Economic Studies of Moldova

<https://orcid.org/0000-0001-8467-9572>, [zaharov.svetlana@gmail.com](mailto:zaharov.svetlana@gmail.com)

DOI: <https://doi.org/10.36004/nier.cdr.V.2023.17.28>

*The Republic of Moldova, along with many other countries, is facing the challenge of an aging population. This poses a threat to healthcare, pensions, social protection, and poverty policies. In this article, we analyze how the aging process has evolved in the Republic of Moldova, including changes in population size and structure by age and gender.*

*Our study aims to evaluate trends in population size and structure, particularly for pensioners, and develop a methodology for predicting the population size at retirement age in the long term. We used a systematic approach, including comparative analysis, graphical methods, and demographic patterns.*

*The analysis of the numerical and descriptive results of population aging projections confirms the irreversible nature of the aging process. Additionally, we provide suggestions for updating policies to address new demographic realities and challenges created by an aging population.*

*The article was elaborated within the framework the State Program Project (2020-2023) 20.80009.0807.21 "Migration, demographic changes and policies of stabilization the situation".*

**Keywords:** demographic ageing, pensioners by age, population projections

**JEL classification:** H 55, J 11, J 18.

**UDC:** 364.35(478)



## RURAL-URBAN DIFFERENTIATION IN LIFE EXPECTANCY DYNAMICS AND POPULATION HEALTH POLICIES

**Irina PAHOMII, PhD Student, Scientific Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0002-6595-9146>, [braga.pahomiiirina@gmail.com](mailto:braga.pahomiiirina@gmail.com)

**Vitalie STIRBA, PhD student, Scientific Researcher  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova**

<https://orcid.org/0000-0001-5948-6509>, [vitalie.stirba@ccd.ince.md](mailto:vitalie.stirba@ccd.ince.md)

**DOI:** <https://doi.org/10.36004/nier.cdr.V.2023.17.29>

*Despite the registered increase in the life expectancy in Moldova during the last years, gender and regional disparities in the length of life are maintained. Thus, our research aims to highlight the urban/rural life expectancy gap, attempting to explain changes in mortality through the implemented measures and policies towards population health. We utilized period life tables for our analysis, enabling the decomposition of life expectancy. Therefore, we systematized the existing legislative framework in population health and implemented national health programs and lifestyle-adjusting policies while analyzing mortality evolution. The changes in life expectancy at birth have occurred in the context of a decrease in mortality primarily attributed to cardiovascular diseases and external causes. The COVID-19 pandemic has significantly reshaped the mortality structure, leading to a substantial decrease in urban life expectancy and causing a reduction in its urban/rural disparity. In our analysis, we deduce that implemented alcohol and tobacco control policies will likely have a long-term output on population lifestyle adjustment. Improvements in healthcare infrastructure and implemented targeted programs (e.g., interventional cardiology) significantly contribute to the amelioration of population health but are less accessible for rural regions than urban ones. Moreover, international standards also influence changes in mortality rates, particularly in improving infrastructure and technologies that impact the population's safety and quality of life.*

*The article was elaborated within the State Program Project (2020-2023) 20.80009.0807.21 „Migration, demographic changes, and situation stabilization policies”.*

**Keywords:** *life expectancy trends, mortality in Moldova, regional disparities, population health policies*

**JEL classification:** *I18, J10, J11, P23, R59*

**UDC:** *314.113+614.2](478)*

## THE ECONOMIC LIFE CYCLE AND THE DEMOGRAPHIC DIVIDEND UNDER THE NTA APPROACH, EVIDENCES FROM EUROPEAN COUNTRIES

Elena ȘOLDAN, PhD Student, Scientific Researcher  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova  
<https://orcid.org/0009-0008-9600-3818>, [elena.sholdan@gmail.com](mailto:elena.sholdan@gmail.com)  
DOI: <https://doi.org/10.36004/nier.cdr.V.2023.17.30>

*This article aims to realize a comparative analysis of the potential demographic dividend and the economic life cycle profiles for several European countries. The demographic dividend is a concept that denotes the positive demographic impact on economic development resulting from the changes in population age structure. Countries where the working-age population predominates have the opportunity to accelerate economic development, thus obtaining the demographic dividend. In estimating the potential demographic dividend, the NTA methodology found its applicability through the economic support ratio indicator, a composite indicator that includes the characteristics of the population structure by age group, and also the production and consumption profiles for each of the age groups. The difference between consumption and income constitutes, the deficit or surplus of the economic life cycle. The comparative analysis of the consumption and income profiles, the surplus and deficits of the economic life cycle, the economic support ratio indicator, and the demographic dividends in the selected countries were carried out. The research results show that, although some countries register a population structure beneficial to economic development, the profiles of the economic life cycle are heterogeneous, reflecting the different situations in the labor market and individual productive behavior. Identifying the drivers needed to improve life cycle surplus would provide the necessary support for identifying country-specific methods for achieving the demographic dividend.*

*The article was elaborated within the State Program Project (2020-2023) 20.80009.0807.21 „Migration, demographic changes, and situation stabilization policies”.*

**Keywords:** demographic dividends, economic life cycle, surplus, deficit, productive age, dependency age, support ratio, economic support ratio

**JEL classification:** A14, J10, J11, J14

**UDC:** 314.114(4)

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## BARRIERS AND SOLUTIONS TO SELF-ADVOCACY FOR INDIVIDUALS WITH DISABILITIES FROM THE REPUBLIC OF MOLDOVA

