HARNESSING THE INACTIVE POPULATION TO ADDRESS LABOUR SHORTAGES IN THE REPUBLIC OF MOLDOVA

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Abstract: *Labour shortages have emerged as a structural constraint to economic development in the Republic of Moldova, driven by demographic decline, sustained outmigration, and persistently low labour force participation. Despite the presence of a sizeable economically inactive population, the extent to which inactivity can be harnessed to alleviate labour shortages remains insufficiently quantified. This study addresses this gap by proposing a transparent, scenario-based framework to assess the realistic activation potential of the inactive population under prevailing structural constraints.*

Using official data from the National Bureau of Statistics for the third quarter of 2025, the inactive population is decomposed into three mutually exclusive groups: structurally unavailable, conditionally activatable, and potentially activatable. Based on this classification, conservative activation scenarios are constructed to estimate upper ceilings for feasible labour supply mobilisation. The results indicate that more than half of the inactive population is structurally unavailable for activation in the short to medium term, primarily due to ageing and migration-related constraints. The realistic activation margin is concentrated in a limited subset of conditionally and potentially activatable individuals, such as caregivers, students, and discouraged workers.

Scenario-based estimates suggest that, even under favourable policy conditions, activation could mobilise at most between 136 and 232 thousand persons, implying that labour market activation alone cannot fully offset labour shortages. These findings underscore the need to treat activation as a complementary policy tool rather than a standalone solution. The study concludes that effective responses to labour shortages in Moldova require a coordinated strategy combining selective activation of inactive populations, improvements in job quality and wage-setting mechanisms, productivity-enhancing investments, and targeted labour migration policies.

Key words: *Labour shortages, economic inactivity, labour force participation, labour market activation, activation potential*

JEL: J21, J23, J61, J68, O15

Introduction

The demographic decline and the outmigration are among the major causes of labour shortage in the Rep. of Moldova. If previously one way to attract foreign investors was by owing them with cheap, and plenty labour force, nowadays, Moldova is facing a labour shortage and albeit the one that exists is expensive. Business associations and think tanks [11] have repeatedly signalled to the Government and the community as a whole the issue of labour shortage [1] including in the context of the implementation of the 2024-2027 Reform Agenda under the EU Growth Plan [6]. Some businesses see as a solution employing labour force from abroad [5]. Even though hiring labour force is a solution to address labour shortage in the areas Moldova lacks skills and population willing to participate, the data shows that there is still inactive population in the labour market in the country that could be attracted into the activity. Thus the question to be addressed in this research is how far and in what way can the inactive population be harnessed to address labour shortages in the Republic of Moldova? With regard to the labour shortage definition, Barnow, Trutko and Piatak see it as „an occupational labour shortage as a sustained market disequilibrium between supply and demand in which the quantity of workers demanded exceeds the supply available and willing to work at the prevailing wage and working conditions at a particular place and point in time" [2]. However, according to

Handel (2024), to determine whether a labour shortage exists, it is necessary to distinguish between normal labour market tightness and true shortage conditions. Moreover, many discussions of labour shortages focus on specific occupations, which would require detailed data on job vacancies by occupation, data that are rarely available. As a result, most assessments of labour shortages in practice are based on general job vacancy data rather than occupation-specific evidence [8]. There is also a question on how to measure the labour shortage. Some measure it by "job openings that could not be filled at all" [10]. According to the authors there is no clear boundary between normal labour market tightness and a true shortage. Because reliable vacancy data by occupation are largely unavailable, shortages cannot be identified using a single quantitative indicator and are instead inferred from a combination of signals, especially employer responses. In practice, evidence of labour shortages relies heavily on employer behaviour such as intensified recruitment, wage increases, overtime use, or relaxed hiring standards rather than on vacancy statistics alone [2].

Literature review.

The literature on labour shortages in the Republic of Moldova portrays it as a structural phenomenon, driven by demographic decline, sustained emigration, and weak labour market participation, rather than by short-term demand fluctuations. A central strand of research highlights the role of poor job quality and weak wage-setting mechanisms in sustaining inactivity and labour outflows. Vaculovschi (2024) shows that persistently low wages especially in agriculture and the public sector, have eroded the motivational and reproductive functions of employment, generating a large group of working poor and encouraging labour force withdrawal, emigration, and high turnover. As a result, labour shortages persist despite the presence of inactive or underutilised labour, suggesting that activation policies are ineffective in the absence of adequate wages and working conditions [19].

