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*Cristina Ungur,  
Ph.D. (Econ.),  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova  
E-mail: cristinaungur@ymail.com;*

*Irina Pahomii,  
scientific researcher,  
National Institute for Economic Research,  
Academy of Economic Studies of Moldova  
E-mail: braga.pahomiiirina@gmail.com  
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## THE INTERPLAY BETWEEN FINANCIAL INCLUSION AND PENSIONER INCOMES: CHALLENGES AND OPPORTUNITIES

### A B S T R A C T

**The purpose of the research** - the study aims to analyse income levels as a determinant of financial inclusion, focusing on the elderly population in the Republic of Moldova. It seeks to identify opportunities and risks associated with integrating this vulnerable group into the financial system under specific economic and social conditions.

**The methodology of the research** – research methods as quantitative statistical analysis, comparative analysis, socioeconomic analysis were used in the study. Besides, the research uses longitudinal income and expenditure data (2019-2023) to assess the financial conditions of elderly individuals.

**The practical importance of the research** - the research provides insights into the challenges faced by pensioners in accessing financial products, which can inform policies for enhancing financial inclusion. This is important for reducing poverty and supporting social cohesion in Moldova's ageing population.

**The results of the research** - the findings reveal a positive yet limited adoption of financial services among pensioners, with most relying on social cards primarily for cash withdrawals. The study highlights significant disparities in income and financial inclusion across regions, emphasizing the economic vulnerabilities of the elderly.

**The originality and scientific novelty of the research** - the study offers a novel perspective by correlating pensioners' financial inclusion with income levels, emphasizing regional disparities and specific challenges this group faces. It contributes to existing literature by providing a focused analysis of Moldova's pensioner population using updated statistical methods and datasets from 2019–2023.

**Keywords:** income, pensioners, inclusion, financial products.

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## INTRODUCTION

Financial inclusion has two main aspects: the first relates to financial education programmes and the second to programmes that facilitate access to financial products and services.

Access to financial services is imperative for active participation in economic and social life. The lack of access or the inadequate use of these services affects the individual and the community as a whole, leading to social inequalities. In many cases, access to functional financial services is a key factor in poverty reduction and the promotion of economic prosperity. Thus, it can be asserted that financial inclusion is an important citizen right and necessary for a fair social and economic environment. Initiatives aimed at promoting access to and the efficient use of financial services must be customised and accessible to the entire population to combat exclusion and support social cohesion.

When discussing financial inclusion and access to financial products, we refer to four basic types of products: banking services, credit, savings, and insurance. The degree to which these services are accessed is determined by the level of financial and digital literacy, regulation, infrastructure, and income levels of the population.

In this research, we will analyse one determinant of the accessibility of financial products – income levels, with a particular focus on pensioners, who exhibit a certain degree of vulnerability from the financial inclusion perspective. The choice of this group is justified by the fact that, currently, 17.4% of the population of the Republic of Moldova is aged 65+, and by 2040, this proportion will increase to 25%, meaning one in four individuals in the country [3].

This research aims to analyse income levels as a determinant factor of financial inclusion. The study focuses on the elderly population of the Republic of Moldova and includes an analysis of primary data from the period 2019-2023. Through this research, we aim to identify opportunities and challenges in the process of financial inclusion for elderly individuals, viewed through the lens of economic and social conditions.

### Literature review

The specialised literature analyses various aspects related to the determinants of financial inclusion. In this research, we will focus on studies that have examined socio-economic conditions as well as levels of literacy.

Spanish researchers have analysed the interaction between financial inclusion and social inequalities [7]. They focused on a specific group of vulnerable urban consumers, particularly those facing poverty and social exclusion. The study found that banking pressures and the lack of financial education cause the difficulties experienced by these vulnerable groups in using financial services.

Another research has emphasised that household income is a determining factor in adopting and promoting certain digital financial practices [13]. A significant aspect emphasised by foreign researchers is the correlation between financial vulnerability, income, and other socio-demographic characteristics. For instance, the education level of individuals is one of the critical characteristics [11], which impacts income levels on the one hand and indicates or creates risks related to the knowledge required for promoting financial inclusion

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on the other. In addition to education, the literature highlights other factors, such as unemployment or periods of joblessness [5, 12, 6].

Beyond studies focusing on the general population, there is also a vast number of studies that have exclusively examined the issue of financial inclusion for elderly individuals, highlighting the barriers to inclusion that elderly people most commonly face [4, 8].

