

## SOCIO-DEMOGRAPHIC FACTORS OF TRANSITION FROM LABOUR ACTIVITY TO PENSION IN THE REPUBLIC OF MOLDOVA

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**Abstract:** *The purpose of research is to analyse the impact of socio-demographic factors on the transition from labour activity to pension in the Republic of Moldova. Demographic factors, including migration, population decline and ageing, have led to the deformation of age structure of population in the direction of elder age groups. The growth in the number of pensioners with a reduction in employed population have conditioned to financial instability of the Social Insurance Budget and disruption of terms payment of pensions and benefits. The analysis of the importance of social factors of stopping of labour activities at retirement the comparative assessment of wages reflects as the basis for pension accrual, average monthly disposable income and amount age pension, as well as indicators of living standards of elderly population (poverty rate). The analysis of the factors takes into account the forced stopping a work and retirement when reaching the established age limit due to the existence of age discrimination in the labour legislation. Taking into account the relevance of the problem, proposals for increasing the effectiveness of state policies to regulate the transition from labour market to pension, including the possibilities of continuing labour activity, were elaborated. The article was elaborated within the framework the Scientific Project “Migration, Demographic Changes and Policies of Stabilization the Situation”, registered in the State Register of projects in the field of science and innovation of the Republic of Moldova with the code 20.80009.0807.21 of the State Program (2020-2023).*

**Key words:** *demographic ageing of population, wages, age pensioners, pension, transition from work to retirement, labour market.*

**JEL Classification:** *J 14, J 26, J 38.*

### 1. Introduction

Increasing life expectancy, migration processes of working age population and demographic ageing, growth in number of pensioners and also reduction in number of workers are the factors the increase of burden on the pension system. Many countries faced these problems in the second half of the 20th century, and the Republic of Moldova (RM) is no exception in given situation. Moreover, it should be noted that a characteristic feature of the above-mentioned processes is the decrease in the average age of exist from labour market, including due to ongoing structural reforms, changes in regional social and economic infrastructure and, as a result, an imbalance both labour force markets on the national and local levels and the pension system, as the number of payers of insurance contributions from wages tends to decrease. The Labour Market Forecast 2023, elaborated by the National Employment Agency<sup>2</sup> (based on a survey of 2859 employers from different sectors, including 74% of private sector, 19% of public sector, the share of micro- and small employers being 87%), showed, that the Republic of Moldova has a constantly formed tendency of decrease in labour force, which will continue in 2023. At the same time, there is a high turnover of human personnel, including due to labour migration, which leads to a lack of labour force and a reduction in labour supply on labour market. Thus, in 2022, labour deficit were registered in private sector (65%). The absence of workers was declared by 18% of respondents-employers

<sup>2</sup> National Employment Agency (NEA), [www.anofm.md](http://www.anofm.md).

(16% in 2021). According to the study, the lack of labour force was observed in all regions of the country, including Chisinau (58%), the Northern area (17%), the Central area (15%), the Southern area (7%), and ATU Gagauzia (3%). Moreover, there were about 10.0 thousand vacancies registered during 2022 due to absence of workers, which were not filled during the year. The deficit of labour force will remain in health, education, social assistance, information and communication, and public administration, as well as in HoReCa area<sup>3</sup> (cooks, waiters, pastry cooks, etc.), blue-collar workers (seamstresses, car drivers, operators, etc.) according to Labour Market Forecast 2023 (NEA). And 37% of employers reported about a shortage of qualified and experienced workers, 30% - an insufficient number of job seekers, and a lack of opportunities to offer adequate wages.

Informal employment and existence the factor of wage in envelopes also let to decline in the number of contributors. So, according to the studies almost every fourth employed informally, about one third of economic agents pay wages in envelopes (on average it is about 30% of wages, that are not declared), including one of the reasons for this type of employment is the desire of employees to get higher income, possibility of employment independently by age. As a consequence of this fact, the budget loses 7% of GDP, or 15 billion MDL annually. It should be noted that the tax losses from shadow economy have increased from 2015 to 2020 from 8.9 billion MDL to 15 billion MDL annually, or by 6.1 billion lei, including in relation to GDP - from 6.1% in 2015 to 7.3% in 2020, or by 1.2 p.p. (Lupușor, 2021; Madan 2023).

Consequently, demographic factors, imbalances of labour force in labour market, informal employment, the process of emergence of financial instability of the pension system as a consequence of its increased burden in recent years, all this have been the cause for stimulation the stopping labour activity and retirement at a later age. Taking into account the relevance and importance of this problem, necessary to determine the motives and factors that are fundamental to the decision to stopping labour activity and retirement, both for females and males. At the same time, “retirement” in the context of given article means the established by law the pension age for females and males, as well as the employee’s decision to exit from labour market.

## **2. Purpose of the research, data and methods applied**

The principal purpose is to analyse the demographic changes, such as population decline and ageing, increase in life expectancy, increase in the number of population in pension age and some indicators of their standard of living. As a consequence of the above-mentioned factors, there is a deformation of the age structure of labour force, the number of employees paying social insurance contributions is decreasing, the problem of ensuring the replenishment of the Social Insurance Budget and its financial stability, including the timely provision of payments to social insurance beneficiaries (pensions, benefits, etc.) is growing. In relation to the above circumstances and on the basis of the analysis, the motives and main factors contributing to the decision to stopping of labour activity and exit from labour market in the gender aspect were determined, as well as proposals for promoting social security policies in the conditions of demographic changes and for increasing the financial stability of the Social Insurance Budget.

The purpose was achieved by performance the following objectives:

Analysis of tendencies in main demographic changes (number of population, including population structure in elder age groups, ageing, average life expectancy at birth and remaining life expectancy at elder ages, demographic burden). Evaluation of tendencies

<sup>3</sup> HoReCa – Hotel, Restaurant, Café.

the change in the population at pension age, including the dynamics of the number of pensioners by type of pension.

Analysis of wages as the basis of insured income for pension accrual, including by main type of economic activity. The assessment of the amount of pensions by age in relation to wages, by gender, by sector (agricultural and non-agricultural), and also the comparative analysis of average monthly disposable income and poverty rate (absolute and extreme) depending on the age of the household head.

Determination of the main social factors that influence the decision to transition from economic activity and exit from labour market to pension.

Elaboration of proposals for improving social security policies in conditions of demographic change and increasing the financial stability of the Social Insurance Budget.

The complex and systemic approach, scientific methods were used for the purpose of this research, including quantitative and qualitative analysis, graphical analysis, authors' calculations, etc.

Official statistical data from the National Bureau of Statistics of the Republic of Moldova, National Social Insurance House were used in the analysis and the authors calculated some indicators necessary for the study. When calculating the indicators, the population with usual residence, defined as the place where a person resided predominantly during the last 12 months, independently of temporary absences (for leisure, vocations, visits to relatives and friends, business, medical treatment, religious pilgrimages, etc.) was used.