Several studies emphasise that labour shortages in Moldova coexist with low employment and participation rates, pointing to underutilised domestic labour resources. Savelieva and Zaharov (2021) argue that structural imbalances stem not only from labour shortages but also from high inactivity among women, older workers, and low-skilled individuals, exacerbated by demographic decline, migration, and insufficient job quality. Existing social policies, they argue, have only partially succeeded in activating inactive persons due to weak incentives and limited access to training [15]. In a follow-up study, Savelieva and Zaharov (2022) demonstrate that despite very low unemployment, nearly 60% of the working-age population is economically inactive, with over 90% neither seeking nor available for work. Inactivity is concentrated among pensioners, homemakers, and students, while return migration represents a diminishing and uncertain labour reserve, underscoring the structural limits of mobilisation. The authors conclude that labour shortages can only be addressed through a combination of activation measures and improvements in job quality, wage-setting, and labour market institutions [16]. A related body of work conceptualises labour shortages as a manifestation of labour force underutilisation rather than a simple lack of workers. Using ILO labour underutilisation indicators (LU1–LU4), Sârbu and Cimpoieș (2020) show that although unemployment in Moldova is low, overall labour underutilisation exceeds 11%, revealing substantial hidden reserves among the underemployed and economically inactive. Inactivity and underemployment are driven by ageing, migration, low wages, and precarious employment, particularly in rural areas. Importantly, many employed individuals express willingness to work more hours or change jobs if wages improved, indicating that labour shortages coexist with unused labour capacity due to weak work incentives. This perspective reinforces the need to distinguish between different inactive groups based on their constraints and activation potential [17]. Migration-focused studies further stress the structural nature of labour shortages. Țugui (2024) situates Moldova's labour market imbalances within the context of European integration and intra-European labour mobility, showing that persistent negative net migration has reduced labour supply and contributed to the lowest employment rate in Europe. Employer surveys indicate that shortages are driven not only by emigration but also by low wage attractiveness, skills mismatches, and limited applicant availability. The author argues for a

reorientation of labour market policy toward participation and reintegration targeting women, youth, older workers, return migrants, and residents of the left bank of the Dniester while complementing these measures with selective labour immigration [18]. Bîrcă (2023), based on a survey of 350 enterprises, finds that 88% of organisations report labour shortages, driven by both quantitative deficits and qualitative mismatches. Key barriers to recruitment include low wages, weak incentive systems, and limited training opportunities, particularly for SMEs. Firms respond by intensifying recruitment and adjusting hiring practices, while calling for public interventions aimed at training, wage support, and reintegration of underqualified workers. This evidence highlights the interaction between labour demand, job quality, and the limited responsiveness of inactive populations [3].

Several studies underline that the scope for activation is further constrained by demographic ageing and sector-specific conditions. Gagauz, Tabac, and Pahomii (2023) demonstrate that over 90% of Moldova's population decline over the last three decades is due to emigration, predominantly among young and working-age cohorts. This has accelerated ageing and reduced the pool of economically active and potentially activatable persons, while projections to 2040 indicate continued population decline and a rising share of individuals aged 50+, regardless of short-term activation measures [7]. Heghea (2020) provides micro-level evidence on elderly workers, showing that while some pensioners remain attached to employment, their activation potential is highly stratified by education, health, and residence, and constrained by poor job quality, age discrimination, and weak institutional support. Finally, a growing strand of literature highlights technological adaptation as a complementary response to labour shortages [9]. Popa (2024) argues that in industry, demographic decline and migration have structurally constrained labour supply, while productivity gains have been driven mainly by price effects rather than real efficiency improvements. The study suggests that digitalisation and Industry 4.0 technologies can help offset labour shortages but cannot substitute for labour market activation [14]. Similarly, Negai et al. (2025) show that in agriculture, automation and precision technologies are necessary to compensate for chronic labour scarcity and ageing rural populations. Both studies emphasise that technological solutions must complement, rather than replace, selective activation of available labour reserves [12].