### **Data and methods**

Primary data provided by the National Bank of Moldova were utilised to analyse the level of access to financial services. The National Bank of Moldova is the central banking authority responsible for supervising the banking sector, insurance, and non-bank lending institutions. The indicators used to evaluate access to financial services included the number of bank cards in circulation (based on issuance conditions and per capita), insurance density, and the share of bank lending. When assessing the income levels of pensioners, consideration was given to the absolute poverty threshold provided by the NBS and the minimum and average pension levels offered by the National Social Insurance House [10].

In this study, statistical indicators obtained from the National Bureau of Statistics (NBS) were utilised to analyse income and expenditure patterns from 2019 to 2023 by socio-demographic characteristics of the household head. Key variables of interest included labour market status and the age of the household head. The dynamic presentation of this data offers a comprehensive perspective on the financial evolution of various population groups during this timeframe. The availability of relevant statistical data on population income and expenditures determined the starting point of the analysis. NBS presents the data on income and expenditures based on the Household Budget Survey (HBS). The HBS is a nationally representative sociological survey conducted by NBS.

### **Results and Discussion**

Over the past five years (2019-2023), the Republic of Moldova has recorded a growth in the number of payment cards issued [9]. By the end of 2023, the number of cards in circulation reached 3.29 million units. Relative to the population, this indicator shows that each citizen in the Republic of Moldova holds 1.3 bank cards, comparable to the European Union average of 1.6 payment cards per capita. According to data from the National Bank of Moldova, of the total bank cards in circulation in 2023, only 16% are social cards, i.e., cards issued for receiving social benefits, predominantly pensions. It is important to note that, according to data from the National Social Insurance House (NSIH), beneficiaries can choose how they receive their benefits – either via a bank card or by cash withdrawal at Î.S. “Poșta Moldovei” (*S.E. “Moldova Post”*). Social bank cards are often used for cash withdrawals, indicating a low level of financial inclusion among the vulnerable population.

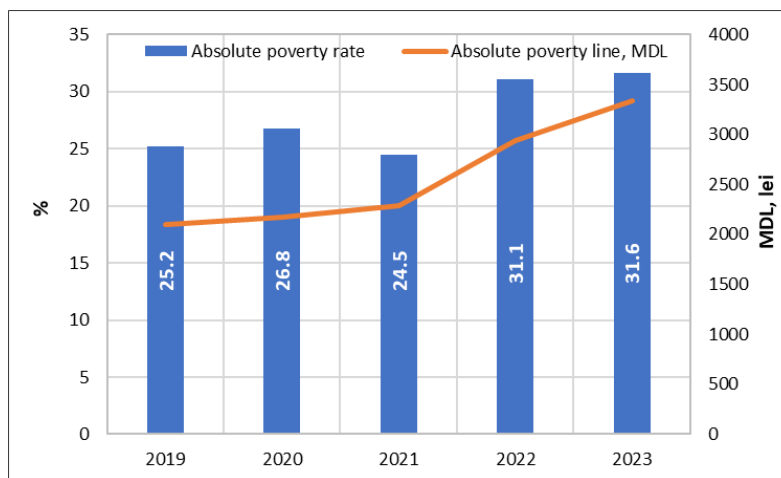
Despite positive dynamics, data concerning other financial products still lag far behind the European average. For example, in terms of accessing private insurance services, the population of the Republic of Moldova remains hesitant, with insurance density reaching only 53.34 USD in 2023. In the EU, the average for this indicator is 2040 euros per capita, or approximately 2200 USD.

There are no specific credit statistics for pensioner borrowers. However, commercial banks are the financial institutions with the country's largest share of credit issuance (81%). Given pensioners' low income levels, this category is presumed to be rarely eligible for credit.