Natalia COJOCARU, PhD Student,  
Moldova State University, Moldova  
<https://orcid.org/0000-0002-6293-7785>, [natalia.cojocaru1978@gmail.com](mailto:natalia.cojocaru1978@gmail.com)  
DOI: <https://doi.org/10.36004/nier.cdr.V.2023.17.31>

*The article explores key obstacles faced by people with disabilities when engaging in self-advocacy, including discriminatory policies, stigma, accessibility issues, resource limitations, lack of support networks, power imbalances, and personal factors. Self-advocacy is pivotal for persons with disabilities, enabling them to express their needs, preferences, and rights, fostering individual empowerment, and reshaping societal norms and policies. However, persistent systemic, attitudinal, and environmental barriers impede effective self-advocacy. The article also presents practical solutions to enhance self-advocacy within the disability community, including inclusive policies, awareness raising, support networks, and self-advocacy education. By examining the barriers and proposing solutions to self-advocacy for people with disabilities, this article contributes to a growing body of knowledge that seeks to advance the rights and well-being of this marginalized population. It underscores the importance of recognizing the agency and voice of individuals with disabilities and advocates for a future where self-advocacy is not just a possibility but an inherent right for all. Furthermore, this article introduces an innovative dimension by scientifically substantiating the barriers and solutions specific to self-advocacy for people with disabilities. This unexplored area in Moldovan specialized literature draws on extensive research, including literature reviews, in-depth interviews with civil society representatives, and group discussions involving individuals with disabilities.*

**Keywords:** disability, self-advocacy, barriers, solutions, empowerment, agency, social inclusion

**JEL classification:** A14, D63, J10, J14

**UDC:** 364.61(478)

## YOUTH TRANSITION TO ADULTHOOD IN A SOCIETY IN PROTRACTED CRISIS

Mariana CRÎȘMARU, Scientific Researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova

<https://orcid.org/0000-0003-2802-5376>, [mariana.crismaru@yahoo.com](mailto:mariana.crismaru@yahoo.com)

DOI: <https://doi.org/10.36004/nier.cdr.V.2023.17.32>

*The article presents the contextual and survey data analysis of youth transition in protracted crises that hit the country in the last decades. These crises have had a crucial impact on the life-course pathways of young people, both by delaying and accelerating them. It is mainly due to economic trends and social development, demographic processes, family well-being, access to resources, functioning of state institutions, and public policies.*

*This paper conceptualizes youth transitions to adulthood for young people in the situation of protracted crisis, suggesting that major challenges at regional and local levels can not only modify, disrupt, or delay certain life events but can also have a detrimental effect on young people's wellbeing and aspirations for their future. The article analyzes the main social, economic, and demographic indicators that have an impact on youth transition to adulthood. As well, the article draws upon the results of a national-representative survey of 600 young people aged 15-35 years, selected from 21 urban and rural localities.*

*Data analysis highlights that the unstable socio-economic situation of the country, exacerbated by the regional crises and challenges, has led to the worsening of young people's material conditions and resulted in increasing uncertainty about their future. In order to cope with the multiple and interconnected problems many young people have expressed their intentions to emigrate abroad. The migration intentions are significantly higher among younger population groups and those that are more pessimistic about the country's future. This can have multiple socioeconomic, political, and cultural consequences, undermining the opportunities for sustainable development of the country.*

*The article was elaborated within the State Program Project (2020-2023) 20.80009.0807.21 „Migration, demographic changes, and situation stabilization policies”.*

**Keywords:** youth transition, context analysis, survey data, problems, uncertainty

**JEL classification:** A14, I30, I31, J10, J13, J18

**UDC:** 316.346.32-053.6(478)

# FIRST MARRIAGE DISSOLUTION, DIVORCE, AND REMARRIAGE IN MOLDOVA

Anna CHIVACIUC,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova  
<https://orcid.org/0000-0003-1915-3202>, [anna\\_kivachuk@ince.md](mailto:anna_kivachuk@ince.md)  
DOI: <https://doi.org/10.36004/nier.cdr.V.2023.17.33>

*The dynamics of marriage significantly influence the dynamics of birth number, because in Moldova, compared to other countries, the majority of children are born within marriage. Remarriage often provides couples with a new opportunity to have children, especially if one or both partners were previously childless or had a limited number of children.*

*The aim of the study is to examine the structure of marriages and divorces in Moldova, analyze the intensity of divorce, and identify the social and demographic factors influencing the probability of entering into remarriage in order to determine the main trends and patterns.*

*The research methodology includes a statistical analysis of marriage and divorce trends over recent years and the identification of key social and demographic factors, including age, education, place of residence, and employment, that may influence divorces and remarriages.*

*The theoretical framework of the research is based on the second demographic transition theory, social exchange theory, and the theory of the family horizon, which have allowed for the interpretation of the ongoing changes in marriage dissolution.*

*The research results have revealed trends in divorces and remarriages, and have identified socio-demographic factors that influence these processes. It has been determined that age, gender, and the presence of one's own children have the greatest impact on the probability of remarriage. In contrast, socioeconomic characteristics such as economic status and urban or rural residence determine the legal quality of relationships – whether it is a remarriage or a partnership. These findings can be valuable for the development of family-related programs and policies.*

*The article was elaborated within the State Program Project (2020-2023) 20.80009.0807.21 „Migration, demographic changes, and situation stabilization policies”.*

**Keywords:** marriages, divorces, remarriages, Moldova

**JEL classification:** J11, J12, J18

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National Institute for Economic Research  
Ion Creanga Street 45, mun. Chisinau, MD-2064