Thus, the literature converges on the view that labour shortages in Moldova are structural, coexist with high inactivity, and cannot be resolved solely through labour immigration or short-term activation measures. However, while existing studies document inactivity, migration, and job quality constraints, they rarely provide an explicit framework to distinguish between inactive groups with different degrees of activation potential or to quantify realistic mobilisation ceilings. This gap motivates the present study's scenario-based approach, which systematically differentiates between structurally unavailable, conditionally activatable, and potentially activatable inactive populations using official aggregate data.

Despite extensive discussion of labour shortages and migration in the Republic of Moldova, existing research has largely treated labour shortages and economic inactivity as separate phenomena, without systematically assessing how much of the inactive population can realistically be mobilised under structural constraints. Most studies rely on descriptive indicators or employer surveys, while few offer an explicit framework for distinguishing between structurally unavailable, conditionally activatable, and potentially activatable inactive groups.

This study contributes by introducing a transparent, scenario-based framework to estimate activation potential in data-constrained contexts, identifying upper ceilings for feasible labour mobilisation using official aggregate statistics, and reframing labour shortages as a problem of limited and unevenly distributed activation capacity rather than a simple shortage of workers. Future research should extend this approach using microdata to estimate activation probabilities and assess regional, sectoral, and policy-specific variation over time.

Analysis and model

The descriptive evidence provided by the National Bureau of Statistics [4] for the third quarter of 2025 on the economically inactive population, indicates that labour market inactivity in the Republic of Moldova is structural rather than cyclical. The inactivity rate of the population aged 15 and over reaches 55.1%, while even among the core working-age population (20–64 years) inactivity remains exceptionally high at 39.2%, a level that substantially exceeds European benchmarks and cannot be explained by short-term economic fluctuations. This persistence points to a long-term failure of labour market participation mechanisms rather than temporary fluctuations related to business cycles. Moreover, the composition of the inactive population further constrains the scope for rapid activation. Nearly 44.6% of inactive individuals are pensioners, whose labour market reintegration is limited by age, health, and institutional factors. Another 13.8% consist of students, whose primary activity is education and whose labour market participation is typically partial and transitional. A further 11.6% are persons engaged in unpaid family and care responsibilities, predominantly women, reflecting structural care constraints rather than weak labour demand. Finally, 11.3% of inactive persons are already working abroad or intend to migrate, representing a group largely disconnected from the domestic labour market. Taken together, these figures indicate that the potential for activating the inactive population to address labour shortages is rather limited, as a substantial share of inactivity reflects demographic, social, and migration-related constraints that cannot be rapidly or fully offset through standard activation policies. The remaining share of inactive persons (18.7%) consists of heterogeneous categories that include discouraged workers, persons with health limitations below retirement age, and other non-classified inactive individuals, representing the primary, though limited, reserve for labour market activation. In Table 1 below the activation potential is provided for each of the groups.

Table 1. Structure of the Economically Inactive Population and Activation Potential in the Republic of Moldova

Group	Share	Activation potential
Pensioners	44.6%	Low (selective only)
Students	13.8%	Medium (part-time, transition)
Caregivers	11.6%	Medium–High (conditional)
Abroad/planning migration	11.3%	Low–Medium (highly conditional, contingent upon right policies to attract diaspora and to create opportunities at home)
Other inactive population	18.7%	Highest, though limited

Source: Developed by the author based on the data from the National Bureau of Statistics

Following OECD (2025) [13], economically inactive populations are heterogeneous and subject to distinctly different structural constraints, implying that only a limited share can be realistically mobilized. Building on this categorization-based approach, this paper extends the analysis by introducing conservative, scenario-based activation ceilings for conditionally and potentially activatable groups

Therefore, after the description of the groups as provided by the National Bureau of Statistics and after assessing the activation potential, as a next step it is worth splitting the inactive population into three mutually exclusive groups.

We can formally represent this as follows:

$$\text{Inactive}=S+C+P \qquad)$$

Where:

- S (Structurally unavailable) → cannot be activated in the short/medium term

- C (Conditionally activatable) → activation possible only if constraints are relaxed
- P (Potentially activatable) → highest realistic activation potential

Next, the inactive categories reported in Table 1 are mapped into the three mutually exclusive groups S, C, and P.