### 3. Theoretical Background

The problem of deciding on the choice of retirement age is not a new one and scientists, researchers and practitioners from different countries research a long time, using a variety of analytical methods and models. Experience shows that the decision to stopping labour activity and retirement age is influenced by many factors, which may or may not be interrelated and have different purposes. On this basis, scientists in dependence on the purpose of the study highlight the main factor, ignoring the other factors. As a rule, a person or a family (household) was used as an object of study, the choice of the object of study and factors was determined depending on the purpose of study and the availability of data for its implementation. In this article, we will focus on single-period models, which do not take into account the influence of factors over time, and on life-cycle models of varying degrees of complexity.

*Gustman-Steinmeier model.* The interpretation of the model in the early works is based on the hypothesis: a person maximizes utility over the life cycle, but under a budget limitation, i.e. it takes into account both starting and earned assets, it should not be less than his consumption (Gustman, Steinmeier, 1986). However, in later works, the object of study in the model is not the separate person, but the couple, and in this case their behavior to collective saving, well-being, consumption and demand for labour in a given period are taken into account (Gustman, Steinmeier, 2013).

*Stock-Wise model* (Stock, Wise, 1990). This type of choice model between work and exit from labour market is close to the one-period model. The main purpose is to determine the optimal age of exit from labour market, taking into account the maximization of future earnings, including from labour income (wages) before exist on pension and the accrued pension in subsequent period of the life cycle. Consequently, in this model, the main factor in the decision to exit from labour market is financial.

*Berkovec-Stern model* (Berkovec, Stern, 1991). Given model is stochastic dynamic model, the object of study is a person who himself chooses three possible states of employment: full-time, part-time or absence of employment at all, i.e. exit from labour

market on pension. However, this model takes into account the possibility that a person may return to labour market after exit on pension.

Thus, the main factor that determines a person's decision about exist on pension, including the choice of exist age, is the change in their current financial situation and possible future budgetary limitations. However, research shows that factors that influence the decision to employ an elderly population in labour market include age, health, gender, and level of education. For example, gender affiliation is manifested in legislation based on the age limit for (old) age pension for males and females. For female, the important factors are, for example, the presence or absence of children, family status, necessity to care for a family member and others.

#### 4. Research Background

*Health* is an equally important factor influencing the choice of retirement age. The notion of health in economy is linked to knowledge, experience and skill, i.e. everything that helps him with needs. Г. Becker also believes that health is an integral part of human capital (Currie, Madrian, 1999). However, the model developed in 1972 by M. Grossman showed the uncertain nature of health, as its deterioration, on the one hand, leads to increased value of free time, leisure time, and on the other hand, it causes an increase in consumption, including high-cost medicines, expenditures of visits to specialists and other expenditures, ultimately leads to an increase in the level of employment in labour market (Grossman, 1972) or even it can be conclude that deteriorating health increases the probability of being employed.

*Level of education* influences the decision to exit the labour market or to continue of labour activity. So, with a high level of education, in most cases, the job is associated with intellectual activity, and financial literacy can also be assumed for this occupation. Another factor that should be mentioned is the absence of heavy physical burden. Thus, a person with a higher level of education will be interested in a later exit from labour market, both for reason of higher incomes and for moral reasons - professional interest and love for creative activity, that is, for work (Nazarov, Dormidontova, Lyashok, 2014).

In addition to the factors mentioned above, family circumstances, the presence of a husband, children, grandchildren in need of care, can also be influenced on the decision to stop labour activity and transition to pension, and also the couple's decision to stop their labour activity when they have the income needed to cover their living needs. In this case, there is also the presence and cohabitation of the children, including their combined income and the need to care for the grandchildren. It is also the case that a intellectual worker is forced to interrupt their labour activity due to care for a sick family member, but in this case the situation is reflected in a decrease in disposable income.

Factors and motives that influence, to a greater or lesser extent, the decision to stopping of labour activity and retirement include both geographical place of residence (urban, rural), and the legislative framework (retirement age established in the country), the specifics of the profession activity (aviation, security, unhealthy working conditions, artistic activity - ballet, circus, emergency services and other areas of activity connected with danger of working conditions and human life).

#### 5. Result and Discussions

*Pensions in the Republic of Moldova.* In the Republic of Moldova, to retire to pension is regulated by the Law on the State Pension System no. 156 of 14.10.1998, with subsequent amendments and additions (Official Monitor of the RM, 1998), which notes that the State Pension System is based on the principles provided for in the Law on State Social Insurance System no. 489 of 08.07.1999, with subsequent amendments and additions

(Official Monitor of the RM, 2000). Thus, the following types of pensions are provided in the country (Article 9): by age, disability, survivor, special pension (in accordance with the provisions of other laws, Article 10) and early age pension for prolonged work, which was introduced from 01.01.2018 [(Article 15, amended by Law of the RM: no. 208 of 06.12.21, Official Monitor of the RM, 2021, no. 308, art. 460]. Given Law (Article 41) establishes the standard retirement age of 63 years starting from 01.07.2019 for males and from 01.07.2028 for females by increasing the standard retirement age every year from July 1 by half a year for females (as 01.07.2022 - 60 years, as 01.07.2023 - 60 years and 6 months) and by 4 months for males (in 2017-2018, from 01.07.2019 - 63 years). Moreover, the Law provides that for persons who have insurance period including not less 10 full years of work experience with special working conditions, the standard pension age shall be reduced, as well as the list of jobs with special working conditions, based on which the age pension shall be granted on preferential conditions, shall be established. The amount of pension is determined by summing up the insurance period (before and after 01.01.1999). The insurance period also includes such types of labour activities as: work as member of collective economy (unions), independently of its character and duration; creative activity of the members of art unions, confirmed by the secretariats of the boards of unions; activity as ministers and cult workers from 01.04.1992; caring for disabled persons of group I, for a disabled child under 16 years old or of elderly persons who have reached 75 years old; full-time studies at a higher education institutions.

The Labour legislation in the Republic of Moldova impacts to the process of stopping labour activity and retirement. Under conditions of structural reforms, transformation of social-economic structure, development of private property, the retirement of employees is often carried out in accordance with the provisions of the Labour Code of the Republic of Moldova no. 154 of 28.03.2003 (Official Monitor of the RM, 2003). Given Law, in accordance with Article 8, prohibits discrimination on the basis of age, however, Article 55. *Urgent labour contract*, item f) provides that with persons who have age pension or length of work (or have acquired the right to such type of pension) the contract may not be concluded unlimitedly, but for a period of up to two years and continue, Article 86. *Dismissal*, in y<sup>1</sup>) provides for the dissolution of an individual labour contract at the initiative of the employer, if the hiring worker has the status of pensioner by age [Art. 86, part (1), item y<sup>1</sup>) introduced by Law of the RM, no.188 of 21.09.17, Official Monitor of the RM, 2017, no. 364-370, art. 622].

Based on the above, it should be noted that along with the factors that depend directly on the worker about retirement, there are external factors that are determined by the existing legislation and the socio-economic situation in the country at the moment of the decision about interruption the labour activity and transition to a pension. Taking into account the importance of given issue for the Republic of Moldova, the analysis has been carried out in accordance factors of demographic and social nature that directly or indirectly influence the pension's process.