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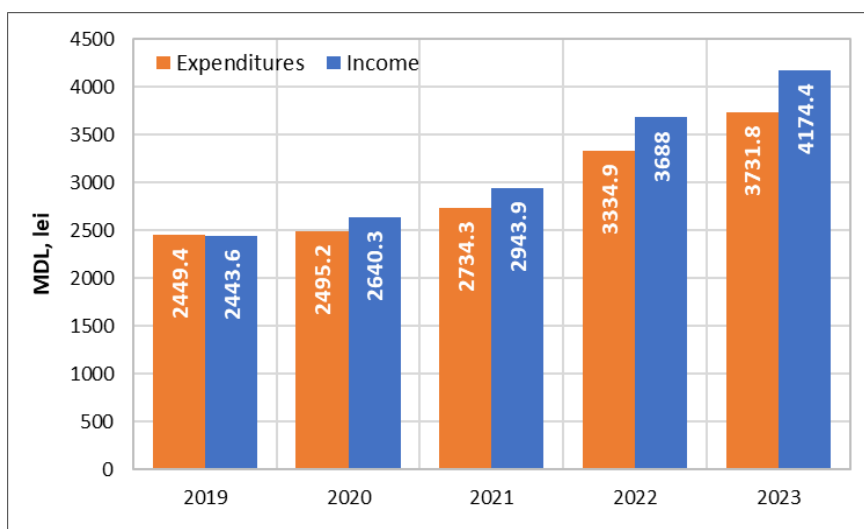
Regarding savings products offered by the banking and non-banking markets in the Republic of Moldova, it is worth noting that, according to BNM data, bank deposits are the most utilised savings instruments.

The analysis of pensioners' degree of access to financial services in the Republic of Moldova demonstrates that significant gaps remain in this area. To encourage access to these services, promoting financial education and ensuring a sufficient income level is necessary. In this context, it is essential to highlight that 31.6% of the general population in the Republic of Moldova lives below the absolute poverty threshold (*Fig. 1*).



*Fig. 1. Absolute poverty dynamics, by rate and line threshold*  
 Source: Elaborated based on NBS data

One fundamental criterion that facilitates access to financial services or products and, consequently, the degree of financial inclusion remains income. Therefore, we will focus further on the incomes of elderly individuals.

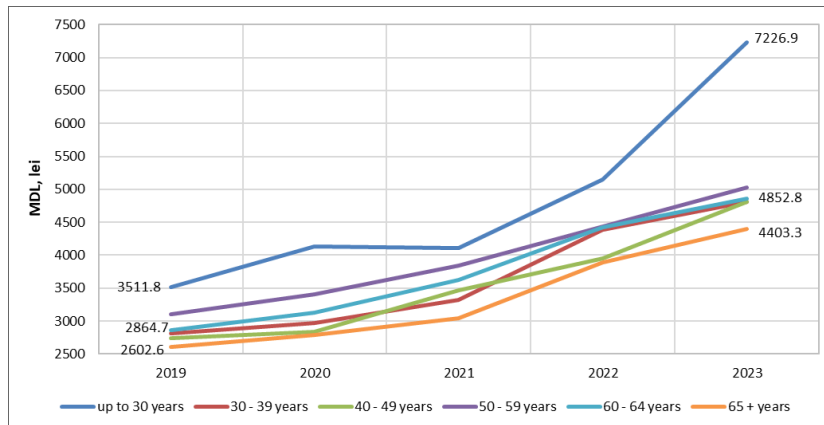


*Fig. 2. Income and expenditure dynamics in pensioners population, 2019-2023*  
 Source: Elaborated based on NBS data

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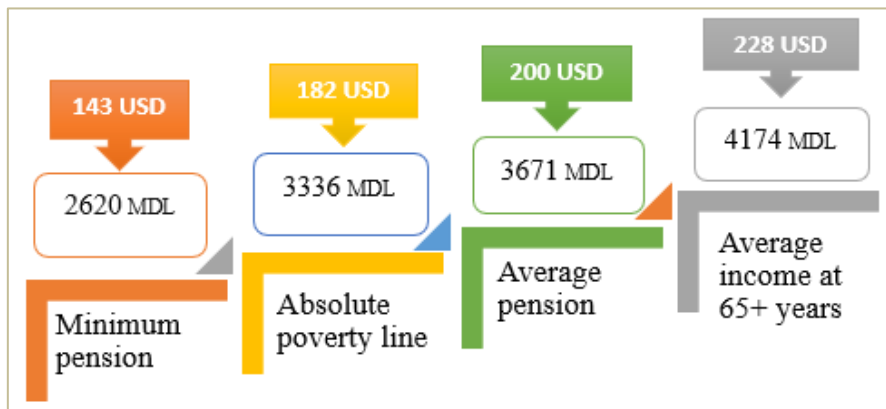
According to data presented by NBS, pensioners maintain modest but positive income-to-expenditure differences, indicating a slight financial surplus in the last 3 years (Fig. 2). Such a small gap between income and expenditure reflects their heavy reliance on fixed pensions, which limits their ability to adapt to rising living costs or improve their economic situation.