1. In the Structurally unavailable (S) group the categories that are facing hard constraints will be included i.e Pensioners → 44.6% and Abroad / planning migration → 11.3%

S=44.6+11.3=55.9%

2. In the Conditionally activatable (C) group where the activation depends on specific policies the following will be included: Students → 13.8% and Caregivers → 11.6%

C=13.8+11.6=25.4%

3. Potentially activatable (P) which is the residual category with highest activation margin the Other inactive population → 18.7% will be included

P=18.7%

Thus the category, definition and share is presented in Table 2:

Table 2. ***Decomposition of the Economically Inactive Population by Activation Potential***

Category	**Definition**	**Share (%)**
Structurally unavailable (S)	Pensioners + abroad/planning migration	**55.9**
Conditionally activatable (C)	Students + caregivers	**25.4**
Potentially activatable (P)	Other inactive population	**18.7**
Total inactive population		**100.0**

Source: Developed by the author

Next to illustrate feasible mobilization ranges, we define a set of low, medium, and high scenarios using assumed activation rates:

- 0% activation from S (For a conservative short-term scenario, S is treated as non-activatable, although selective activation, for example part-time work among pensioners and return migration is possible)
- 20–40% activation from C
- 40–60% activation from P

It should be noted that, because the total refers to the inactive population aged 15 and over, the resulting activation counts represent an upper ceiling rather than expected outcomes. To illustrate feasible mobilization ranges, we calculate a range for the upper-ceiling activation share implied by the assumed activation rates:

Potential activation share = (0×55.9)+(0.2–0.4×25.4)+(0.4–0.6×18.7) (2)

For reference, given a total inactive population (15+) of 1,086.9 thousand persons, the corresponding population sizes of each group are:

- Structurally unavailable (S) ≈ 607.9 thousand persons
- Conditionally activatable (C) ≈ 276.1 thousand persons
- Potentially activatable (P) ≈ 202.9 thousand persons

Applying the assumed activation rates to groups C and P yields an upper-bound mobilisable labour supply ranging from approximately 136.5 thousand persons (low scenario: 20% of C and 40% of P) to 232.4 thousand persons (high scenario: 40% of C and 60% of P).

Conclusions

1. Labour shortages in the Republic of Moldova are structural rather than cyclical, driven by demographic decline, sustained outmigration, and persistently low labour force participation, rather than by short-term fluctuations in labour demand. The coexistence of high inactivity and labour

shortages reflects deep-seated participation failures and weak work incentives rather than insufficient job creation alone.

2. The potential for mobilising the inactive population to alleviate labour shortages is inherently bounded. More than half of the inactive population (55.9%) is structurally unavailable for activation in the short to medium term, as it consists primarily of pensioners and persons already working or planning to work abroad. These groups face hard demographic, health, and migration-related constraints that limit their responsiveness to standard activation policies.

3. The realistic activation margin is concentrated in a limited subset of the inactive population. Conditionally activatable groups, i.e. students and caregivers, account for 25.4% of inactivity and can be mobilised only if key constraints such as care responsibilities, rigid working arrangements, and weak school-to-work transitions are addressed. The remaining 18.7%, consisting of heterogeneous inactive persons, represents the primary but still limited domestic labour reserve.

4. Scenario-based estimates indicate that even under favourable conditions, activation can only partially offset labour shortages. The upper-ceiling mobilisation range of approximately 136–232 thousand persons confirms that activation policies, while necessary, are insufficient on their own to fully compensate for demographic decline and migration-driven labour deficits.

Therefore, harnessing the inactive population should be viewed as a complementary rather than a standalone solution, requiring coordination with wage policy reforms, job quality improvements, productivity-enhancing investments, and selective labour immigration. Activation should be prioritized where it is most feasible. Policy efforts should focus on conditionally and potentially activatable groups, particularly caregivers, discouraged workers, and inactive persons of working age with residual work capacity, rather than dispersing resources across structurally unavailable groups. To make activation effective, the job quality should be improved. Raising the minimum wage in line with living costs, reducing informal employment, and strengthening wage-setting mechanisms are essential to ensure that re-entry into employment is financially viable and sustainable. The activation should be complemented with productivity-enhancing and migration policies. Given the limited activation ceiling, labour market policy should be coordinated with investments in automation and digitalisation, as well as selective, skills-based labour immigration and targeted return-migration incentives.

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