In this context, it should be noted that despite significant improvements in economic indicators for the past two decades, Moldova remains one of the poorest countries in Europe. The fact that the ongoing model of economic growth, which is based on consumption and attraction remittances from labour migrants, has ensured economic growth and poverty reduction. However, the country's economy remains less sustainable, given situation was long before the COVID-19 pandemic crisis. Moreover, the pandemic and energy crises, together with the influx of refugees (the number of refugees who have crossed the border with the beginning the war amounted to 15% of country's population), the proximity to the war zone, the vulnerability of the country with its isolated economy dependent on connections to

Ukraine and Russia and their break, have highlighted even more vulnerabilities in the economic growth model. Despite more than 75% of refugees have left for the European Union, the remaining refugees in the country require additional financial expenditure, which has led to in reduced funds for realization of long-term priorities for the socio-economic development in the country. Continued processes of decreasing remittances, demographic factors, including declining and ageing population, have led to slowdown of productivity growth and increased in number of low-income population, resulting in increased dependency of certain categories of population from pensions and social assistance (The World Bank in Moldova).

Population decline and ageing cause a number of socio-economic problems, including growth of burden on working age part of population, on the economy both of the country as a whole and its territorial units, it is the obstacle of economic growth and, consequently, and, as a consequence of adequate reaction in the Moldovan society. Table no. 1 shows the main indicators characterizing the dynamics of age structure the population of the Republic of Moldova.

**Table no. 1. Principal characteristics of population structure of the Republic of Moldova, usual residence**

	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Population</b> (as of January 1) - total, thousand persons	2869.3	2846.3	2825.6	2780.7	2729.6	2684.8	2643.7	2626.6	2603.8
compared to previous year, %	-	99.2	99.3	98.4	98.2	98.4	98.5	99.4	99.1
<b>Population</b> (as of January 1) - total, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Including by: Age groups, %									
55-59	7.21	7.37	7.56	7.66	7.65	7.55	7.3	6.94	6.7
60-64	6.63	6.58	6.53	6.58	6.78	7.07	7.31	7.54	7.64
65-69	3.23	3.97	4.78	5.41	5.97	6.17	6.19	6.15	6.17
70-74	3.14	2.98	2.71	2.5	2.45	2.83	3.54	4.24	4.73
75+	4.54	4.54	4.52	4.7	4.79	4.77	4.68	4.42	4.25
Population structure by basic main age groups, %									
<b>RM, %</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
under working age, 0-15 years old	19.1	19.1	19.2	19.5	19.7	19.7	19.6	19.4	19.3
working age, 16-56/61	62.2	61.7	61.1	60.1	59.1	59.7	59.1	59.5	59.2
over working age, 57-62+	18.7	19.2	19.7	20.4	21.2	20.6	21.3	21.1	21.5
Average age of population, years									
<b>RM</b>	37.4	37.7	37.9	38.2	38.5	38.9	39.3	39.6	39.8
Northern zone	36.5	39.5	39.6	39.8	40.0	40.4	40.8	41.1	41.4
Central zone	36.6	36.8	37.0	37.3	37.7	38.2	38.7	39.1	39.4
Southern zone	37.2	37.5	37.8	38.2	38.6	39.1	39.7	40.1	40.4
A.T.U. Gagauzia	37.5	37.8	38.1	38.3	38.5	38.7	38.9	39.2	39.4
Ageing coefficient (ageing rate), as of January 1, %									
<b>RM</b>	17.5	18.1	18.5	19.2	20.0	20.8	21.7	22.4	22.8
Males	14.5	15.0	15.4	16.0	16.7	17.5	18.3	18.8	19.1
Females	20.3	20.9	21.5	22.2	23.0	23.9	24.9	25.6	26.2
Urban	16.7	17.3	17.9	18.5	19.2	20.0	20.6	21.0	21.1
Rural	18.1	18.6	19.0	19.6	20.5	21.5	22.5	23.3	24.0
Life expectancy at birth, years									
<b>RM</b>	69.3	69.4	69.8	70.8	70.6	70.9	69.8	69.1	
Males	65.2	65.2	65.7	66.7	66.3	66.8	65.9	65.2	
Females	73.6	73.7	74.2	74.9	75.0	75.1	73.9	73.1	
Urban	71.2	71.0	71.7	72.4	72.5	72.8	71.0	69.8	
Rural	68.4	68.4	68.8	69.7	69.4	69.7	69.1	68.5	
Index of demographic dependence (demographic dependency ratio) per 100 working age population, as of January 1, %									
Population <i>over working age</i> (57/62+)	30.0	31.0	32.0	34.0	36.0	34.5	36.3	35.4	36.2

Population <i>over age</i> at 65 years (65+), %	15.3	16.3	17.2	18.3	19.4	20.4	21.5	22.2	22.7
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Note: The retirement age has increased from 01.01.2019 for males - 63 years, for females - 58 years.

The retirement age for women has increased to 59 years from 01.01.2021.

2022 – preliminary data.

Source: NBS, [www.statistica.md](http://www.statistica.md) and authors' calculations

As follows from the analysis, for the period 2014-2022, the population of the Republic of Moldova had an annual decrease tendency: as of 01.01.2022, the population of the country declined by 265 thousand persons or by 9.3% compared to 01.01.2014. The average age in the Republic of Moldova increased during given period of time by 2.4 years, with more adult population concentrated in the Northern zone (41.4 years or the increase by 4.9 years, exceeding the national average by 1.6 years). Next comes the South Zone (40.4 years or the increase by 3.2 years and 0.6 years above the national average). The population is younger in the Central zone (39.4 years) and ATU Gagauzia (39.4 years), or 0.4 years less than in the country.

In the Republic of Moldova, the share of population aged 60 years and over was 22.8% at the beginning of 2022, and aged 65 years and over increased to 10% (6% in 1990). According to the United Nations Report<sup>4</sup> (United Nations, 2022), the proportion in this age group rose to 16%. The coefficient of population ageing during the analyzed period increased by 5.3 p.p., including for females is 7.1 p.p. higher than that for males; in rural the coefficient is 2.9 p.p. higher than in urban.

*The process of population ageing, which is irreversible, is one of the main factors that make the problem of transition from labour market to retirement one of the most important and actual at present in the Republic of Moldova.*

At the same time, life expectancy is an important qualitative characteristic of the population. Average life expectancy in 2021 was 69.1 years, or 0.7 years less than in 2020, including 73.1 years for females and 65.2 years for males, or 7.9 years less. Moreover, the average life expectancy at birth in the EU27 in 2020 was 80.4 years, what by 11.3 years less than this indicator in the Republic of Moldova. The decrease of this indicator is mainly due to an increase in both the total death rate and the infant mortality rate (NBS, 2022a). Table no. 2 shows the total life expectancy both at birth and in elder age groups, as well as the total death rate in elder age groups.

<sup>4</sup> United Nations, Department of Economic and Social Affairs.