The fact that age is a critical factor in determining income levels and financial vulnerability can also be observed from the income distribution by the household head's age. As shown in Figure 3, families headed by individuals aged 65 years and older consistently report the lowest income levels throughout the observation period (2019–2023). This trend demonstrates once again their reliance on fixed pensions, which provide a stable but insufficient income to meet rising living costs. Despite modest increases over time, the income of this group remains significantly lower than that of younger age groups, highlighting the persistent economic challenges older households face.



**Fig. 3. Income dynamics by age of household head**  
 Source: Based on the NBS data

Based on a general and comprehensive overview, we can observe that the situation of elderly individuals is quite challenging, fluctuating around the absolute poverty threshold (Fig. 4). It can be noted that the average pension constitutes 88% of the average income of individuals aged 65 and older and is only 18 USD higher than the absolute poverty threshold.



**Fig. 4. Overview of pensioner population income by 2023**  
 Source: based on NBS and NSIH (National Social Insurance House)

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Significant discrepancies are observed at the regional level (*Table 1*), with the most favourable situation recorded among pensioners in Chisinau municipality. Across the geographic regions, the average pension value is relatively uniform, amounting to approximately 3142 MDL, which is roughly 170 USD.

*Table 1.*

**Average pension by geographic regions at 01.10.2023**

<b>Geographic region</b>	<b>The number of pension beneficiaries, individuals</b>	<b>The average pension amount, in lei</b>
Chisinau municipality	162351	5277,5
North region	191921	3157,3
Center region	191364	3152,8
South region	96912	3127,5
ATU Gagauzia	31434	3132,8
<b>Total</b>	<b>675671</b>	<b>3671,05</b>

*Source: elaborated by author based on NSIH (National Social Insurance House) data*

The average pension in Chisinau municipality is higher than the national average because urban residents have higher salaries and, consequently, larger pension contributions. Additionally, the occupational structure in urban areas is dominated by well-paid sectors, and residents tend to have a longer duration of formal contributions due to easier access to stable employment. These differences reflect the generally higher economic and social development level in municipalities than in rural areas. It is important to mention that in regions, the share of the rural population is higher than the urban population, but Chisinau municipality refers broadly exclusively to the urban population. As a result, pensioners in Chisinau municipality are more advantaged in income compared to other regions, which provides them with more significant opportunities for accessing financial services.

## CONCLUSIONS

The analysis of the situation regarding access to financial services in the Republic of Moldova shows a positive trend, driven by the COVID-19 pandemic, which forced the adoption of remote services, including financial ones. Among the most accessed financial products are bank cards and deposits. Of the financial service providers, commercial banks enjoy the highest trust due to strict regulation and transparency in their relationships with clients. However, there are opportunities to expand financial inclusion through the digitalisation and diversification of financial products, as well as through the implementation of policies adapted to the needs of all social groups.

The research highlighted that the financial inclusion of elderly individuals is limited in the Republic of Moldova. Pensioners face reduced access to financial products, with most using social cards only for cash withdrawals. This practice reflects a low level of financial

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education and a dependence on fixed incomes, which prevents adopting more diverse financial behaviours.

Pensioners in Chisinau municipality receive higher pensions than those in other regions. This is due to higher salary levels, contributions in urban areas, and more developed economic and financial infrastructure. As a result, this group benefits from greater opportunities in terms of financial inclusion. However, these differences exacerbate regional inequalities and highlight the need for fairer policies.

The most acute problem is that pensioners' incomes are insufficient to surpass the poverty threshold. Although pensioners maintain a small surplus between income and expenditures, this advantage is modest and insufficient to cope with rising consumption expenses. The average pension accounts for only 88% of the average income of individuals over 65 years old, remaining very close to the absolute poverty threshold.

The low level of financial education limits the adoption of more complex financial products and services, such as savings through bank deposits or private insurance. This highlights the importance of promoting financial education to reduce economic vulnerability.

Public policies that consider the specific needs of elderly individuals must be implemented to combat financial exclusion. These should include financial education programmes, increased accessibility to financial products, and support measures to raise incomes.

These conclusions underscore the complexity of the economic and social challenges faced by pensioners and the importance of a systemic approach to improve their financial situation.

### Acknowledgements

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