**Table no. 2. Dynamics of life expectancy of remaining life and mortality, 2014-2021\***

	2014	2015	2016	2017	2018	2019	2020	2021
Life expectancy at birth, RM, years	<b>69.3</b>	<b>69.4</b>	<b>69.8</b>	<b>70.8</b>	<b>70.6</b>	<b>70.9</b>	<b>69.8</b>	<b>69.1</b>
Remaining life expectancy of at age, years left								
50 years	23.9	23.8	24.2	24.8	24.7	25.0	23.9	23.0
55 years	20.2	20.1	20.4	21.0	20.9	21.2	20.1	19.1
60 years	16.7	16.7	17.0	17.4	17.3	17.6	16.6	15.6
65 years	13.6	13.6	13.8	14.1	14.1	14.3	13.4	12.4
70 years	10.6	10.7	10.9	11.0	11.1	11.3	10.5	9.6
75 years	8.1	8.1	8.4	8.3	8.3	8.4	7.9	7.1
80 years	6.0	5.9	6.2	6.0	6.0	6.1	5.7	5.2
85 years	4.4	4.3	4.3	4.1	4.0	4.1	3.7	3.2
Death rate, ‰								
RM, ‰	<b>13.8</b>	<b>14.0</b>	<b>13.7</b>	<b>13.3</b>	<b>13.8</b>	<b>13.7</b>	<b>15.5</b>	<b>17.4</b>
including in elder age groups:								
50 – 54 years	11.8	12.1	11.3	9.9	10.0	10.3	10.9	11.1
55 – 59 years	16.9	17.2	16.6	14.7	14.7	15.0	16.1	16.8
60 -64 years	24.2	24.8	23.9	22.0	22.8	21.2	23.7	26.1
65 – 69 лет	33.7	33.8	33.3	30.7	32.4	31.5	35.4	40.4
70 – 74 years	54.2	52.8	52.5	47.5	45.1	41.8	52.1	59.8
75 – 79 years	83.2	80.4	78.0	76.6	77.6	75.4	84.4	100.5
80 – 84 years	133.6	136.1	123.8	126.1	124.2	121.7	134.1	152.9
85 years and over	230.4	236.5	234.0	247.2	248.1	245.2	271.7	311.9

\*Statistical data for 2022 is absent.

Source: NBS, [www.statistica.md](http://www.statistica.md) and authors' calculations

Life expectancy during the period 2014-2019 increased not only in the Republic of Moldova as a whole, but also in elder ages.

*The increase in life expectancy at birth, including remaining life expectancy (years left) at elder ages, has caused and led to the necessity to revise and to raise the standard retirement age.*

*Given the increased life expectancy, together with the growing number of population of pre- and retirement age and, as a consequence, increasing burden on the pension system, the task of stimulation later retirement has become particularly relevant for the Republic of Moldova.*

However, the Covid-19 pandemic (from March 2020), as well as its consequences in the form of an exacerbation of chronic diseases in subsequent years, which often lead to death, affected on the change of this indicator in direction of its decrease (table no. 2). The male mortality among the elderly population is higher than the female mortality. According to the official statistics, the main causes of mortality for people aged 60 years and over were circulatory system diseases (59.8%), tumours (11.6%), including malignant tumours, which were characteristic in the 65-69 age groups, digestive diseases (4.5%). Active tuberculosis was one of the causes of mortality in the 55-64 age group. With the beginning of the Covid-19 pandemic (March 2020 to 28.09.2022), the population aged 60 years and over accounted for 23.9% of total number of infected and 83.5% of total number of deaths, including female - the proportion of infected women in the population 60 years and older was 62.5% and 53.3% of the number of those who died from the virus (NBS, 2022b).



The above-mentioned situation was one of the reasons for the decrease in number of pensioners in 2020-2021, including by 0.4% at the beginning of 2021 and 2022 in comparison to 2020 and 2021, the total number of pensioners of all categories decreased by 1.6% at the beginning of 2022 in comparison to the previous year. The changes for all categories of pensioners are presented in table no. 3.

**Table no. 3. Dynamics of the number of pensioners by type of pension, as of January 1**

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Pensioners - total, thousand persons*	659.6	669.9	679.9	691.2	716	703.9	696.0	686.2	674.9
Pensioners by age – total, thousand persons	495.9	507.5	518.9	531.8	533.0	526.7	524.5	522.8	520.9
% of total pensioners	75.2	75.8	76.3	76.9	74.4	74.8	75.4	76.2	77.2
Age structure of pensioners by main age groups:									
50 years <, thousand persons	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01
50-54 years, thousand persons	0.4	0.4	0.4	0.3	0.3	0.05	0.05	0.04	0.03
54 years ≤ %	0.1	0.1	0.1	0.1	0.1	0.01	0.01	0.01	0.01
55-59 years, thousand persons	60.5	61.8	63.8	66.3	59.2	47.4	34.7	21.2	10.8
%	12.2	12.2	12.3	12.5	11.1	9.0	6.6	4.1	2.1
60-64 years, thousand persons	140.3	138.1	136.8	135.9	135.0	133.6	132.0	133.9	135.6
%	28.3	27.2	26.3	25.6	25.3	25.4	25.2	25.6	26.0
65 years and over, thousand persons	294.7	307.2	317.9	329.3	338.5	345.6	357.7	367.7	374.5
%	59.4	60.5	61.3	61.8	63.5	65.6	68.2	70.3	71.9
Pensioners by age in case of early retirement, thousand persons**	...	...	...	...	8.4	7.6	5.4	2.1	1.3
Disability pensioners, thousand persons	136.4	136.7	136.3	135.4	131.9	128.4	126.2	122.2	113.9
Survivor pensions, thousand persons	18.4	16.6	15.4	14.4	14.7	13.6	12.7	12.4	12.9
Other categories of pensioners, thousand persons	8.9	9.1	9.4	9.6	28.0	27.6	27.2	26.7	25.9
Pensioners by age in labour market, thousand persons	147 996	154 654	160 658	164 477	170 028	174 757	175 656	172 516	169 529
%	21.8	22.5	23.0	23.3	23.3	23.0	23.4	23.7	24.0
Pensioners by age – total, %, Including:	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agricultural sector, thousand persons	201.8	199.0	195.9	193.9	190.0	182.8	176.0	170.0	163.9
%	40.7	39.2	37.8	36.5	35.6	34.7	33.6	32.5	31.5
Non-agricultural sector, thousand persons	294.1	308.4	322.9	337.9	343.0	343.8	348.5	352.8	356.9
%	59.3	60.8	62.2	63.5	64.4	65.3	66.4	67.5	68.5

\*As of 1 January 2017, the National Social Insurance House took over the function of establishing and accruing pensions for law enforcement agencies.

From 1 January 2018, the figures include law enforcement agencies.

\*\*From 1 January 2018 early retirement pension is granted.

Source: NBS, [www.statistica.md](http://www.statistica.md) and authors' calculations

At the beginning of 2022, the share of age pensioners was 77.2% of total, including 97.9% of population aged 60 and over, of whom 68.5% were female. The highest share of total number of age pensioners was 65 years and over (71.9%, compared to 59.4% as of 01.01.2014 and 65.6% as of 01.01.2019). The share of pensioners aged 55-59 years has also decreased significantly (2.1% as at 01.01.2022 as against 9.0% as at 01.01.2019, or by 6.9 p.p.), and less than 1.0% of the structure analyzed are aged up to 54 years. It can also be noted that there is the tendency to reduce the survivor pensions, disability and other categories, as well as age pensioners who were employed in agricultural sector (from 40.7% as of 01.01.2014 to 31.5% as of 01.01.2022, or by 9.2 p.p.). Despite the fact that, from 01.01.2018 law established the right to an early retirement pension, this category of pensioners has the stable downward tendency, including from 8.400 as of 01.01.2018 to 1.300 as of 01.01.2022, or by 15.5%.

*The increase in the number of pensioners of all types of pensions with a reduction in the number of employed working age population in labour market highlights the problem of ensuring the financial stability of the pension system as a priority.*

Analyzing the factors that influence the decision to stop the labour activity and retirement, one of the main factors is financial ensuring, i.e. that the income received pensioner makes it possible to provide the vital necessities. The main source of the pensioner's income is a pension, the amount of which depends on the insured income or, ultimately, on the wage and transferred insure contributions. The characteristics of changes in wages by sectors and by main type of economic activity are presented in table no. 4.

**Table no. 4. Dynamics of average monthly wages and some basic social indicators**

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Average monthly wage of an employee in economy (gross), lei (MDL)	4172.0	4610.9	5084.0	5697.1	6446.4	7356.1	8107.5	9115.9	10529.1
compared to previous year, %	110.8	110.5	110.3	112.1	113.2	114.1	110.2	112.4	115.5
Gender Pay Gap, %	12.4	13.2	14.5	13.5	14.4	14.1	13.6	13.6	....
Budgetary/real sector, %	83.9	85.7	80.9	82.5	84.1	87.0	87.0	81.2	79.5
Budgetary sector, lei	3673.9	4125.3	4359.7	4950.1	5675.1	6636.2	7313.8	7786.6	8844.6
compared to previous year, %	110.8	112.3	105.7	113.5	114.6	116.9	110.2	106.5	113.6
Real sector of economy, lei	4378.6	4814.6	5390.1	6000.1	6748.2	7627.1	8402.7	9595.0	11126.6
compared to previous year, %	110.9	110.0	112.0	111.3	112.5	113.0	110.2	114.2	116.0
Wages in main sectors (MDL), including:									
Agriculture, forestry and fisheries	2773.9	3072.3	3321.4	379.08	4318.4	4834.4	5167.3	5790.9	7000.7
Industry	4469.4	4962.8	5353.7	5902.7	6544.7	7184.3	7673.6	8333.6	9647.4
Constructions	43573	4559.0	5064.5	5649.8	6456.2	7301.5	7728.1	8106.2	9316.3
Wholesale and retail trade; maintenance and repair of motor vehicles and motorcycles	3547.7	3903.2	4558.0	5120.1	6009.7	6729.4	7346.4	8163.5	9443.2
Transport and storage	4076.4	4411.3	4746.3	5389.6	6077	6979.3	6647.3	7376.8	8936.8
Public administration and defense, obligatory social insurance	5260.4	5749.2	6144.2	7361.4	8397.8	8916.9	9769.4	10395.7	11901.7
Education	3357.4	3813.6	4017.7	4459.0	5147.4	6338.7	7023.3	7 440.5	8417.1
Health and social assistance	4046.5	4430.2	5010.0	5634.6	6228.0	7160.1	8718.9	11299.5	11651.1

\*The population with usual place residence was used as the basis for assessing the indicators. Usual residence is defined as the place, where a person has lived mainly during the past 12 months, independently of temporary absences (for leisure, vocations, visits to relatives and friends, business, medical treatment, religious pilgrimage, etc.).

Source: NBS, [www.statistica.md](http://www.statistica.md), <https://statistica.gov.md/category.php?l=ro&idc=445>

Analysis of wages as the main source of income shows, that against the background of an increase in its absolute value, there is difference by gender (females earn on average 14% less than males), by sector (wages in budgetary sector are by 13-20% lower than in real sector of economy) and by type of economic activity (for example, the lowest wages are in agriculture, forestry and fisheries – by 33.5% lower than the national average in 2022; in education, respectively, by 20.1%; in transport and storage – by 15.1%).

	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>RM, total</b>	<b>1735.2</b>	<b>1951.8</b>	<b>2051.8</b>	<b>2208.5</b>	<b>2357.1</b>	<b>2880.6</b>	<b>3096.6</b>	<b>3510.1</b>	<b>4252.6</b>
Urban	2093.9	2368.6	2490.1	2695.4	2875.9	3521.9	3695.2	4309	5355.3
Rural	1477.2	1652.4	1736.3	1868.1	1995.9	2457.2	2702.3	2985	3528.4
Including by economic status									
Hiring workers (employees)	-	-	-	-	-	3478.1	3712.4	4188.7	4950.9
Self-employed workers in agriculture (farmers)	-	-	-	-	-	1828.2	2276.3	2408.0	2866.2
Farmers	1069.0	1160.3	1173.3	1265.6	1400.5	-	-	-	-
Workers of agricultural sector	1313.3	1483.7	1521.1	1689.5	1897.7	-	-	-	-
Self-employed workers in non-agricultural activities	-	-	-	-	-	2837.4	2824.1	3379.6	4283.9
Workers of non-agricultural sector	2061.7	2344.5	2546.5	2722.6	2962.3				-
Entrepreneurs	2753.1	2401.7	3032.1	3635.4	3121.4	-	-	-	-
Pensioners	1454.1	1697.1	1781.3	1918.0	2065.5	2443.6	2640.3	2943.9	3688.0
Other activities	1894.8	2084.6	2121.6	2245.4	2182.4	2399.3	2386.4	2810.6	3384.0
Disposable income depending on the source of income of the household head, MDL									
30 years <	-	-	-	-	-	3511.8	4129.2	4108.3	5153.1
30-39 years	-	-	-	-	-	2816.4	2971.5	3318.0	4390.6
40-49 years	-	-	-	-	-	2739.5	2839.4	3472.1	3956.9
50-59 years	-	-	-	-	-	3098	3409.5	3839.5	4440.9
60-64 years	-	-	-	-	-	2864.7	3132.7	3627.9	4417.5
65 years and over	-	-	-	-	-	2602.6	2794.8	3047.8	3891.3
I quintile/V quintile, times	<b>5.6636</b>	<b>5.4758</b>	<b>5.7733</b>	<b>5.3455</b>	<b>5.0761</b>	<b>5.0905</b>	<b>5.3030</b>	<b>5.5736</b>	<b>5.3116</b>
Urban, times	4.8818	4.6111	4.8321	4.4699	4.4254	4.8774	5.3732	5.4401	5.3237
Rural, times	5.5375	5.3972	5.6864	5.1399	4.7633	4.6213	4.8390	5.0789	4.4909

**Table no. 5. Dynamics of average monthly disposable income\*, MDL**

\* Since 2019 the data are not comparable with the previous period, as the methodology of the household survey was modified.

Source: NBS, [www.statistica.md, https://statistica.md/category.php?l=ro&idc=445](https://statistica.md/category.php?l=ro&idc=445)

The Republic of Moldova is characterized by a low level of labour income, namely wages as the main source of income of working-age population (e.g. in EU countries the average monthly (gross) wage is much higher, than in Republic of Moldova, e.g. in 2021 the wage in Bulgaria is 944.00 EUR €, in Hungary - 1,344.00 EUR, in Germany – 4,640.00 EUR, in Italy – 3,360.00 EUR, in Portugal – 2,032.00 EUR, in Romania – 672.00 EUR, in Greece – 2,176.00 EUR, in Spain – 2,720.00 EUR, in France – 4,112.00 EUR. ), high level of social inequality (5.6 times the national average), risk of remaining without a job. Social inequality can be observed by comparing the income ratios of the population in quintiles I and V, which are 5.3 times in urban and 4.5 times in rural. According to the official statistics of the NBS, the lowest average monthly disposable income is among workers in agricultural sector, including farmers, the amount of which does not even cover the subsistence level of working age person.

*Low wages lead to small pensions, which do not provide pensioners with a decent standard of living with an insufficient level of social protection.*

Differences in wages, in disposable income, constant changes in the socio-economic structure and rising prices and tariffs for food, goods and services, were affected the decline standard of living of working population and especially of pensioners. The characteristics of absolute and extreme poverty by age group and depending to source of income of the head of household are shown in table no. 6.

**Table no. 6. Levels of extreme poverty and absolute poverty**

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Extreme poverty, MDL	1257.0	1378.9	1467.2	1564.0	1611.7	1689.7	1753.4	1843.0	2372.7
Extreme poverty rate, %	12.8	10.5	10.4	11.0	8.7	10.7	10.8	9.5	13.5
Absolute poverty, MDL	1558.6	1709.8	1819.2	1939.3	1998.4	2095.1	2174.1	2285.2	2942.7
Absolute poverty rate, %	29.5	25.4	26.4	27.7	23.0	25.2	26.8	24.5	31.1
Including by main age groups, %									
30 years <	18.1	14.6	16.1	20.8	13.1	12.9	16.7	15.4	22.2
30-39 years	25.4	22.2	20.1	22.8	20.5	19.2	22.3	18.6	21.3
40-49 years	28.9	24.8	28.6	29.1	22.7	24.5	23.3	23.3	28.5
50-59 years	30.2	27.7	25.0	26.4	23.6	22.0	26.2	21.1	30.4
60-64 years	33.8	24.7	31.9	30.6	22.9	28.8	28.5	26.6	34.2
65 years and over	37.7	31.4	34.3	34.8	29.4	40.8	41.1	39.7	48.1
Absolute poverty rate by gender of household head, %									
Males	28.8	26	26.6	28.4	22.6	24.6	25.6	23.6	30.4
Females	30.8	24.1	26.1	26.1	23.6	26.6	29.3	26.3	32.6
Absolute poverty rate by source of income of household head, %									
Wages in agricultural sector	51.5	50.1	51.9	42.7	39.9	43.2	37.9	35.1	39.2
Wages in non-agricultural sector	19.5	14.9	14.6	14.9	12	11.9	14.5	12.9	19.1
Individual agricultural activity	46.5	44.1	46.1	54	42.2	38.4	35.4	36.5	42.5
Individual non-agricultural activity	22	19.1	19.2	21	17.9	22	25.1	17.1	30.4
Pension	37.7	29.8	32.7	34.6	28.9	38.3	39.5	38.2	45.8
Remittances from abroad (labour migrants)	21.7	21.2	18.9	21.9	19.7	16.1	25.3	18.2	20.8
Other sources of income	46.0	40.0	43.6	48.4	51.8	46.2	48.8	46.3	58.5
Subsistence level (living wages)									
Working age population, RM, MDL	1726.8	1842.2	1914.7	1984.5	2016.1	2194	2247.6	2310.5	2818.3
Age pensioners, RM, MDL	1343.7	1437.4	1494.8	1547.5	1574.2	1707.4	1759.8	1811.7	2193.3

\* Since 2019 the data are not comparable with the previous period, as the methodology of the household survey was modified.

Source: NBS, [www.statistica.md](http://www.statistica.md), <https://statistica.gov.md/category.php?l=ro&idc=445>

The households of pensioners are the highest absolute poverty rate – 45.8%, and also those, in which the head of the household is employed in the agricultural sector (39.2%) and in individual agricultural activity (42.5%), and by age groups - 65 and over (48.1%) and 60-64 years (34.2%). Thus, despite the annual indexation, compensations and a number of other benefits provided to the category of pensioners (not including other categories of households), pensioners are the most vulnerable category of population. The dynamics of pensions for 2014 and 2022 reflects in table no. 7.

**Table no. 7. Characteristic of average monthly amount of pension by age, as at 01 January**

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Average amount of pension by age, as of January 1, MDL	1049.9	1114.7	1191.8	1301.1	1456.9	1643.7	1843.0	2067.5	2595.3
compared to previous year, %	106.4	106.2	106.9	109.2	112.0	112.8	112.1	112.2	125.5
Average amount of age pension in case of early retirement, MDL	-	-	-	-	2793.7	2972.4	3076.9	2855.1	2959.6
Agricultural sector, MDL	899.18	949.28	1007.27	1093.7	1208.78	1289.06	1447.39	1522.18	1984.8
Non-agricultural sector, MDL	1153.34	1221.51	1303.82	1420.15	1594.23	1832.36	2042.73	2330.39	2875.8
Agricultural/non-agricultural sector, %	78.0	77.7	77.3	77.0	75.8	70.3	70.9	65.3	69.0
Males, MDL	1190.43	1268.13	1362.52	1491.1	1682.35	1940.06	2157.78	2409.25	2960.65
Females, MDL	991.4	1050.4	1120.3	1221.4	1362.78	1520.21	1711.56	1919.94	2432.16
Females/Males, %	83.3	82.8	82.2	81.9	81.0	78.4	79.3	79.7	82.1
Replacement rate (brut), %** (pension/wage)	26.7	25.8	25.6	25.6	25.5	25.1	25.5	28.5	30.1
Indexation of state social insurance pensions for the corresponding year, %	6.45	7.95	10.1	6.8	6.6	5.3	4.83 as of 01.04.2020 1.07 as of 01.10.2020	3.89 as of 01.04.2021 3.86 as of 01.10.2021***	9900.0< 13.94% plus fixed sum 171.71 MDL
Consumer Price Index (CPI, annual average), %	105.1	109.7	106.4	106.57	103.05	104.84	103.77	105.11	128.74
CPI for foodstuffs, %	106.5	109.8	107.4	107.93	105.39	107.61	107.35	106.96	131.89
CPI for non-food goods, %	105.5	111.8	106.3	104.53	102.67	104.19	100.89	105.95	120.31
CPI for services, %	102.5	106.2	104.9	107.06	99.78	101.47	102.38	101.28	136.96
Pensioners by age in labour market, pers.	147996	154654	160658	164477	170028	174757	175656	172516	169529
Share of pensioners by age in labour market, %	21.8	22.5	23.0	23.3	23.3	23.0	23.4	23.7	24.0

\*Since 2019 the methodology of wage assessment was changed, there are no data on wages for 2021.

\*\*Data from Ministry of Labour, Social Protection and Family for 2014-2018, for 2019-2022 calculated by authors.

\*\*\*Law no. 127 of 30.09.2021 amending the Law no. 156/1998 on the public pension system. Official Monitor of the RM, 2021, no 238, 01.10.2021, article 279: item 2. Paragraph (3) article 12 according to which from 01.10.2023 payment of solidarity allowance is provided "if the amount of pension calculated according to the law is less than the amount of

the minimum pension for the respective category, the difference between these amounts in the form of solidarity allowance shall be covered from the state budget funds”.

Decision of the Government of the Republic of Moldova on indexation of social insurance benefits and some state social payments: no. 162 of 08.09.2021. Official Monitor of the RM, 2021, no. 212-218, art. 367.

Source: NBS, [www.statistica.md](http://www.statistica.md)

The analysis shows that despite the annual growth of the average amount pension by age, there is a 31% differentiation in the amount of pensions between agricultural and non-agricultural sectors, and a 17.9% difference between the pensions of females and males. Indexation and recalculation of pensions did not ensure a significant increase of living standards of agricultural pensioners and in 2021, their average amount of pension by age (MDL 1984.8) was 13.1% lower than the absolute poverty line (MDL 2285.2). Moreover, if take into account the annual growth of the Consumer Prices Index (CPI), for example, in 2021 the real change of the average amount of age pension in the country will not be 125.5% compared to the previous year, but 97.5% or on the contrary, will decrease by 2.5%.

Analysis of the structure of social insurance expenditures in 2021 showed that social insurance pensions constitute 82.9% of expenditures, including actual expenditures for age pension compared to 2020 increased by 113.7%, and for early age pension constituted only 31.9% of expenditures compared to 2020. The share of expenditure on age pensions constituted 83.2% of the total actual expenditure on social insurance pensions. The transfers from the State Budget to cover social insurance expenditures amounted to 39.4% or 9.8% compared to 2020 (income from compulsory contributions and other revenues amounted to 60.6%). The increase of expenditure is related to the indexation by 3.89% as of 01.04.2021 and 3.86% as of 01.10.2021 - 3.86%, as well as for revised age pensions for persons who were in labour market after realization the right to a pension and accumulated more than 7 years of insurance period. Except the abovementioned, from 01.10.2021 the amount of minimum age pension was increased to MDL 2000, which also raised the amount of average pension (the difference between the minimum pension and the calculated pension is covered by the State Budget). However, as shown in table no. 7, the amount of pensions in the country is not enough to ensure a normal adequate standard of living for pensioners (CNAS, 2022).

Taking into account the fact that the Republic of Moldova is characterized by a low level of income from labour activity, namely the wages as the main source of income of working-age population (e.g. in 2021 the amount of average monthly (gross) wage in EU countries was registered much higher, including Bulgaria - EUR 944.00, Hungary - EUR 1,344.00, Germany - EUR 4,640.00, Italy - EUR 3,360.00, Portugal - EUR 2,032.00, Romania - EUR 672.00, Greece - EUR 2,176.00, Spain - EUR 2,720.00, France - EUR 4,112.00), the level of social inequality in the country remains high, as a consequence, low pensions (in the presence of low income). The coefficient of replacement of wages by pensions (income from the labour activity of worker, who loses it from the moment of its stopping and retirement) is 30%), which does not provide pensioners with not only a decent standard of living but also with an insufficient level of social protection. The low wage replacement rate of established pension indicates the distrust of population towards the existing state pension system and is the reason for deviation from paying social insurance contributions. The Strategy for the Reform of the Pension System of the Republic of Moldova (Decision of the RM Parliament, 1998) was foreseen that the value of given coefficient should reach the level of 42% (in the ILO Convention no. 102 on Minimum Standards of Social Security, 1952, which was not ratified by the Republic of Moldova, the

replacement rate was established at 40%, and later in Recommendation 167 [ILO, no. 167. The Maintenance of Social Security Rights Recommendation, 1983], the amount of the coefficient for developed countries was established at 45% and is now at 50%). In a number of countries, for example, in Ukraine the replacement rate has reached the level of 50% and even up to 80% for scientific researchers, in the public administration - up to 75%, in Russia - 40%, in France - 70-80%, in Croatia - 80-90%.

*Consequently, the difference between the previously received income from work activity and the amount of established pension in the Republic of Moldova remains quite significant, which is one of the main reasons for the continued economic activity of persons of pension age.*

However, the share of age pensioners in labour market in the last two years (2021-2022) was only 24%. According to the Labour Code of the Republic of Moldova (Official Monitor of the RM, 2003, no 159-162, art. 648), art. 55, item (1), y1) both in the hiring and conclusion of the labour contract and in its interruption in relation to workers of pension age, there are infringements of equal constitutional rights of worker to labour according to the criterion depending on age, in the process of ongoing reforms, structural changes and internal optimization, economic agents primarily dismiss workers of pre- and retirement age, which is the cause of the increase in informal employment in both the formal and informal sectors. In addition to the above, this situation leads to the deterioration of the emotional and psychological state and fear of the unknown future, both in the pre-retirement period and during the immediate retirement period due to worsening of material well-being, risk of poverty and reduction of living standards.

Analyzing demographic and social factors, as well as motives about the deciding on the transition from labour activity to pension, it can be noted that given process, on the one hand, can be implemented by stimulating and creating the necessary conditions for voluntary continuation of labour activity, and, on the other hand, using destimulation the exit of age working in pension age from labour market, including through tools of psychological and normative character (the person's own assessment of their possibilities and the physical capacity to work). While financial factors will play an important role as an stimulus. Thus, a combination of non-financial and financial factors, as well as the removal of legal and normative limitations on continued labour activity will allow for retaining workers of pension age in labour market, independently of the standard pension age established in the country.

### **Conclusions**

Analysis of the demographic situation in the Republic of Moldova during 2014-2021 led to conclusions about a decrease in the number of working-age population aged 16-56/61 years (by 3.0 p.p.), the increase in the number of population of pension age 57/62 years and over (by 2.8 p.p.), which led to the increased burden on the pension system (index of demographic burden of population over 57/62 years has increased by 6.2 p.p., and population aged 65 and over by 7.4 p.p.). As a result of the ageing process, as of January 01 in period 2014-2022, the share of population aged 65-69 years increased by 2.94 p.p. and 70-74 years by 1.6 p.p., including 12.4 years of length of remaining life at 65 years. The reduction of employed population, from which insurance contributions are deducted, has led to financial instability of the Social Insurance Budget and, consequently, to late payment of pensions and other social benefits (the ratio of employed population to pensioners dropped from 1.93 to 1.62). At the same time, average life expectancy in 2021 is 69.1 years, including 73.1 years for female and 65.2 years for male, or 7.9 years less (in the Republic of Moldova this indicator is 11.3 years less than the average indicator in the EU-27 countries in 2020 - 80.4 years). Also in the Republic of Moldova, the ageing process has become irreversible: in 2022



ageing coefficient is 22.8%, or increased by 5.3 p.p. compared to 2014, including by female 26.2%, in rural areas 24%.

Thus, it can be concluded, that demographic factors are the principal reason for the formation of the transition from labour activity to pension, and the analysis of the demographic burden of population at elder ages and the population's life expectancy at elder ages are prerequisites for establishing and revising the pension age limit.

Ageing is a cycle or last period of life, that manifests itself differently in different people and is a specific period of human development. Modern society has different relations to elderly people and at present the category of pensioners is a social problem, as the end of their professional life turns them into unneeded people, a used resource and they live with a sense of their needlessness and marginalization. Retirement has opposite consequences for the population of pre- and pension age: there is a part of elderly who have successfully coped with old age, have certain resources for their material ensuring, including through the accumulation savings, and there is another part of the elderly whose financial situation was precarious, there was a financial deficit, in this case, when they retire and become even poorer. The Republic of Moldova is characterized by low wages and money earnings of population, including females wages, on average, 14% lower than males, wages in budget sector 13-20% lower than in real sector of economy, the lowest wages being registered in agriculture, forestry and fisheries or by 33.5% lower than the average in 2022, respectively in education by 20.1%, in transport and storage by 15.1%. The ratio of population incomes in quintiles I and V constitute 5.4 times in urban and 5.1 times in rural.

This situation led to a small pension, the wage replacement rate for pension in analyzed period was only at the level of 26-30% (45% or more in advanced countries). I.e. pensions as the principal source of income for most pensioners is not a basis for decent living standard. For example, the ratio of average amount of age pension between agricultural and non-agricultural sectors is up to 30%, for males and females - 18%. In the context of rising prices of food, medicines, goods and tariffs for services, the small amount of pensions as a source of existence reflected on the standard of living of both the population as a whole and, especially, of pensioners (the absolute poverty rate for households of pensioners was 38.2%, including 65 and over - 39.7%). The main source of livelihood (средств к существованию) for households consisting only of elderly people is social benefits (66.6%), but if they are engaged in labour activity, they have income from other sources, including hiring activity (14.4%) and individual agricultural activities (8.3%).

Thus, the problem of transition from labour activity to pension has become particularly actual as a result of the increase in life expectancy and the growing population at pension age. The transition to the "third age" and retirement supposes some social, psychological and biological changes and, as a consequence, has a certain stress for a person, who must adapt to the changes taking place in his life and accept them as the inevitability of a certain stage of the life cycle. At the same time one of the consequences of retirement is a decrease in income and the emergence of financial difficulties due to the loss of social position (status), deterioration of emotional and psychological state and, consequently, of the state of health. Considering the above-mentioned, especially the process of demographic ageing of population, the problems of elderly become an important actual objective for modern social policies. Modern policies should be directed to adapt to new living conditions, ensuring the various necessity of elderly population, observance for human rights, effective social protection, as well as taking into account the possibility of reorienting the elderly to activities that will give them emotional and financial satisfaction, using their professional and creative skills and physical possibilities. All of the above led to a search for the most effective ways to solve the issues of an ageing population.

Consequently, two main categories of factors can be distinguished from the study that not only influence to the process the transition from labour market to pension, but also necessitate the regulation of this process by the state:

- *Demographic situation*, which is a causal factor for the transition from labour activity to pension as a result of the population ageing process and the change in the age structure towards an increase in population in elder age groups. In the Republic of Moldova for 2014-2022, with a 13.6% decrease in working age population and a 5.0% increase in the number of age pensioners, when there are less than 2 employed persons per pensioner, the pension system based on the principle of solidarity between generations threatens its future viability and financial stability due to the decrease of social insurance contribution payers. Due to the ageing of labour force the share of 55-64 age group in employed population is 19.0%, but with discriminatory provisions in the labour legislation, age limits can change the stability of employment for this category of workers, and their labour activity may be stopped at any moment and they may be forced to retire. Given fact will reduce in the number of labour force, which, with the limited reproduction possibilities of labour force, will also deepen the deficit and competitiveness of national labour market, and given fact that needs to be taken into account in the national development programs of the country;

- *Social factors*, which are more related to the motivation of the decision in the transition from labour activity to pension. In the Republic of Moldova as of 1 July 2019 for males and as of 1 July 2028 for females the standard pension age is established 63 years of age, which will be achieved by an annual increase of six months for females (pension age for males is 63 years as of 01.01.2019, through increases in 2017-2018) and for female as of 01.07.2022, the pension age is 60 years and will be increased according to the law. Age pensions are established from the date of emergence of the right to a pension and in the calculation of its amount, the insurance period established by law is taken into account. (Article 41 and Article 42 of Law on state pension system: no. 156 of 14.10.1998. Official Monitor of the RM, 1998, no.111-113, art. 683 with subsequent amendments and additions. Republished under Parliament Decision: no. 1546-XIII of 25.02.1998, Official Monitor of the RM, 1998, no. 26-27, article 176). In the group of social factors, the main one is the amount of the future pension, which depends on the number of years of insurance and the transferred social insurance contributions from wage, which is small amount, considering its different forms of differentiation, and that is the reason of low pensions, which hardly cover 30% of the previously received labour income. Moreover, given the insufficient effective social protection of pensioners, the loss of employment not only does not guarantee a decent standard of living, but also presents a real risk of being in the category of the most vulnerable strata on the brink of survival.

Consequently, based on the existing demographic situation, the level of socio-economic development of the country, financial possibilities and national traditions, it is necessary to carry out the following:

**First**, to determine the *purpose of regulation* the process of transition from labour market to pension, including whether the labour force at an elder age is needed as a resource for reproduction of labour deficit and in given case the policies will be stimulate the continuation of economic activity by the population that has reached the established pension age in the country;

**Secondly**, upon reaching the established pension age, this age group exist from labour market, and at the same time, it is possible to revise the established pension age standard, revise the principles of pension system formation, develop alternative pension systems;

**Thirdly**, to determine the economic effect for the socio-economic stable development of the country from the implementation of the first and second scenarios;

**Fourthly**, to elaborate the state policies and measures to ensure the realization of the selected effective scenario for Republic of Moldova's development.

In order to adopt the most effective and scientifically-based scenario, the following measures should be carried out:

- To elaborate the population forecast by age, including gender and urban-rural aspect, for the medium- and long term;
- To elaborate the forecast of principal macro-economic indicators in the medium- and long term, including by regional aspect;
- To elaborate the forecast the market of labour force in the medium- and long term, including by regional and gender aspects;
- To calculate the years left of healthy life expectancy of the population in elder age groups;
- To carry out the evaluation of the effectiveness of the existing system of pension security, based on the principle of generations' solidarity, its legal basis and the perspectives for the development of alternative systems (professional pension funds, non-State pension funds, changes in the principle of functioning the pension system, taking into account the experience of developed countries);
- To perform the sociological studies of the state of health and living standards of the population aged 55 and over with purpose of increasing the effectiveness of social policies on the basis of the data obtained;
- To revise the criteria, standards applied in social protection and support for elderly population, including the maximum approximation of their quantitative value (amount) to the standards of international conventions, as well as those used in developed EU countries.

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